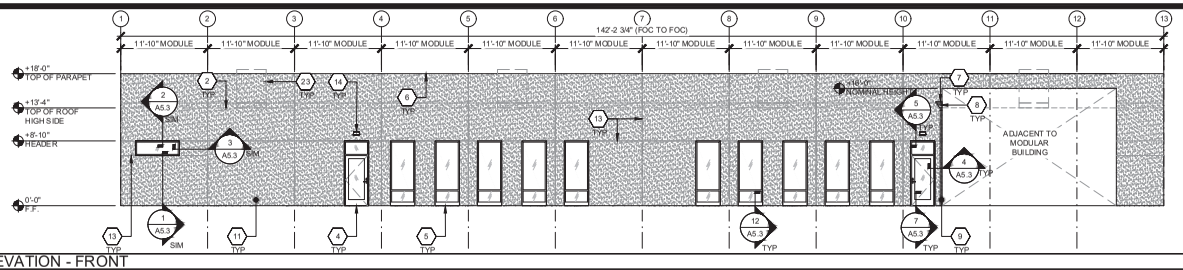
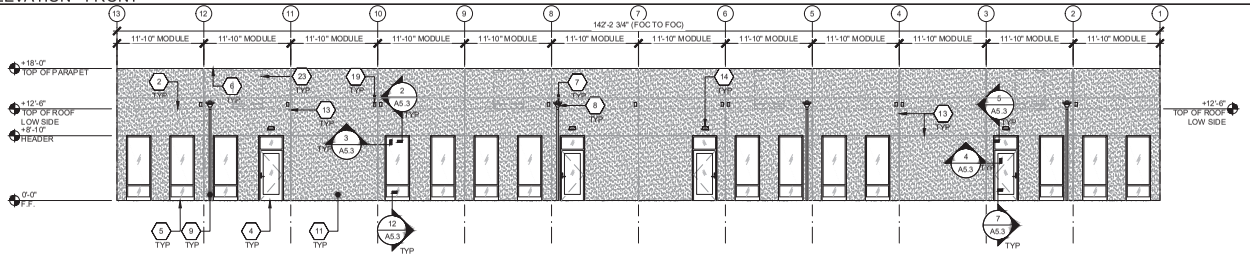


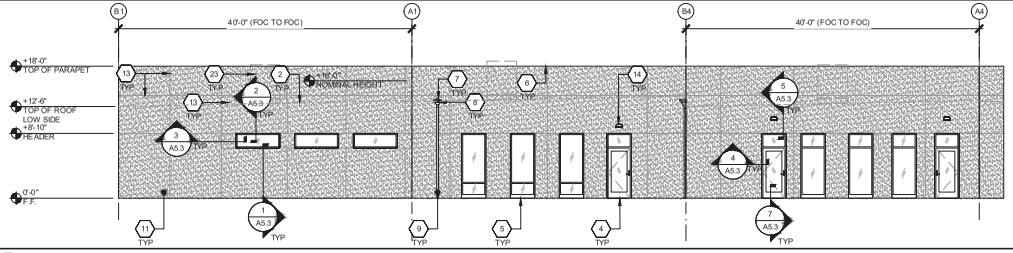
EXTERIOR ELEVATION - FRONT

SCALE: 1/8" = 1'-0" | 1



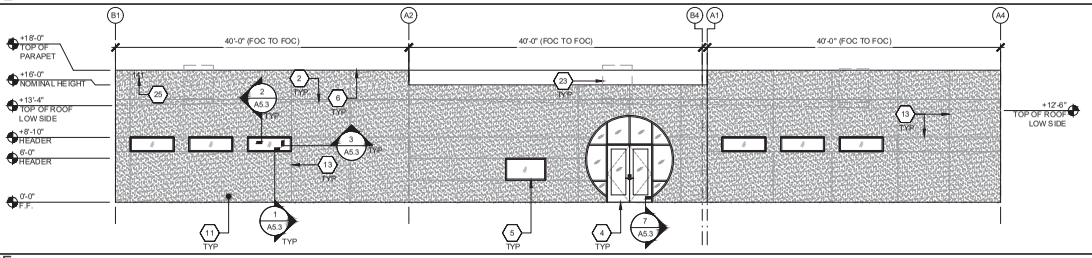
EXTERIOR ELEVATION - REAR

SCALE: 1/8" = 1'-0" | 2



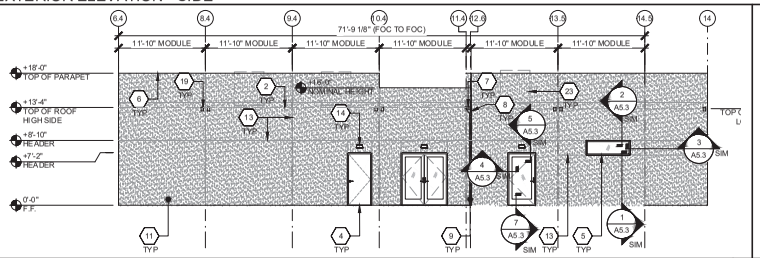
EXTERIOR ELEVATION - SIDE

SCALE: 1/8" = 1'-0" | 3



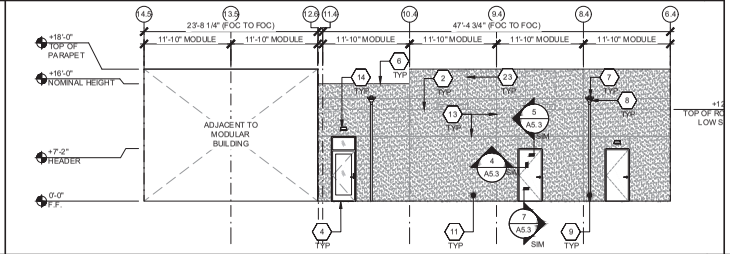
EXTERIOR ELEVATION - SIDE

SCALE: 1/8" = 1'-0" | 4



EXTERIOR ELEVATION - FRONT

SCALE: 3/16" = 1'-0" | 5



EXTERIOR ELEVATION - REAR

SCALE: 1/8" = 1'-0" | 6

1. STANDING SEAM METAL ROOFING
2. SINGLE-PLY ROOFING
3. OVERHANG - SEE STRUCTURAL
4. TYP EXTERIOR DOOR - SEE SCHEDULE SHEET N3.0
5. WINDOW - SEE SCHEDULE SHEET N3.0
6. OPTIONAL PARAPET - SEE SHEET S4.3
7. SCUPPER @ PARAPET OPTION - SEE DETAIL 6/A2.5
8. 4"x4" MIN. SCUPPER BOX @ PARAPET OPTION - SEE DETAIL 6 & 13/A2.5
9. DOWNSPOUT SEE DETAIL 8/A5.1 FOR ATTACHMENT
10. NOT USED
11. STUCCO FINISH
11A. NOT USED
11B. NOT USED
12. NOT USED
13. CONTROL JOINT (LOCATION MAY VARY) - SIMILAR DETAIL 9/A5.3 @ STUDS
14. EXTERIOR LIGHT - SEE ELECTRICAL
15. NOT USED
16. NOT USED
17. NOT USED
18. NOT USED
19. MODULAR IDENTIFICATION TAG +90" ABOVE A.F.F.
20. NOT USED
21. NOT USED
22. NOT USED
23. HVAC UNIT BEHIND PARAPET
24. NOT USED
25. BUILDING IDENTIFICATION PER CFC 505.1 (BY GENERAL CONTRACTOR)

KEYNOTES

NOT USED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS
American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK MARTIN
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

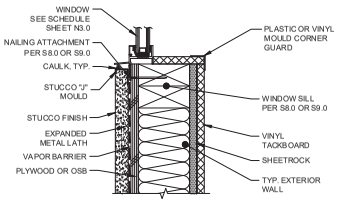
DRAWN BY:	JM/MKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

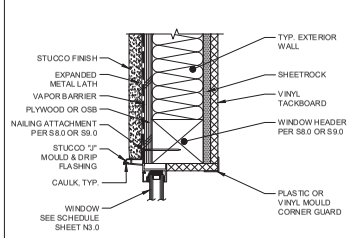
TYPICAL EXTERIOR ELEVATIONS - STUCCO OPTION

SHEET NUMBER:

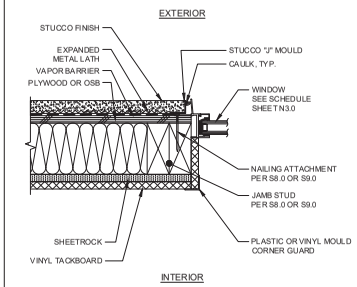
A5.2



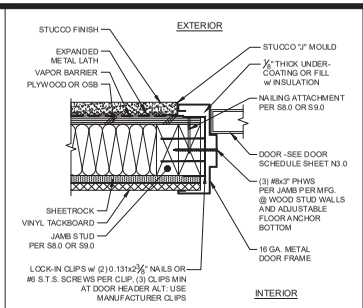
TYPICAL WINDOW SILL — SCALE: 3" = 1'-0" — 1



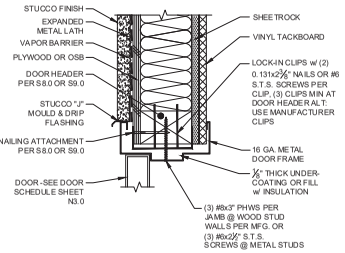
TYPICAL WINDOW HEADER — SCALE: 3" = 1'-0" — 2



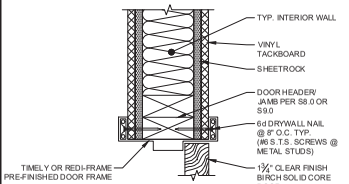
TYPICAL WINDOW JAMB — SCALE: 3" = 1'-0" — 3



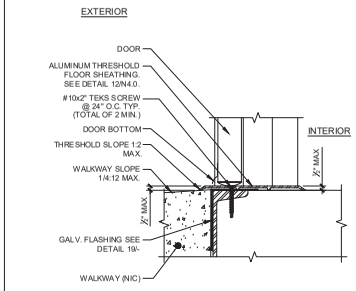
TYPICAL DOOR JAMB — SCALE: 3" = 1'-0" — 4



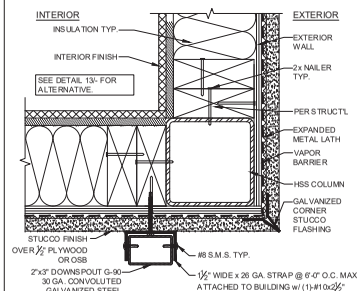
TYPICAL DOOR HEADER — SCALE: 3" = 1'-0" — 5



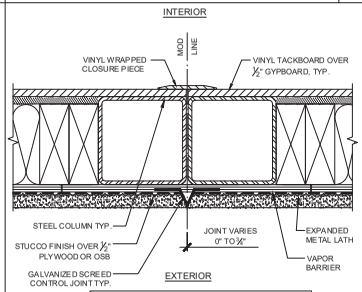
TYP. INTERIOR DOOR HEADER/JAMB — SCALE: 3" = 1'-0" — 6



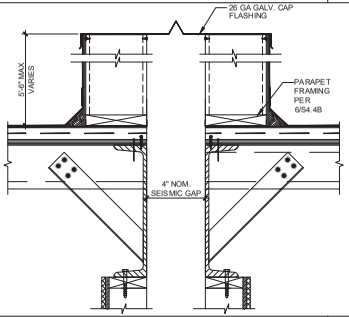
TYPICAL THRESHOLD DETAIL — SCALE: 3" = 1'-0" — 7



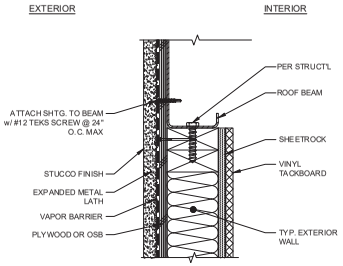
TYP. BLDG CORNER & DOWNSPOUT ATTACHMENT DETAIL — SCALE: 3" = 1'-0" — 8



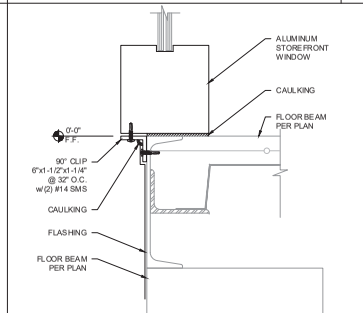
TYP. MODLINE CLOSURE DETAIL — SCALE: 3" = 1'-0" — 9



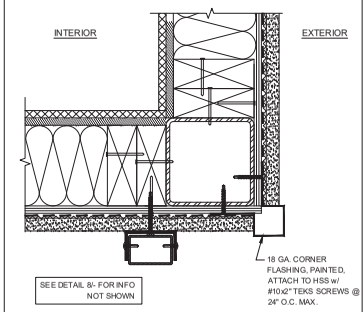
PARPET SEISMIC CLOSURE AT ROOF — 10



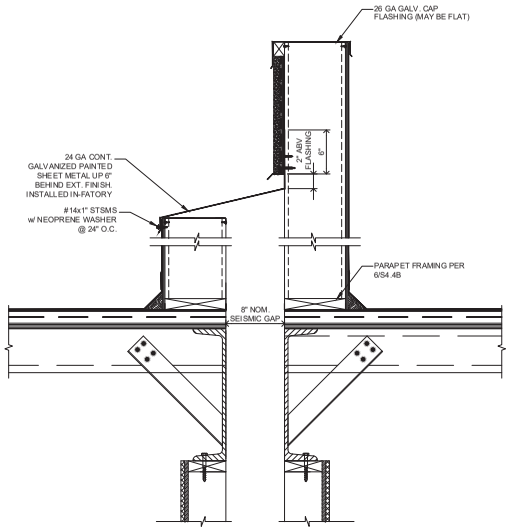
SIDING DETAIL @ ROOF BEAM — SCALE: 3" = 1'-0" — 11



STOREFRONT WINDOW SILL DETAIL — SCALE: 3" = 1'-0" — 12



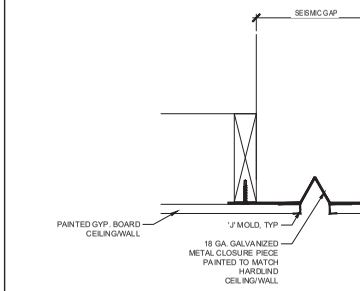
ALTERNATE BUILDING CORNER DETAIL — SCALE: 3" = 1'-0" — 13



DUAL HEIGHT PARPET SEISMIC CLOSURE AT ROOF — 19

1. OPTIONAL METAL STUD FRAMING, SEE S9.0 THRU S9.2.
2. ADDITIONAL R-4 RIGID INSULATION REQUIRED @ METAL STUD WALLS, PER INSULATION SCHEDULE SHEET M1.7 & DETAILS 18/-.
3. FOR FINISH OPTIONS, SEE SHEET A7.0.
4. REFER TO SHEET A7.3 FOR ALL BUILDING INSULATION INSTALLATION NOT SHOWN OR NOTED ON THIS SHEET.
5. REFER TO SECTION 9A "STUCCO" FOR ALL STUCCO INSULATION NOTES.
6. FOR BUILDINGS 2160 SQ. FT. OR LESS & ALL BUILDINGS INSTALLED ON ABOVE GRADE FOUNDATIONS PER 1A/S1.4, FLASHING SHALL BE PROVIDED PER DETAILS 10 & 19/-.
7. FOR BUILDINGS LARGER THAN 2160 SQ. FT. INSTALLED ON BELOW GRADE FOUNDATIONS PER 1/S1.4, FLASHING & DETERIORATION PROTECTION SHALL BE PROVIDED PER SHEET S5.3A. WHERE DETERIORATION PROTECTION IS NOT REQUIRED BY THE SHEET NOTES OF SHEET A5.3A, FLASHING SHALL BE PROVIDED BY DETAIL 10 & 19/-.

SHEET NOTES



INTERIOR CEILING SEISMIC CLOSE UP (JAMB SIM) — 17

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
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PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. WYATT No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

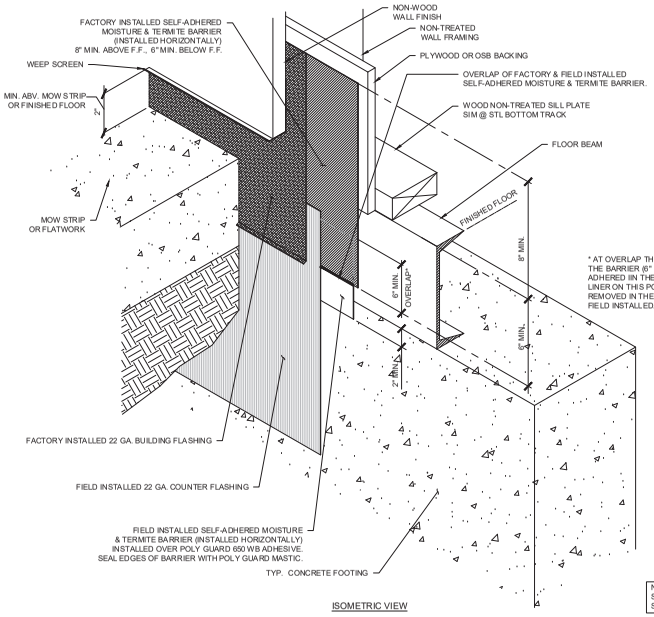
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

TYP. ARCHITECTURAL DETAILS - STUCCO OPTION

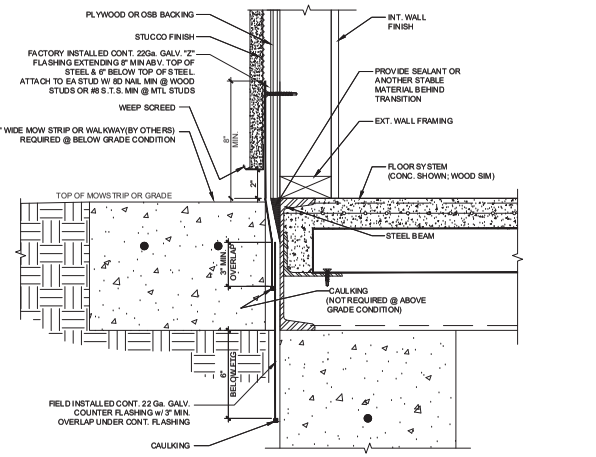
SHEET NUMBER:

A5.3



ISOMETRIC VIEW

NOTE:
SEE NOTES IN DETAIL 2/- FOR DETERIORATION PROTECTION REQUIREMENTS.
SEE NOTES IN DETAIL 7/- FOR DETERIORATION PROTECTION MATERIALS.



NOTE: WATER RESISTIVE BARRIER (BUILDING PAPER) AND POLYGUARD MEMBRANE (MOISTURE & TERMITE BARRIER) NOT SHOWN IN SECTION FOR CLARITY. REFER TO ISOMETRIC VIEW FOR POLYGUARD MEMBRANE.

SECTION VIEW

DETERIORATION PROTECTION 1

MOISTURE AND TERMITE BARRIER MEMBRANE INSTALLATION REQUIREMENTS

- ALL SURFACES SHALL BE CLEAN (FREE OF DIRT, DUST, OIL AND OTHER DEBRIS) PRIOR TO APPLICATION OF THE ADHESIVE AND MEMBRANE.
- ALL SURFACE VOIDS GREATER THAN 1/8" IN WIDTH SHALL BE FILLED WITH SEALANT PRIOR TO INSTALLATION.
- APPLY LIQUID ADHESIVE TO ALL SURFACES WHICH WILL RECEIVE THE POLY-GUARD BARRIER.
- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS IN THE SELF-ADHERED BARRIER, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET, SEE DETAIL 9/-.
- WHERE A MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED AS SHOWN ON DETAIL 4/-. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULES ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
- WHERE A VERTICAL LAP OCCURS THE UPPER MEMBRANE LAYER SHALL BE LAPPED OVER THE LOWER MEMBRANE LAYER 6" MINIMUM.
- THE MEMBRANE SHALL BE ROLLED FIRMLY INTO PLACE USING HAND ROLLER.
- APPLY MASTIC OR SEALANT TO TERMINATING EDGES AND AROUND PIPES OR OTHER PENETRATIONS.
- WHERE THE SURFACES ARE OFFSET MORE THAN 1/8" CUT-OF-PLANE PROVIDE SEALANT OR ANOTHER STABLE MATERIAL TO TRANSITION BETWEEN THE SURFACES.
- WHERE A HORIZONTAL LAP OCCURS IN THE GALVANIZED FLASHING THE JOINTS SHALL BE LAPPED 2 1/2" MINIMUM
- REFER TO DETAIL 4/- FOR MODLINE DETERIORATION PROTECTION

REPAIR REQUIREMENTS

WHERE DAMAGE OCCURS, THE REPAIRS SHALL BE AS FOLLOWS:

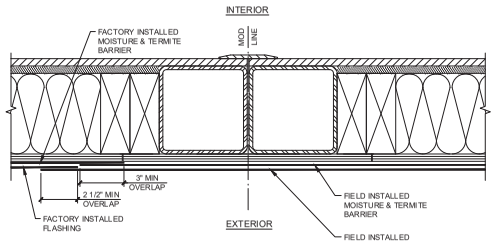
1. WHERE THE DAMAGE MEASURES LESS THAN ½" IN ANY DIRECTION THE PUNCTURE SHALL BE SEALED WITH MASTIC.
2. WHERE THE DAMAGE MEASURES MORE THAN ½", BUT LESS THAN 2", IN ANY DIRECTION A PATCH SHALL BE INSTALLED OVER THE DAMAGE USING THE SAME MEMBRANE MATERIAL. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTION.
3. WHERE THE DAMAGE MEASURES MORE THAN 2" IN ANY DIRECTION THE DAMAGED PORTION SHALL BE REMOVE AND A PIECE OF MEMBRANE SHALL BE INSTALLED. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTIONS.

INSPECTION REQUIREMENTS

THE INPLANT INSPECTOR SHALL OBSERVE THE INSTALLATION OF FACTORY INSTALLED PORTION OF THE MEMBRANE FLASHING. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE.

THE ON-SITE INSPECTOR SHALL OBSERVE THE INSTALLATION OF THE SITE INSTALLED PORTION OF THE MEMBRANE FLASHING. THE FACTORY INSTALLED MEMBRANE SHOULD BE INVESTIGATED TO DETERMINE IF ANY DAMAGE OCCURRED DURING MODULE SHIPMENT/INSTALLATION PRIOR TO PROCEEDING WITH THE SITE INSTALLED MEMBRANE PLACEMENT. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE LAPPED ONTO THE FOUNDATION WALL AS INDICATED WITHIN THIS DRAWING PACKAGE. THE GALVANIZED FLASHING SHALL BE INSTALLED OVER THE MEMBRANE. THE GALVANIZED FLASHING SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE AND SHALL CONTINUE BELOW THE BOTTOM OF THE FLATWORK OR MOW STRIP AS INDICATED WITHIN THIS DRAWING PACKAGE.

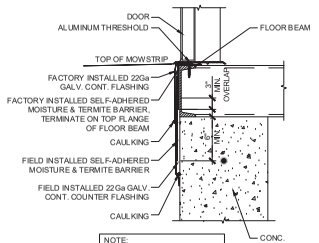
DETERIORATION PROTECTION REQUIREMENTS 2



NOTES:
1. SHOWN SLIGHTLY EXPLODED AT MODLINE FOR CLARITY.
2. SEE DETAIL 1/- FOR REQUIRED HEIGHT OF BARRIER AND FLASHING ON WALL.
3. UTILIZE TYPICAL BUILDING DETAILS FOR MOD LINE FINISHING ABOVE DETERIORATION PROTECTION.
4. WALL FINISH NOT SHOWN FOR CLARITY.

DETERIORATION PROTECTION DETAIL @ MOD LINE 4

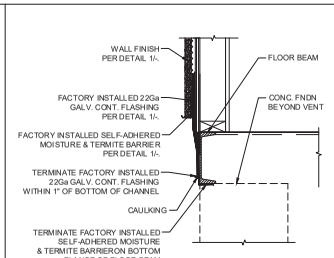
SCALE: 3" = 1'-0"



NOTE:
SEE DETAIL 1/- FOR ALL ITEMS NOT SHOWN OR NOTED.

DETERIORATION PROTECTION @ THRESHOLD 5

SCALE: 1-1/2" = 1'-0"



NOTE:
SEE DETAIL 1/- FOR ALL ITEMS NOT SHOWN OR NOTED.

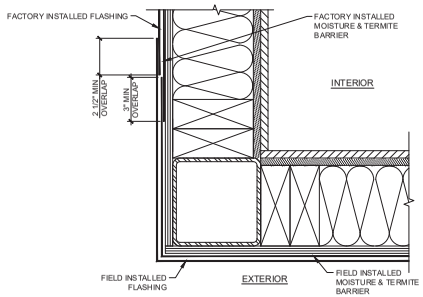
DETERIORATION PROTECTION @ VENT ACCESS 6

SCALE: 1-1/2" = 1'-0"

MATERIALS USED FOR DETERIORATION PROTECTION SHAL BE AS FOLLOWS:

1. FACTORY INSTALLED SELF-ADHERED TERMITE BARRIER SHALL BE "POLYGUARD TERM" FLASHING MOISTURE/TERMITE BARRIER. WITH FOIL FACE UV BARRIER.
2. FIELD INSTALLED SELF-ADHERED TERMITE BARRIER SHALL BE "POLYGUARD TERM" WATER TERMITE/BARRIER FOR CONCRETE FOUNDATIONS.
3. LIQUID ADHESIVE SHALL BE "POLYGUARD" 650WB.
4. ALL FLASHING TO BE 22 GA FLASHING G60 COATING MIN., TYP.

DETERIORATION PROTECTION MATERIALS 7



DETERIORATION PROTECTION DETAIL @ CORNER 9

SCALE: 3" = 1'-0"

NOT USED 10

NOT USED 11

1. DETERIORATION DETAILS SHOWN ON THIS SHEET ARE NOT REQUIRED FOR BUILDINGS 2160 SQ. FT. OR LESS.
2. DETERIORATION DETAILS SHOWN ON THIS SHEET ARE ONLY REQUIRED FOR BUILDINGS INSTALLED WITH BELOW GRADE FOUNDATIONS.
3. DETERIORATION DETAILS SHOWN ON THIS SHEET ARE NOT REQUIRED FOR BUILDINGS WITH CONCRETE FLOORS & MTL STUDS WHERE ALL WALL FINISHES AND BACKING ARE P.T. OR NON-WOOD MATERIAL.
4. THE DETERIORATION DETAILS SHOWN ON THIS SHEET SHALL BE USED AT THE BUILDINGS PERIMETER & SHALL EXTEND VERTICALLY UP THE WALL TO THE MIN. HEIGHT REQUIRED PER DETAIL 1/-. THE TYPICAL BUILDING DETAILS FOR MOD LINE FINISHING MAY BE USED ABOVE THAT POINT.

SHEET NOTES 12

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
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PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. MAHONEY
No. C12631
Exp. 3-31-25
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REVISIONS

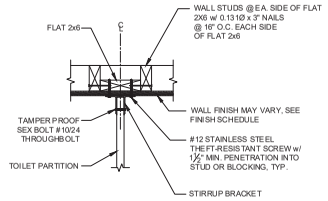
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

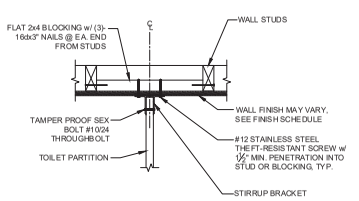
DETERIORATION DETAILS GREATER THAN 2160 SQ.FT. - STUCCO OPTION

SHEET NUMBER:

A5.3A



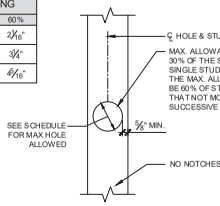
WOOD STUDS
OPTION No. 1



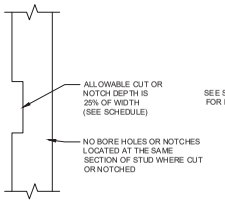
WOOD STUDS
OPTION No. 2

TOILET PARTITION ANCHORAGE BLOCKING DETAILS @ WALL — SCALE: 1-1/2" = 1'-0" — 1

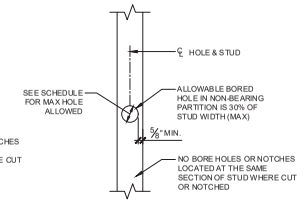
NOTCH & BORING SCHEDULE					
	STUD WIDTH		NOTCHING	BORING	
SIZE	NOMINAL	ACTUAL	25%	30%	60%
2x4	4"	3½"	1⅞"	1"	2⅛"
2x6	6"	5½"	1⅜"	1⅝"	3¼"
2x8	8"	7¼"	1 13/16"	2⅜"	4⅝"



EXTERIOR WALL
BORING

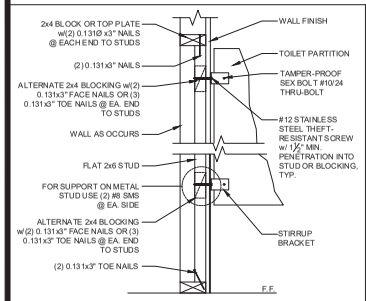


INTERIOR WALL
NOTCHING



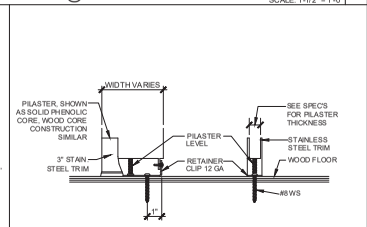
INTERIOR WALL
BORING

STUD NOTCHING AND BORING DETAILS — NOT TO SCALE — 2

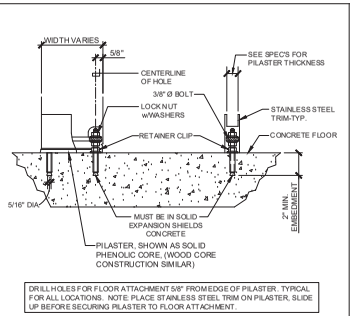


NOTE: FOR METAL STUD OPTION, SEE SHEET 20/S9.1 FOR BLOCKING.

TOILET PARTITION WALL BLOCKING — NOT TO SCALE — 3

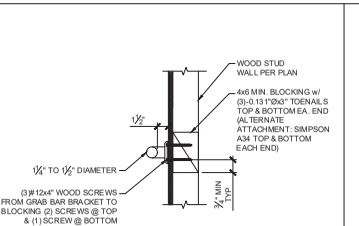


PARTITION TO WOOD FLOOR — NOT TO SCALE — 4



DRILL HOLES FOR FLOOR ATTACHMENT 5/8" FROM EDGE OF PILASTER. TYPICAL FOR ALL LOCATIONS. NOTE: PLACE STAINLESS STEEL TRIM ON PILASTER, SLIDE UP BEFORE SECURING PILASTER TO FLOOR ATTACHMENT.

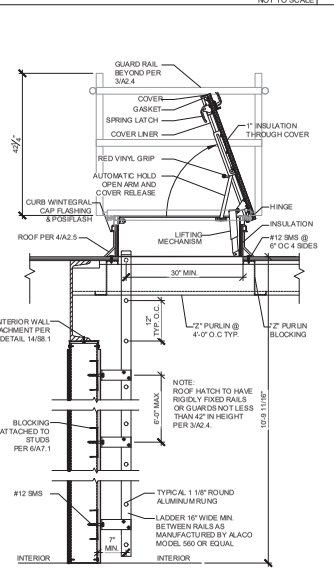
PARTITION TO CONCRETE FLOOR — NOT TO SCALE — 5



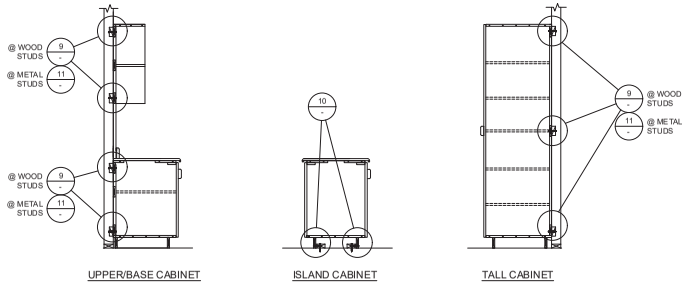
TYPICAL GRAB BAR
BLOCKING DETAIL

NOTE: FOR METAL STUD WALL OPTION, SEE DETAILS 9&10/S9.2.

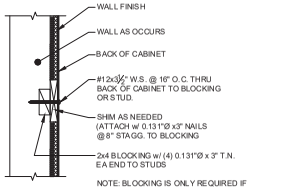
GRAB BAR BLOCKING DETAIL — SCALE: 1-1/2" = 1'-0" — 6



CABINET ATTACHMENT @ METAL STUDS — SCALE: 1-1/2" = 1'-0" — 11

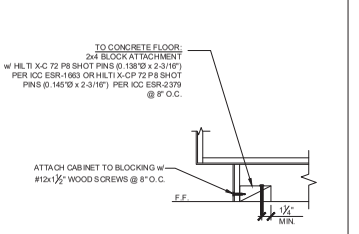


TYP. CABINET ATTACHMENT — NOT TO SCALE — 8

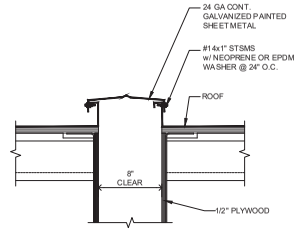


NOTE: FOR METAL STUD OPTION, SEE 11/-.

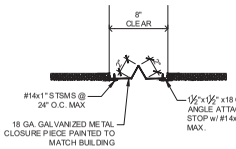
CABINET ATTACHMENT @ WOOD STUDS — SCALE: 1-1/2" = 1'-0" — 9



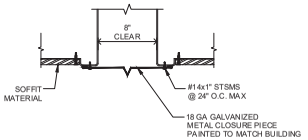
CABINET ATTACHMENT @ FLOOR — SCALE: 1-1/2" = 1'-0" — 10



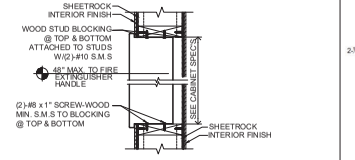
SEISMIC CLOSURE @ ROOF — 12



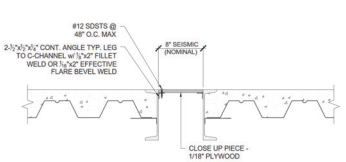
SEISMIC CLOSURE @ WALL — 13



SEISMIC CLOSURE @ SOFFIT — 14



FIRE EXTINGUISHER IN CABINET DETAIL — 15



INTERIOR WALL @ FLOOR SEISMIC GAP CLOSE UP — 16

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS
American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. MAHONEY
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

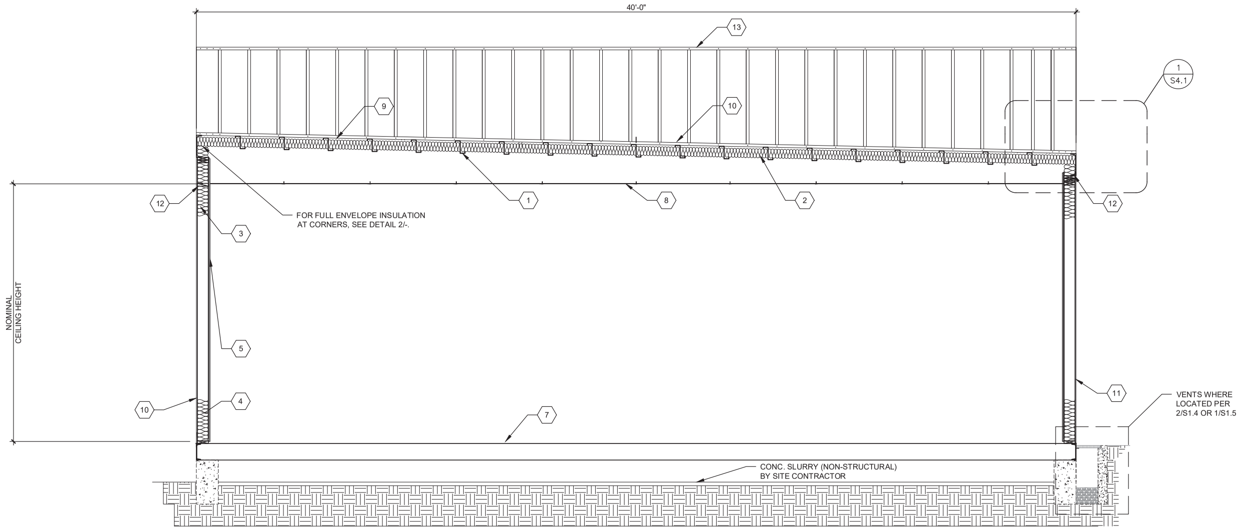
DRAWN BY:	JM/MA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

MISCELLANEOUS
ARCHITECTURAL DETAILS

SHEET NUMBER:

A7.1



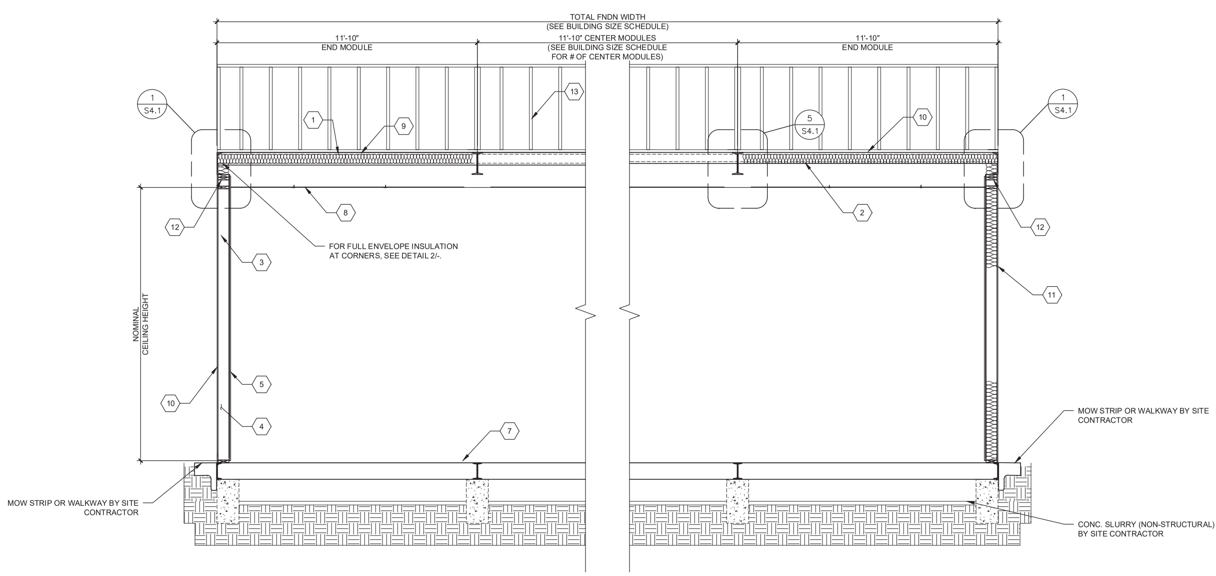
TYP. LONGITUDINAL SECTION - MONO/DUAL PITCH

SCALE: 3/8"=1'-0" A

1 ROOF PURLINS PER ROOF FRAMING PLAN
1A NOT USED
2 BATT ROOF INSULATION PER SHEET M1.7
3 WALL FRAMING PER SHEETS S8.0
4 WALL INSULATION PER SHEET M1.7
5 VINYL FABRIC OVER TACKABLE BRACING PANELS
6 NOT USED
7 CONCRETE FLOOR PER SHEETS S3.3
8 SUSPENDED T-BAR CEILING PER M1.0A-M1.0D
9 FINISHED ROOFING PER ROOF PLAN & ROOF FRAMING PLAN
10 RIGID ROOF INSULATION PER SHEET M1.7 OVER ROOF SHEATHING (S4.1)
11 EXTERIOR WALL FINISH PER EXTERIOR ELEVATIONS
12 FIRE BLOCKING @ CEILING LEVEL PER CBC 718.2
13 PARAPET PER S4.4B

KEY NOTES

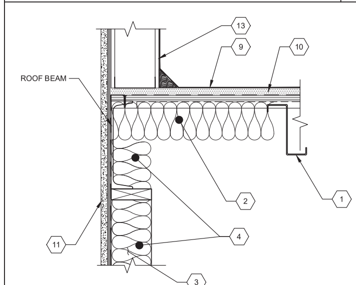
NOT USED



TYP. TRANSVERSE SECTION - MONO/DUAL PITCH

SCALE: 3/8"=1'-0" B

NOT USED 1



INSULATION CORNER DET.

SCALE: 1-1/2"=1'-0" 2

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DATE: 08/30/2022

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK ... KAVANAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

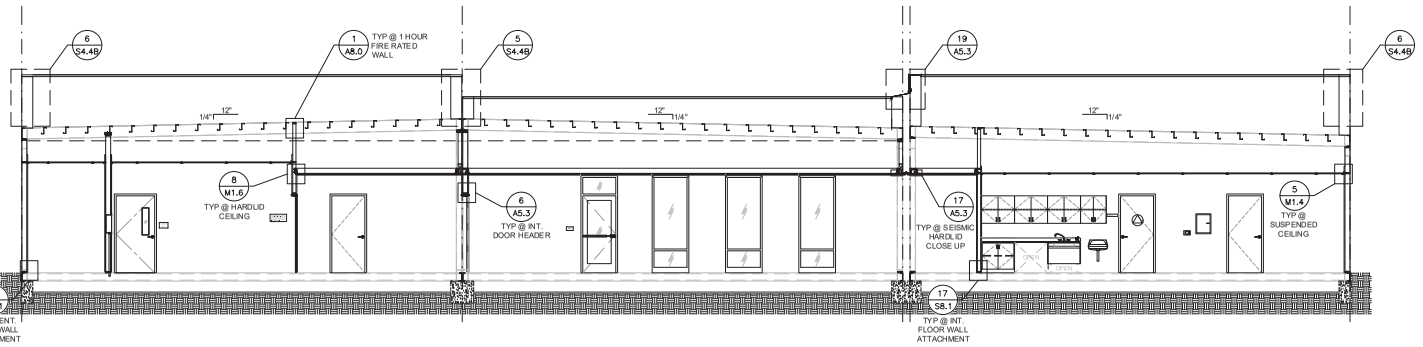
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

TYPICAL LONGITUDINAL
AND TRANSVERSE
FRAME SECTIONS

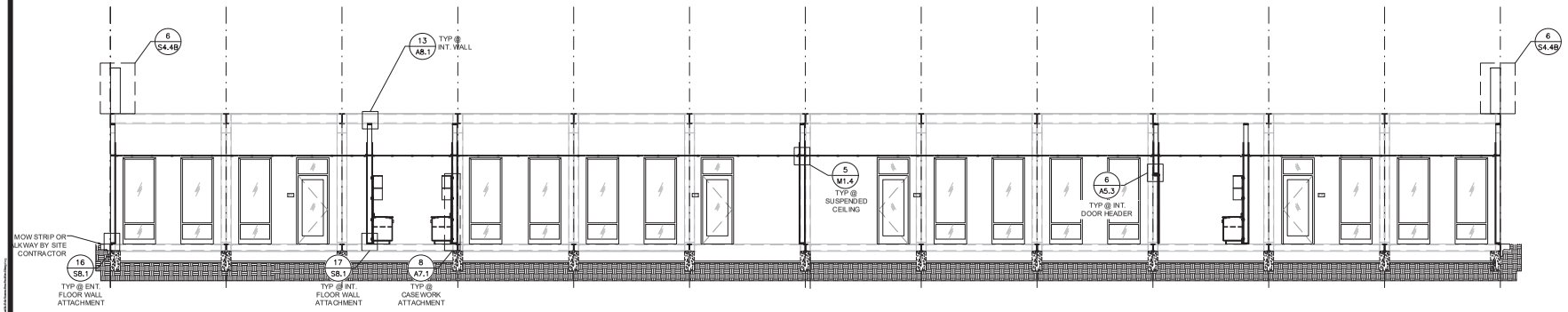
SHEET NUMBER:

A7.3



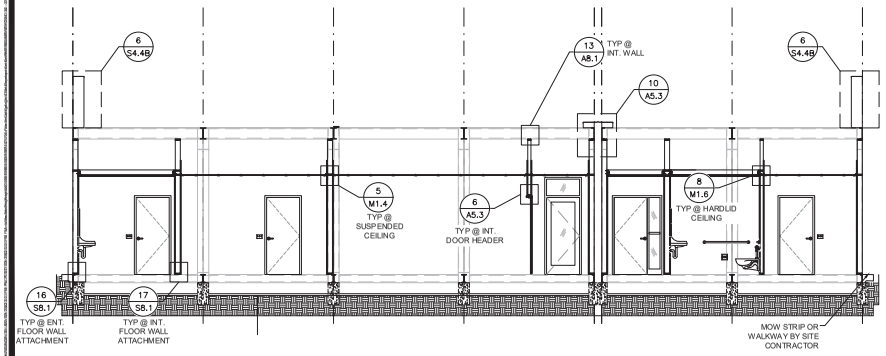
BUILDING SECTION A-A

SCALE: 3/16"=1'-0" 1



BUILDING SECTION B-B

SCALE: 3/16"=1'-0" 2



BUILDING SECTION C-C

SCALE: 3/16"=1'-0" 3

NOT USED 4

IDENTIFICATION STAMP
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EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK [illegible] No. C12631 Exp. 5-31-23 STATE OF CALIFORNIA

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REVISIONS

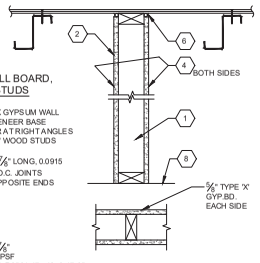
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

BUILDING
SECTIONS

SHEET NUMBER:

A7.4



GYPSUM WALL BOARD,
WOOD STUDS

ONE LAYER 5/8" TYPE-X GYPSUM WALL BOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR ATRIGHT ANGLES TO EACH SIDE OF 2"x4" WOOD STUDS 24" O.C.
w/ 6d COATED NAILS, 1 7/8" LONG, 0.0915 SHANK, 1/4" HEADS, 7" O.C. JOINTS STAGGERED 24" ON OPPOSITE ENDS (LOAD BEARING)

5/8" TYPE 'X' GYP.BD. EACH SIDE

BOTH SIDES

G.A. FILE NO. WP 3510
THICKNESS: 4 7/8
APPROX. WEIGHT: 7 PSF
FIRE TESTS: UL R3501-47, -48, 9-17-65
UL DESIGN U309
UL R1319-129, 7-22-70
UL DESIGN U314 (OPTIONAL)
SOUND TEST: NCG 2404, 10-14-70 (OPTIONAL)

1 HOUR INTERIOR ASSEMBLY N.T.S. 1

GYPSUM WALL BOARD,
GYPSUM SHEATHING,
WOOD STUDS

EXTERIOR SIDE: ONE LAYER 48" WIDE 5/8" TYPE-X GYPSUM SHEATHING APPLIED PARALLEL TO 2"x4" WOOD STUDS w/ 1 1/4" GALVANI ED ROOFING NAILS, 0.120" SHANK, 7/16" OR 1/2" HEADS, 4" O.C. AT VERTICAL JOINTS AND 7" O.C. AT INTERMEDIATE STUDS AND TOP AND BOTTOM PLATES. JOINTS OF GYPSUM SHEATHING MAY BE LEFT UNTREATED. EXTERIOR CLADDING TO BE ATTACHED THRU SHEATHING TO STUDS.

INTERIOR SIDE: ONE LAYER 5/8" TYPE-X GYPSUM WALLBOARD APPLIED PARALLEL OR ATRIGHT ANGLES TO STUDS w/ 6D COATED NAILS, 1 7/8" LONG, 0.915" SHANK, 1/4" HEADS, 7" O.C. (LOAD BEARING).

ANGLE ATTACH TO PURLINS w/ 8 S.M.S. (OR E UIV.)

6d DRYWALL SCREWS 7" O.C. TO 2"x2"x18ga. ANGLES

G.A. FILE NO. WP 8105
THICKNESS: 4 5/8
APPROX. WEIGHT: VARIES
FIRE TESTS: UL R3501-47, -48, 9-17-65
UL DESIGN U309
UL R1319-129, 7-22-70
UL DESIGN U314
SOUND TEST: NCG 2404, 10-14-70 (OPTIONAL)

1 HOUR EXTERIOR ASSEMBLY N.T.S. 2

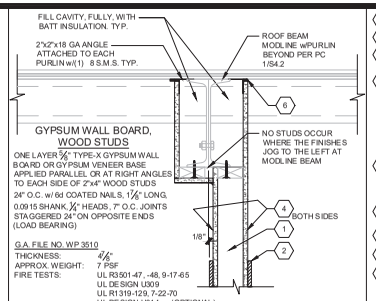
GYPSUM WALL BOARD,
WOOD STUDS

ONE LAYER 5/8" TYPE-X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2x4 WOOD STUDS 24" O.C. w/ 6d COATED NAILS, 1 7/8" LONG, 0.0915 SHANK, 1/4" HEADS, 7" O.C. JOINTS STAGGERED 24" ON OPPOSITE ENDS. LOAD BEARING.

5/8" TYPE 'X' GYP.BD. PER SPEC EACH SIDE

G.A. FILE NO. WP 3510
THICKNESS: 4 5/8
APPROX. WEIGHT: 7 PSF
FIRE TESTS: UL R3501-47, -48, 9-17-65
UL DESIGN U309
UL R1319-129, 7-22-70
UL DESIGN U314
SOUND TEST: NCG 2404, 10-14-70 (OPTIONAL)

1 HOUR EXTERIOR ASSEMBLY N.T.S. 3



GYPSUM WALL BOARD,
WOOD STUDS

ONE LAYER 5/8" TYPE-X GYPSUM WALL BOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2"x4" WOOD STUDS 24" O.C. w/ 6d COATED NAILS 1 7/8" LONG. 0.0915 SHANK, 1/4" HEADS, 7" O.C. JOINTS STAGGERED 24" ON OPPOSITE ENDS (LOAD BEARING)

G.A. FILE NO. WP 3510
THICKNESS: 4 5/8
APPROX. WEIGHT: 7 PSF
FIRE TESTS: UL R3501-47, -48, 9-17-65
UL DESIGN U309
UL R1319-129, 7-22-70
UL DESIGN U314 (OPTIONAL)
SOUND TEST: NCG 2404, 10-14-70 (OPTIONAL)

1 HOUR FIRE RATED ASSEMBLY AT MOD LINE N.T.S. 4

KEY NOTES

1. 2"x4" MIN. STUDS 16" O.C. MAX.
2. TYPICAL INTERIOR FINISH
3. TYPICAL EXTERIOR FINISH
4. ONE LAYER 5/8" TYPE-'X' GYPSUM BOARD PER C.B.C. 721(2) 14-1.3. (NOTE: WHERE EXTERIOR FINISH IS 7/8" PLASTER THEN REPLACE 5/8" TYPE-X GYPSUM BOARD w/ 1/2" PLYWOOD ON PLASTER SIDE OF WALL ONLY).

   ALTERNATE: 2 LAYERS OF 1/2" GYPSUM BOARD PER C.B.C. 721.1(2) 14-1.2.
5. TWO LAYERS 1/2" GYPSUM BOARD PER C.B.C. 721.1(1) 1-7.1 (NOTE: WHERE EXTERIOR FINISH IS 7/8" PLASTER THEN REPLACE BASE LAYER OF TYPE-X GYPSUM BOARD w/ 1/2" PLYWOOD ON PLASTER SIDE OF WALL ONLY).
6. INTUMESCENT CAULK "FIRETEMP CI", "FIRESTOP 4100NS" OR HILTY "FS-ONE MAX"
7. ROOF SYSTEM (SEE ROOF PLAN)
8. FLOOR SYSTEM OF 1-HR FLOOR ASSEMBLY
9. COLUMN PER PLAN

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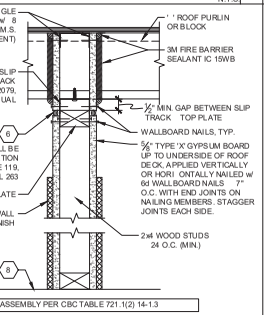
PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

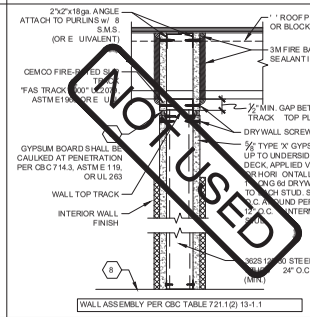
SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES



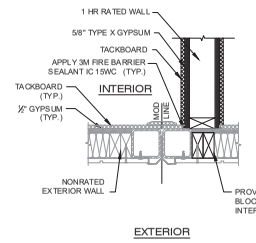
WALL ASSEMBLY PER CBC TABLE 721.1(2) 14-1.3

1 HOUR RATED PARTITION (WOOD STUDS) N.T.S. 6



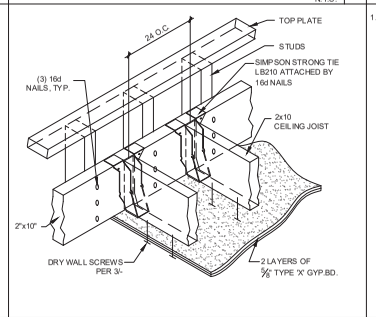
WALL ASSEMBLY PER CBC TABLE 721.1(2) 13-1.1

1 HOUR RATED PARTITION (STEEL STUDS) N.T.S. 7



EXTERIOR

INTERSECTION OF INTERIOR RATED WALL AT NONRATED EXTERIOR WALL N.T.S. 8



1 HOUR RATED PARTITION N.T.S. 9

SHEET NOTES

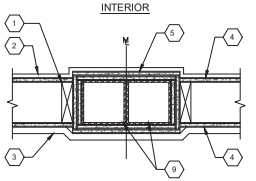
1. AS ALTERNATE TO COLUMN WRAP USE INTUMESCENT FIRE RETARDANT PAINT. APPLY AS FOLLOWS:

   AT COLUMN, APPLY "INTUMESCENT FIRE RETARDANT PAINT" PER ASTM-E-119 FIRE TEXT OF BUILDING CONSTRUCTION MATERIALS (NFPA-251) "FURNACE TEST"

   REFERENCES: 1-NFPA-101: LIFE SAFETY CODES PROVIDES GUIDANCE REGARDING USE OF FIRE RETARDANT COATINGS AND SETS FLAME SPREAD AND SMOKE LIMITS DEPENDENT UPON USE AND OCCUPANCY -NFPA-703" STD. FOR FIRE RETARDANT IMPREGNATED WOOD AND FIRE RESISTANT COATINGS FOR BUILDINGS. DEFINES RE UIREMENTS TO BE MET IN ORDER TO BE CALLED A FIRE RETARDANT COATING AS REFERENCED IN NFPA-101/UL X 612-1331145/MANUFACTURER: AD FIRE FILM 2

ATTACH GYP. TO COLUMN WITH MIN. 8 S.T.S. AT THE LISTED RE UIRED SPACING.

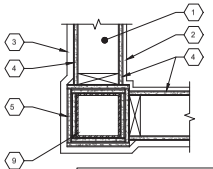
INTERIOR



EXTERIOR

NOTE: ALTERNATE FIRE PROTECTION PER DETAIL 20/-

COLUMN WRAP MODLINE N.T.S. 11



ATTACH GYP. TO COLUMN WITH MIN. 8 S.T.S. AT THE LISTED RE UIRED SPACING.

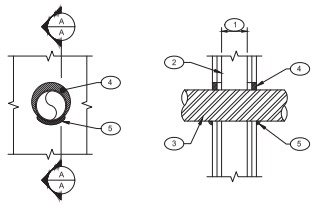
NOTE: ALTERNATE FIRE PROTECTION PER DETAIL 20/-

COLUMN WRAP CORNER N.T.S. 16

METAL PIPE THRU 1-HR OR 2-HR
GYPSUM WALL ASSEMBLY

F-RATING 1-HR OR 2-HR
T-RATING 0-HR
L-RATING AT AMBIENT LESS THAN 1 CFM/S . FT.
L-RATING AT 400 F 4 CFM/S . FT.

NOTES:
1. MAXIMUM DIAMETER OF OPENING:
   a. 32 1/4" FOR STEEL STUD WALLS
   . 14 1/2" FOR WOOD STUD WALLS
2. ANNULAR SPACE MINIMUM 0", MAXIMUM 2"
3. PIPE MAY BE INSTALLED WITH CONTINUOUS POINT OF CONTACT.
4. PIPE MAY BE INSTALLED AT AN ANGLE NOT GREATER THAN 45 FROM PERPENDICULAR.



FRONT VIEW SECTION A-A

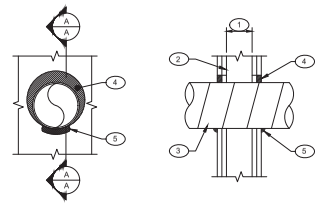
UL WL-1054
1. GYPSUM WALL ASSEMBLY (UL/ULC CLASSIFIED U300 OR U400 SERIES) (1-HR OR 2-HR FIRE RATING) (2-HR SHOWN)
2. WOOD STUDS TO CONSIST OF NOMINAL 2"x4" LUMBER. STEEL STUDS TO BE MINIMUM 2 1/2" WIDE.
3. PENETRATING ITEM MAY BE ONE OF THE FOLLOWING:
   A. MAXIMUM 30" NOMINAL STEEL PIPE (SCHEDULE 10 OR HEAVIER)
   B. MAXIMUM 30" NOMINAL CAST IRON PIPE
   C. MAXIMUM 6" NOMINAL COPPER PIPE (TYPE L OR HEAVIER)
   D. MAXIMUM 6" NOMINAL STEEL CONDUIT
   E. MAXIMUM 4" NOMINAL STEEL EMT
4. MINIMUM 5/8" DEPTH INTUMESCENT FIRE RATED SEALANT .
5. MINIMUM 1/2" BEAD INTUMESCENT FIRE RATED SEALANT AT POINT OF CONTACT. SEE KEYNOTE 6.

METAL DUCT THRU RATED WALL N.T.S. 17

METAL DUCT (WITHOUT DAMPER)
THRU 1-HR OR 2-HR
GYPSUM WALL ASSEMBLY

F-RATING 1-HR OR 2-HR
T-RATING 0-HR

NOTES:
1. MAXIMUM DIAMETER OF OPENING:
   a. 21 3/4" FOR STEEL STUD WALLS
   . 14 1/2" FOR WOOD STUD WALLS
2. ANNULAR SPACE MINIMUM 0", MAXIMUM 1"
3. PIPE MAY BE INSTALLED WITH CONTINUOUS POINT OF CONTACT.



FRONT VIEW SECTION A-A

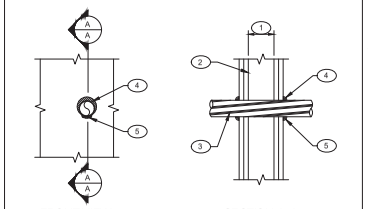
UL WL-7214
1. GYPSUM WALL ASSEMBLY (UL/ULC CLASSIFIED U300 OR U400 SERIES) (1-HR OR 2-HR FIRE RATING) (2-HR SHOWN)
2. WOOD STUDS TO CONSIST OF NOMINAL 2"x4" LUMBER. STEEL STUDS TO BE MINIMUM 3 1/2" WIDE.
3. PENETRATING ITEM MAY BE ONE OF THE FOLLOWING:
   A. MAXIMUM 20" NOMINAL SPIRAL WOUND SHEET METAL DUCT (24ga. MIN.)
   B. MAXIMUM 12" NOMINAL SHEET METAL DUCT (28ga. MIN.)
4. INTUMESCENT FIRE RATED SEALANT:
   A. MINIMUM 5/8" DEPTH FOR A 1-HR FIRE RATING
   B. MINIMUM 1 1/4" DEPTH FOR A 2-HR FIRE RATING
5. MINIMUM 1/2" BEAD INTUMESCENT FIRE RATED SEALANT AT POINT OF CONTACT. SEE KEYNOTE 6.

METAL DUCT THRU RATED WALL N.T.S. 18

NON-METALLIC PIPE OR TUBING
THRU 1-HR OR 2-HR
GYPSUM WALL ASSEMBLY

F-RATING 1, 2, 3 OR 4-HR
T-RATING 1, 2, 3 OR 4-HR

NOTES:
1. MAXIMUM DIAMETER OF OPENING:
   a. 3 1/8" FOR STEEL STUD WALLS
   . 3 1/8" FOR WOOD STUD WALLS
2. ANNULAR SPACE:
   a. CPVC PIPE: MINIMUM 1/4", MAXIMUM 1/2"
   . PEX TUBING: MINIMUM 1/4", MAXIMUM 3/8"
   c. PVC PIPE: MINIMUM 1/4", MAXIMUM 1/2"

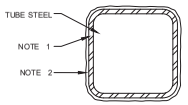


FRONT VIEW SECTION A-A

UL WL-2126
1. GYPSUM WALL ASSEMBLY (UL/ULC CLASSIFIED U300 OR U400 SERIES) (1, 2, 3 OR 4-HR FIRE RATING) (2-HR SHOWN)
2. WOOD STUDS TO CONSIST OF NOMINAL 2"x4" LUMBER. STEEL STUDS TO BE MINIMUM 3 5/8" WIDE.
3. PENETRATING ITEM MAY BE ONE OF THE FOLLOWING:
   A. CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE, NOMINAL 2" MAX
   B. CROSSLINKED POLYETHYLENE (PEX) TUBING, NOMINAL 1 1/2" MAX
   C. POLYVINYL CHLORIDE (PVC) PIPE, NOMINAL 2" MAX SCHEDULE 40
4. INTUMESCENT FIRE RATED SEALANT:
   A. MINIMUM 5/8" THICKNESS FOR A 1-HR FIRE RATING
   B. MINIMUM 1" THICKNESS FOR A 2, 3, 4-HR FIRE RATING
5. MINIMUM 1/2" BEAD INTUMESCENT FIRE RATED SEALANT AT POINT OF CONTACT. SEE KEYNOTE 6.

NON-METALLIC PIPE THRU RATED WALL N.T.S. 19

ONE HOUR PER ANSI/UL 263
UL DESIGN NO. X661



NOTES:
1. COLUMN SHALL BE FREE OF DIRT, LOOSE SCALE AND OIL. COLUMN SHALL BE PRIMED WITH 0.002 INCHES DRY FILM THICKNESS OF TWO COMPONENT EPOXY OR PHENOLIC MODIFIED ALKYD.
2. MASTIC INTUMESCENT COATINGS: BY CARBOLINE CO., THERMO-SORB OR THERMO-SORB VOC. SPRAY OR BRUSH APPLY COATING IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AT THE MINIMUM AVERAGE DRY THICKNESS SHOWN IN THE TABLE BELOW. THE THICKNESS SHOWN DOES NOT INCLUDE PRIMER THICKNESS.

COLUMN SI E	6"x6"x1/4"	6"x6"x3/16"
DRY THICKNESS FOR 1-HR PROTECTION	0.073" INCHES	0.056" INCHES
DRY TIME AT 50 F (BETWEEN COATS)	24 HRS	24 HRS
FLASH POINT	86 F	86 F
DURAMETER HARDNESS	SHORE D: 70 (CURED)	SHORE D: 70 (CURED)

1 HOUR FIRE RATED COLUMN N.T.S. 20

REVISIONS

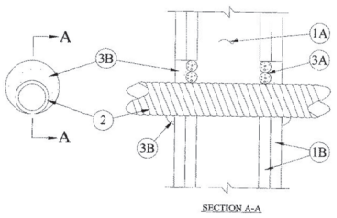
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

1-HR FIRE RATED
CONSTRUCTION
DETAILS

SHEET NUMBER:

A8.0



SECTION A-A

1-1/2" OR SMALLER STEEL FLEXIBLE METAL CONDUIT

1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. **Studs** — Wall framing shall consist of either wood or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-1/2 in. wide and spaced max 24 in. OC.
B. **Gypsum Board*** — Min 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers and orientation shall be as specified in the individual U300 or U400 Wall and Partition Design. Max diam of opening is 3 in.
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

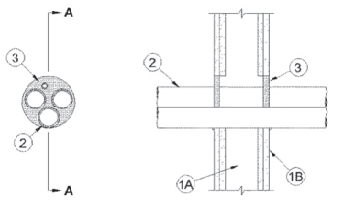
1A. **Metallic Sleeve** — (Optional) — Cylindrical sleeve fabricated from min No. 26 gauge galv sheet steel and having a min 1 in. overlap along the orgitudnal seam. Ends of sleeve to be flush with or extend a max 1 in. beyond each surface of wall.

2. **Through-Penetrant** — One **Flexible Metal Conduit+** to be installed either eccentrically or concentricaly within the firestop system. The annular space shall be min 0 in. (point contact) to max 1-1/8 in. Conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of conduit may be used:
A. **Steel Flexible Metal Conduit** — Nom 1-1/2 in. diam (or smaller) steel flexible metal conduit. **When steel flexible metal conduit is used, the hourly T Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.** See **Flexible Metal Conduit** (DXUZ) category in the Electrical Construction Materials Directory for names of manufacturers
B. **Aluminum Flexible Metal Conduit** — Nom 1-1/2 in. diam (or smaller) aluminum flexible metal conduit. **When aluminum flexible metal conduit is used, the hourly T Rating of the firestop system is 0 and 1/4 hr when installed in 1 and 2 hr walls, respectively.** See **Flexible Metal Conduit** (DXUZ) category in the Electrical Construction Materials Directory for names of manufacturers.

3. **Firestop System** — The firestop system shall consist of the following:
A. **Packing Material** — In 2 hr rated wall assemblies, foam backer rod firmly packed into opening as a permanent form. Packing material to be recessed from both surfaces of wall as required to accommodate the required thickness of fill material.
B. **Fill, Void or Cavity Materials* — Caulk** — Min 1/2 in. thickness of fill material applied within the annulus, flush with both surfaces of wall. At point contact location between wall and conduit, a min 1/4 in. diam bead of fill material shall be applied to the wall/conduit interface on both surfaces of wall.
RECTORSEAL — Biostop 500+ Caulk

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-1178 THROUGH-PENETRATION | 1 | 1A



Section A-A

3" OR SMALLER STEEL OR CAST IRON PIPE OR CONDUIT AND 2" OR SMALLER COPPER PIPE

1. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (405 mm) OC. Steel studs to be min 3-1/2 in (89 mm) wide spaced max 24 in. (610 mm) OC.
B. **Gypsum Board*** — The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 8 in. (203 mm).

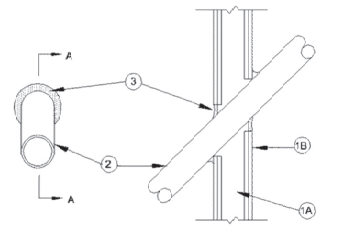
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating is 0 and 1/4 Hr for 1 and 2 Hr fire rated assemblies, respectively.

2. **Through-Penetrants** — One or more metallic pipes, conduits, tubes or flexible metal pipes installed concentrically or eccentrically within opening. Annular space between penetrants and periphery of opening to be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). Space between penetrants to be min 1/4 in. (6 mm) to max 2 in. (51 mm). Penetrants to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:
A. **Steel Pipe** — Nom 3 in. (76 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
B. **Iron Pipe** — Nom 3 in. (76 mm) diam (or smaller) cast or ductile iron pipe.
C. **Conduit** — Nom 3 in. (76 mm) diam (or smaller) steel conduit or steel electrical metallic tubing.
D. **Copper Tubing** — Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
E. **Copper Pipe** — Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.
F. **Through Penetrating Product*-Flexible Metal Piping** — The following types of steel flexible metal gas piping may be used:
1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. **OMEGA FLEX INC**
2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. **GASTITE, DIV OF TITEFLEX**
3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly. **WARD MFG L L C**

3. **Fill, Void or Cavity Material* - Caulk or Sealant** — Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall.
3M COMPANY — IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-1287 THROUGH-PENETRATION | 2 | 2A



Section A-A

8" OR SMALLER STEEL OR CAST IRON PIPE AND 4" OR SMALLER CONDUIT OR COPPER PIPE

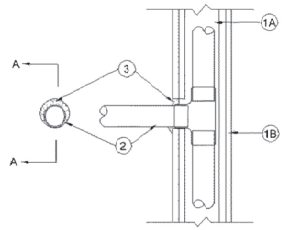
1. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
B. **Gypsum Board*** — The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 12 in. (305 mm). **The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**

2. **Through Penetrants** — One metallic pipe, conduit or tubing installed concentrically or eccentrically within opening. Annular space between penetrant and periphery of opening to be min 0 in. (0 mm point contact) to max 3-1/2 in. (85 mm). The penetrant may be installed at an angle not greater than 45 degrees from perpendicular. Penetrant to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:
A. **Steel Pipe** — Nom 8 in. (203 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. **Iron Pipe** — Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
C. **Conduit** — Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or nom 6 in. (152 mm) rigid steel conduit.
D. **Copper Tubing** — Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing.
E. **Copper Pipe** — Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Fill, Void or Cavity Material* - Caulk or Sealant** — Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/2 in. (13 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall.
3M COMPANY — IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-1340 THROUGH-PENETRATION | 3 | 3A



SECTION A-A

2" OR SMALLER STEEL, CAST IRON PIPE, CONDUIT, OR COPPER PIPE

1. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) (or larger) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
B. **Gypsum Board*** — Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max diam of opening is 3-1/2 in. (89 mm).
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Metallic Pipe** — Metallic pipe, tube or conduit installed within the stud cavity and connected to metallic tee for use in closed (process or supply) or vented (drain, waste or vent) piping systems. Pipe, tube or conduit penetrating wall assembly on one side of wall to be installed either concentrically or eccentrically with the annular space between the penetrant and the periphery of opening of min 0 in. (0 mm, point contact) to max 1 in. (25 mm). The following types of metallic pipes, tubes, conduits and tees may be used:
A. **Steel Pipe** — Nom 2 in. (51 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. **Iron Pipe** — Nom 2 in. (51 mm) diam (or smaller) cast or ductile iron pipe.
C. **Copper Tubing** — Nom 2 in. (51 mm) diam (or smaller) Type L (or heavier) copper tubing.
D. **Copper Pipe** — Nom 2 in. (51 mm) diam (or smaller) Regular (or heavier) copper pipe.
E. **Conduit** — Nom 2 in. (51 mm) diam (or smaller) rigid steel conduit or electrical metallic steel tubing (EMT).

2A. **Conduit Body*** — (Not Shown) - When a steel conduit or EMT is used, nom 2 in. size (or smaller) steel conduit body with steel fittings as an alternate to the metallic tee. Refer to Conduit Fittings (DWTT) category in the UL Electrical Construction Directory.

3. **Fill, Void or Cavity Material* — Caulk** — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with surface of wall. At the point contact location between duct and wallboard, a min 1/2 in. (13 mm) diam bead of sealant shall be applied at the wallboard/duct interface on both surfaces of wall assembly.
3M COMPANY — IC 15WB+ caulk, CP 25WB+ caulk or FB-3000 WT Sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-1353 THROUGH-PENETRATION | 4 | 4A

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. MAHONEY
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

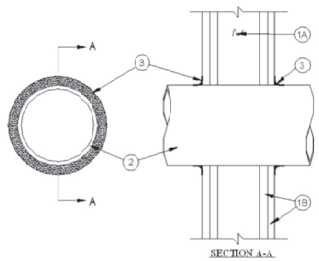
DRAWN BY:	JM/MKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

FIRE-RATED
CONSTRUCTION
DETAILS

SHEET NUMBER:

A8.1



12" OR SMALLER STEEL OR CAST IRON PIPE AND 6" OR SMALLER CONDUIT OR COPPER PIPE

1. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** — The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diameter of opening is 12-3/4 in. (324 mm).

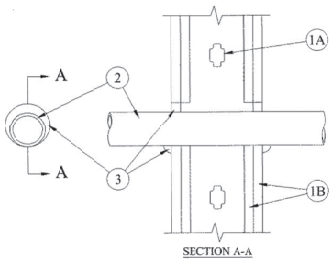
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through-Penetrant** — One metallic pipe, conduit or tubing installed within the firestop system. The through penetrant to be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. **Steel Pipe** — Nom 12 in. (305 mm) diameter or smaller Schedule 10 (or heavier) steel pipe.
   B. **Iron Pipe** — Nom 12 in. (305 mm) diameter or smaller) service weight (or heavier) cast iron soil pipe or Class 50 (or heavier) ductile iron pressure pipe.
   C. **Conduit** — Nom 6 in. (152 mm) diameter or smaller) galvanized steel conduit or nom 4 in. (102 mm) diameter or smaller) steel electrical metallic tubing.
   D. **Copper Tubing** — Nom 6 in. (152 mm) diameter or smaller) Type L (or heavier) copper tubing.
   E. **Copper Pipe** — Nom 6 in. (152 mm) diameter or smaller) Regular (or heavier) copper pipe.

3. **Fill, Void or Cavity Material*- Caulk** — Bead of fill material lapping min 1 in. (25 mm) onto gypsum board and min 1/2 in. (13 mm) onto penetrant around outer circumference of through penetrant on both surfaces of wall assembly.
3M COMPANY 3M FIRE PROTECTION PRODUCTS — CP 25WB+ Caulk, IC 15WB+ Caulk, FB-3000 WT Sealant

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-1450 THROUGH-PENETRATION 1 — 1A



2" OR SMALLER CPVC OR ABS

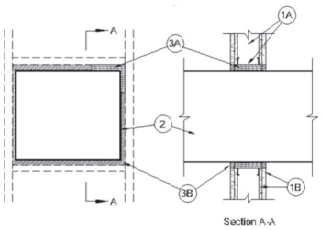
1. **Wall Assembly** — The 1 and 2 hr fire rated gypsum board/stud wall assemblies shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** — Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Diameter of opening shall be 1 in. (25 mm) larger than nominal pipe diameter. **The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**

2. **Through Penetrants** — One nonmetallic pipe or conduit to be installed either concentrically or eccentrically within the firestop system. The annular space between the pipe or conduit and periphery of opening shall be min of 0 in. (0 mm, point contact) to max 5/8 in. (16 mm). Pipe or conduit to be rigidly supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
   A. **Polyvinyl Chloride (PVC) Pipe** — Nom 2 in. (51 mm) diameter or smaller, Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** — Nom 2 in. (51 mm) diameter or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
   C. **Rigid Nonmetallic Conduit+** — Nom 2 in. (51 mm) diameter or smaller). Schedule 40 PVC conduit installed in accordance with the National Electrical Code (NFPA No. 70).
   D. **Acrylonitrile Butadiene Styrene (ABS) Pipe** — Nom 2 in. (51 mm) diameter or smaller). Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   The hourly T Rating of the firestop system is 0 Hr when pipes are used in vented (drain, waste or vent) piping systems. The hourly T Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed when pipes are used in closed (process or supply) piping systems.

3. **Fill, Void or Cavity Materials* - Caulk or Sealant** — Min thickness of 5/8 in. (16 mm) of caulked applied within annulus between pipe or conduit and periphery of the opening, flush with both surfaces of wall assembly. At the point contact location between pipe or conduit and **gypsum board**, a min 1/2 in. (13 mm) diameter bead of caulk or putty shall be applied at the pipe or conduit/gypsum board interface on both surfaces of wall assembly.
3M COMPANY — FireDam 150+, CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant. **(Note:** CP 25WB+ and FireDam 150+ not suitable for use with CPVC pipes.)

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-2264 THROUGH-PENETRATION 2 — 2A



24" x 24" OR SMALLER STEEL DUCT. 22 GA MINIMUM

1. **Wall Assembly** — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** — Wall framing shall consist of steel channel studs. Steel studs to be min 6 in. (152 mm) wide and spaced max 24 in. (610 mm) OC. Additional framing members shall be used to completely frame around opening.
   B. **Gypsum Board*** — Min 5/8 in. (16 mm) thick, 4 ft (121 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers and orientation shall be as specified in the individual U400 or V400 Wall and Partition Design. Max area of opening is 676 sq in. (4362 sq cm) with a max dimension of 26 in.
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

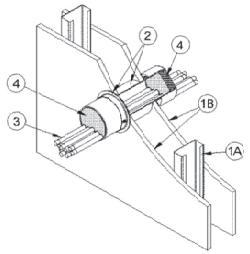
2. **Steel Duct** — Max 24 by 24 in. (610 by 610 mm) No. 22 gauge (or heavier) steel duct to be installed either concentrically or eccentrically within the opening. The annular space shall be min 3/4 in. (19 mm) to max 1-1/2 in. (38 mm). Duct to be rigidly supported on both sides of wall assembly.

3. **Firestop System** — The firestop system shall consist of the following:
   A. **Packing Material** — Min 6 in. (152 mm) or 7-1/4 in. (184 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation for 1 or 2 hr rated walls, respectively. Mineral wool to be firmly packed into opening as a permanent form and recessed from both surfaces of wall to accommodate the required thickness of fill material.
   A1. **Forming Material*** — As an alternate to the packing material in Item 3A, nom 4 in. (102 mm) wide strips of min 1/2 in (13 mm) thick compressible mat to be stacked to a thickness greater than the width of the annular space and compression-fitted, edge-first, to fill the annular space to a min 6 in. (152 mm) depth for 1 hr rated walls and min 7-1/4 in. depth for 2 hr rated walls. Forming material to be recessed from both surfaces of wall as necessary to accommodate the required thickness of fill material.
3M COMPANY 3M FIRE PROTECTION PRODUCTS — Fire Barrier Packing Material

   B. **Fill Void or Cavity Material*— Caulk** — Min 5/8 in. (16 mm) thickness of fill material applied within annular space, flush with both sides of wall.
3M COMPANY 3M FIRE PROTECTION PRODUCTS — FB-3000 WT, IC 15WB+ or CP 25WB+

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-7191 THROUGH-PENETRATION 3 — 3A



LOW VOLTAGE SLEEVES

1. **Wall Assembly** — The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs** — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** — 5/8 in. (16 mm) thick, 4 ft (1.2 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diameter of opening is 4-1/2 in. (114 mm). **The hourly F rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.**

2. **Firestop Device*** — Steel sleeve device centered within opening and installed in accordance with the accompanying installation instructions. Steel sleeve device secured in place by means of steel escutcheon plates installed with gasketing material supplied with product. Steel escutcheon plates installed on both sides of wall and secured to device by means of steel screws provided with device. Steel sleeve device provided in nom 1, 2 and 4 in. (25, 51 and 102 mm) sizes. The min and max opening sizes for each sleeve device are shown in the table below:

Device Size	Min Opening Size	Max Opening Size
1 in. (25 mm)	1.12 in. (28 mm)	1.25 in. (32 mm)
2 in. (51 mm)	2.38 in. (60 mm)	2.50 in. (64 mm)
4 in. (102 mm)	4.50 in. (114 mm)	4.50 in. (114 mm)

SPECIFIED TECHNOLOGIES INC — FS106, FS200, FS201, FS400 and FS401 SpecSeal Ready-Sleeves
3. **Cables** — Aggregate cross-sectional area of cables in steel sleeve to be max 48 percent of the aggregate crosssectional area of the sleeve. Cables to be rigidly supported on both sides of wall assembly. Any combination of the following types and sizes of copper conductor cable may be used:
   A. Max 200 pair No. AWG (or smaller) copper conductor cable with polyvinyl chloride (PVC) jacketing and insulation.
   B. Max 3/C No. 2/0 AWG (or smaller) aluminum or copper conductor service entrance cable with PVC insulation and jacket.
   C. Max 3/C No. 8 AWG (or smaller) nonmetallic sheathed (Romex) cable with copper conductors, PVC insulation and jacket.
   D. Max 7/C No. 2/0 AWG (or smaller) multiconductor power and control cables with XLPE or PVC insulation and X-LPE or PVC jacket.
   E. Max RG/U (or smaller) coaxial cable with fluorinated ethylene insulation and jacketing.
   F. Max 62.5/48 fiber optic cable with PVC insulation and jacketing.
   G. Max 4 pair No. 24 AWG (or smaller) copper conductor data cable with PVC insulation and jacket.
   H. Max 4/C No. 2/0 aluminum or copper conductor aluminum or steel Metal-Clad® or Armored-Clad® cable.

4. **Fill, Void or Cavity Material* - Putty** — Fill material supplied with firestop device (Item 2) applied to 1 in. (25 mm) thickness flush with each end of steel sleeve device. At point contact location, min 3/8 in. (9 mm) diameter bead of fill material applied at grouped cable/steel sleeve interface on each side of wall. **SPECIFIED TECHNOLOGIES INC** — SpecSeal Putty
*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

UL SYSTEM NO. W-L-3275 THROUGH-PENETRATION 4 — 4A

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. KELLY
No. C12631
Ren. 8-31-23
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
1
2
3
4

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FIRE-RATED
CONSTRUCTION
DETAILS

SHEET NUMBER:
A8.2

NOT USED 2

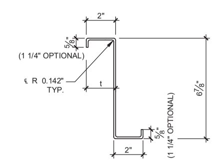
NOT USED 3

NOTE USED 5

NOT USED 7

NOT USED 8

NOT USED 10



6 7/8"x2"x14ga ' '

TYPICAL ROOF PURLIN

ASTM A1011 SS, GRADE 50
F 50 si

A	0.8267 IN^2
Sx	1.6434 IN^3
Ix	5.6493 IN^4
t	0.0677 IN MIN. (0.0713 IN DESIGN)

NOTE:
PURLIN STIFFENING LIPS HAVE BEEN INCREASED TO ACCOMMODATE CADDY CLIP FASTENERS FOR CEILING SUPPORTS PER 2/M1.4.

LIGHT GAUGE ROOF PURLIN PROPERTIES 15

NOT USED 18

NOT USED 19

1. THE MATERIAL THICKNESS OF LIGHT GAUGE STRUCTURAL MEMBERS, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED ON SHEET S0.0 THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.

2. UNLESS NOTED OTHERWISE, ALL SECTION PROPERTIES ARE GROSS SECTION PROPERTIES.

3. LIGHT GAUGE STRUCTURAL MEMBERS TO BE FABRICATED FROM HOT ROLLED SHEETS WITH RUST INHIBITIVE COATING. SEE SHEET N2.0, "LIGHT GAUGE METAL STUDS COLD FORMED STEEL", FOR ADDITIONAL INFORMATION.

4. MINIMUM DESIGN THICKNESSES FOR LIGHT GAUGE STRUCTURAL MEMBERS SHALL BE AS FOLLOWS.

20 GA	-	0.0346"
18 GA	-	0.0451"
16 GA	-	0.0566"
14 GA	-	0.0713"
12 GA	-	0.1017"
10 GA	-	0.1242"

SHEET NOTES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
RANDALL PATRICK CAVANAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
BRUCE D. DOIG
No. 2522
STRUCTURAL
STATE OF CALIFORNIA

REVISIONS

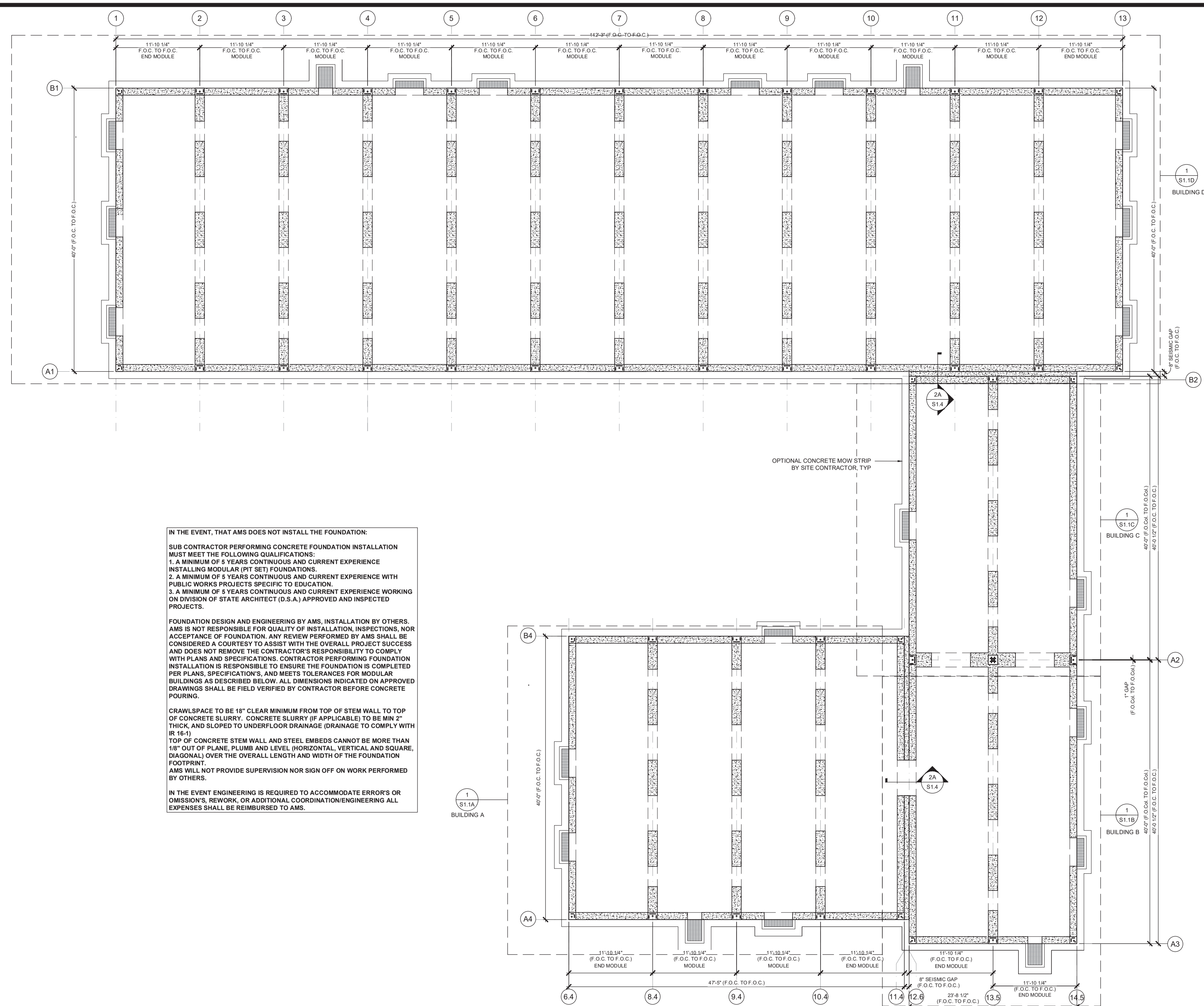
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

STEEL
MEMBER
PROPERTIES

SHEET NUMBER:

S0.0



IN THE EVENT, THAT AMS DOES NOT INSTALL THE FOUNDATION:

SUB CONTRACTOR PERFORMING CONCRETE FOUNDATION INSTALLATION MUST MEET THE FOLLOWING QUALIFICATIONS:
1. A MINIMUM OF 5 YEARS CONTINUOUS AND CURRENT EXPERIENCE INSTALLING MODULAR (PIT SET) FOUNDATIONS.
2. A MINIMUM OF 5 YEARS CONTINUOUS AND CURRENT EXPERIENCE WITH PUBLIC WORKS PROJECTS SPECIFIC TO EDUCATION.
3. A MINIMUM OF 5 YEARS CONTINUOUS AND CURRENT EXPERIENCE WORKING ON DIVISION OF STATE ARCHITECT (D.S.A.) APPROVED AND INSPECTED PROJECTS.

FOUNDATION DESIGN AND ENGINEERING BY AMS, INSTALLATION BY OTHERS. AMS IS NOT RESPONSIBLE FOR QUALITY OF INSTALLATION, INSPECTIONS, NOR ACCEPTANCE OF FOUNDATION. ANY REVIEW PERFORMED BY AMS SHALL BE CONSIDERED A COURTESY TO ASSIST WITH THE OVERALL PROJECT SUCCESS AND DOES NOT REMOVE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH PLANS AND SPECIFICATIONS. CONTRACTOR PERFORMING FOUNDATION INSTALLATION IS RESPONSIBLE TO ENSURE THE FOUNDATION IS COMPLETED PER PLANS, SPECIFICATION'S, AND MEETS TOLERANCES FOR MODULAR BUILDINGS AS DESCRIBED BELOW. ALL DIMENSIONS INDICATED ON APPROVED DRAWINGS SHALL BE FIELD VERIFIED BY CONTRACTOR BEFORE CONCRETE POURING.

CRAWLSPACE TO BE 18" CLEAR MINIMUM FROM TOP OF STEM WALL TO TOP OF CONCRETE SLURRY. CONCRETE SLURRY (IF APPLICABLE) TO BE MIN 2" THICK, AND SLOPED TO UNDERFLOOR DRAINAGE (DRAINAGE TO COMPLY WITH IR 16-1)
TOP OF CONCRETE STEM WALL AND STEEL EMBEDS CANNOT BE MORE THAN 1/8" OUT OF PLANE, PLUMB AND LEVEL (HORIZONTAL, VERTICAL AND SQUARE, DIAGONAL) OVER THE OVERALL LENGTH AND WIDTH OF THE FOUNDATION FOOTPRINT.
AMS WILL NOT PROVIDE SUPERVISION NOR SIGN OFF ON WORK PERFORMED BY OTHERS.

IN THE EVENT ENGINEERING IS REQUIRED TO ACCOMMODATE ERROR'S OR OMISSION'S, REWORK, OR ADDITIONAL COORDINATION/ENGINEERING ALL EXPENSES SHALL BE REIMBURSED TO AMS.

OVERALL CONCRETE FOUNDATION PLAN (CONCRETE FLOOR)

N.T.S. | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. DONG STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

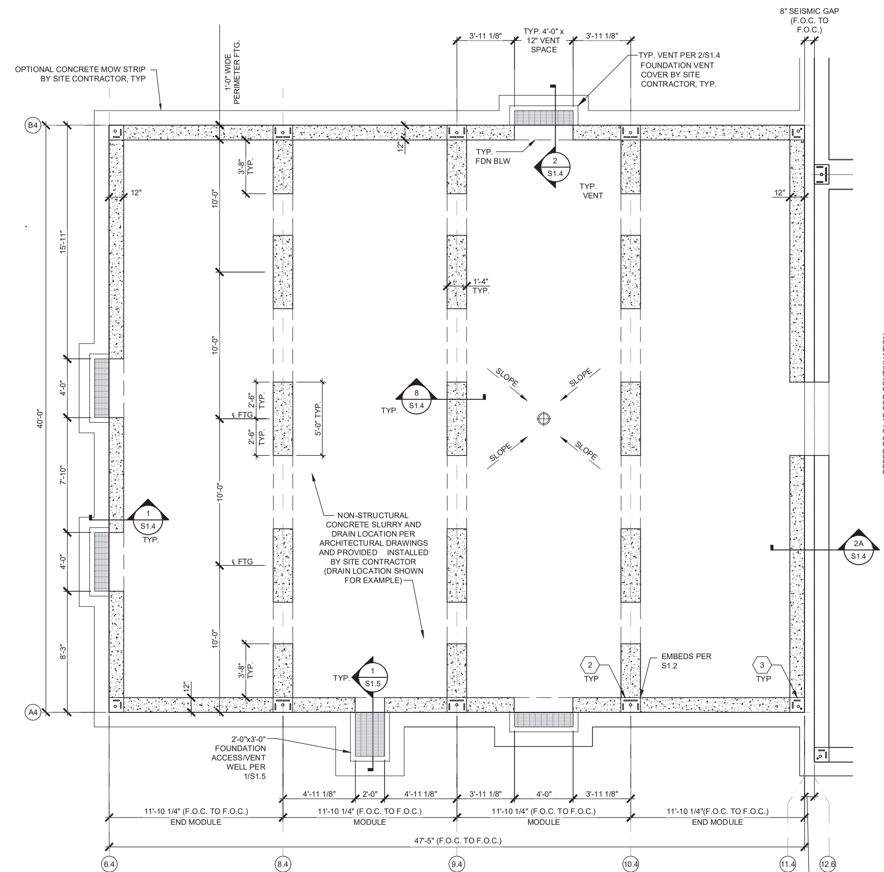
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

OVERALL
CONCRETE FOUNDATION PLAN

SHEET NUMBER:

S1.1



CONCRETE FOUNDATION PLAN (CONCRETE FLOOR) - BUILDING A
100 PSF LIVE LOAD

SCALE: 1/4" 1'-0" 1

1. CONCRETE MIXTURES:
   A. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH ('c) SHALL BE PER SHEET N1.0A
   B. PROPORTIONING OF CONCRETE MIXTURES SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.3.
   C. DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.4.
   D. CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1.
   E. SEE SHEET N1.0 FOR ADDITIONAL CONCRETE NOTES.

2. BUILDINGS MAY BE SET ON CONCRETE FOUNDATIONS THAT HAVE REACHED A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 2,500 PSI. PRIOR TO THE SETTING OF THE MODULAR BUILDING ON CONCRETE FOUNDATIONS THAT HAVE NOT YET CURED 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE, THE FOUNDATION CONTRACTOR SHALL
   A. HAVE THE PROJECT TESTING LAB PERFORM CONCRETE CYLINDER COMPRESSION TESTS OF THE FOUNDATION CONCRETE USED AT THE SITE,
   B. FURNISH THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WITH THE CONCRETE TEST REPORTS VERIFYING THAT THE FOUNDATION CONCRETE HAS REACHED THE MINIMUM STRENGTH AS SPECIFIED ABOVE, AND
   C. NOTIFY THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF THEIR INTENT TO SET THE MODULAR BUILDING PRIOR TO 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE.

3. REINFORCING STEEL SHALL BE 60,000 PSI MINIMUM, PER ASTM A615. THE REINFORCING BARS SHALL BE TESTED PER TITLE 24, PART 2, SECTION 1910A.2. TEST OF REINFORCING BARS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCEMENT.

4. DESIGN SOIL BEARING CAPACITY: 2000 PSF.
   (1/3 INCREASE IN SOIL BEARING CAPACITY NOT PERMITTED FOR WIND SEISMIC LOAD COMBINATIONS UNLESS USING ALTERNATIVE BASIC LOAD COMBINATIONS PER CBC SECTION 1605A.3.2)

5. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL VERIFY THE NET AREA OF THE UNDER-FLOOR VENTING IS E UAL TO OR LARGER THAN THE VENT AREA RE UIRED (AS SHOWN ON THE ADJACENT TABLE).

NOTES

1. INTERIOR MODLINE BASE PLATE PER 1/S1.2
2. EXTERIOR MODLINE BASE PLATE PER 2/S1.2
3. CORNER BASE PLATE PER 4/S1.2

KEY NOTES

TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	TOTAL NOMINAL FLOOR AREA (FT^2) (CRAWLSPACE)	NET FREE VENT AREA REQ'D[3] (FT^2)	ACCESS VENT REQ'D	IF 4'x12" VENTS ARE USED SOLELY: "C" MIN. TOTAL VENTS REQ'D[3]	IF 4'x12" VENTS ARE USED SOLELY: NET FREE VENT AREA PROVIDED[3] (FT^2)
4	2	1578	10.52	1	4	14.68

TOTAL FOUNDATION WIDTH INCLUDES 1/4" PER MODULE CONSTRUCTION TOLERANCE.

1. UNLESS NOTED OTHERWISE, DIMENSIONS ARE FROM FACE OF CONCRETE TO FACE OF CONCRETE (FOC TO FOC)
2. THE NUMBER OF VENTS RE UIRED IS BASED ON THE VENT NET FREE AREA (NFA) PROVIDED BEING GREATER OR E UAL TO THE VENT NFA RE UIRED. VENT NFA RE UIRED IS BASED ON A 1:150 VENTILATION RATIO OF THE NOMINAL BUILDING FLOOR AREA. VENT NFA PROVIDED IS THE ACTUAL OPEN AREA WITH A VENT GROSS AREA REDUCTION PERCENTAGE OF 73 NUMBER OF VENTS PROVIDED.

   $NFA_{RE\ UIRED}$ A_{FLOOR} / 150 $NFA_{PROVIDED}$ $NFA_{RE\ UIRED}$ $A_{VENT,GROSS}$ x 73 x (OF VENTS) $NFA_{RE\ UIRED}$

4. RE UIRED VENTING MAY BE ACHIEVED BY A COMBINATION OF ACCESS VENT(S) AND VENTS OF DIFFERENT SI ES BASED ON THE VALUES LISTED BELOW.

   4'x12" VENTS x 0.73 x (OF VENTS) 2.92 FT^2 x (OF VENTS)
   ACCESS VENTS - 2' x1.5' x (OF VENTS) 3.00 FT^2 x (OF VENTS)

MODULE SCHEDULE AND VENTING

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
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DATE: 08/30/2022

AMS®
American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
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PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER BRUCE D. OCHS STATE OF CALIFORNIA

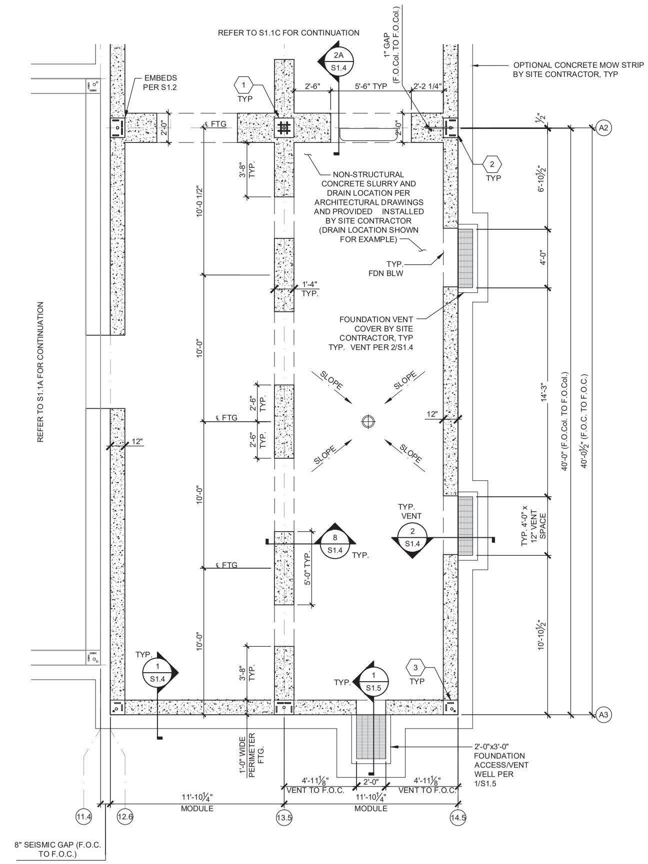
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
CONCRETE FOUNDATION PLAN
(100 PSF MAX FLOOR LIVE LOAD)
BUILDING A

SHEET NUMBER:
S1.1A



CONCRETE FOUNDATION PLAN (CONCRETE FLOOR) - BUILDING B
100 PSF LIVE LOAD

SCALE: 1/4" 1'-0" 1

1. CONCRETE MIXTURES:
   A. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH ('c) SHALL BE PER SHEET N1.0A
   B. PROPORTIONING OF CONCRETE MIXTURES SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.3.
   C. DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.4.
   D. CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1.
   E. SEE SHEET N1.0 FOR ADDITIONAL CONCRETE NOTES.
2. BUILDINGS MAY BE SET ON CONCRETE FOUNDATIONS THAT HAVE REACHED A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 2,500 PSI. PRIOR TO THE SETTING OF THE MODULAR BUILDING ON CONCRETE FOUNDATIONS THAT HAVE NOT YET CURED 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE, THE FOUNDATION CONTRACTOR SHALL
   A. HAVE THE PROJECT TESTING LAB PERFORM CONCRETE CYLINDER COMPRESSION TESTS OF THE FOUNDATION CONCRETE USED AT THE SITE,
   B. FURNISH THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WITH THE CONCRETE TEST REPORTS VERIFYING THAT THE FOUNDATION CONCRETE HAS REACHED THE MINIMUM STRENGTH AS SPECIFIED ABOVE, AND
   C. NOTIFY THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF THEIR INTENT TO SET THE MODULAR BUILDING PRIOR TO 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE.
3. REINFORCING STEEL SHALL BE 60,000 PSI MINIMUM, PER ASTM A615. THE REINFORCING BARS SHALL BE TESTED PER TITLE 24, PART 2, SECTION 1910A.2. TEST OF REINFORCING BARS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCEMENT.
4. DESIGN SOIL BEARING CAPACITY: 2000 PSF.
   (1/3 INCREASE IN SOIL BEARING CAPACITY NOT PERMITTED FOR WIND SEISMIC LOAD COMBINATIONS UNLESS USING ALTERNATIVE BASIC LOAD COMBINATIONS PER CBC SECTION 1605A.3.2)
5. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL VERIFY THE NET AREA OF THE UNDER-FLOOR VENTING IS E UAL TO OR LARGER THAN THE VENT AREA RE UIRED (AS SHOWN ON THE ADJACENT TABLE).

NOTES

1 INTERIOR MODLINE BASE PLATE PER 1/S1.2
2 EXTERIOR MODLINE BASE PLATE PER 2/S1.2
3 CORNER BASE PLATE PER 4/S1.2

KEY NOTES

NOTE: BUILDINGS B & C ARE COMBINED.

TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	TOTAL NOMINAL FLOOR AREA (FT^2) (CRAWLSPACE)	NET FREE VENT AREA REQ'D[3] (FT^2)	ACCESS VENT REQ'D	IF 4'x12" VENTS ARE USED SOLELY	
					"C" MIN. TOTAL VENTS REQ'D[3]	NET FREE VENT AREA PROVIDED[3] (FT^2)
4	0	1569	10.46	1	4	14.68

TOTAL FOUNDATION WIDTH INCLUDES ¼" PER MODULE CONSTRUCTION TOLERANCE.

1. UNLESS NOTED OTHERWISE, DIMENSIONS ARE FROM FACE OF CONCRETE TO FACE OF CONCRETE (FOC TO FOC)
2. THE NUMBER OF VENTS RE UIRED IS BASED ON THE VENT NET FREE AREA (NFA) PROVIDED BEING GREATER OR E UAL TO THE VENT NFA RE UIRED. VENT NFA RE UIRED IS BASED ON A 1:150 VENTILATION RATIO OF THE NOMINAL BUILDING FLOOR AREA. VENT NFA PROVIDED IS THE ACTUAL OPEN AREA WITH A VENT GROSS AREA REDUCTION PERCENTAGE OF 73 NUMBER OF VENTS PROVIDED.

   $NFA_{RE\ UIRED}$ A_{FLOOR} / 150 $NFA_{PROVIDED}$ $NFA_{RE\ UIRED}$ $A_{VENT,GROSS}$ x 73 x (OF VENTS) $NFA_{RE\ UIRED}$

4. RE UIRED VENTING MAY BE ACHIEVED BY A COMBINATION OF ACCESS VENT(S) AND VENTS OF DIFFERENT SI ES BASED ON THE VALUES LISTED BELOW.

   4'x12" VENTS x 0.73 x (OF VENTS) 2.92 FT^2 x (OF VENTS)
   ACCESS VENTS - 2' x1.5' x (OF VENTS) 3.00 FT^2 x (OF VENTS)

MODULE SCHEDULE AND VENTING

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK C. KAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. DOIG STATE OF CALIFORNIA

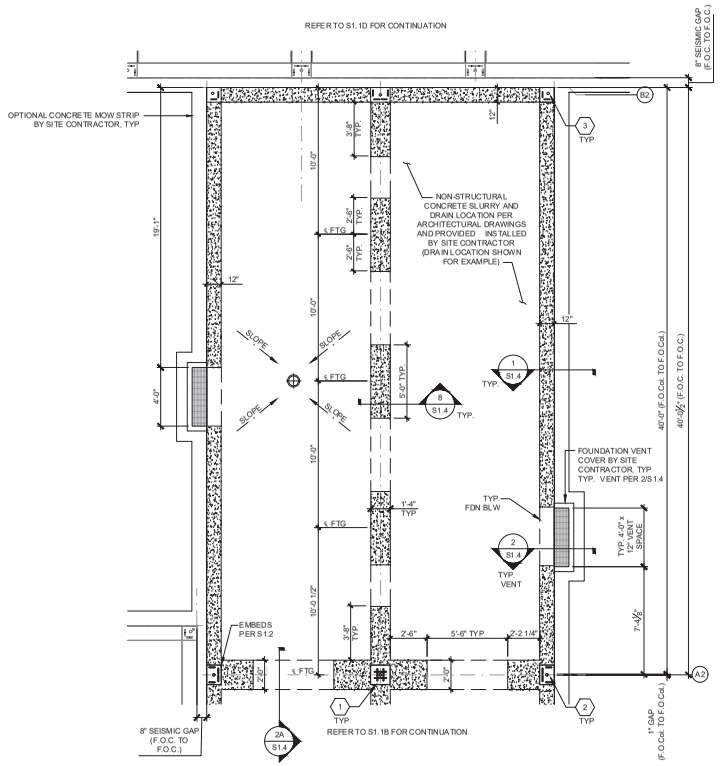
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY: JMA/KA
SCALE: AS NOTED
DATE: 06/29/22
PROJECT NO: 1674-21

SHEET TITLE:
CONCRETE FOUNDATION PLAN (100 PSF MAX FLOOR LIVE LOAD) BUILDING B

SHEET NUMBER:
S1.1B



CONCRETE FOUNDATION PLAN (CONCRETE FLOOR) - BUILDING C
100 PSF LIVE LOAD

SCALE: 1/4" 1'-0" | 1

NOTES

1. CONCRETE MIXTURES:
   A. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH ('c) SHALL BE PER SHEET N1.0A
   B. PROPORTIONING OF CONCRETE MIXTURES SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.3.
   C. DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.4.
   D. CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1.
   E. SEE SHEET N1.0 FOR ADDITIONAL CONCRETE NOTES.

2. BUILDINGS MAY BE SET ON CONCRETE FOUNDATIONS THAT HAVE REACHED A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 2,500 PSI. PRIOR TO THE SETTING OF THE MODULAR BUILDING ON CONCRETE FOUNDATIONS THAT HAVE NOT YET CURED 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE, THE FOUNDATION CONTRACTOR SHALL
   A. HAVE THE PROJECT TESTING LAB PERFORM CONCRETE CYLINDER COMPRESSION TESTS OF THE FOUNDATION CONCRETE USED AT THE SITE,
   B. FURNISH THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WITH THE CONCRETE TEST REPORTS VERIFYING THAT THE FOUNDATION CONCRETE HAS REACHED THE MINIMUM STRENGTH AS SPECIFIED ABOVE, AND
   C. NOTIFY THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF THEIR INTENT TO SET THE MODULAR BUILDING PRIOR TO 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE.

3. REINFORCING STEEL SHALL BE 60,000 PSI MINIMUM, PER ASTM A615. THE REINFORCING BARS SHALL BE TESTED PER TITLE 24, PART 2, SECTION 1910A.2. TEST OF REINFORCING BARS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCEMENT.

4. DESIGN SOIL BEARING CAPACITY: 2000 PSF.
   (1/3 INCREASE IN SOIL BEARING CAPACITY NOT PERMITTED FOR WIND SEISMIC LOAD COMBINATIONS UNLESS USING ALTERNATIVE BASIC LOAD COMBINATIONS PER CBC SECTION 1605A.3.2)

5. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL VERIFY THE NET AREA OF THE UNDER-FLOOR VENTING IS E UAL TO OR LARGER THAN THE VENT AREA RE UIRED (AS SHOWN ON THE ADJACENT TABLE).

KEY NOTES

1. INTERIOR MODLINE BASE PLATE PER 1/S1.2
2. EXTERIOR MODLINE BASE PLATE PER 2/S1.2
3. CORNER BASE PLATE PER 4/S1.2

MODULE SCHEDULE AND VENTING

NOTE: BUILDINGS B & C ARE COMBINED.

TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	TOTAL NOMINAL FLOOR AREA (FT^2) (CRAWLSPACE)	NET FREE VENT AREA REQ'D[3] (FT^2)	ACCESS VENT REQ'D	IF 4'x12" VENTS ARE USED SOLELY	
					"C" MIN. TOTAL VENTS REQ'D[3]	NET FREE VENT AREA PROVIDED[3] (FT^2)
4	0	1569	10.46	1	4	14.68

TOTAL FOUNDATION WIDTH INCLUDES ½" PER MODULE CONSTRUCTION TOLERANCE.

1. UNLESS NOTED OTHERWISE, DIMENSIONS ARE FROM FACE OF CONCRETE TO FACE OF CONCRETE (FOC TO FOC)

2. THE NUMBER OF VENTS RE UIRED IS BASED ON THE VENT NET FREE AREA (NFA) PROVIDED BEING GREATER OR E UAL TO THE VENT NFA RE UIRED. VENT NFA RE UIRED IS BASED ON A 1:150 VENTILATION RATIO OF THE NOMINAL BUILDING FLOOR AREA. VENT NFA PROVIDED IS THE ACTUAL OPEN AREA WITH A VENT GROSS AREA REDUCTION PERCENTAGE OF 73 NUMBER OF VENTS PROVIDED.

$NFA_{RE\ UIRED}$ A_{FLOOR} / 150 $NFA_{PROVIDED}$ $NFA_{RE\ UIRED}$ $A_{VENT\ (GROSS)}$ x 73 x (OF VENTS) $NFA_{RE\ UIRED}$

4. RE UIRED VENTING MAY BE ACHIEVED BY A COMBINATION OF ACCESS VENT(S) AND VENTS OF DIFFERENT SI ES BASED ON THE VALUES LISTED BELOW.

4'x12" VENTS x 0.73 x (OF VENTS) 2.92 FT^2 x (OF VENTS)
ACCESS VENTS - 2' x1.5' x (OF VENTS) 3.00 FT^2 x (OF VENTS)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK [illegible]
No. C-12631
Exp. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STRUCTURAL
No. 5523
STATE OF CALIFORNIA

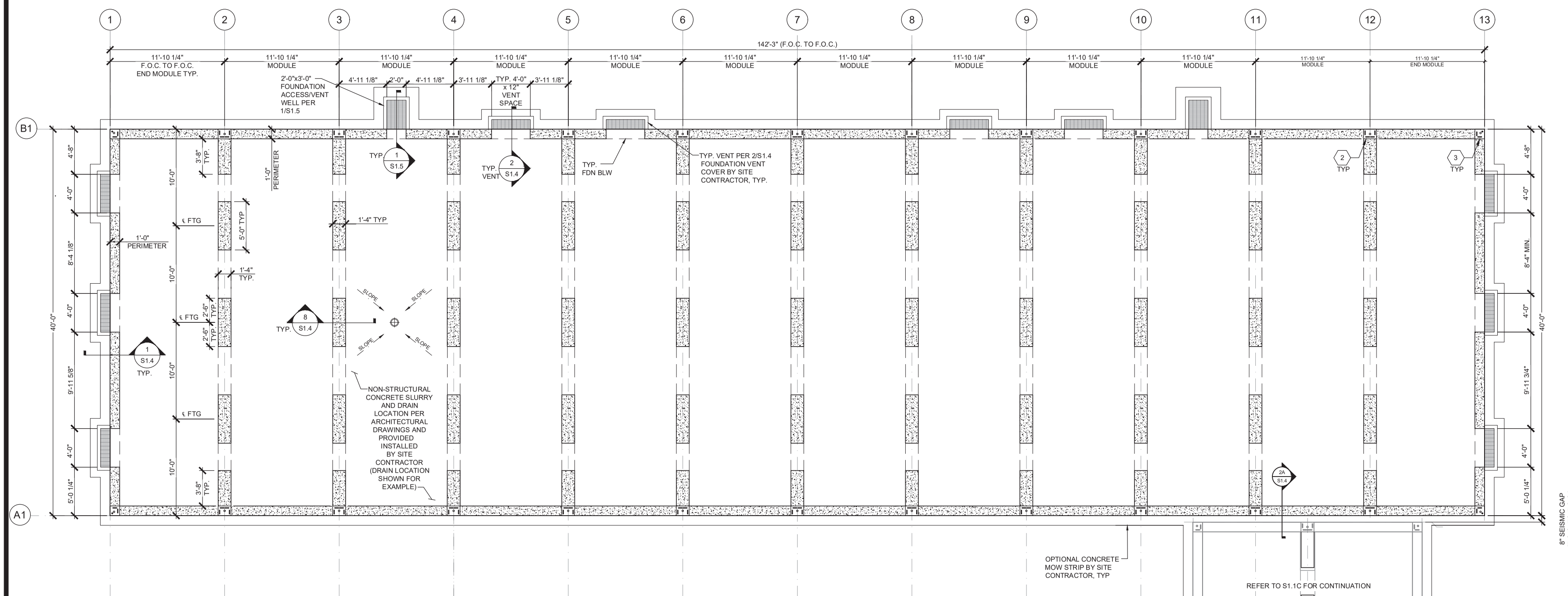
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
△
△
△
△

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
CONCRETE FOUNDATION PLAN
(100 PSF MAX FLOOR LIVE LOAD)
BUILDING C

SHEET NUMBER:
S1.1C



CONCRETE FOUNDATION PLAN (CONCRETE FLOOR) - BUILDING D (100 PSF LIVE LOAD)

SCALE: 3/16" 1'-0" 1

NOTES

1. CONCRETE MIXTURES:
   A. ULTIMATE 28-DAY CONCRETE COMPRESSIVE STRENGTH ('c) SHALL BE PER SHEET N1.0A
   B. PROPORTIONING OF CONCRETE MIXTURES SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.3.
   C. DOCUMENTATION OF CONCRETE MIXTURE CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 26.4.4.
   D. CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1.
   E. SEE SHEET N1.0 FOR ADDITIONAL CONCRETE NOTES.

2. BUILDINGS MAY BE SET ON CONCRETE FOUNDATIONS THAT HAVE REACHED A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 2,500 PSI. PRIOR TO THE SETTING OF THE MODULAR BUILDING ON CONCRETE FOUNDATIONS THAT HAVE NOT YET CURED 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE, THE FOUNDATION CONTRACTOR SHALL
   A. HAVE THE PROJECT TESTING LAB PERFORM CONCRETE CYLINDER COMPRESSION TESTS OF THE FOUNDATION CONCRETE USED AT THE SITE,
   B. FURNISH THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WITH THE CONCRETE TEST REPORTS VERIFYING THAT THE FOUNDATION CONCRETE HAS REACHED THE MINIMUM STRENGTH AS SPECIFIED ABOVE, AND
   C. NOTIFY THE PROJECT IOR AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF THEIR INTENT TO SET THE MODULAR BUILDING PRIOR TO 28 DAYS POST PLACEMENT OF FOUNDATION CONCRETE.

3. REINFORCING STEEL SHALL BE 60,000 PSI MINIMUM, PER ASTM A615. THE REINFORCING BARS SHALL BE TESTED PER TITLE 24, PART 2, SECTION 1910A.2. TEST OF REINFORCING BARS MAY BE WAIVED PROVIDED CERTIFIED MILL TEST REPORTS ARE PROVIDED FOR EACH SHIPMENT OF SUCH REINFORCEMENT.

4. DESIGN SOIL BEARING CAPACITY: 2000 PSF.
   (1/3 INCREASE IN SOIL BEARING CAPACITY NOT PERMITTED FOR WIND SEISMIC LOAD COMBINATIONS UNLESS USING ALTERNATIVE BASIC LOAD COMBINATIONS PER CBC SECTION 1605A.3.2)

5. THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL VERIFY THE NET AREA OF THE UNDER-FLOOR VENTING IS E UAL TO OR LARGER THAN THE VENT AREA RE UIRED (AS SHOWN ON THE ADJACENT TABLE).

KEY NOTES

1. INTERIOR MODLINE BASE PLATE PER 1/S1.2
2. EXTERIOR MODLINE BASE PLATE PER 2/S1.2
3. CORNER BASE PLATE PER 4/S1.2

MODULE SCHEDULE AND VENTING

TOTAL # OF 12' WIDE MODULES	"A" TOTAL # OF CENTER MODULES	TOTAL NOMINAL FLOOR AREA (FT^2) (CRAWLSPACE)	NET FREE VENT AREA REQ'D[3] (FT^2)	ACCESS VENT REQ'D	IF 4'x12" VENTS ARE USED SOLELY	
					"C" MIN. TOTAL VENTS REQ'D[3]	NET FREE VENT AREA PROVIDED[3] (FT^2)
12	10	4962	33.08	2	10	33.2

TOTAL FOUNDATION WIDTH INCLUDES 1/4" PER MODULE CONSTRUCTION TOLERANCE.

1. UNLESS NOTED OTHERWISE, DIMENSIONS ARE FROM FACE OF CONCRETE TO FACE OF CONCRETE (FOC TO FOC)

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4. RE UIRED VENTING MAY BE ACHIEVED BY A COMBINATION OF ACCESS VENT(S) AND VENTS OF DIFFERENT SI ES BASED ON THE VALUES LISTED BELOW.

4'x12" VENTS x 0.73 x (OF VENTS) 2.92 FT^2 x (OF VENTS)
ACCESS VENTS - 2' x1.5' x (OF VENTS) 3.00 FT^2 x (OF VENTS)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS®
American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER BRUCE D. CRAIG STATE OF CALIFORNIA

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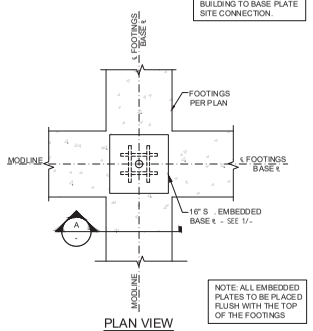
REVISIONS

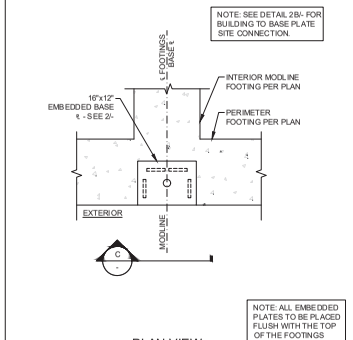
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
CONCRETE FOUNDATION PLAN
(100 PSF MAX FLOOR LIVE LOAD)
BUILDING D

SHEET NUMBER:
S1.1D

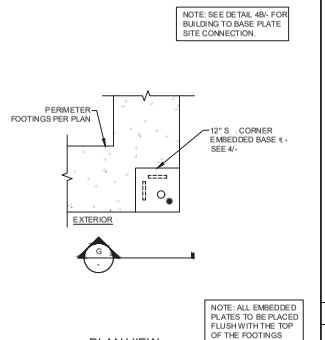


INTERIOR MODLINE BASE PLATE
FOUNDATION ONLY — SCALE: 3/4" 1'-0" — 1A

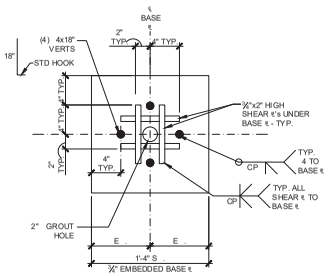


EXTERIOR MODLINE BASE PLATE
FOUNDATION ONLY — SCALE: 3/4" 1'-0" — 2A

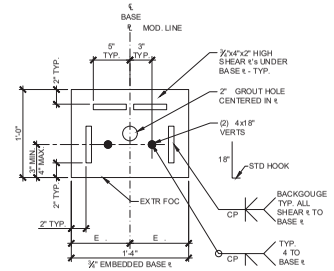
NOT USED
3A



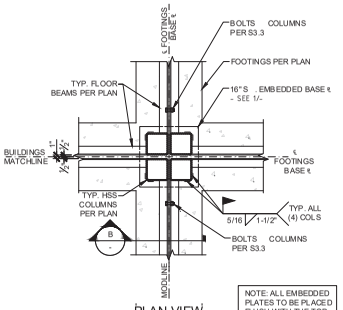
CORNER BASE PLATE PLAN
FOUNDATION ONLY — SCALE: 3/4" 1'-0" — 4A



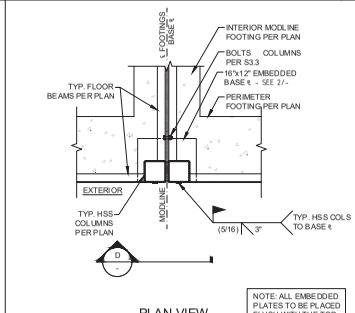
INTERIOR MODLINE BASE PLATE DETAIL
SCALE: 1-1/2" 1'-0" — 1



EXTERIOR MODLINE BASE PLATE DETAIL
SCALE: 1-1/2" 1'-0" — 2

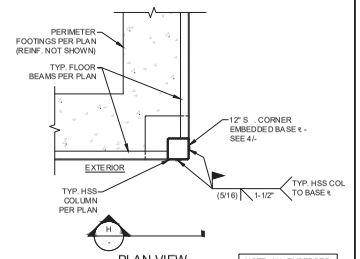


INTERIOR MODLINE BASE PLATE
SITE CONNECTION — SCALE: 3/4" 1'-0" — 1B



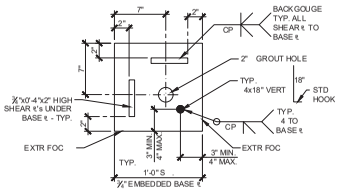
EXTERIOR MODLINE BASE PLATE
SITE CONNECTION — SCALE: 3/4" 1'-0" — 2B

NOT USED
3B



CORNER BASE PLATE
SITE CONNECTION — SCALE: 3/4" 1'-0" — 4B

NOT USED
3



CORNER BASE PLATE DETAIL
SCALE: 1-1/2" 1'-0" — 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
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DATE: 08/30/2022

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PRE-CHECKED SET NAME

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CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. [illegible]
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GEORGE D. [illegible]
No. 25522
MECHANICAL
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND IS OT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

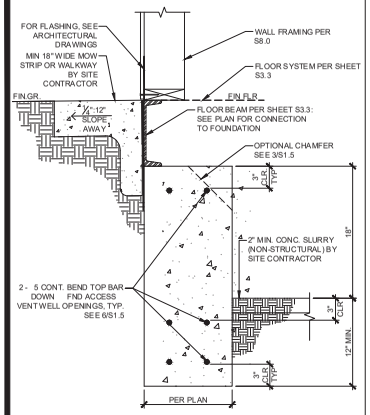
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

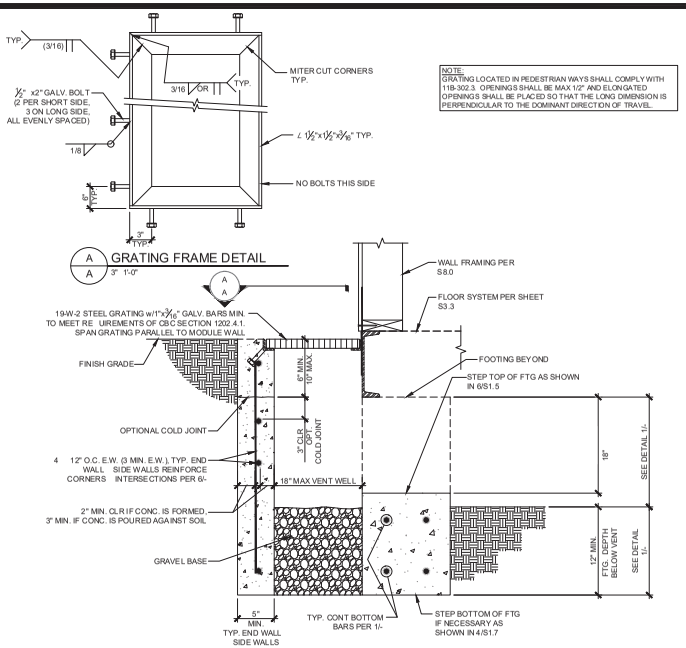
EMBEDDED FOUNDATION
SHEAR PLATES

SHEET NUMBER:

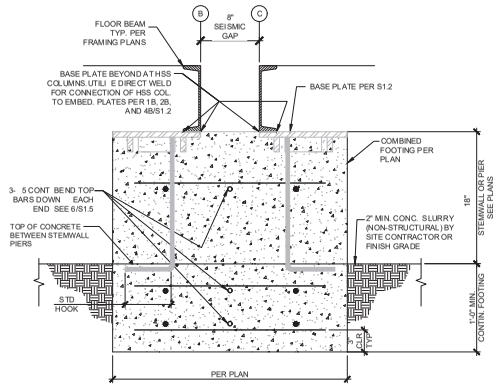
S1.2



TYP. FOOTING - BELOW GRADE SCALE: 1-1/2" 1'-0" 1



TYP. VENT DETAIL - BELOW GRADE SCALE: 1-1/2" 1'-0" 2

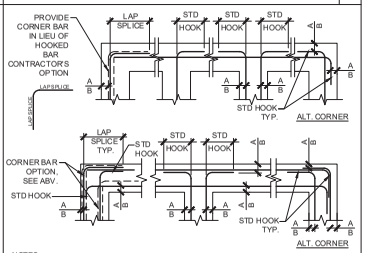


NEW DETAIL

COMBINED FOOTING DETAIL SEISMIC SCALE: 1-1/2" 1'-0" 2A

NOT USED 3

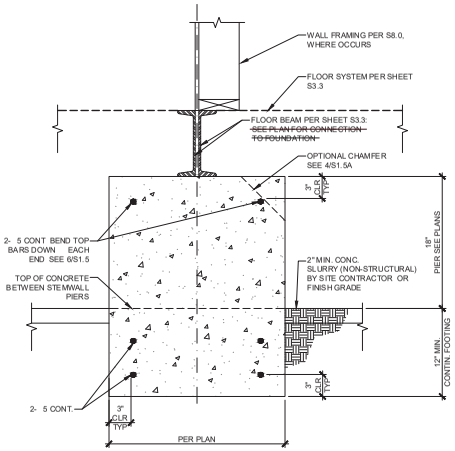
NOT USED 3A



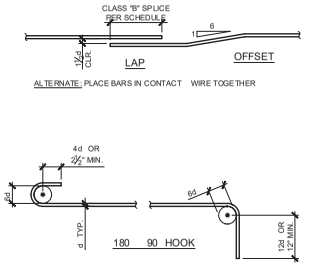
NOTES:
1. LAP SPLICE SHALL BE TYPICAL CLASS B SPLICE PER DETAIL 9/-.
2. HOOK LENGTH SHALL BE MIN 12d OR 12", WHICHEVER IS GREATER, WHERE d = DIAMETER OF THE BAR.
3. "A" = 2" COVER FORMED FOOTING
4. "B" = 3" COVER UNFORMED FOOTING

NOT USED 5

TYPICAL FOOTING REINFORCING SCALE: 1-1/2" 1'-0" 6



TYPICAL INTERIOR MODLINE PIER SECTION 8



BAR SIZE	DEVELOPMENT LENGTH[3]		TYPICAL CLASS B LAP SPLICE LENGTH[4]				TYPICAL HOOKED BAR DEVELOPMENT LENGTH	
	3000 PSI (IN)	3500 PSI (IN) AND ABOVE	3000 PSI		3500 PSI AND ABOVE		3000 PSI (IN)	3500 PSI (IN) AND ABOVE
			TOP[2] (IN)	BOTTOM (IN)	TOP[2] (IN)	BOTTOM (IN)		
3	16	15	29	22	26	20	9	8
4	22	20	38	29	34	26	11	11
5	28	26	47	36	43	33	14	13
6	33	30	56	43	52	40	17	16

NOTES:
1. THE ABOVE TABLE IS BASED ON GRADE 60 STEEL.
2. TOP BARS ARE ANY BARS WITH MORE THAN 12" OF CONCRETE PLACED BELOW.
3. DEVELOPMENT LENGTH IS CALCULATED FOR TYP. BARS - ψ_t 1.0
4. LAP SPLICES IN ADJACENT BARS SHALL BE STAGGERED, UNLESS OTHERWISE NOTED.
5. FOR LIGHTWEIGHT CONCRETE USE TOP SPLICES, TYP.

TYP. REINFORCING LAPS BENDS SCALE: 1-1/2" 1'-0" 9

IDENTIFICATION STAMP
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PRE-CHECKED SET NAME
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EVOLVE

SITE SPECIFIC PROJECT NAME
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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. DORE No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JEROME B. DORE No. 2522 MECHANICAL STATE OF CALIFORNIA

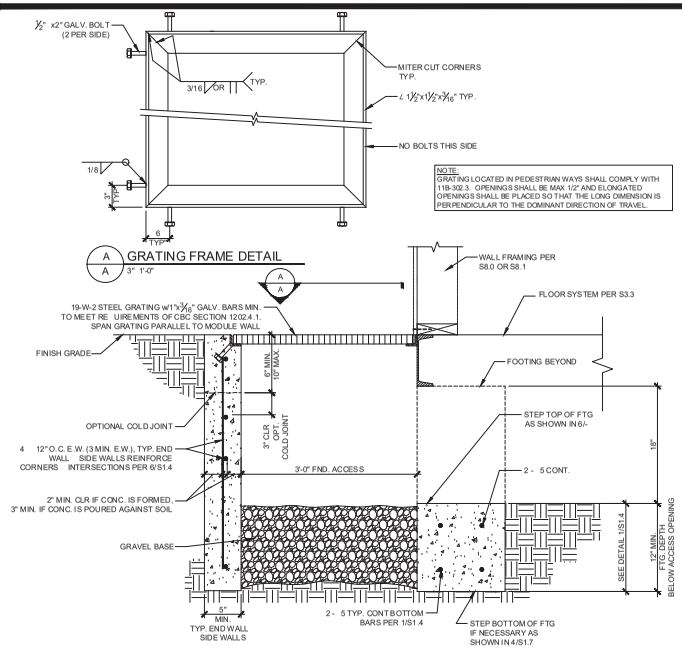
THESE DRAWINGS ARE PRELIMINARY AND IS NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
1
2
3
4

DRAWN BY: JM/AKA
SCALE: AS NOTED
DATE: 08/29/22
PROJECT NO: 1674-21

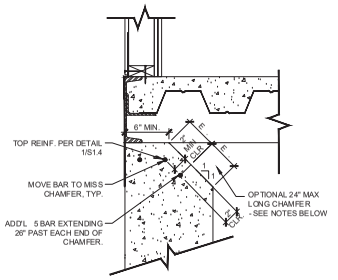
SHEET TITLE:
CONCRETE FOUNDATION DETAILS

SHEET NUMBER:
S1.4



BELOW GRADE SECTION / ACCESS WELL DETAIL — SCALE:1 1/2" 1'-0" — 1

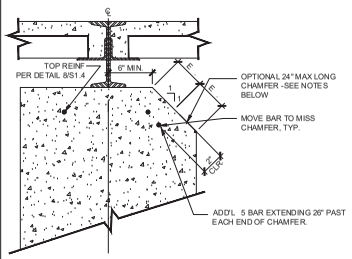
NOT USED — 2



NOTES:

1. CHAMFER MAY BE LOCATED ALONG ALL LOCATIONS OF THE PERIMETER OF THE BUILDING FOUNDATION UNLESS OTHERWISE NOTED ON PLAN OR AS DESCRIBED BELOW.
2. CHAMFER SHALL NOT BE LOCATED WITHIN 3'-6" OF THE CORNERS OF THE BUILDING FOUNDATION.
3. CHAMFERS AT FRONT OR REAR END WALL FOOTINGS SHALL NOT BE LOCATED WITHIN 2'-0" OF A MODULE LINE
4. CHAMFER SHALL NOT BE LOCATED WITHIN 1'-6" OF ANCHORAGE EMDED. PLATE LOCATION.
5. CHAMFERS SHALL NOT BE LOCATED WITHIN 1'-6" OF UTILITY OPENINGS PER SHEET S1.7
6. CHAMFER MAY OCCUR AT THE ENDS OF VENT OR ACCESS OPENINGS (ALONG THE INTERIOR EDGE OF THE STEMWALL PARALLEL TO THE FLOOR BEAM AS SHOWN ABOVE)
7. BOTTOM OF CHAMFER SHALL NOT BE LOWER THAN FINISHED GRADE
8. FOR ALL ITEMS NOT SHOWN OR NOTED SEE DETAILS 1/S1.4

CHAMFER DETAILS PERIMETER — SCALE:1 1/2" 1'-0" — 3

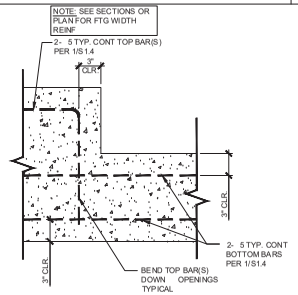


NOTES:

1. CHAMFER MAY BE LOCATED ALONG ALL LOCATIONS OF INTERIOR FOOTING OF THE BUILDING FOUNDATION UNLESS OTHERWISE NOTED ON PLAN OR AS DESCRIBED BELOW.
2. CHAMFER SHALL NOT BE LOCATED WITHIN 2'-6" OF THE ENDS OF THE BUILDING.
3. CHAMFER MAY OCCUR ON BOTH SIDES OF THE FOOTING CONCURRENTLY.
4. CHAMFER SHALL NOT BE LOCATED WITHIN 1'-6" OF UTILITY OPENING PER SHEET S1.7
5. CHAMFER MAY OCCUR AT THE ENDS OF INTERIOR PIERS (ALONG THE SIDE OF THE PIER PARALLEL TO THE FLOOR BEAMS AS SHOWN ABOVE)
6. BOTTOM OF CHAMFER SHALL NOT BE LOWER THAN FINISHED GRADE
7. FOR ALL ITEMS NOT SHOWN OR NOTED - SEE DETAIL 8/S1.4.

CHAMFER DETAILS INTERIOR — SCALE:1 1/2" 1'-0" — 4

NOT USED — 5



VENT/ACCESS OPENING DETAIL — SCALE:1 1/2" 1'-0" — 6

NOT USED — 7

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
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DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK D. QUINN No. C12631 Exp. 3-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GEORGE D. QUINN No. 25523 CIVIL STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

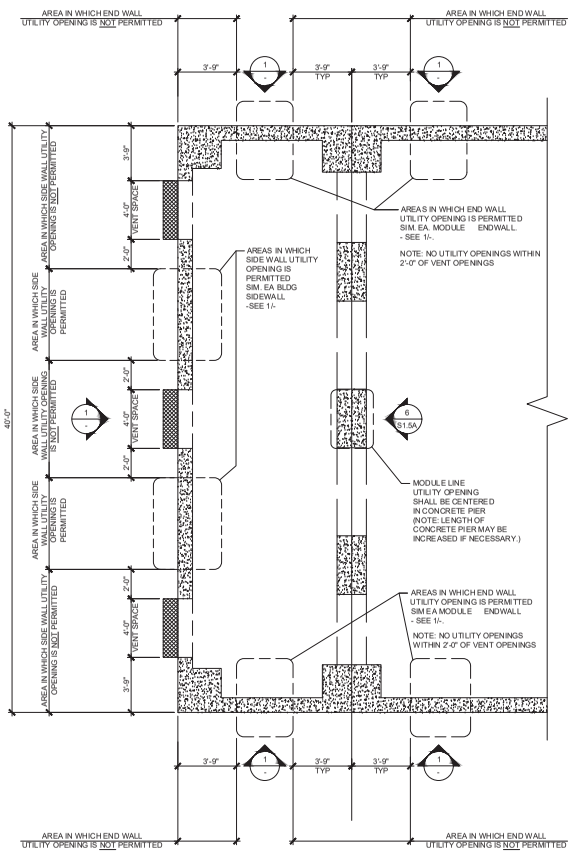
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	167421

SHEET TITLE:

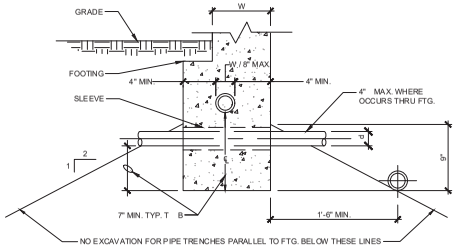
CONCRETE FOUNDATION DETAILS

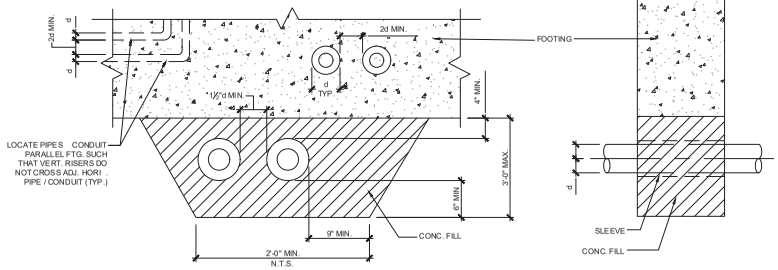
SHEET NUMBER:

S1.5



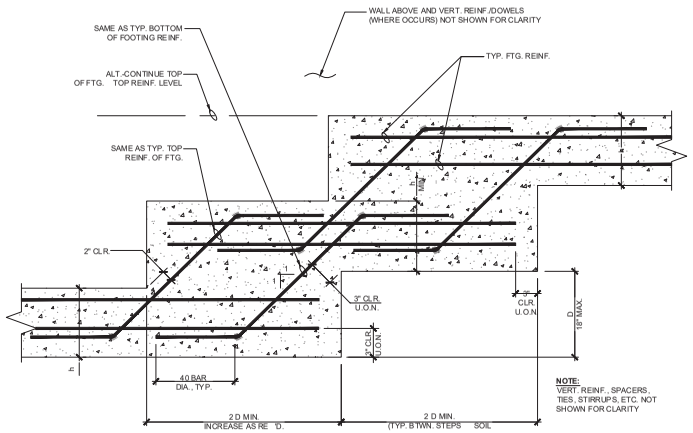
UTILITY CROSSING PLAN — SCALE: 1/4" 1'-0" — A





NOTE:
ALL PIPES TO CLR. SLEEVES BY 1" ALL AROUND-FILL SPACE w/ CAULK AS DIRECTED BY ARCH. PIPE NEVER TO BE MORE THAN 2'-6" BLW. BOT. OF FOOTING STEP FOOTING IF RE 'D. PER TYP. STEP DETAIL.

PIPE SLEEVE DETAIL — SCALE: 1 1/2" 1'-0" — 1



TYPICAL STEPPED FOOTING DETAIL — SCALE: 1 1/2" 1'-0" — 4

NOT USED — 2

NOT USED — 3

NOT USED — 5

NOT USED — 6

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. [illegible] No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GEORGE D. DORN No. 2522 MECHANICAL STATE OF CALIFORNIA

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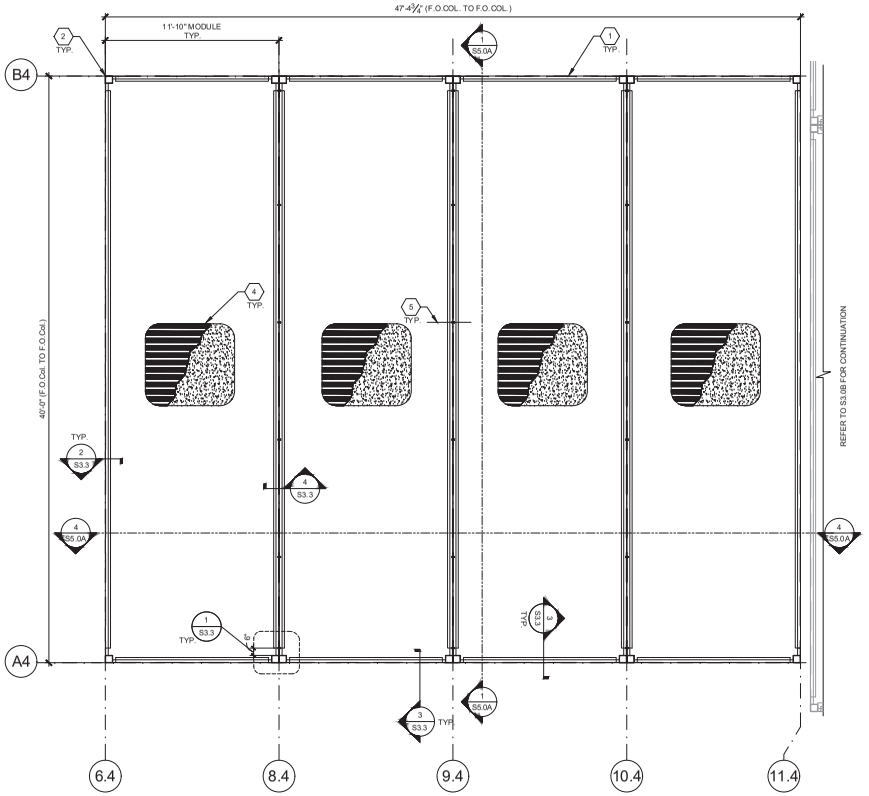
REVISIONS
1
2
3
4

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
CONCRETE FOUNDATION
OPTIONAL UTILITY
OPENINGS IN FOOTINGS

SHEET NUMBER:
S1.7



NOTE: FOR ANY MISSING INFORMATION REFER TO S3.3

FLOOR FRAMING PLAN (CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION) 100 PSF MAX FLOOR LIVE LOAD - BUILDING A

SCALE : 1/4" 1'-0" | A

NOT USED

KEY NOTES

1. FLOOR BEAM PER SHEET S5.0A USE SINGLE S I E CHANNEL THROUGHOUT FLOOR SYSTEM.
2. HSS COLUMN PER SHEET S5.0A
3. NOT USED
4. 5" MIN. LIGHTWEIGHT CONC. FILL w/ 6x6/W1.4xW1.4 WWF w/ 1'-0" LAP OVER ASC 18 GA. 3WxH GALVANI ED DECK (5" MAX TOTAL THICKNESS)
5. ¾" MB 10'-0" O.C. MAX. 6" MAX FROM INSIDE FACE OF COLUMNS. BOLT HOLE THRU FLOOR CHANNELS BOLT 1/16".
6. NOT USED
7. NOT USED
8. FLOOR ACCESS OPENING PER 6/S5.1

IDENTIFICATION STAMP
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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

PATRICK J. [illegible]
No. C12631
Exp. 3-31-23
LICENSED ARCHITECT
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GEORGE D. DORR
No. 2522
STRUCTURAL
STATE OF CALIFORNIA

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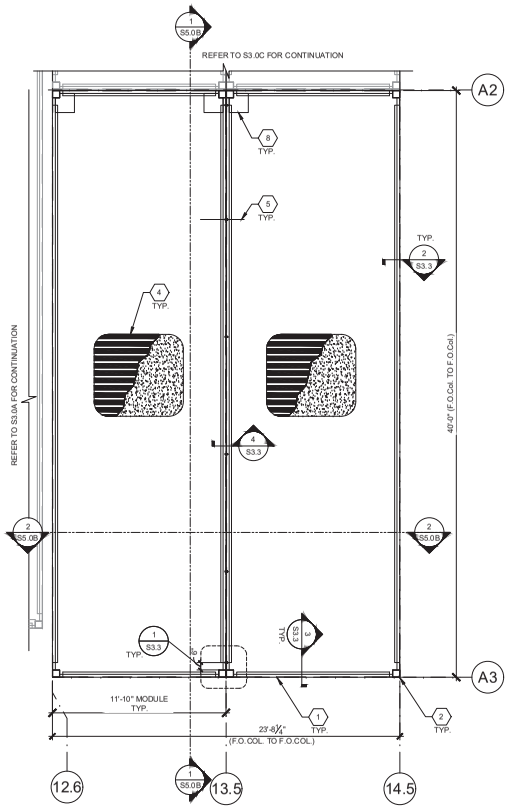
REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FLOOR FRAMING PLAN
DETAILS FOR CONCRETE
FLOOR w/ 3WH-DECK OR
3WxH DECK OPTION
(100 PSF MAX FLOOR L.L.)

SHEET NUMBER:

S3.0A



FLOOR FRAMING PLAN (CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION) 100 PSF MAX FLOOR LIVE LOAD - BUILDING B

SCALE : 3/16" 1'-0"

A

NOT USED

KEY NOTES

1. FLOOR BEAM PER SHEET S5.0B USE SINGLE SI E CHANNEL THROUGHOUT FLOOR SYSTEM.
2. HSS COLUMN PER SHEET S5.0B
3. NOT USED
4. 5" MIN. LIGHTWEIGHT CONC. FILL w/ 6x6/W1.4xW1.4 WWF w/ 1'-0" LAP OVER ASC 18 GA. 3WxH GALVANI ED DECK (5" MAX TOTAL THICKNESS)
5. ⅝" MB 10'-0" O.C. MAX. 6" MAX FROM INSIDE FACE OF COLUMNS. BOLT HOLE THRU FLOOR CHANNELS BOLT 1/16".
6. NOT USED
7. NOT USED
8. FLOOR ACCESS OPENING PER 6/S5.1

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PRE-CHECKED SET NAME

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SITE SPECIFIC PROJECT NAME

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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. DORE No. C12631 Rein. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GRACE D. DORE No. 2522 STRUCTURAL STATE OF CALIFORNIA

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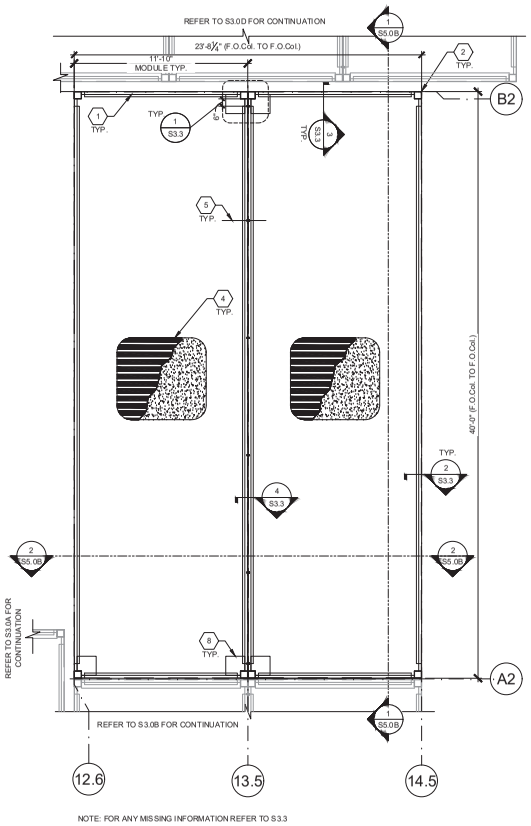
REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FLOOR FRAMING PLAN
DETAILS FOR CONCRETE
FLOOR w/ 3WH-DECK OR
3WxH DECK OPTION
(100 PSF MAX FLOOR L.L.)

SHEET NUMBER:

S3.0B



NOTE: FOR ANY MISSING INFORMATION REFER TO S3.3

FLOOR FRAMING PLAN (CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION) 100 PSF MAX FLOOR LIVE LOAD - BUILDING C

SCALE : 3/16" 1'-0" | A

NOT USED

KEY NOTES

1. FLOOR BEAM PER SHEET S5.0B USE SINGLE S I E CHANNEL THROUGHOUT FLOOR SYSTEM.
2. HSS COLUMN PER SHEET S5.0B
3. NOT USED
4. 5" MIN. LIGHTWEIGHT CONC. FILL w/ 6x6/W1.4xW1.4 WWF w/ 1'-0" LAP OVER ASC 18 GA. 3WxH GALVANI ED DECK (5" MAX TOTAL THICKNESS)
5. ⅝" MB 10'-0" O.C. MAX. 6" MAX FROM INSIDE FACE OF COLUMNS. BOLT HOLE THRU FLOOR CHANNELS BOLT 1/16".
6. NOT USED
7. NOT USED
8. FLOOR ACCESS OPENING PER 6/S5.1

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LICENSED ARCHITECT
PATRICK J. [illegible]
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
BRUCE D. COX
No. 2522
STRUCTURAL
STATE OF CALIFORNIA

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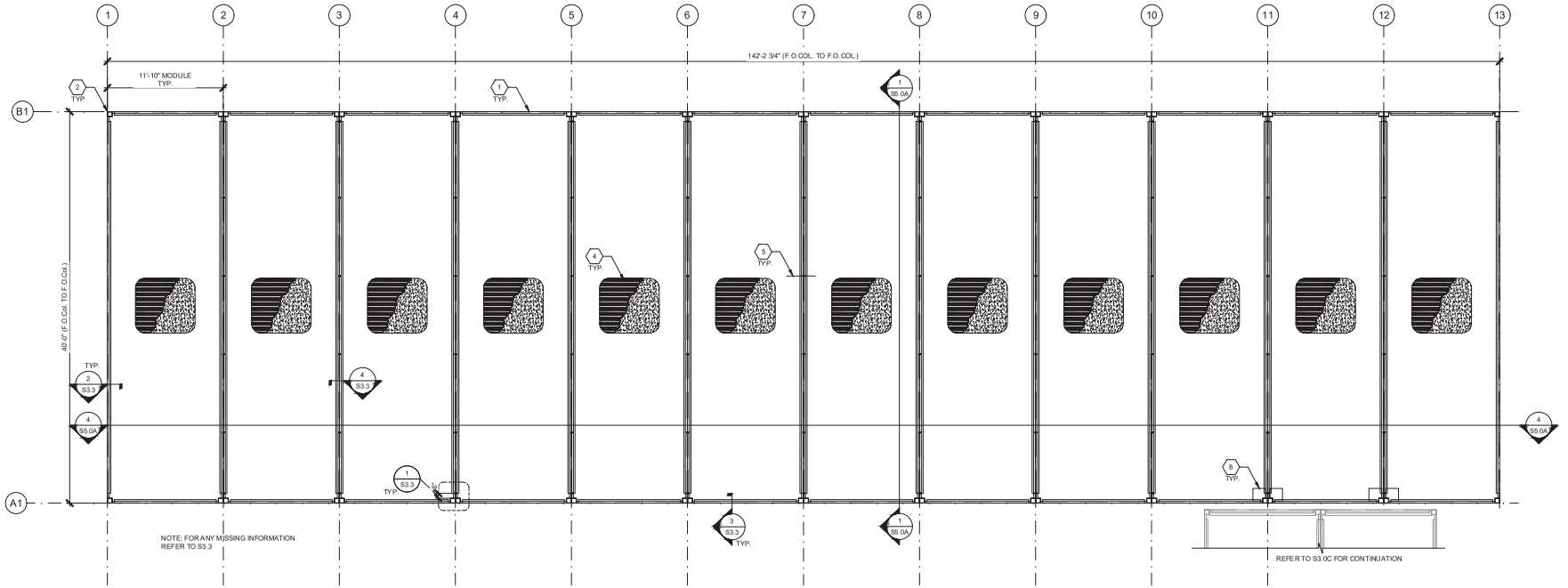
REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FLOOR FRAMING PLAN
DETAILS FOR CONCRETE
FLOOR w/ 3WH-DECK OR
3WxH DECK OPTION
(100 PSF MAX FLOOR L.L.)

SHEET NUMBER:

S3.0C



FLOOR FRAMING PLAN (CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION) 100 PSF MAX FLOOR LIVE LOAD - BUILDING D

SCALE : 3/16" 1'-0" A

NOT USED

KEY NOTES

1. FLOOR BEAM PER SHEET S5.0A USE SINGLE SI E CHANNEL THROUGHOUT FLOOR SYSTEM.
2. HSS COLUMN PER SHEET S5.0A
3. NOT USED
4. 5" MIN. LIGHTWEIGHT CONC. FILL w/ 6x6/W1.4xW1.4 WWF w/ 1'-0" LAP OVER ASC 18 GA. 3WxH GALVANI ED DECK (5" MAX TOTAL THICKNESS)
5. ⅝" MB 10'-0" O.C. MAX. 6" MAX FROM INSIDE FACE OF COLUMNS. BOLT HOLE THRU FLOOR CHANNEL S BOLT 1/16".
6. NOT USED
7. NOT USED
8. FLOOR ACCESS OPENING PER 6/S5.1

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REGISTERED PROFESSIONAL ENGINEER BRUCE D. DUDEK No. 2522 MECHANICAL STATE OF CALIFORNIA

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REVISIONS

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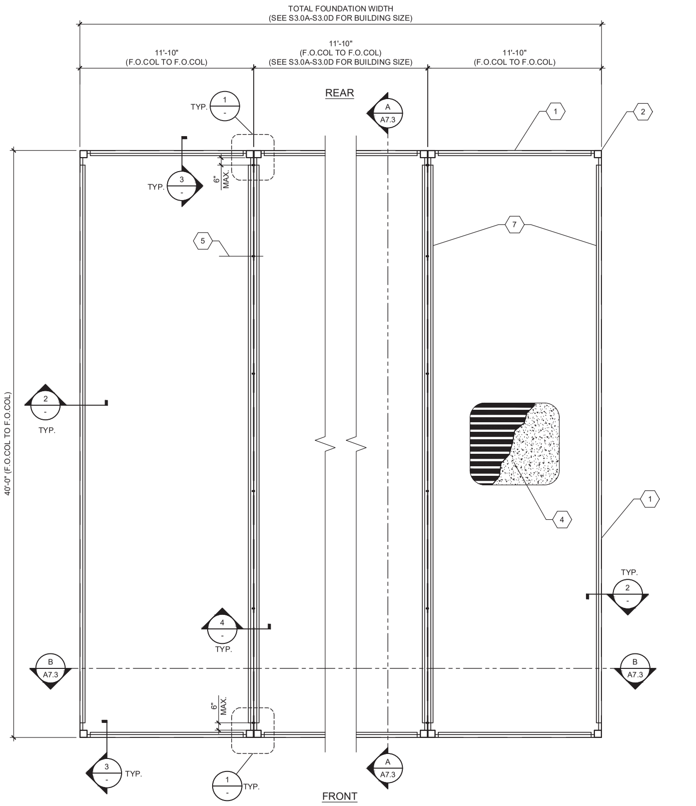
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FLOOR FRAMING PLAN
DETAILS FOR CONCRETE
FLOOR w/ 3WH-DECK OR
3WxH DECK OPTION
(100 PSF MAX FLOOR L.L.)

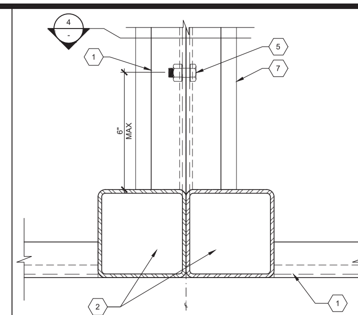
SHEET NUMBER:

S3.0D



FLOOR FRAMING PLAN (CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION) 100 PSF MAX FLOOR LIVE LOAD

SCALE : 1/4"=1'-0" A

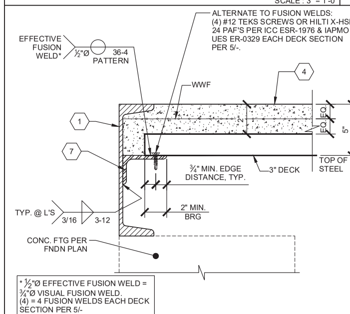


TYP. FLOOR BEAMS CONNECTION

SCALE : 3" = 1'-0" 1

KEY NOTES

1. FLOOR BEAM PER SHEET S5.0. USE SINGLE SIZE CHANNEL THROUGHOUT FLOOR SYSTEM.
2. HSS COLUMN PER SHEET S5.0.
3. NOT USED
4. 2" MIN. LIGHTWEIGHT CONC. FILL w/ 6x6/W1.4xW1.4 WWF w/ 1'-0" LAP OVER ASC 18 GA. 3WxH GALVANIZED DECK (5" MAX TOTAL THICKNESS) SEE 5/- FOR DECK PROPERTIES AND ATTACHMENT PATTERN.
5. 5/8"Ø MB @ 10'-0" O.C. MAX. 6" MAX FROM INSIDE FACE OF COLUMNS PER DETAILS 1 & 4/-.
   BOLT HOLE THRU FLOOR CHANNELS = BOLT Ø + 1/16".
6. NOT USED
7. ∠4"x3"x1/4" LLH (MIN.) DECK SUPPORT ANGLE PER DETAIL 2, 3, & 4/-

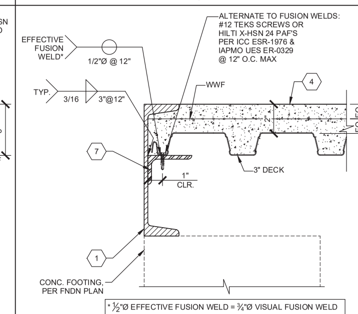


ALTERNATE TO FUSION WELDS:
(4) #12 TEKS SCREWS OR HILTI X-HSN 24 PAF'S PER ICC ESR-1976 & IAPMO UES ER-0329 EACH DECK SECTION PER 5/-.
EFFECTIVE FUSION WELD* 1/2"Ø 36-4 PATTERN
WWF
3/4" MIN. EDGE DISTANCE, TYP.
3" DECK
TOP OF STEEL
2" MIN. BRG
TYP. @ L'S 3/16 3-12
CONC. FTG PER FNDN PLAN
* 1/2"Ø EFFECTIVE FUSION WELD = 3/4"Ø VISUAL FUSION WELD. (4) = 4 FUSION WELDS EACH DECK SECTION PER 5/-

TYP. PERIMETER CONNECTION

(@ LONGITUDINAL FLOOR BEAMS)

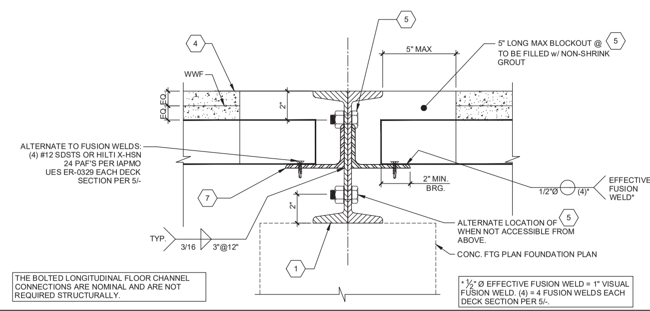
SCALE : 3" = 1'-0" 2



TYP. PERIMETER CONNECTION

(@ TRANSVERSE FLOOR BEAMS)

SCALE : 3" = 1'-0" 3



5" MAX
5" LONG MAX BLOCKOUT @ 5 TO BE FILLED w/ NON-SHRINK GROUT
WWF
ALTERNATE TO FUSION WELDS: (4) #12 SDSTS OR HILTI X-HSN 24 PAF'S PER IAPMO UES ER-0329 EACH DECK SECTION PER 5/-
2" MIN. BRG.
1/2"Ø (4) EFFECTIVE FUSION WELD*
ALTERNATE LOCATION OF 5 WHEN NOT ACCESSIBLE FROM ABOVE.
CONC. FTG PLAN FOUNDATION PLAN
TYP. 3/16 3"@12"
THE BOLTED LONGITUDINAL FLOOR CHANNEL CONNECTIONS ARE NOMINAL AND ARE NOT REQUIRED STRUCTURALLY.
* 1/2"Ø EFFECTIVE FUSION WELD = 1" VISUAL FUSION WELD. (4) = 4 FUSION WELDS EACH DECK SECTION PER 5/-.

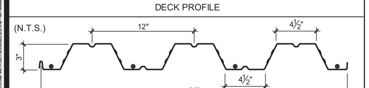
TYP. MODULE LINE CONNECTION

SCALE : 3" = 1'-0" 4

MINIMUM PROPERTIES

PLAN DESIGNATION	DECK TYPE	S_{gbot} IN^3/FT	I_g IN^4/FT	AVAILABLE DIAPHRAGM SHEAR (LRFD)
(hatch)	3"-18 GA ASC 3WxH GALV DECK (36" WIDE)	0.789	1.233	1565 PLF (LRFD) w/ 2" LWC TOPPING (5" TOTAL SLAB THICKNESS)

DECK PROFILE



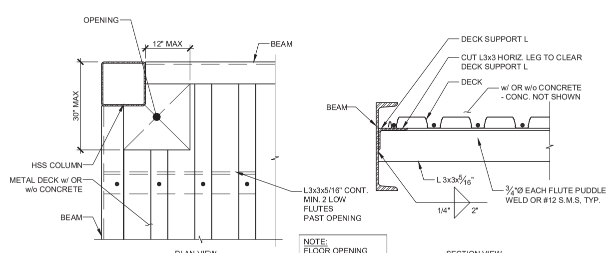
⊙ = (4) 1/2"Ø EFFECTIVE FUSION WELDS* ALTERNATE (4) #12 SDSTS OR HILTI X-HSN 24 PAF'S.
(SEE 3/- FOR ATTACHMENT AT PARALLEL SUPPORTS)

* 1/2"Ø EFFECTIVE FUSION WELD = 3/4"Ø VISUAL FUSION WELD

SIDE LAP ATTACHMENT TO BE BOTTON PUNCHED @ 36" O.C.
NOTE: ASC STEEL DECKING: IAPMO UES ER #0329

3WxH MTL DECK PROPERTIES & PROFILE

N.T.S. 5



OPENING
12" MAX
BEAM
30" MAX
HSS COLUMN
METAL DECK w/ OR w/o CONCRETE
L3x3x5/16" CONT. MIN. 2 LOW FLUTES PAST OPENING
PLAN VIEW
DECK SUPPORT L
CUT L3x3 HORIZ. LEG TO CLEAR DECK SUPPORT L
DECK
w/ OR w/o CONCRETE - CONC. NOT SHOWN
L 3x3x5/16"
3/4"Ø EACH FLUTE PUDDLE WELD OR #12 S.M.S, TYP.
1/4" 2"
SECTION VIEW

NOTE:
FLOOR OPENING MAY BE FILLED w/ NON-SHRINK GROUT.

OPTIONAL FLOOR ACCESS OPENING DETAIL

SCALE : 1 1/2"=1'-0" 6

NOT USED

SCALE : 3" = 1'-0" 7

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK C. NAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. DOIG STATE OF CALIFORNIA

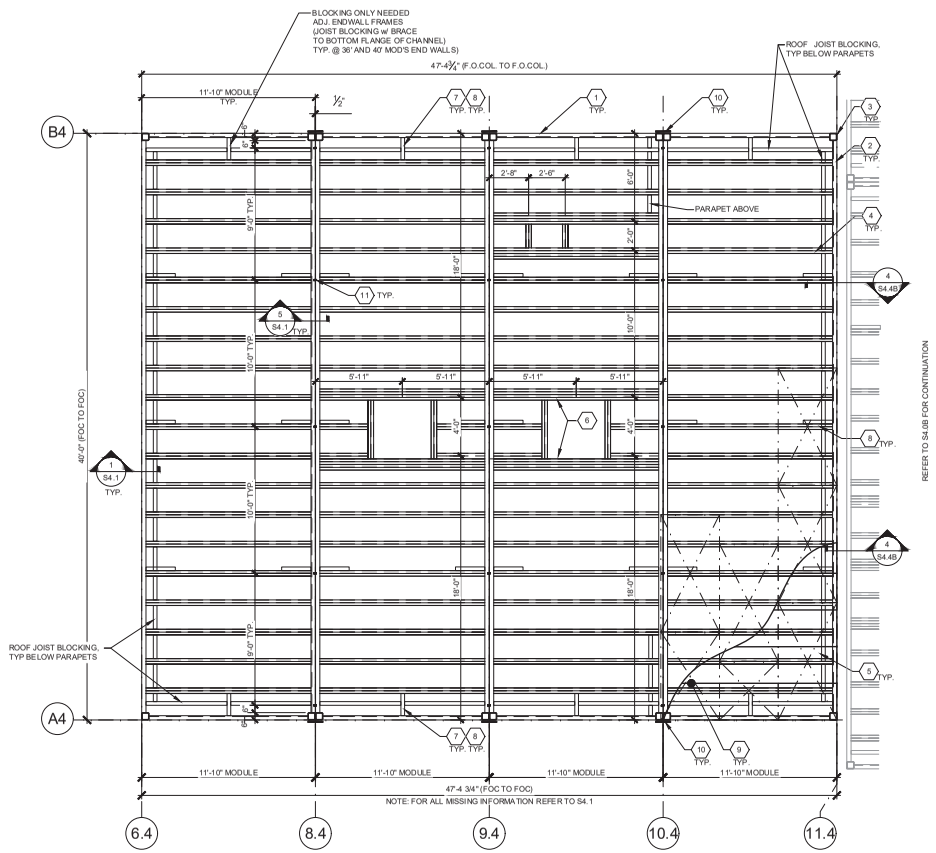
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
FLOOR FRAMING PLAN & DETAILS FOR CONCRETE FLOOR w/ 3WH-DECK OR 3WxH DECK OPTION (100 PSF MAX FLOOR L.L.)

SHEET NUMBER:
S3.3



ROOF FRAMING PLAN - BUILDING A

SCALE: 1/4"=1'-0" | A

1 TRANSVERSE ROOF BEAM PER SHEET S5.0.

2 LONGITUDINAL ROOF BEAM PER SHEET S5.0.

3 HSS COLUMN PER SHEET S5.0.

4 ROOF PURLINS @ 24" O.C. MAX.
-SEE SHEET S0.0

5 SINGLE PLY ROOFING

6 PROVIDE DOUBLE PURLINS PER 2-4/S4.3
@ OPTIONAL HVAC UNIT (800# MAX), (1) HVAC UNIT PER MODULE MAX.
LOCATE PER ROOF PLAN & PROVIDE 48" CLEAR MIN. BETWEEN ALL DUCT & SKYLIGHT OPENINGS, TYP. REFER TO M1.1A FOR HVAC SIZE AND M1.7 FOR UNIT WEIGHT

NOTE: DO NOT HEAD OFF MORE THAN ONE (1) ROOF PURLIN. MULTIPLE CONSECUTIVE ROOF PURLINS SHALL NOT BE INTERRUPTED U.N.O - SEE 2/S4.3.

7 MID-SPAN PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 3/S4.3
BLOCKING IS ONLY REQUIRED AT END WALLS AT PURLINS WITH DIAGONAL BEAM BRACING AT EXTERIOR END WALLS PER 8 BELOW.

8 3x1 x12 GA. BENT PLATE DIAGONAL BRACE TO ROOF BEAM PER DETAIL 1/S4.1 @ 10'-0" O.C.

PROVIDE PURLIN BLOCKING AND BRACE @ CENTER OF END WALLS ONLY PER 7 ABOVE.

9 15/32" APA RATED PLYWOOD OR OSB ROOF SHEATHING, C-D EXPOSURE 1, 32/16 SPAN RATING. PLYWOOD SHALL BE 5 PLY CONFORMING TO PS 1-09 OR PS 2-10. OSB SHEATHING SHALL CONFORM TO PRP-108 OR PS 2-10. ALL PLYWOOD OR OSB SHALL BE EITHER T&G OR EDGE CLIPPED AT UNSUPPORTED EDGES. STAGGER SHEETS 48" O.C. AS SHOWN w/ FACE GRAIN PERPENDICULAR TO ROOF PURLINS, 2 SPANS MIN., 24" MIN. WIDTH. ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 3/8" MIN. FROM EDGE OF OSB OR PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO FASTENING SCHEDULE S4.1 FOR FASTENING.

10 TENSION TIE (SITE CONDITION) - SEE S5.2

11 ½"Ø A307 BOLTS @ 6" FROM ENDS AND @ 10'-0" MAX. O.C. AT MID DEPTH C12'S TYP. @ MOD LINES

KEYNOTES

SHEATHING FASTENING SCHEDULE		
FASTENING	0.100"Ø OR 0.144"Ø ET&F PINS SPACING	#12 SDSTS SPACING (STRUCTURAL STEEL ONLY)
BOUNDARY	6" O.C.	6" O.C.
EDGE	6" O.C.	5" O.C.
FIELD	6" O.C.	12" O.C.

NOTE:
-ET&F PINS PER IAPMO REPORT UES ER-0335. SDSTS PER ASTM C1513. (TEKS PER ESR 1976 OR EQUAL)
-ET&F PINS AT COLD FORMED MEMBERS ONLY.

FASTENING SPACING SCHEDULE

BUILDING SIZE SCHEDULE				
BUILDING SIZE (FT)	TOTAL # OF 12'-0" WIDE MODULES	TOTAL # OF CENTER MODULES	OVERALL BUILDING WIDTH[1]	
☐ 24'x40'	2	0	23'-8½"	
☐ 36'x40'	3	1	35'-6¾"	
☒ 48'x40'	4	2	47'-5"	
☐ 60'x40'	5	3	59'-3¼"	
☐ 72'x40'	6	4	71'-1½"	
☐ 84'x40'	7	5	82'-11¾"	
☐ 96'x40'	8	6	94'-10"	
☐ 108'x40'	9	7	106'-8¼"	
☐ 120'x40'	10	8	118'-6½"	
☐ 144'x40'	12	10	142'-2 ¾"	

NOTES:
1. TOTAL BUILDING WIDTH INCLUDES 1/4" PER MODULAR CONSTRUCTION TOLERANCE PER FOUNDATION SHEET S1.2

BUILDING SIZE SCHEDULE

NOT USED

SCALE: 1/4"=1'-0" | 1

NOT USED

SCALE: 1 1/2"=1'-0" | 5

IDENTIFICATION STAMP
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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK D. DUNN
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PATRICK D. DUNN
No. 25523
ELECTRICAL
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

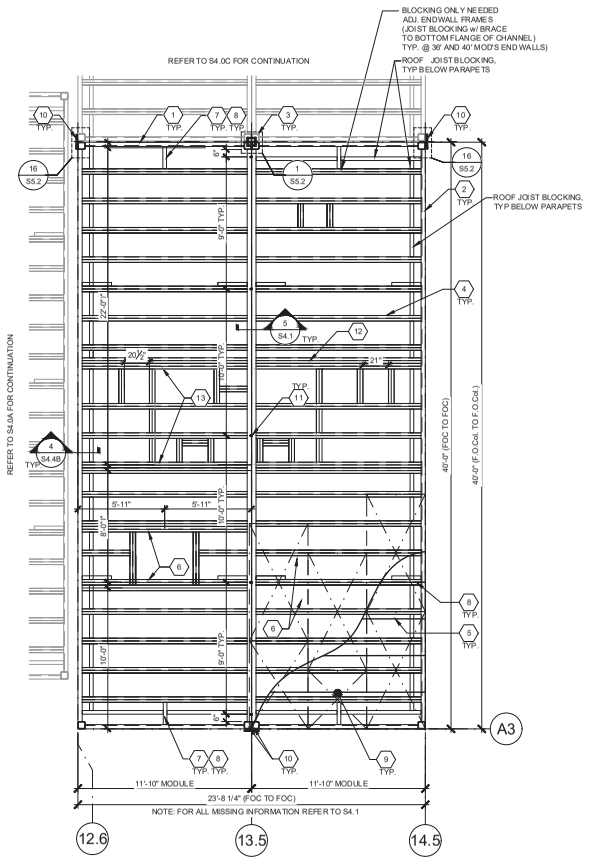
REVISIONS

DRAWN BY:	JM/MK
SCALE:	AS NOTED
DATE:	09/29/22
PROJECT NO:	1674-21

SHEET TITLE:
ROOF FRAMING PLAN
& DETAILS
ROOF SHEATHING OPTION
BUILDING A

SHEET NUMBER:

S4.0A



ROOF FRAMING PLAN - BUILDING B

SCALE: 1/4"=1'-0" | A

1 TRANSVERSE ROOF BEAM PER SHEET S5.0.

2 LONGITUDINAL ROOF BEAM PER SHEET S5.0.

3 HSS COLUMN PER SHEET S5.0.

4 ROOF PURLINS @ 24" O.C. MAX.
-SEE SHEET S0.0

5 SINGLE PLY ROOFING

6 PROVIDE DOUBLE PURLINS PER 2-4/S4.3
@ OPTIONAL HVAC UNIT (800# MAX), (1) HVAC UNIT PER MODULE MAX.
LOCATE PER ROOF PLAN & PROVIDE 48" CLEAR MIN. BETWEEN ALL DUCT & SKYLIGHT OPENINGS, TYP. REFER TO M1.1B FOR HVAC SIZE AND M1.7 FOR UNIT WEIGHT

NOTE: DO NOT HEAD OFF MORE THAN ONE (1) ROOF PURLIN. MULTIPLE CONSECUTIVE ROOF PURLINS SHALL NOT BE INTERRUPTED UNO - SEE 2/S4.3.

7 MID-SPAN PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 3/S4.3
BLOCKING IS ONLY REQUIRED AT END WALLS AT PURLINS WITH DIAGONAL BEAM BRACING AT EXTERIOR END WALLS PER 8 BELOW.

8 3x1x12 GA. BENT PLATE DIAGONAL BRACE TO ROOF BEAM PER DETAIL 1/S4.1 @ 10'-0" O.C.

PROVIDE PURLIN BLOCKING AND BRACE @ CENTER OF END WALLS ONLY PER 7 ABOVE.

9 15/32" APA RATED PLYWOOD OR OSB ROOF SHEATHING, C-D EXPOSURE 1, 32/16 SPAN RATING. PLYWOOD SHALL BE 5 PLY CONFORMING TO PS 1-09 OR PS 2-10. OSB SHEATHING SHALL CONFORM TO PRP-108 OR PS 2-10. ALL PLYWOOD OR OSB SHALL BE EITHER T&G OR EDGE CLIPPED AT UNSUPPORTED EDGES. STAGGER SHEETS 48" O.C. AS SHOWN w/ FACE GRAIN PERPENDICULAR TO ROOF PURLINS, 2 SPANS MIN., 24" MIN. WIDTH. ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 3/8" MIN. FROM EDGE OF OSB OR PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO FASTENING SCHEDULE S4.1 FOR FASTENING.

10 TENSION TIE (SITE CONDITION) - SEE S5.2

11 ½"Ø A307 BOLTS @ 6" FROM ENDS AND @ 1'-0" MAX. O.C. AT MID DEPTH C12'S TYP. @ MOD LINES

12 PROVIDE DOUBLE PURLING PER 3/S4.3 @ HOOD UNIT (800#MAX)

13 OPENING FOR HOOD - ATTACHMENT BY SITE CONTRACTOR PER SF-502

KEYNOTES

SHEATHING FASTENING SCHEDULE		
FASTENING	0.100"Ø OR 0.144"Ø ET&F PINS SPACING	#12 SDS25 SPACING (STRUCTURAL STEEL ONLY)
BOUNDARY	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.
FIELD	6" O.C.	12" O.C.

NOTE:
-ET&F PINS PER ICC-ES ESR-3046 REPORT USE ER-0335. SDS25 PER ASTM C1513. (TEKS PER ESR 1976 OR EQUAL)
-ET&F PINS AT COLD FORMED MEMBERS ONLY.

FASTENING SPACING SCHEDULE

BUILDING SIZE SCHEDULE				
BUILDING SIZE (FT)	TOTAL # OF 12'-0" WIDE MODULES	TOTAL # OF CENTER MODULES	OVERALL BUILDING WIDTH[1]	
☒ 24'x40'	2	0	23'-8½"	
☐ 36'x40'	3	1	35'-6¾"	
☐ 48'x40'	4	2	47'-5"	
☐ 60'x40'	5	3	59'-3¼"	
☐ 72'x40'	6	4	71'-1½"	
☐ 84'x40'	7	5	82'-11¾"	
☐ 96'x40'	8	6	94'-10"	
☐ 108'x40'	9	7	106'-8¼"	
☐ 120'x40'	10	8	118'-6½"	
☐ 144'x40'	12	10	142'-2 ½"	

NOTES:

1. TOTAL BUILDING WIDTH INCLUDES 1/4" PER MODULAR CONSTRUCTION TOLERANCE PER FOUNDATION SHEET S1.2

BUILDING SIZE SCHEDULE

NOT USED

SCALE: 1/4"=1'-0" | 1

NOT USED

SCALE: 1 1/2"=1'-0" | 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS
American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK D. DUNN
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PATRICK D. DUNN
No. 5523
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

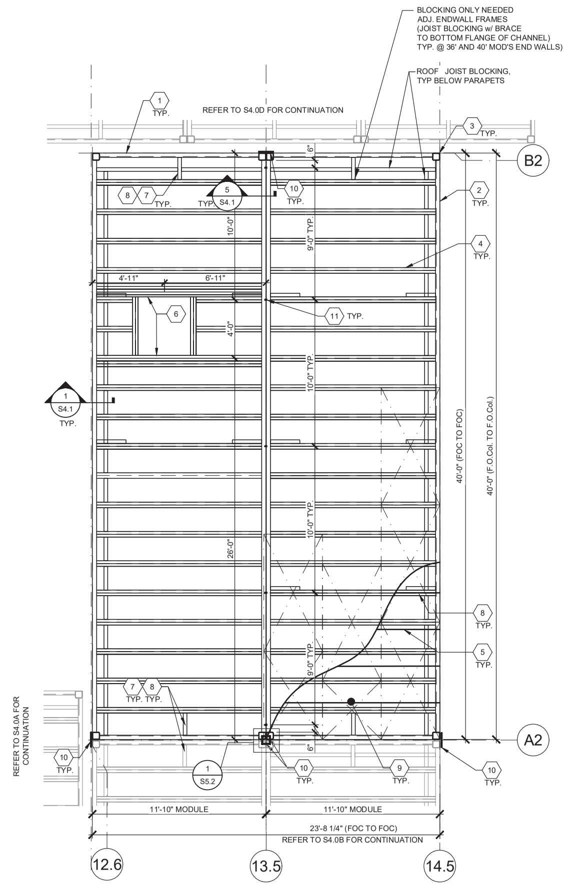
DRAWN BY:	JM/MA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
ROOF FRAMING PLAN
& DETAILS
ROOF SHEATHING OPTION
BUILDING B

SHEET NUMBER:

S4.0B

ROOF FRAMING PLAN - BUILDING C



NOTE: FOR ALL MISSING INFORMATION REFER TO S4.1

SCALE: 1/4"=1'-0" A

KEYNOTES

1. TRANSVERSE ROOF BEAM PER SHEET S5.0.
2. LONGITUDINAL ROOF BEAM PER SHEET S5.0.
3. HSS COLUMN PER SHEET S5.0.
4. ROOF PURLINS @ 24" O.C. MAX. -SEE SHEET S0.0
5. SINGLE PLY ROOFING
6. PROVIDE DOUBLE PURLINS PER 2-4/S4.3 @ OPTIONAL HVAC UNIT (800# MAX), (1) HVAC UNIT PER MODULE MAX. LOCATE PER ROOF PLAN & PROVIDE 48" CLEAR MIN. BETWEEN ALL DUCT & SKYLIGHT OPENINGS, TYP. REFER TO M1.1C FOR HVAC SIZE AND M1.7 FOR UNIT WEIGHT

   NOTE: DO NOT HEAD OFF MORE THAN ONE (1) ROOF PURLIN. MULTIPLE CONSECUTIVE ROOF PURLINS SHALL NOT BE INTERRUPTED UNO - SEE 2/S4.3.
7. MID-SPAN PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 3/S4.3 BLOCKING IS ONLY REQUIRED AT END WALLS AT PURLINS WITH DIAGONAL BEAM BRACING AT EXTERIOR END WALLS PER (8) BELOW.
8. 3x1x12 GA. BENT PLATE DIAGONAL BRACE TO ROOF BEAM PER DETAIL 1/S4.1 @ 10'-0" O.C.

   PROVIDE PURLIN BLOCKING AND BRACE @ CENTER OF END WALLS ONLY PER (7) ABOVE.
9. 15/32" APA RATED PLYWOOD OR OSB ROOF SHEATHING, C-D EXPOSURE 1, 32/16 SPAN RATING. PLYWOOD SHALL BE 5 PLY CONFORMING TO PS 1-09 OR PS 2-10. OSB SHEATHING SHALL CONFORM TO PRP-108 OR PS 2-10. ALL PLYWOOD OR OSB SHALL BE EITHER T&G OR EDGE CLIPPED AT UNSUPPORTED EDGES. STAGGER SHEETS 48" O.C. AS SHOWN w/ FACE GRAIN PERPENDICULAR TO ROOF PURLINS, 2 SPANS MIN., 24" MIN. WIDTH. ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 3/8" MIN. FROM EDGE OF OSB OR PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO FASTENING SCHEDULE S4.1 FOR FASTENING.
10. TENSION TIE (SITE CONDITION) - SEE S5.2
11. ½"Ø A307 BOLTS @ 6" FROM ENDS AND @ 10'-0" MAX. O.C. AT MID DEPTH C12'S TYP. @ MOD LINES

FASTENING SPACING SCHEDULE

SHEATHING FASTENING SCHEDULE

FASTENING	0.100"Ø OR 0.144"Ø ET&F PINS SPACING	#12 SDSTS SPACING (STRUCTURAL STEEL ONLY)
BOUNDARY	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.
FIELD	6" O.C.	12" O.C.

NOTE:
-ET&F PINS PER IAPMO REPORT UES ER-0335. SDSTS PER ASTM C1513. (TEKS PER ESR 1976 OR EQUAL)
-ET&F PINS AT COLD FORMED MEMBERS ONLY.

NOT USED

SCALE: 1/4"=1'-0" 1

NOT USED

SCALE: 1 1/2"=1'-0" 5

BUILDING SIZE SCHEDULE

BUILDING SIZE SCHEDULE

	BUILDING SIZE (FT)	TOTAL # OF 12'-0" WIDE MODULES	TOTAL # OF CENTER MODULES	OVERALL BUILDING WIDTH[1]
☒	24'x40'	2	0	23'-8½"
☐	36'x40'	3	1	35'-6¾"
☐	48'x40'	4	2	47'-5"
☐	60'x40'	5	3	59'-3¼"
☐	72'x40'	6	4	71'-1½"
☐	84'x40'	7	5	82'-11¾"
☐	96'x40'	8	6	94'-10"
☐	108'x40'	9	7	106'-8¼"
☐	120'x40'	10	8	118'-6½"
☐	144'x40'	12	10	142'-2 ½"

NOTES:

1. TOTAL BUILDING WIDTH INCLUDES 1/4" PER MODULAR CONSTRUCTION TOLERANCE PER FOUNDATION SHEET S1.2

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
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DATE: 08/30/2022

AMS®
American Modular Systems
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PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK ... NAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. ... STATE OF CALIFORNIA

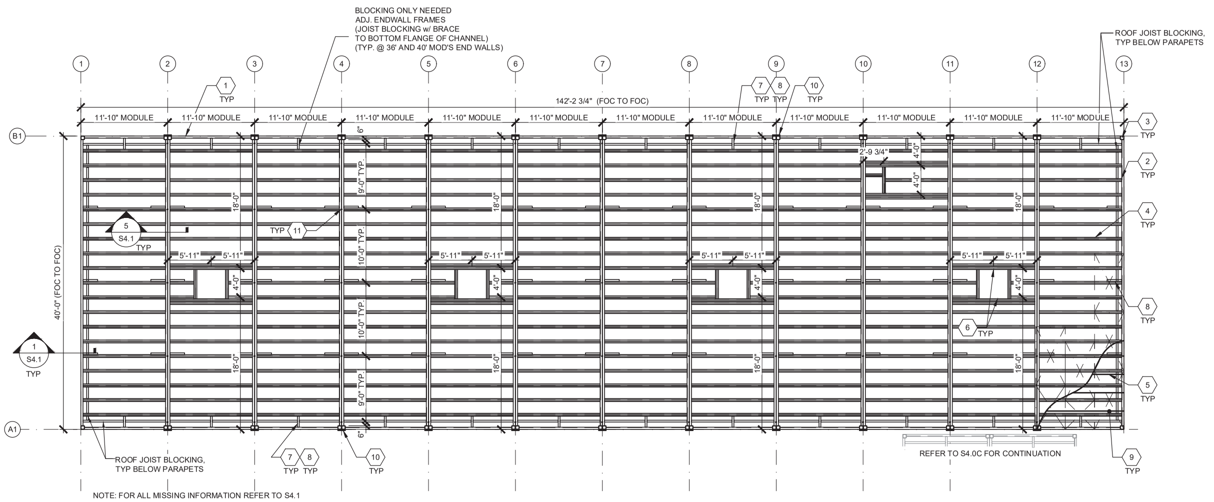
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:
ROOF FRAMING PLAN & DETAILS
ROOF SHEATHING OPTION
BUILDING C

SHEET NUMBER:
S4.0C



ROOF FRAMING PLAN - BUILDING D

SCALE: 1/4"=1'-0" | A

1. TRANSVERSE ROOF BEAM PER SHEET S5.0.
2. LONGITUDINAL ROOF BEAM PER SHEET S5.0.
3. HSS COLUMN PER SHEET S5.0.
4. ROOF PURLINS @ 24" O.C. MAX. -SEE SHEET S0.0
5. SINGLE PLY ROOFING
6. PROVIDE DOUBLE PURLINS PER 2-4/S4.3 @ OPTIONAL HVAC UNIT (800# MAX), (1) HVAC UNIT PER MODULE MAX. LOCATE PER ROOF PLAN & PROVIDE 48" CLEAR MIN. BETWEEN ALL DUCT & SKYLIGHT OPENINGS, TYP. REFER TO M1.1D FOR HVAC SIZE AND M1.7 FOR UNIT WEIGHT

   NOTE: DO NOT HEAD OFF MORE THAN ONE (1) ROOF PURLIN. MULTIPLE CONSECUTIVE ROOF PURLINS SHALL NOT BE INTERRUPTED UNO - SEE 2/S4.3.
7. MID-SPAN PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 3/S4.3 BLOCKING IS ONLY REQUIRED AT END WALLS AT PURLINS WITH DIAGONAL BEAM BRACING AT EXTERIOR END WALLS PER (8) BELOW.
8. 3x1x12 GA. BENT PLATE DIAGONAL BRACE TO ROOF BEAM PER DETAIL 1/S4.1 @ 10'-0" O.C.

   PROVIDE PURLIN BLOCKING AND BRACE @ CENTER OF END WALLS ONLY PER (7) ABOVE.
9. 15/32" APA RATED PLYWOOD OR OSB ROOF SHEATHING, C-D EXPOSURE 1, 32/16 SPAN RATING. PLYWOOD SHALL BE 5 PLY CONFORMING TO PS 1-09 OR PS 2-10. OSB SHEATHING SHALL CONFORM TO PRP-108 OR PS 2-10. ALL PLYWOOD OR OSB SHALL BE EITHER T&G OR EDGE CLIPPED AT UNSUPPORTED EDGES. STAGGER SHEETS 48" O.C. AS SHOWN w/ FACE GRAIN PERPENDICULAR TO ROOF PURLINS, 2 SPANS MIN., 24" MIN. WIDTH. ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 3/8" MIN. FROM EDGE OF OSB OR PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO FASTENING SCHEDULE S4.1 FOR FASTENING.
10. TENSION TIE (SITE CONDITION) - SEE S5.2
11. ½"Ø A307 BOLTS @ 6" FROM ENDS AND @ 10'-0" MAX. O.C. AT MID DEPTH C12'S TYP. @ MOD LINES

KEYNOTES

SHEATHING FASTENING SCHEDULE		
FASTENING	0.100"Ø OR 0.144"Ø ET&F PINS SPACING	#12 SDSTS SPACING (STRUCTURAL STEEL ONLY)
BOUNDARY	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.
FIELD	6" O.C.	12" O.C.

NOTE:
-ET&F PINS PER IAPMO REPORT UES ER-0335. SDSTS PER ASTM C1513. (TEKS PER ESR 1976 OR EQUAL)
-ET&F PINS AT COLD FORMED MEMBERS ONLY.

FASTENING SPACING SCHEDULE

NOT USED

SCALE: 1/4"=1'-0" | 1

NOT USED

SCALE: 1 1/2"=1'-0" | 5

BUILDING SIZE SCHEDULE				
	BUILDING SIZE (FT)	TOTAL # OF 12'-0" WIDE MODULES	TOTAL # OF CENTER MODULES	OVERALL BUILDING WIDTH[1]
☐	24'x40'	2	0	23'-8½"
☐	36'x40'	3	1	35'-6¾"
☐	48'x40'	4	2	47'-5"
☐	60'x40'	5	3	59'-3¼"
☐	72'x40'	6	4	71'-1½"
☐	84'x40'	7	5	82'-11¾"
☐	96'x40'	8	6	94'-10"
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☐	120'x40'	10	8	118'-6½"
☒	144'x40'	12	10	142'-2 ¾"

NOTES:
1. TOTAL BUILDING WIDTH INCLUDES 1/4" PER MODULAR CONSTRUCTION TOLERANCE PER FOUNDATION SHEET S1.2

BUILDING SIZE SCHEDULE

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APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

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EVOLVE

SITE SPECIFIC PROJECT NAME

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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK C. KAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. OHG STATE OF CALIFORNIA

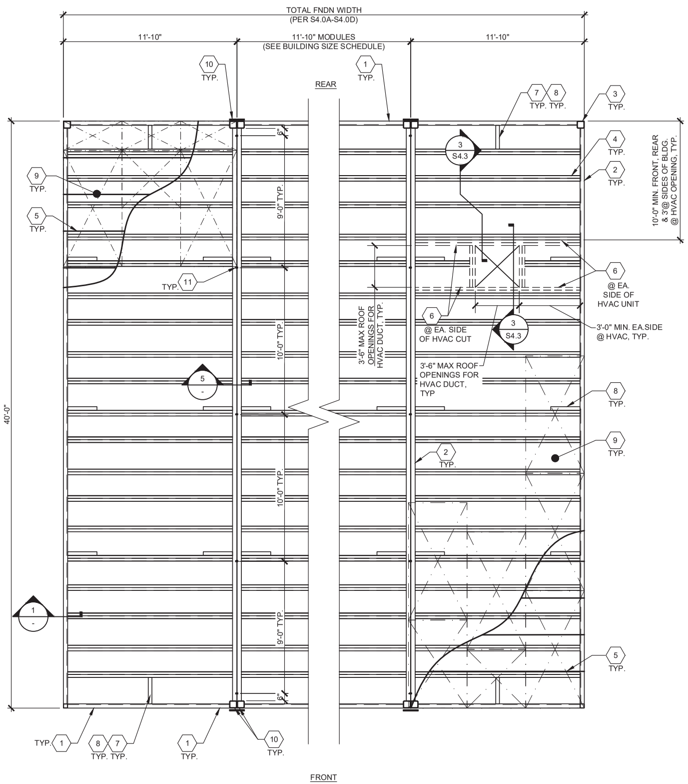
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY: JMA/KA
SCALE: AS NOTED
DATE: 06/29/22
PROJECT NO: 1674-21

SHEET TITLE:
ROOF FRAMING PLAN & DETAILS
ROOF SHEATHING OPTION
BUILDING D

SHEET NUMBER:
S4.0D



OVERALL ROOF FRAMING PLAN

SCALE: 1/4"=1'-0" | A

1. TRANSVERSE ROOF BEAM PER SHEET S5.0.
2. LONGITUDINAL ROOF BEAM PER SHEET S5.0.
3. HSS COLUMN PER SHEET S5.0.
4. ROOF PURLINS @ 24" O.C. MAX. -SEE SHEET S0.0
5. SINGLE PLY ROOFING
6. PROVIDE DOUBLE PURLINS PER 2-4/S4.3 @ OPTIONAL HVAC UNIT (800# MAX), (1) HVAC UNIT PER MODULE MAX. LOCATE PER ROOF PLAN & PROVIDE 48" CLEAR MIN. BETWEEN ALL DUCT & SKYLIGHT OPENINGS, TYP. REFER TO M1.1A FOR HVAC SIZE AND M1.7 FOR UNIT WEIGHT

   NOTE: DO NOT HEAD OFF MORE THAN ONE (1) ROOF PURLIN. MULTIPLE CONSECUTIVE ROOF PURLINS SHALL NOT BE INTERRUPTED UNO - SEE 2/S4.3.
7. MID-SPAN PURLIN BLOCKING WELD TO ROOF PURLINS PER DETAIL 3/S4.3 BLOCKING IS ONLY REQUIRED AT END WALLS AT PURLINS WITH DIAGONAL BEAM BRACING AT EXTERIOR END WALLS PER (8) BELOW.
8. 3x1x12 GA. BENT PLATE DIAGONAL BRACE TO ROOF BEAM PER DETAIL 1/S4.1 @ 10'-0" O.C.

   PROVIDE PURLIN BLOCKING AND BRACE @ CENTER OF END WALLS ONLY PER (7) ABOVE.
9. 15/32" APA RATED PLYWOOD OR OSB ROOF SHEATHING, C-D EXPOSURE 1, 32/16 SPAN RATING. PLYWOOD SHALL BE 5 PLY CONFORMING TO PS 1-09 OR PS 2-10. OSB SHEATHING SHALL CONFORM TO PRP-108 OR PS 2-10. ALL PLYWOOD OR OSB SHALL BE EITHER T&G OR EDGE CLIPPED AT UNSUPPORTED EDGES. STAGGER SHEETS 48" O.C. AS SHOWN w/ FACE GRAIN PERPENDICULAR TO ROOF PURLINS, 2 SPANS MIN., 24" MIN. WIDTH. ALL BOUNDARY, EDGE & FIELD ATTACHMENTS SHALL BE 3/8" MIN. FROM EDGE OF OSB OR PLYWOOD & EDGE OF STEEL SUPPORTING MEMBER. REFER TO FASTENING SCHEDULE S4.1 FOR FASTENING.
10. TENSION TIE (SITE CONDITION) - SEE S5.2
11. ½"Ø A307 BOLTS @ 6" FROM ENDS AND @ 10'-0" MAX. O.C. AT MID DEPTH C12'S TYP. @ MOD LINES

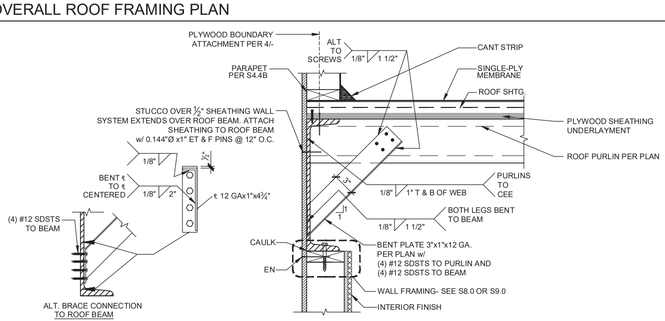
KEYNOTES

SHEATHING FASTENING SCHEDULE

FASTENING	0.100"Ø OR 0.144"Ø ET&F PINS SPACING	#12 SDSTS SPACING (STRUCTURAL STEEL ONLY)
BOUNDARY	6" O.C.	6" O.C.
EDGE	6" O.C.	6" O.C.
FIELD	6" O.C.	12" O.C.

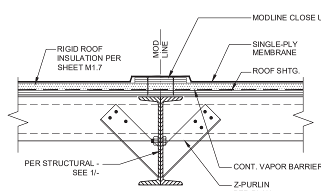
NOTE:
-ET&F PINS PER IAPMO REPORT UES ER-0335. SDSTS PER ASTM C1513. (TEKS PER ESR 1976 OR EQUAL)
-ET&F PINS AT COLD FORMED MEMBERS ONLY.

FASTENING SPACING SCHEDULE | 4



SIDE WALL TO ROOM BEAM DETAIL

SCALE: 1/4"=1'-0" | 1



ROOF BEAM CONNECTION DETAIL

SCALE: 1 1/2"=1'-0" | 5

NOT USED

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PRE-CHECKED SET NAME
MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK C. KAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. CRAIG STATE OF CALIFORNIA

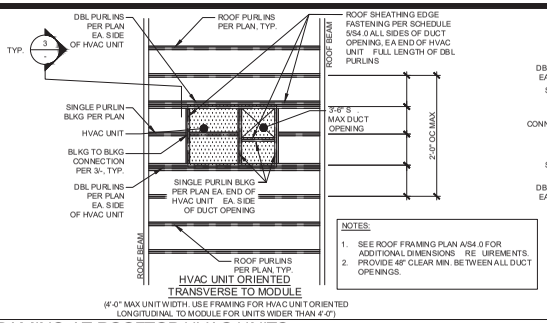
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

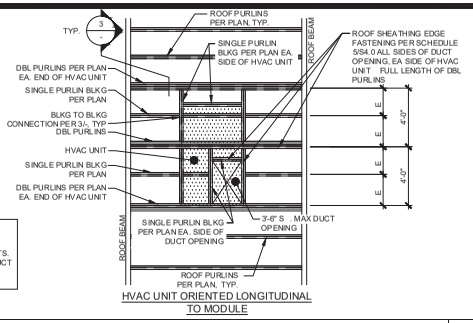
SHEET TITLE:
ROOF FRAMING PLAN
& DETAILS
ROOF SHEATHING OPTION

SHEET NUMBER:
S4.1



HVAC UNIT ORIENTED TRANSVERSE TO MODULE

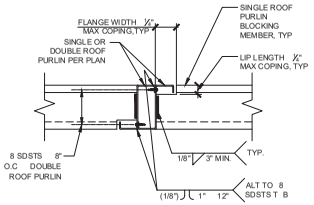
(4'-0" MAX UNIT WIDTH. USE FRAMING FOR HVAC UNIT ORIENTED LONGITUDINAL TO MODULE FOR UNITS WIDER THAN 4'-0")



HVAC UNIT ORIENTED LONGITUDINAL TO MODULE

ROOF FRAMING AT ROOFTOP HVAC UNITS

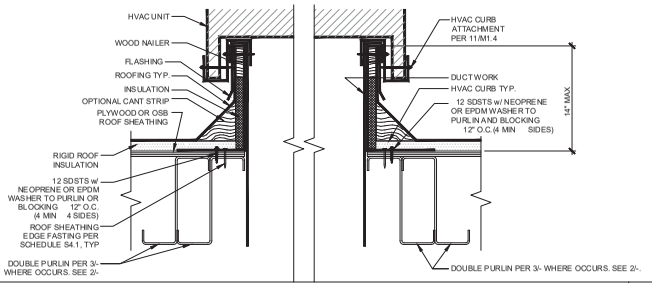
SCALE: 1 1/2"=1'-0" | 2



' ' PURLINS

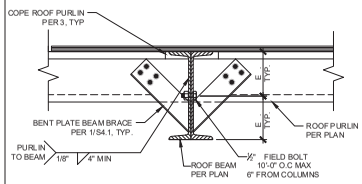
BLOCKING & DBL PURLIN CONNECTION DETAIL

SCALE: 1 1/2"=1'-0" | 3



HVAC CURB DETAIL ANCHORAGE

SCALE: 1 1/2"=1'-0" | 4



OPTIONAL ROOF TIE PLATE

SCALE: 1 1/2"=1'-0" | 5

NOT USED | 6

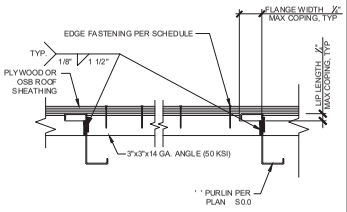
NOT USED | 7

NOT USED | 8

NOT USED | 9

NOT USED | 10

NOT USED | 11



' ' PURLINS

TYP. ANGLE TO Z-PURLIN ATTACHMENT

SCALE: 1 1/2"=1'-0" | 12

NOT USED | 13

NOT USED | 14

NOT USED | 15

GENERAL NOTES

1. THE MATERIAL THICKNESS OF LIGHT GAUGE STRUCTURAL MEMBERS, IN THEIR END USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED ON SHEET S0.0 THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

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REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

ROOF FRAMING DETAILS
ROOF SHEATHING OPTION

SHEET NUMBER:

S4.3

WALL LEGEND

- PARAPET HEIGHT +18'-0" A.F.F.
- PARAPET HEIGHT +16'-0" A.F.F.
- PARAPET HEIGHT NOMINAL +6" ABOVE ROOF DECK

OVERALL PARAPET PLAN 1

SCALE: 1/8"=1'-0"

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LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BRUCE D. DOIG STATE OF CALIFORNIA

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REVISIONS

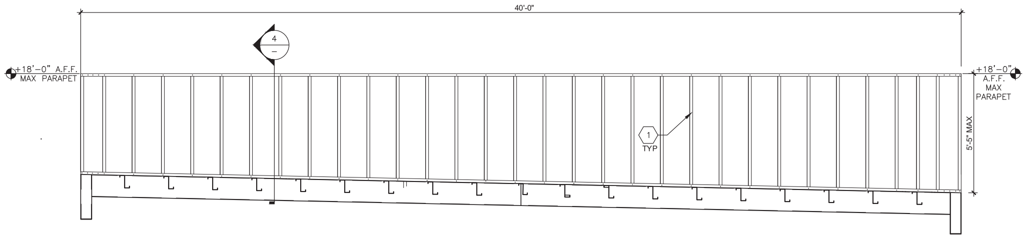
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

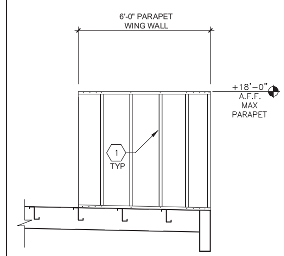
OVERALL PARAPET PLAN

SHEET NUMBER:

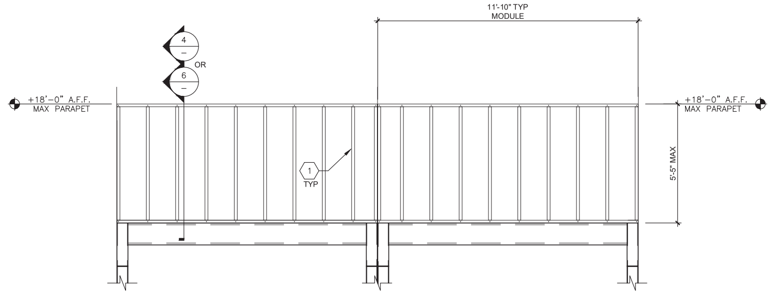
S4.4A



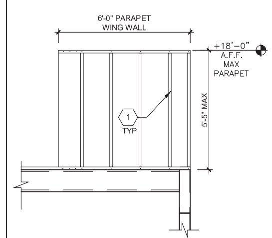
PARAPET WALL OPTION @ LONGITUDINAL FRAME — SCALE: 3/8"=1'-0" — 1



PARTIAL PARAPET WALL OPT. @ LONGITUDINAL FRAME — SCALE: 3/8"=1'-0" — 1A



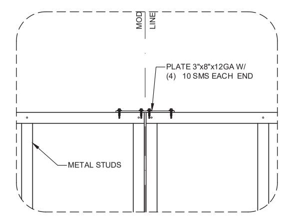
PARAPET WALL OPTION @ TRANSVERSE FRAME — SCALE: 3/8"=1'-0" — 2



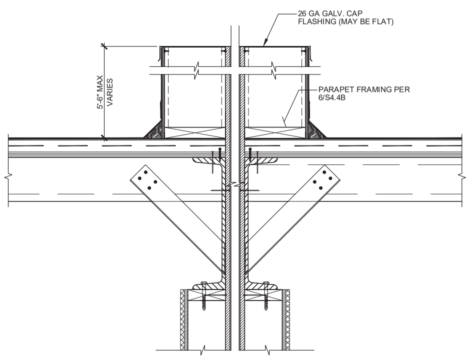
PARTIAL PARAPET WALL OPT. @ TRANSVERSE FRAME — SCALE: 3/8"=1'-0" — 2A

KEY NOTES

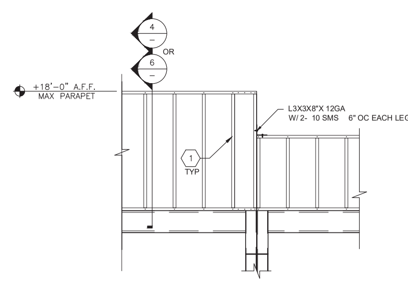
1 — STEEL STUDS OER STUD/STRACK SCHEDULE 16" O.C.



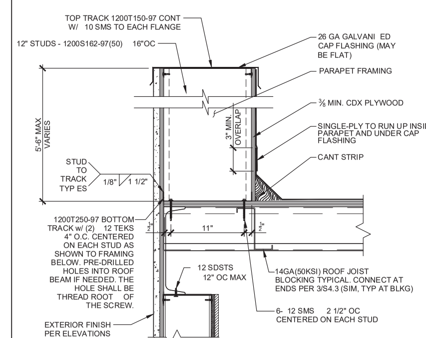
PARAPET DETAIL @ MODLINES — SCALE: N.T.S. — 3



BACK TO BACK PARAPET DETAIL — 4



PARAPET @ DROP — SCALE: 3/8" = 1'-0" — 5


TOP TRACK 1200T150-97 CONT
W/ 10 SMS TO EACH FLANGE
12" STUDS - 1200S162-97(50) 16"OC
26 GA GALVANI ED
CAP FLASHING (MAY
BE FLAT)
PARAPET FRAMING
⅜ MIN. CDX PLYWOOD
SINGLE-PLY TO RUN UP INSIDE
PARAPET AND UNDER CAP
FLASHING
CANT STRIP
3" MIN.
OVERLAP
5'-6" MAX
VARIES
STUD
TO
TRACK
TYP ES
1/8"
1 1/2"
11"
1200T250-97 BOTTOM
TRACK w/ (2) 12 TEKS
4" O.C. CENTERED
ON EACH STUD AS
SHOWN TO FRAMING
BELOW. PRE-DRILLED
HOLES INTO ROOF
BEAM IF NEEDED. THE
HOLE SHALL BE
THREAD ROOT OF
THE SCREW.
12 SDSTS
12" OC MAX
14GA(50KSI) ROOF JOIST
BLOCKING TYPICAL. CONNECT AT
ENDS PER 3/S4.3 (SIM, TYP AT BLKG)
6- 12 SMS 2 1/2" OC
CENTERED ON EACH STUD
EXTERIOR FINISH
PER ELEVATIONS

NOTE: REFER TO DETAILS 4/- FOR OTHER ATTACHMENT DETAILS

PARAPET DETAIL TYP — SCALE: 1 1/2" = 1'-0" — 6

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MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT — PATRICK ... NAGH — No. C12631 — Ren. 3-31-23 — STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER — BRUCE D. OKIG — STATE OF CALIFORNIA

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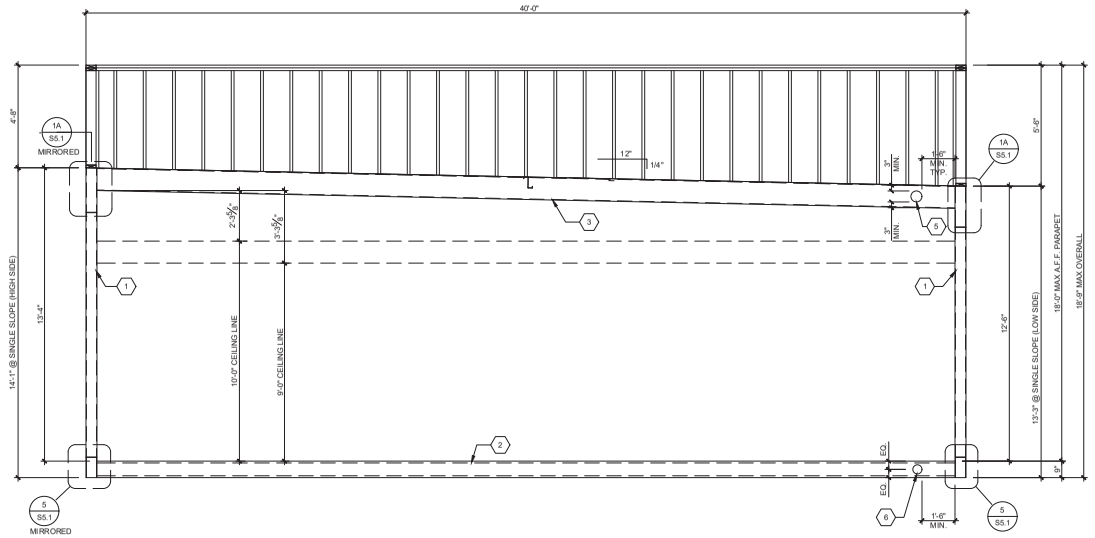
REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
PARAPET FRAMING
ELEVATIONS DETAILS

SHEET NUMBER:
S4.4B



PARAPET LONGITUDINAL FRAME ELEVATION

SCALE: 3/8"=1'-0" | 1

1 HSS COLUMN - SEE SCHEDULE 3 & BELOW

2 FLOOR BEAM - SEE SCHEDULE 3 & BELOW

3 LONGITUDINAL ROOF BEAM PER 18/S0.0 - GAUGE PER SCHEDULE 3 BELOW.

4 TRANSVERSE ROOF BEAM PER 18/S0.0 - GAUGE PER 3 BELOW.

5 6"Ø MAX OPENING IN WEB OF ROOF BEAM. MINIMUM SPACING OF HOLES @ 48" O.C., HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF ROOF BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION. - SEE 6/S5.1

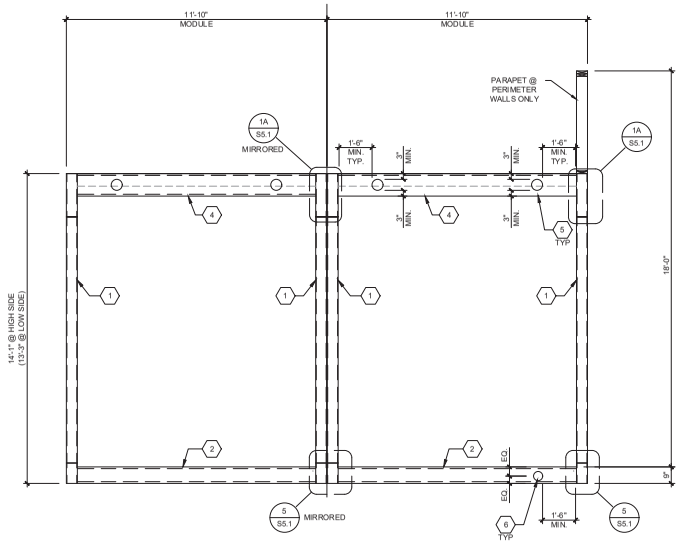
NOTE: IF HOLE IS 3" OR LESS, THEY MAY BE SPACED @ 24" O.C. MINIMUM

6 4"Ø MAX OPENING IN WEB OF FLOOR BEAM. MINIMUM SPACING OF HOLES @ 48" O.C. HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF FLOOR BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION - SEE 6/S5.1.

NOTE: IF HOLE IS 2" OR LESS, THEY MAY BE SPACED @ 24" O.C. MINIMUM.

7 NOT USED

KEY NOTES



PARAPET TRANSVERSE FRAME ELEVATION

SCALE : 3/8"= 1'-0" | 4

NOT USED | 2

NOT USED | 5

FLOOR BEAMS	COLUMNS	LONGITUDINAL ROOF BEAM	TRANSVERSE ROOF BEAM
CONCRETE FLOOR			
C9x13.4 (36 KSI)	HSS 6x6x5/16 (ASTM A1085) Fy = 50ksi	C12x20.7 (50 KSI)	C12x20.7 (50 KSI)

FRAME MEMBER SCHEDULE | 3

NOT USED | 6

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SITE SPECIFIC PROJECT NAME

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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK D. DORE
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PATRICK D. DORE
No. 35223
STATE OF CALIFORNIA

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REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

MOMENT FRAME
ELEVATIONS & DETAILS
@ BUILDINGS A & D

SHEET NUMBER:

S5.0A

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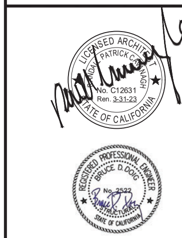
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES



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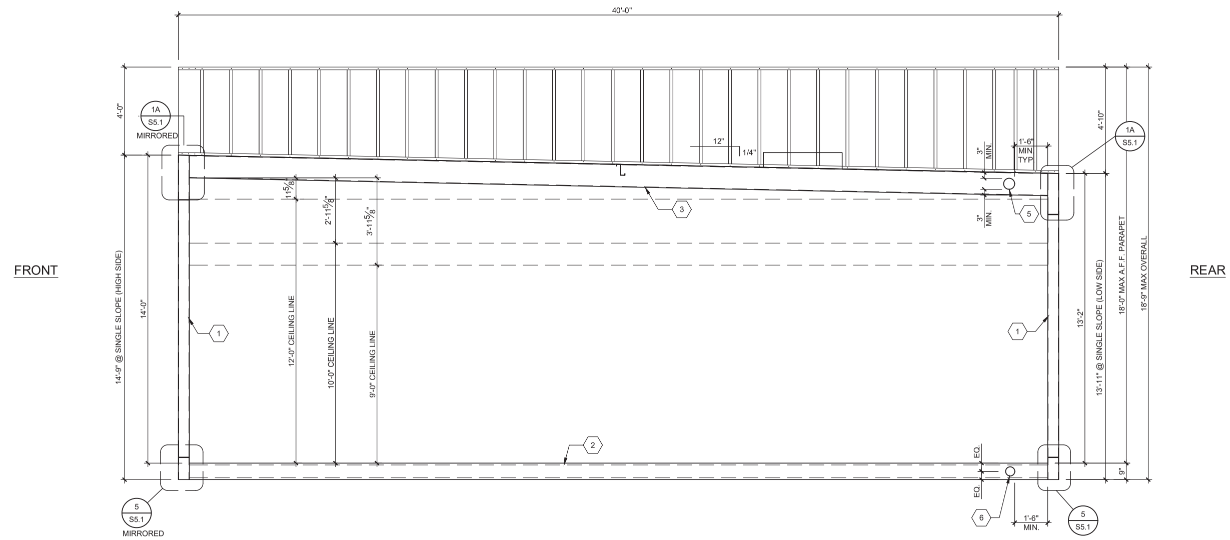
REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
MOMENT FRAME ELEVATIONS & DETAILS @ BUILDINGS B & C

SHEET NUMBER:
S5.0B



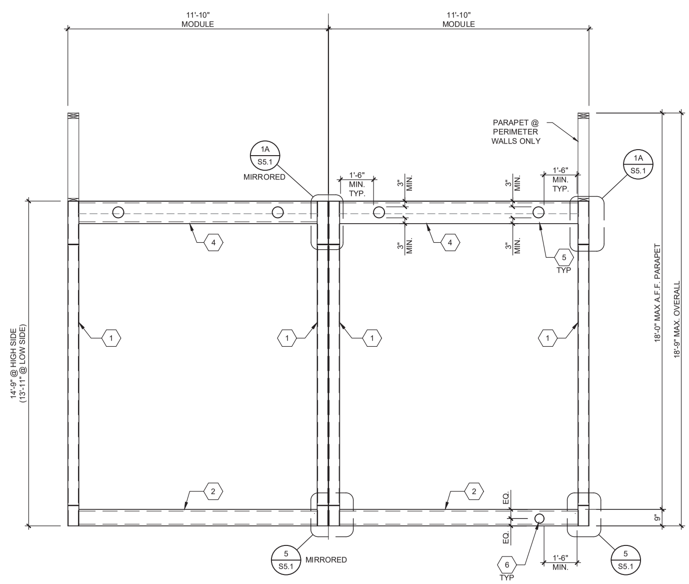
PARAPET LONGITUDINAL FRAME ELEVATION — SCALE: 3/8"=1'-0" — 1

KEY NOTES

1. HSS COLUMN - SEE SCHEDULE 3 & BELOW
2. FLOOR BEAM - SEE SCHEDULE 3 & BELOW
3. LONGITUDINAL ROOF BEAM PER 18/S0.0 - GAUGE PER SCHEDULE 3 BELOW.
4. TRANSVERSE ROOF BEAM PER 18/S0.0 - GAUGE PER 3 BELOW.
5. 6"Ø MAX OPENING IN WEB OF ROOF BEAM. MINIMUM SPACING OF HOLES @ 48" O.C., HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF ROOF BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION. - SEE 6/S5.1

   NOTE: IF HOLE IS 3" OR LESS, THEY MAY BE SPACED @ 24" O.C. MINIMUM
6. 4"Ø MAX OPENING IN WEB OF FLOOR BEAM. MINIMUM SPACING OF HOLES @ 48" O.C. HOLES MAY OCCUR @ ANY LOCATION ALONG LENGTH OF FLOOR BEAM EXCEPT AS NOTED OTHERWISE ON FRAMING ELEVATION - SEE 6/S5.1.

   NOTE: IF HOLE IS 2" OR LESS, THEY MAY BE SPACED @ 24" O.C. MINIMUM.



PARAPET TRANSVERSE FRAME ELEVATION — SCALE: 3/8"=1'-0" — 2

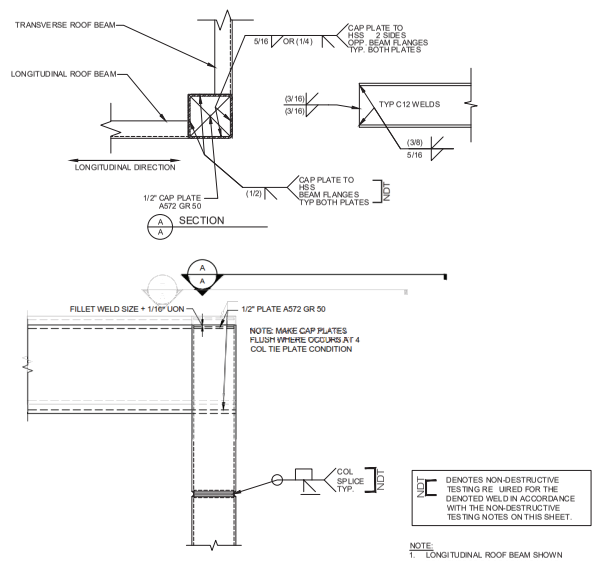
NOT USED — 2

FRAME MEMBER SCHEDULE — 3

FLOOR BEAMS	COLUMNS	LONGITUDINAL ROOF BEAM	TRANSVERSE ROOF BEAM
CONCRETE FLOOR			
C9x13.4 (36 KSI)	HSS 6x6x$\frac{3}{8}$ (ASTM A1085) Fy = 50ksi	C12x20.7 (50 KSI)	C12x20.7 (50 KSI)

NOT USED — 5

NOT USED — 6



NOTE:
1. LONGITUDINAL ROOF BEAM SHOWN TRANSVERSE ROOF BEAM SIMILAR

TYPICAL ROOF BEAM TO HSS DETAIL | 1A

SCALE: 1 1/2" 1'-0"

NOT USED | 1B

THE WELDING PROCEDURE UALIFICATION TEST RECORD AND WELDING PROCEDURE SPECIFICATION FOR WELDS ON THIS SHEET SHALL BE PREPARED IN ACCORDANCE WITH AWS D1.1-15 (HOT-ROLLED), D1.3-08 (COLD-FORMED) D1.8-16 AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND SUBMITTAL TO D.S.A. UPON RE UEST. ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT.-LBS AT ERO DEGREES F, AS DETERMINED BY AWS CLASSIFICATION.

GENERAL NOTES

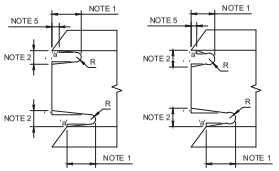
NON-DESTRUCTIVE TESTING OF COMPLETE JOINT PENETRATION (CJP) GROVE WELDS AT THE MOMENT-RESISTING BEAM-TO-COLUMN CONNECTIONS SHALL COMPLY WITH AISC 341-16 CHAPTER J PER CBC 1705A.2.1.

1. WELDS SUBJECT TO THE RE UIREMENTS OF NON-DESTRUCTIVE TESTING ARE NOTED ON THESE DRAWINGS WITH THE SYMBOL: NDT
2. ALL WELDS DESIGNATED FOR NON-DESTRUCTIVE TESTING RE UIRE MAGNETIC PARTICLE TESTING (MT) TO BE PERFORMED ON 25 OF THOSE WELDS.
3. ULTRASONIC TESTING (UT) IS TO BE PERFORMED ON 100 OF WELDS DENOTED WITH THE SYMBOL: NDT AND IS ONLY RE UIRED ON THOSE DESIGNATED WELDS.
4. ULTRASONIC TESTING (UT) IS ONLY RE UIRED WHERE THE THICKNESS OF THE COLUMN IS 5/16" OR GREATER. UT IS NOT RE UIRED WHERE THE COLUMN THICKNESS IS LESS THAN 5/16". MAGNETIC PARTICLE TESTING (MT) IS STILL RE UIRED.
5. ULTRASONIC TESTING (UT) IS NOT RE UIRED ON WELDS FROM STRUCTURAL STEEL CHANNEL BEAM FLANGES TO COLUMNS AS UT TESTING IS NOT APPROPRIATE FOR SECTIONS WITH VARYING DEPTHS. MAGNETIC PARTICLE TESTING (MT) IS STILL RE UIRED.

NON-DESTRUCTIVE TESTING NOTES

1. FILLER METALS SHALL CONFORM TO THE RE UIREMENTS OF THE AISC SEISMIC PROVISIONS.
2. WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH THE AISC SEISMIC PROVISIONS.
3. UALITY CONTROL AND UALITY ASSURANCE SHALL BE IN ACCORDANCE WITH THE AISC SEISMIC PROVISIONS.
4. WELD ACCESS HOLES SHALL BE IN ACCORDANCE WITH AISC 360-16, SECTION J1.6, AND SHALL BE CONSTRUCTED PER THE FOLLOWING DETAILS NOTES.

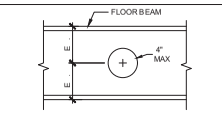
WELD ACCESS HOLE GEOMETRY



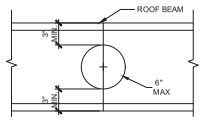
NOTES: THESE ARE TYPICAL DETAILS FOR JOINTS WELDED FROM ONE SIDE AGAINST STEEL BACKING WHERE WELD ACCESS HOLES ARE RE UIRED.

1) LENGTH: GREATER OF 1.5tw (WEB THICKNESS) OR 1-1/2 IN. (38 MM)
2) HEIGHT: GREATER OF 1.0tw OR 3/4 IN. (19 MM) BUT NEED NOT EXCEED 2 IN. (50 MM)
3) R: 3/8 IN. MIN. (10 MM). GRIND THE THERMALLY CUT SURFACES OF WELD ACCESS HOLES IN HEAVY SHAPES AS DEFINED IN SECTIONS A3.1(c) AND (d) OF AISC 360-16.
4) SLOPE 'a' FORMS A TRANSITION FROM THE WEB TO THE FLANGE. SLOPE ' ' MAY BE HORI ONTAL.
5) THE BOTTOM OF THE TOP FLANGE IS TO BE CONTOURED TO PERMIT THE TIGHT FIT OF BACKING BARS WHERE THEY ARE TO BE USED.

RE . FOR FR. MOMENT CONNECTIONS



4" OPENING IN FLOOR BEAM



6" OPENING IN ROOF BEAM

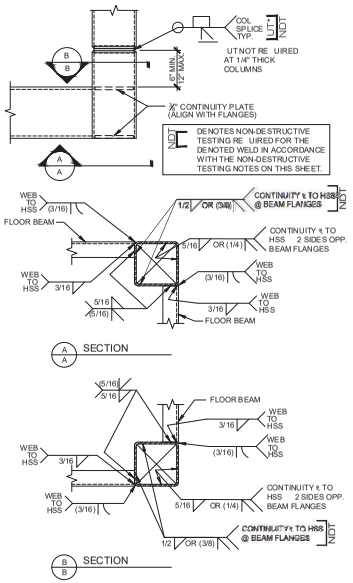
OPENING IN BEAMS | 6

SCALE: 1 1/2" 1'-0"

NOT USED | 3

NOT USED | 4

SCALE: 1 1/2" 1'-0"



TYP. CORNER TO FLOOR BM DETAIL | 5

SCALE: 1 1/2" 1'-0"

NOT USED | 5B

SCALE: 1 1/2" 1'-0"

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DATE: 08/30/2022

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PRE-CHECKED SET NAME

MODULAR BUILDING
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40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK D. DORE
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
PATRICK D. DORE
No. M 2522
MECHANICAL
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND/OR FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

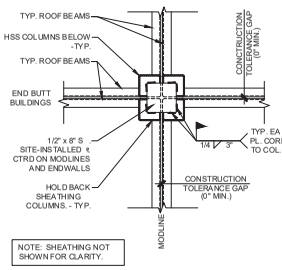
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

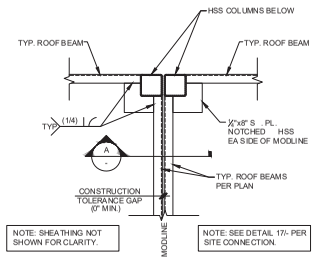
MOMENT FRAME
CONNECTION DETAILS

SHEET NUMBER:

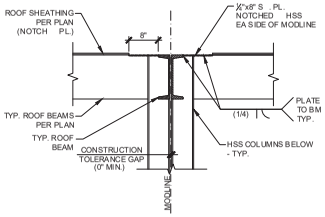
S5.1



INTERIOR FRAME TENSION TIE DETAIL
SITE CONNECTION
SCALE: 3/4" 1'-0" | 1



PLAN VIEW



A - SECTION VIEW

NOT USED | 6

ENDWALL TENSION TIE DETAIL - OPTION 2
FACTOR (IN-PLANT)
SCALE: 3/4" 1'-0" | 7

NOT USED | 3

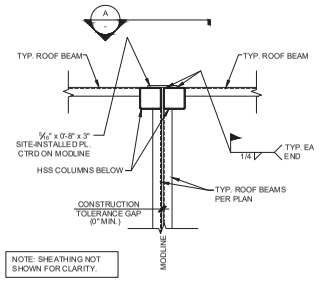
NOT USED | 4

NOT USED | 5

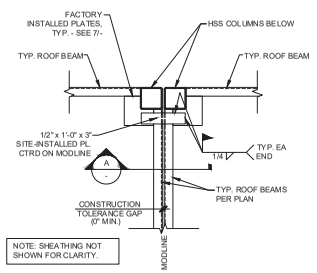
NOT USED | 8

NOT USED | 9

NOT USED | 10



PLAN VIEW

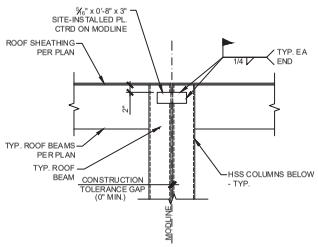


PLAN VIEW

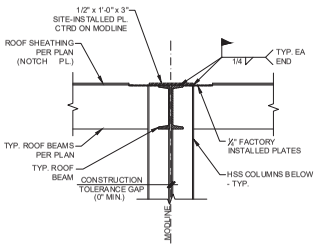
NOT USED | 13

NOT USED | 14

NOT USED | 15



A - SECTION VIEW



A - SECTION VIEW

ENDWALL TENSION TIE DETAIL - OPTION 1
SITE CONNECTION
SCALE: 3/4" 1'-0" | 16

ENDWALL TENSION TIE DETAIL - OPTION 2
SITE CONNECTION
SCALE: 3/4" 1'-0" | 17

NOT USED | 18

NOT USED | 19

NOT USED | 20

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CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. [illegible]
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GEORGE D. DORR
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REVISIONS

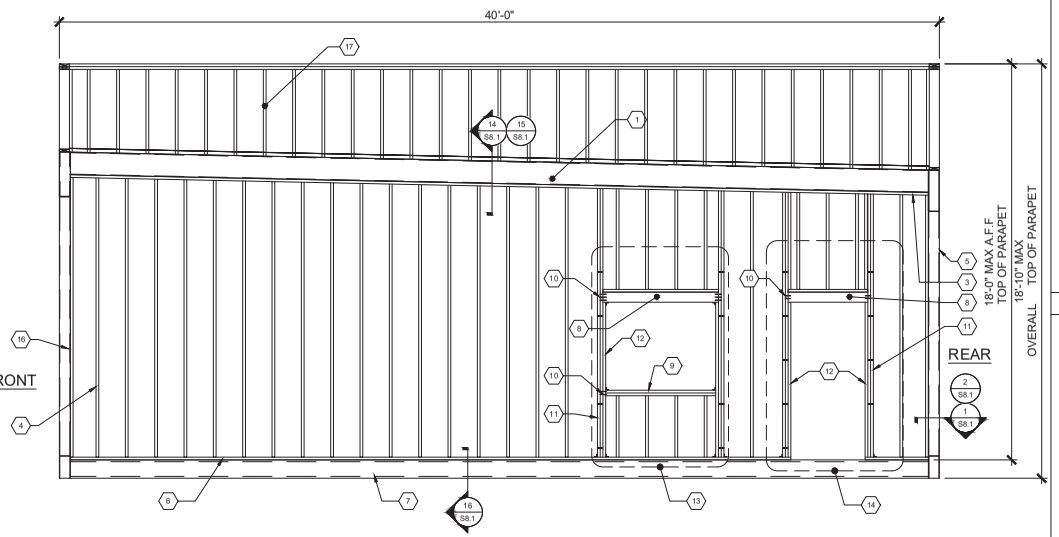
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

CONNECTION DETAILS

SHEET NUMBER:

S5.2



TYPICAL SIDE WALL FRAMING (MONO PITCH)

SCALE: 3/8" 1'-0" A

1. ROOF BEAM PER SHEET S5.0
2. 2x6 MIN. TOP PLATE - NO SPLICE
3. 2x6 MIN. TOP PLATE
4. 2x6 MIN. STUDS SPACED PER SCHEDULE W(3) 0.131" x3" END NAILS OR (4) 0.131" x3" TOE NAILS T B TO PLATES TYP.
5. HSS COLUMN PER SHEET S5.0
6. 2x6 MIN. BOTTOM PLATE - NO SPLICE (P.T. AT CONCRETE FLOORS)
6A. 2x6 MIN. BOTTOM PLATE (P. T. AT CONCRETE FLOORS)
7. PERIMETER FLOOR BEAM PER SHEET S5.0
8. HEADER PER OPENING SCHEDULE
9. WINDOW SILL PER OPENING SCHEDULE
10. END NAILS THROUGH KING STUD TO HEADER SILL PER OPENING SCHEDULE
11. KING STUDS PER OPENING SCHEDULE
12. 2x6 MIN. TRIMMER
13. OPTIONAL WINDOW OPENING FRAMING PER SCHEDULE (REFER TO 4/S8.0 FOR DETAILS AND FLOOR PLANS FOR LOCATIONS)
14. OPTIONAL DOOR OPENING FRAMING PER SCHEDULE (REFER TO 5/S8.0 FOR DETAILS AND FLOOR PLANS FOR LOCATIONS)
15. NOT USED
16. 2x DOUBLE NAILER
17. PARAPET FRAMING - REFER TO S4.4

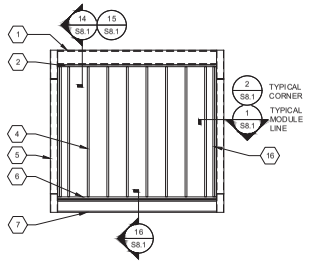
NOTE: SEE CARPENTRY NOTES SHEET N1.0 SECTION 6 FOR WOOD SPECIES GRADE

KEY NOTES

EXTERIOR WALL SCHEDULE			
FINISH TYPE	WALL FINISH COMMENTS	STUD TYPE	STUD SPACING
½" PLYWOOD SHEATHING CONFORMING TO PS1-09, APA RATED, 5 PLY 32/16", OR ½" OSB PANELS EXPOSURE 1 w/ ½" STUCCO	WALL FINISH PER A5.2 A5.3 NAILING PER BLDG SECTIONS[2]	2X6 HEM FIR 2 OR 2X6 DOUG FIR 2	16" O.C. MAX

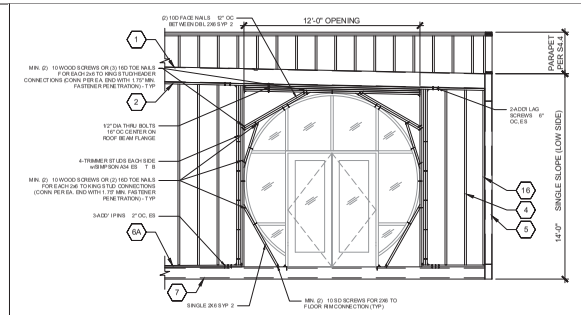
FOOTNOTES
1. ALL NAILS IN EXTERIOR APPLICATIONS SHALL BE GALVANI ED.
2. TYPICAL PLYWOOD NAILING WHERE OCCURS: 0.131" x2½" GALV. NAILS 6" O.C. E.N. 12" O.C. F.N. (ALL EDGES BLOCKED).

EXTERIOR WALL FINISH/WALL STUD SCHEDULE



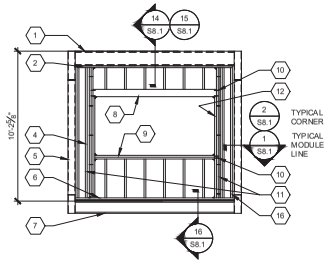
TYP. END WALL FRAMING w/ NO OPENINGS

SCALE: 1/4" 1'-0" 1



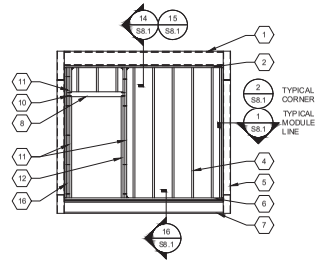
LONGITUDINAL ROUND DOOR

SCALE: 1/4" 1'-0" 3



TYPICAL END WALL FRAMING WINDOW

SCALE: 1/4" 1'-0" 4



TYPICAL END WALL FRAMING w/ DOOR

SCALE: 1/4" 1'-0" 5

DOOR/WINDOW OPENING AT STUCCO WALL								
OPENING SI E	HEADER	WINDOW SILL[2] (AS APPLICABLE)	KING STUDS[1]	KING STUD INTERNAIL SPACING	HEADER TO KING STUD NAILING		WINDOW SILL TO KING STUD NAILING	
					END NAILS 1ST KING STUD TO HEADER[1] (0.131" x3" NAILS)	FACE NAILS KING STUD TO KING STUD HEADER (0.131" x3" NAILS)	END NAILS 1ST KING STUD TO WINDOW SILL[3] (0.131" x3" NAILS)	FACE NAILS KING STUD TO KING STUD WINDOW SILL (0.131" x3" NAILS)
6'-0" TO 9'-0"	6x8	(2) 2x6	(4) 2x6	0.131" x3" NAILS 12" O.C. MAX. STAGGERED	5	3	4	2
4'-0" TO 6'-0"	6x8	(2) 2x6	(3) 2x6		4	2	4	2
4'-0" OR LESS	4x6 FLAT	(1) 2x6	(2) 2x6		3	2	2	2

FOOTNOTES
1. PROVIDE (2) SIMPSON A34 T B OF KING STUDS TO PLATES FOR OPENINGS GREATER THAN 4'-0". PROVIDE (1) SIMPSON A34 T B OF KING STUDS TO PLATES FOR OPENINGS 4'-0" OR LESS.
2. WHEN MORE THAN A SINGLE SILL PLATE IS RE UIRED, INTERNAIL w/ 0.131" x3" NAILS 12" O.C. STAGGERED.
3. TWO (2) END NAILS PER LAMINATION MINIMUM.

OPENING SCHEDULE

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK D. DORE
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
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No. M 2522
MECHANICAL
STATE OF CALIFORNIA

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REVISIONS
1
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3
4

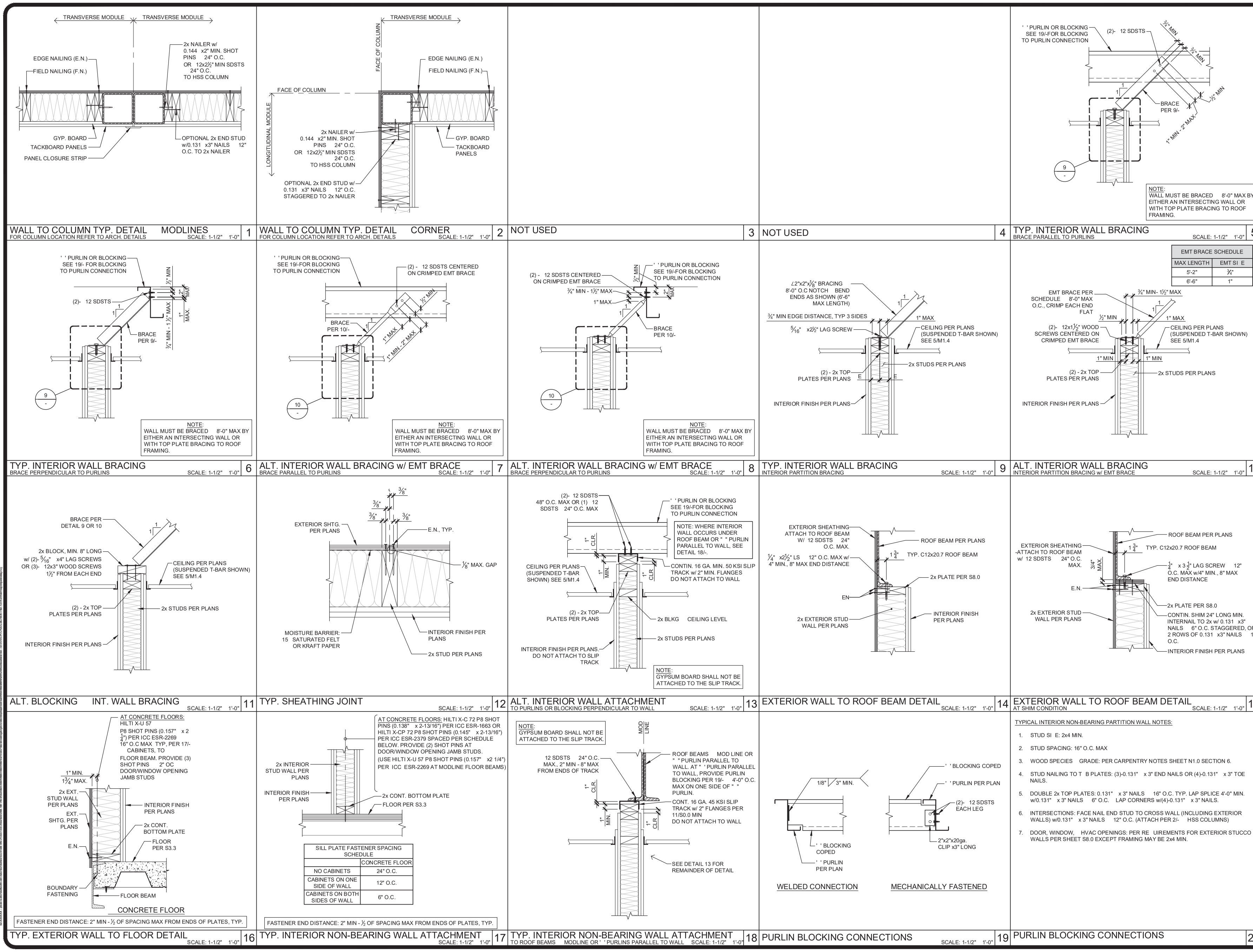
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

WALL FRAMING
ELEVATIONS SCHEDULES
- WOOD STUDS

SHEET NUMBER:

S8.0


WALL TO COLUMN TYP. DETAIL MODLINES 1
FOR COLUMN LOCATION REFER TO ARCH. DETAILS SCALE: 1-1/2" 1'-0"
TRANSVERSE MODULE
EDGE NAILING (E.N.)
FIELD NAILING (F.N.)
GYP. BOARD
TACKBOARD PANELS
PANEL CLOSURE STRIP
OPTIONAL 2x END STUD w/0.131 x3" NAILS 12" O.C. TO 2x NAILER
WALL TO COLUMN TYP. DETAIL CORNER 2
FACE OF COLUMN
LONGITUDINAL MODULE
TO HSS COLUMN
STAGGERED TO 2x NAILER
NOT USED 3
NOT USED 4
TYP. INTERIOR WALL BRACING 5
BRACE PARALLEL TO PURLINS
NOTE: WALL MUST BE BRACED 8'-0" MAX BY EITHER AN INTERSECTING WALL OR WITH TOP PLATE BRACING TO ROOF FRAMING.
TYP. INTERIOR WALL BRACING 6
BRACE PERPENDICULAR TO PURLINS
ALT. INTERIOR WALL BRACING w/ EMT BRACE 7
BRACE PARALLEL TO PURLINS
ALT. INTERIOR WALL BRACING w/ EMT BRACE 8
BRACE PERPENDICULAR TO PURLINS
TYP. INTERIOR WALL BRACING 9
INTERIOR PARTITION BRACING
ALT. INTERIOR WALL BRACING 10
INTERIOR PARTITION BRACING w/ EMT BRACE
EMT BRACE SCHEDULE
MAX LENGTH | EMT SI E
5'-2" | ½"
6'-6" | 1"
CEILING PER PLANS (SUSPENDED T-BAR SHOWN) SEE 5/M1.4
2x STUDS PER PLANS
INTERIOR FINISH PER PLANS
ALT. BLOCKING INT. WALL BRACING 11
TYP. SHEATHING JOINT 12
MOISTURE BARRIER: 15 SATURATED FELT OR KRAFT PAPER
ALT. INTERIOR WALL ATTACHMENT 13
TO PURLINS OR BLOCKING PERPENDICULAR TO WALL
NOTE: GYPSUM BOARD SHALL NOT BE ATTACHED TO THE SLIP TRACK.
EXTERIOR WALL TO ROOF BEAM DETAIL 14
EXTERIOR WALL TO ROOF BEAM DETAIL 15
AT SHIM CONDITION
TYP. EXTERIOR WALL TO FLOOR DETAIL 16
CONCRETE FLOOR
FASTENER END DISTANCE: 2" MIN - ½ OF SPACING MAX FROM ENDS OF PLATES, TYP.
TYP. INTERIOR NON-BEARING WALL ATTACHMENT 17
SILL PLATE FASTENER SPACING SCHEDULE
CONCRETE FLOOR
NO CABINETS 24" O.C.
CABINETS ON ONE SIDE OF WALL 12" O.C.
CABINETS ON BOTH SIDES OF WALL 6" O.C.
TYP. INTERIOR NON-BEARING WALL ATTACHMENT 18
TO ROOF BEAMS MODLINE OR PURLINS PARALLEL TO WALL
PURLIN BLOCKING CONNECTIONS 19
WELDED CONNECTION
MECHANICALLY FASTENED
PURLIN BLOCKING CONNECTIONS 20
TYPICAL INTERIOR NON-BEARING PARTITION WALL NOTES:
1. STUD SI E: 2x4 MIN.
2. STUD SPACING: 16" O.C. MAX
3. WOOD SPECIES GRADE: PER CARPENTRY NOTES SHEET N1.0 SECTION 6.
4. STUD NAILING TO T B PLATES: (3)-0.131" x 3" END NAILS OR (4)-0.131" x 3" TOE NAILS.
5. DOUBLE 2x TOP PLATES: 0.131" x 3" NAILS 16" O.C. TYP. LAP SPLICE 4'-0" MIN. w/0.131" x 3" NAILS 6" O.C. LAP CORNERS w/(4)-0.131" x 3" NAILS.
6. INTERSECTIONS: FACE NAIL END STUD TO CROSS WALL (INCLUDING EXTERIOR WALLS) w/0.131" x 3" NAILS 12" O.C. (ATTACH PER 2/- HSS COLUMNS)
7. DOOR, WINDOW, HVAC OPENINGS: PER RE UIREMENTS FOR EXTERIOR STUCCO WALLS PER SHEET S8.0 EXCEPT FRAMING MAY BE 2x4 MIN.

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REVISIONS

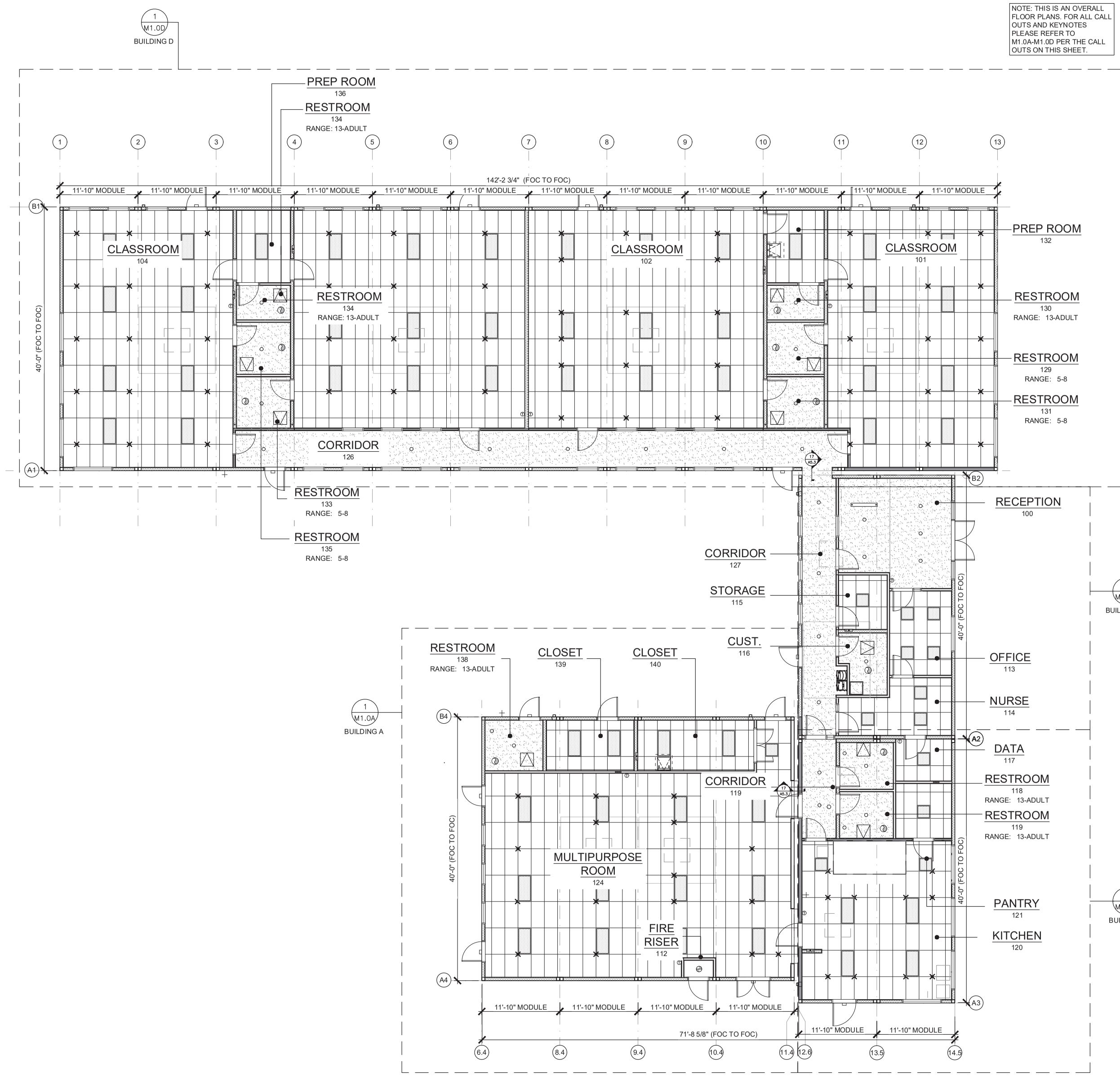
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

WALL FRAMING DETAILS - WOOD STUDS

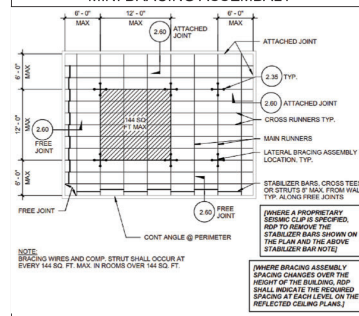
SHEET NUMBER:

S8.1



TYPICAL REFLECTED CEILING PLAN

SCALE: 1/8" 1'-0" 1



MIN. BRACING ASSEMBALY

REFER TO IR 25-2 APPENDIX A FOR GENERAL RE UIREMENTS

MIN. BRACING ASSEMBALY

MEP COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT RE UIREMENTS PRESCRIBED IN THE 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT E UIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE E UIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR110/220 VOLT RECEPTACLES HAVING A FLEXBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE E UIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS RE UIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCE NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND E UIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE RE UIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTES

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADE UACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☒ MD☒ PP☒ E☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM) __________.

MEP COMPONENT ANCHORAGE NOTES

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DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

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American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK KAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

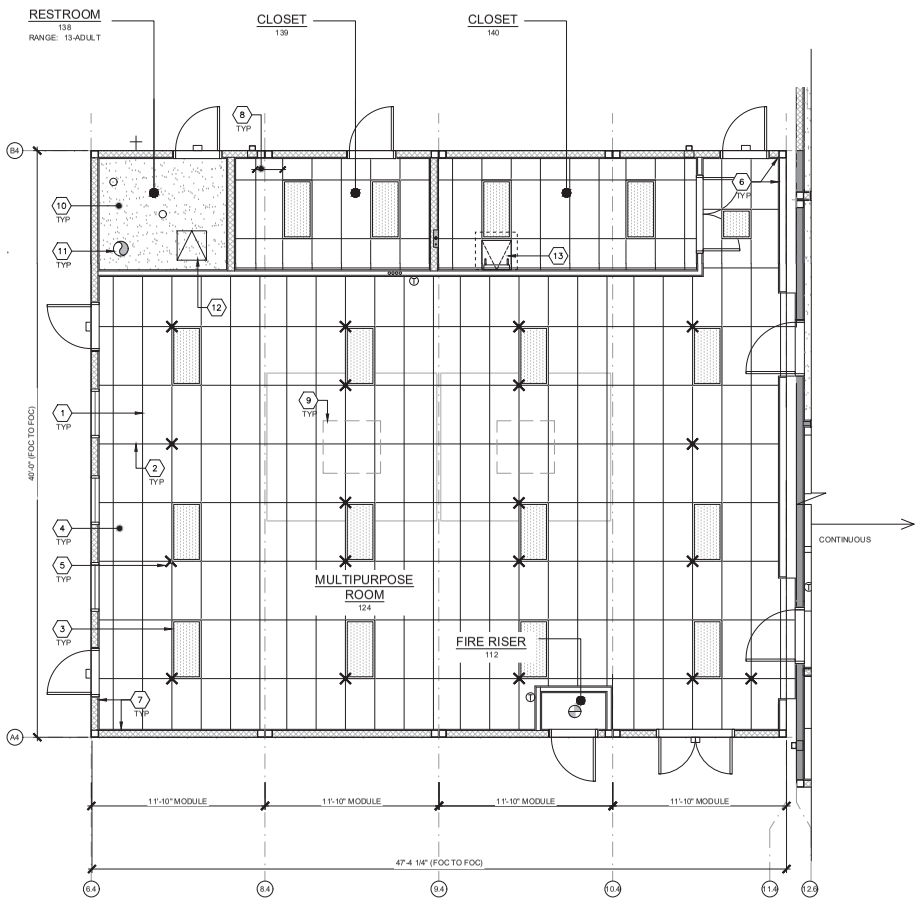
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
1
2
3
4

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

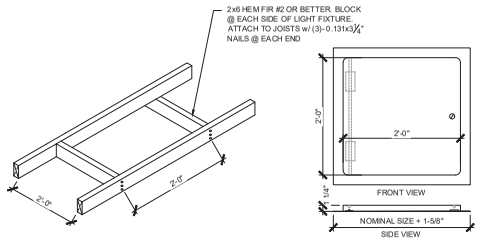
SHEET TITLE:
OVERALL REFLECTED CEILING PLAN

SHEET NUMBER:
M1.0



REFLECTED CEILING PLAN - BLDG A

SCALE: 1/4" = 1'-0" | 1



ATTIC ACCESS DETAIL

SCALE: 1" = 1'-0" | 2

2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A

ROOF HATCH/LADDER PER M1.6A

T-GRID CEILING - PER 5 AND 12/M1.4

GYP CEILING - PER 8/M1.6

SYMBOL LEGEND

NOT USED

NOT USED

1. MAIN TEE RUNNER TYP. PER TABLE A, SHEET M1.7
2. CROSS TEE RUNNER TYP. PER TABLE A, SHEET M1.7
3. INTERIOR LIGHT FIXTURE, REFER TO SHEET SHEET E1.0 FOR SPEC'S ATTACHMENT PER DETAIL 7/M1.4
4. CEILING HEIGHT @ 8'-6" MIN. REFER TO N3.0 FOR HEIGHTS
5. STRUT/SPLAY WIRE ASSEMBLY, SEE 2/M1.4 FOR DETAILS
6. FIXED CEILING END, SEE DETAIL 5A/M1.4
7. FREE CEILING END, SEE DETAIL 5B/M1.4
8. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED, SEE DETAIL 5C/M1.4
9. TYP. HVAC UNIT
10. GYP. BOARD CEILING - PER 8/M1.6
11. EXHAUST FAN
12. 2'x2' ATTIC CEILING ACCESS PANEL PER 2/-ROOF HATCH/LADDER PER M1.6A
13.

KEY NOTES

1. NOT USED
2. NOT USED
3. LIGHT FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
4. P.C TITLE 24 HAS BEEN RUN FOR WORSE CASE OUTDOOR VENTILATION REQUIREMENTS (SEE OUTDOOR VENTILATION ON SHEET N2.0 FOR OUR OUTDOOR VENTILATION DESIGN REQUIREMENT NOTES)

GENERAL NOTES

IDENTIFICATION STAMP
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Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. MAHONEY No. C12631 Exp. 3-31-25 STATE OF CALIFORNIA

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REVISIONS

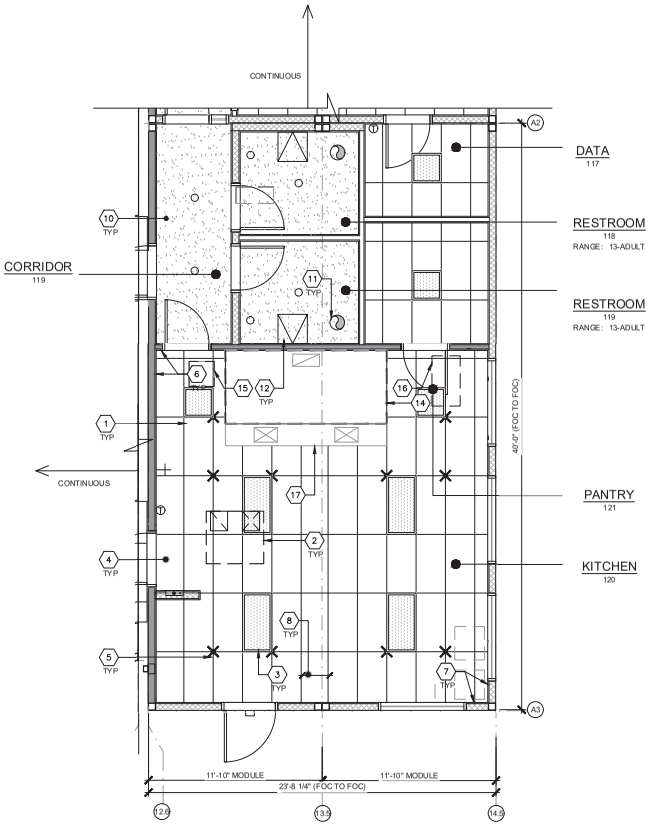
DRAWN BY:	JM/MK/A
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

REFLECTED CEILING PLAN - BLDG A

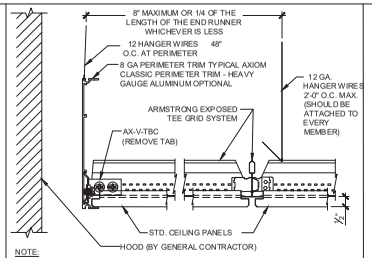
SHEET NUMBER:

M1.0A



REFLECTED CEILING PLAN - BLDG B

SCALE: 1/4" 1'-0" | 1



CEILING PERIMETER DETAIL

SCALE: 1/4" 1'-0" | 2

SYMBOL LEGEND

- 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
- ROOF HATCH/LADDER PER M1.6A
- T-GRID CEILING - PER 5 AND 12/M1.4
- GYP CEILING - PER 8/M1.6

NOT USED

NOT USED

NOT USED

1. MAIN TEE RUNNER TYP. PER TABLE A, SHEET M1.7
2. CROSS TEE RUNNER TYP. PER TABLE A, SHEET M1.7
3. INTERIOR LIGHT FIXTURE, REFER TO SHEET SHEET E1.0 FOR SPEC'S ATTACHMENT PER DETAIL 7/M1.4
4. CEILING HEIGHT 8'-6" MIN. REFER TO N3.0 FOR HEIGHTS
5. STRUT/SPLAY WIRE ASSEMBLY, SEE 2/M1.4 FOR DETAILS
6. FIXED CEILING END, SEE DETAIL 5A/M1.4
7. FREE CEILING END, SEE DETAIL 5B/M1.4
8. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED, SEE DETAIL 5C/M1.4
9. TYP. HVAC UNIT
10. GYP. BOARD CEILING - PER 8/M1.6
11. EXHAUST FAN
12. 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
13. NOT USED
14. CEILING PERIMETER HOOD PER DETAIL 2/-
15. EXHAUST FAN PER 8/A811 - PROVIDED/INSTALLED BY G.C.
16. MAKE-UP AIR UNIT PER C/A811 - PROVIDED/INSTALLED BY G.C.
17. HOOD PER FS-502 & FS-802 - PROVIDED/INSTALLED BY G.C.

KEY NOTES

1. NOT USED
2. NOT USED
3. LIGHT FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
4. PC TITLE 24 HAS BEEN RUN FOR WORSE CASE OUTDOOR VENTILATION REQUIREMENTS (SEE OUTDOOR VENTILATION ON SHEET N2.0 FOR OUR OUTDOOR VENTILATION DESIGN REQUIREMENT NOTES)

GENERAL NOTES

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www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. [illegible]
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

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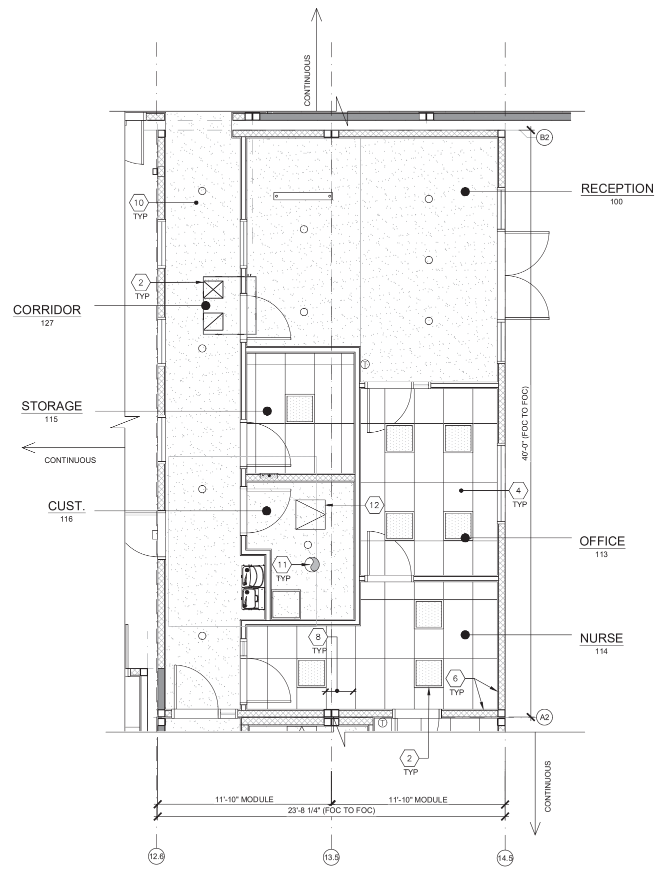
REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:
REFLECTED CEILING PLAN - BLDG B

SHEET NUMBER:
M1.0B



REFLECTED CEILING PLAN - BLDG C

SCALE: 1/4" 1'-0" 1

SYMBOL LEGEND

- 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
- ROOF HATCH/LADDER PER M1.6A
- T-GRID CEILING - PER 5 AND 12/M1.4
- GYP CEILING - PER 8/M1.6

NOT USED

NOT USED

NOT USED

NOT USED

KEY NOTES

1. MAIN TEE RUNNER TYP. PER TABLE A, SHEET M1.7
2. CROSS TEE RUNNER TYP. PER TABLE A, SHEET M1.7
3. INTERIOR LIGHT FIXTURE, REFER TO SHEET SHEET E1.0 FOR SPEC'S ATTACHMENT PER DETAIL 7/M1.4
4. CEILING HEIGHT 8'-6" MIN. REFER TO N3.0 FOR HEIGHTS
5. STRUT/SPLAY WIRE ASSEMBLY, SEE 2/M1.4 FOR DETAILS
6. FIXED CEILING END, SEE DETAIL 5A/M1.4
7. FREE CEILING END, SEE DETAIL 5B/M1.4
8. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED, SEE DETAIL 5C/M1.4
9. TYP. HVAC UNIT
10. GYP. BOARD CEILING - PER 8/M1.6
11. EXHAUST FAN
12. 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
13. NOT USED

GENERAL NOTES

1. NOT USED
2. NOT USED
3. LIGHT FIXTURES MAY BE INSTALLED ROTATED 90 FROM SHOWN TO MATCH T-GRID.
4. PC TITLE 24 HAS BEEN RUN FOR WORSE CASE OUTDOOR VENTILATION RE UIREMENTS (SEE OUTDOOR VENTILATION ON SHEET N2.0 FOR OUR OUTDOOR VENTILATION DESIGN RE UIREMENT NOTES)

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PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK CAVANAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

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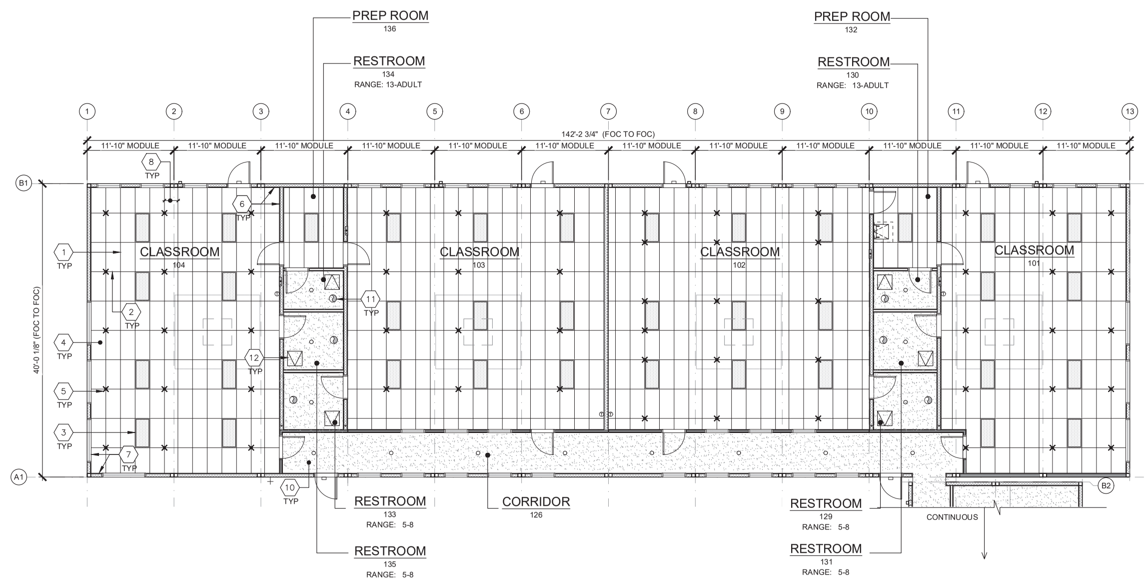
REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:
REFLECTED CEILING PLAN - BLDG C

SHEET NUMBER:
M1.0C



REFLECTED CEILING PLAN - BLDG D

SCALE: 1/8" = 1'-0" 1

KEY NOTES

1. MAIN TEE RUNNER TYP. PER TABLE A, SHEET M1.7
2. CROSS TEE RUNNER TYP. PER TABLE A, SHEET M1.7
3. INTERIOR LIGHT FIXTURE, REFER TO SHEET SHEET E1.0 FOR SPEC'S ATTACHMENT PER DETAIL 7/M1.4
4. CEILING HEIGHT @ 8'-6" MIN. REFER TO N3.0 FOR HEIGHTS
5. STRUT/SPLAY WIRE ASSEMBLY, SEE 2/M1.4 FOR DETAILS
6. FIXED CEILING END, SEE DETAIL 5A/M1.4
7. FREE CEILING END, SEE DETAIL 5B/M1.4
8. CENTER SECTION THAT CROSSES MODULE LINE TO BE FIELD INSTALLED, SEE DETAIL 5C/M1.4
9. TYP. HVAC UNIT
10. GYP. BOARD CEILING - PER 8/M1.6
11. EXHAUST FAN
12. 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
13. NOT USED

GENERAL NOTES

1. NOT USED
2. NOT USED
3. LIGHT FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
4. PC TITLE 24 HAS BEEN RUN FOR WORSE CASE OUTDOOR VENTILATION REQUIREMENTS (SEE OUTDOOR VENTILATION ON SHEET N2.0 FOR OUR OUTDOOR VENTILATION DESIGN REQUIREMENT NOTES)

SYMBOL LEGEND

- 2'x2' ATTIC CEILING ACCESS PANEL PER 2/M1.0A
- ROOF HATCH/LADDER PER M1.6A
- T-GRID CEILING - PER 5 AND 12/M1.4
- GYP CEILING - PER 8/M1.6

NOT USED

NOT USED

NOT USED

NOT USED

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PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK CAVANAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

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REVISIONS

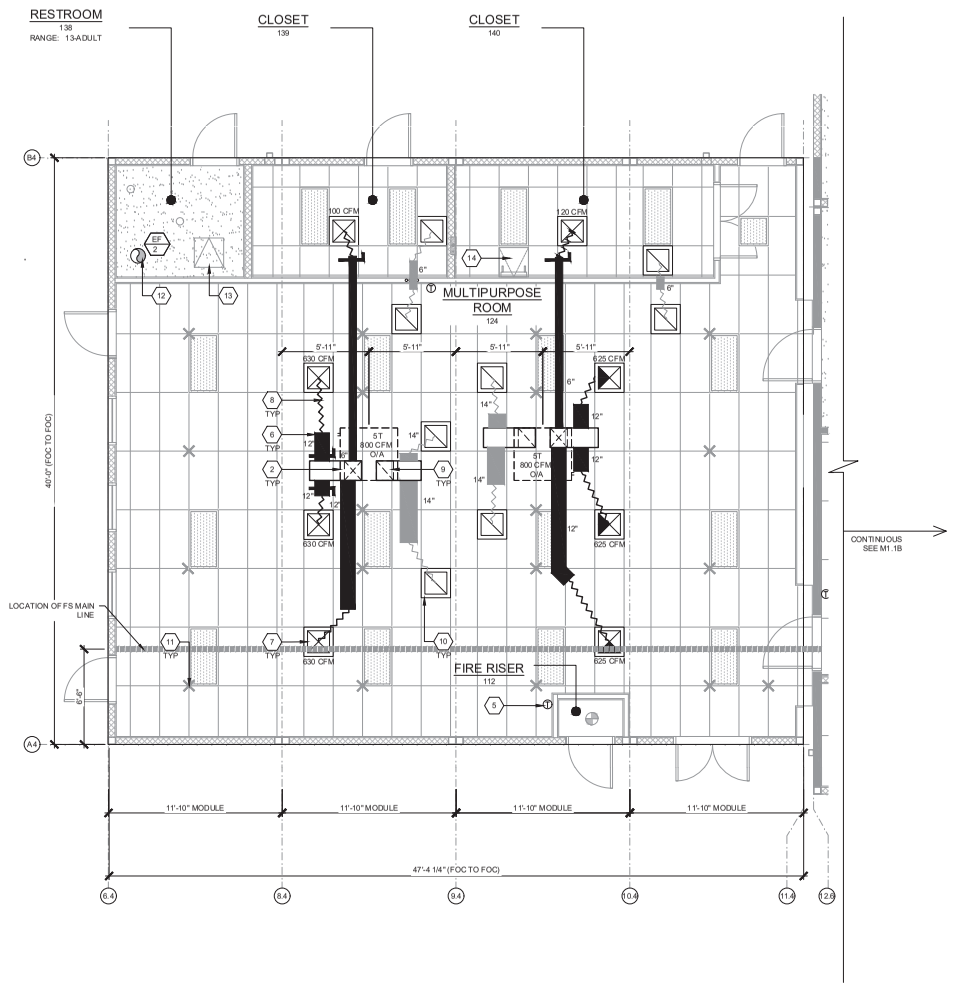
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

REFLECTED CEILING PLAN - BLDG D

SHEET NUMBER:

M1.0D



NOT USED

NOT USED

NOT USED

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
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PATRICK J. MAHONEY
No. C12631
Exp. 3-31-23
STATE OF CALIFORNIA

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REVISIONS

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:

MECHANICAL PLAN - BUILDING A

SHEET NUMBER:

M1.1A

MECHANICAL PLAN - BLDG A

SCALE: 1/8"=1'-0" | 1 | NOT USED | A

EXHAUST FAN SCHEDULE

MARK	DESCRIPTION	CFM	WATTS	S.P.	VOLT/PH	
EF 1	EXHAUST FAN	110	47.3	.10"	120-1Ø	NUTONE AN110 CEILING MOUNTED 18(W INPUT 10 LBS (OR EQUAL)
EF 2	EXHAUST FAN	210	127	.125"	120-1Ø	BROAN L200 CEILING MOUNTED 180W INPUT 23 LBS (OR EQUAL)

NOTES:
1. VENT EXHAUST FAN THROUGH ROOF.
2. FANS MUST WEIGH LESS THAN 25 LBS.
3. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID LAYOUT.
4. FOR INSTALLATION DETAILS REFER TO 11 & 15/M1.6

SHEET NOTES

1. WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE EQUIPPED WITH A DUCT SMOKE DETECTOR FOR AUTOMATIC SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM.
2. AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE TO ENCLOSED SPACES WITHIN THE BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF.
3. AUTOMATIC SHUT-OFF IS NOT REQUIRED WHEN OCCUPIED ROOMS SERVED BY THE AIR HANDLING EQUIPMENT HAVE A DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FT. (PER C.M.C. 608.1 EXCEPTION #2.)
4. LIGHTING FIXTURE MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
5. FOR T-BAR CEILING SPECIFICATIONS, SEE M1.7.

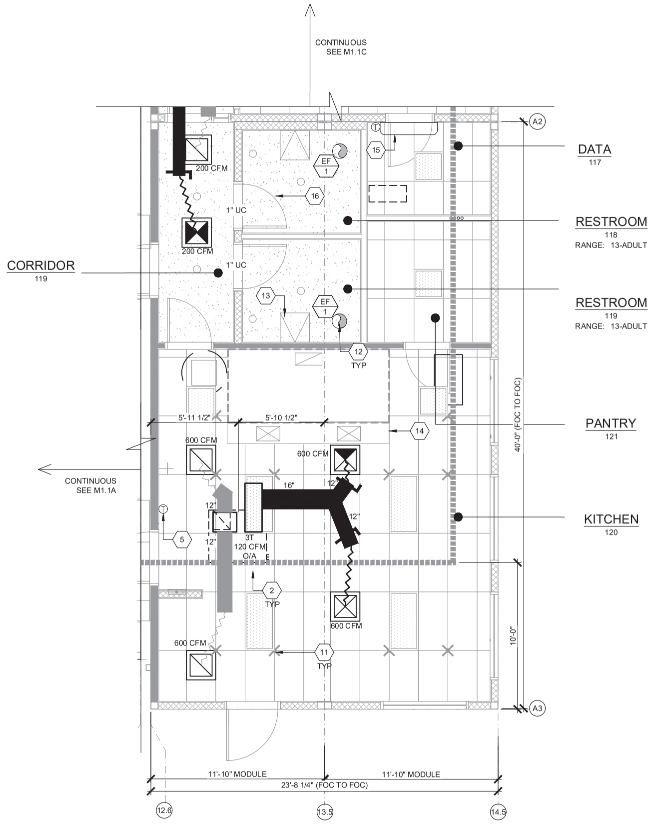
KEY NOTES

1. NOT USED
2. ROOF MOUNT UNIT - SEE 11/M1.4.
3. NOT USED
3A. AIR HANDLER UNIT (IN ROOM) - SEE 3/M1.5.
3B. AIR HANDLER UNIT (ABOVE CEILING) - SEE DETAIL 3/M1.5. INSTALL FRESH AIR INTAKE THRU ROOF INTAKE, PENETRATION PER 2/M1.6 SIM.
4. NOT USED
5. THERMOSTAT - 48" A.F.F, MAX TO TOP OF BOX
6. CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING - SEE 1/M1.4.
7. TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SIZE MAY VARY PER CEILING LAYOUT AND BUILDING SIZE - SEE 7/M1.5.
8. FLEX DUCT - NOMINAL 10" MIN. (MAY VARY) - SEE 8/M1.5.
9. RETURN AIR AS PART OF UNIT.
10. RETURN AIR REGISTER - SEE 7/M1.5.
11. STRUT/SPLAY WIRE ASSEMBLY, SEE 5/M1.4 FOR DETAILS
12. EXHAUST FAN
13. 24"x24" CEILING ACCESS
14. ROOF HATCH/LADDER - PER 11/A7.1

NOTE: FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4 AND CMC 603.4.1

NOT USED

MECHANICAL PLAN - BLDG B


CONTINUOUS
SEE M1.1C
DATA
117
RESTROOM
118
RANGE: 13-ADULT
RESTROOM
119
RANGE: 13-ADULT
CORRIDOR
119
PANTRY
121
KITCHEN
120
CONTINUOUS
SEE M1.1A
200 CFM
200 CFM
1" UC
1" UC
600 CFM
600 CFM
600 CFM
600 CFM
3T
120 CFM
O/A
16"
12"
5'-11 1/2"
5'-10 1/2"
40'-0" (FOC TO FOC)
10'-0"
11'-10" MODULE
11'-10" MODULE
23'-8 1/4" (FOC TO FOC)
TYP

SCALE: 1/8"=1'-0" 1

ESCRIPTION	CFM	WATTS	S.P.	VOLT/PH	
XHAUST FAN	110	47.3	.10"	120-1Ø	NUTONE AN110 CEILING MOUNTED 180W INPUT 10 LBS (OR EQUAL)
XHAUST FAN	210	127	.125"	120-1Ø	BROAN L200 CEILING MOUNTED 180W INPUT 23 LBS (OR EQUAL)

ENT EXHAUST FAN THROUGH ROOF.
ANS MUST WEIGH LESS THAN 25 LBS.
IGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN
ATCH T-GRID LAYOUT.
OR INSTALLATION DETAILS REFER TO 11 & 16/M1.6

NOT USED

1. WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE EQUIPPED WITH A DUCT SMOKE DETECTOR FOR AUTOMATIC SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM.
2. AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE TO ENCLOSED SPACES WITHIN THE BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF.
3. AUTOMATIC SHUT-OFF IS NOT REQUIRED WHEN OCCUPIED ROOMS SERVED BY THE AIR HANDLING EQUIPMENT HAVE A DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FT. (PER C.M.C. 608.1 EXCEPTION #2.)
4. LIGHTING FIXTURE MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
5. FOR T-BAR CEILING SPECIFICATIONS, SEE M1.7.

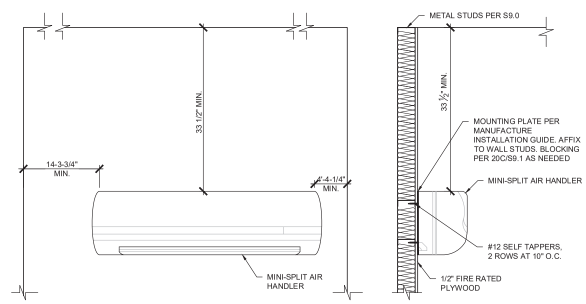
SHEET NOTES

- (1) NOT USED
- (2) ROOF MOUNT UNIT - SEE 11/M1.4.
- (3) NOT USED
- (3A) NOT USED
- (3B) NOT USED
- (4) NOT USED
- (5) THERMOSTAT - 48" A.F.F, MAX TO TOP OF BOX
- (6) CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING - SEE 1/M1.4.
- (7) TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SIZE MAY VARY PER CEILING LAYOUT AND BUILDING SIZE - SEE 7/M1.5.
- (8) FLEX DUCT - NOMINAL 10" MIN. (MAY VARY) - SEE 8/M1.5.
- (9) RETURN AIR AS PART OF UNIT.
- (10) RETURN AIR REGISTER - SEE 7/M1.5.
- (11) STRUT/SPLAY WIRE ASSEMBLY, SEE 5/M1.4 FOR DETAILS
- (12) NOT USED
- (13) 24"x24" CEILING ACCESS
- (14) HOOD BY G.C. PER FS-502
- (15) MINI SPLIT AIR HANDLER - PER A/-
- (16) MINI SPLIT CONDENSER - ROOF MOUNT - PER B/-

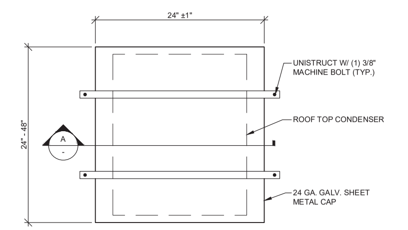
NOTE: FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4 AND CMC 603.4.1

KEY NOTES

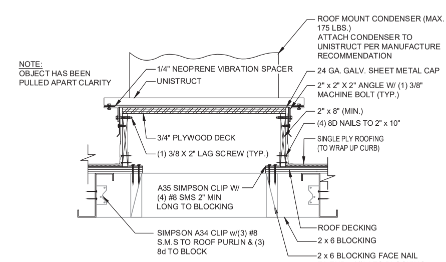
NOT USED


14-3-3/4"
MIN.
33 1/2" MIN.
4-1/4"
MIN.
MINI-SPLIT AIR
HANDLER
METAL STUDS PER S9.0
33 1/2" MIN.
MOUNTING PLATE PER MANUFACTURE INSTALLATION GUIDE. AFFIX TO WALL STUDS. BLOCKING PER 20C/S9.1 AS NEEDED
MINI-SPLIT AIR HANDLER
#12 SELF TAPPERS, 2 ROWS AT 10" O.C.
1/2" FIRE RATED PLYWOOD

AIR HANDLER DETAIL
NTS A



TOP VIEW


NOTE:
OBJECT HAS BEEN PULLED APART CLARITY
1/4" NEOPRENE VIBRATION SPACER
UNISTRUCT
3/4" PLYWOOD DECK
(1) 3/8 X 2" LAG SCREW (TYP.)
A35 SIMPSON CLIP W/ (4) #8 SMS 2" MIN LONG TO BLOCKING
SIMPSON A34 CLIP w/(3) #8 S.M.S TO ROOF PURLIN & (3) 8d TO BLOCK
ROOF MOUNT CONDENSER (MAX. 175 LBS.) ATTACH CONDENSER TO UNISTRUCT PER MANUFACTURE RECOMMENDATION
24 GA. GALV. SHEET METAL CAP
2" x 2" X 2" ANGLE W/ (1) 3/8" MACHINE BOLT (TYP.)
2" x 8" (MIN.)
(4) 8D NAILS TO 2" x 10"
SINGLE PLY ROOFING (TO WRAP UP CURB)
ROOF DECKING
2 x 6 BLOCKING
2 x 6 BLOCKING FACE NAIL EA END w/ #8d TO BLOCKING

DETAIL A

ROOF MOUNT CONDENSER MOUNTING DETAIL
NTS B

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS®
American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK ... NAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

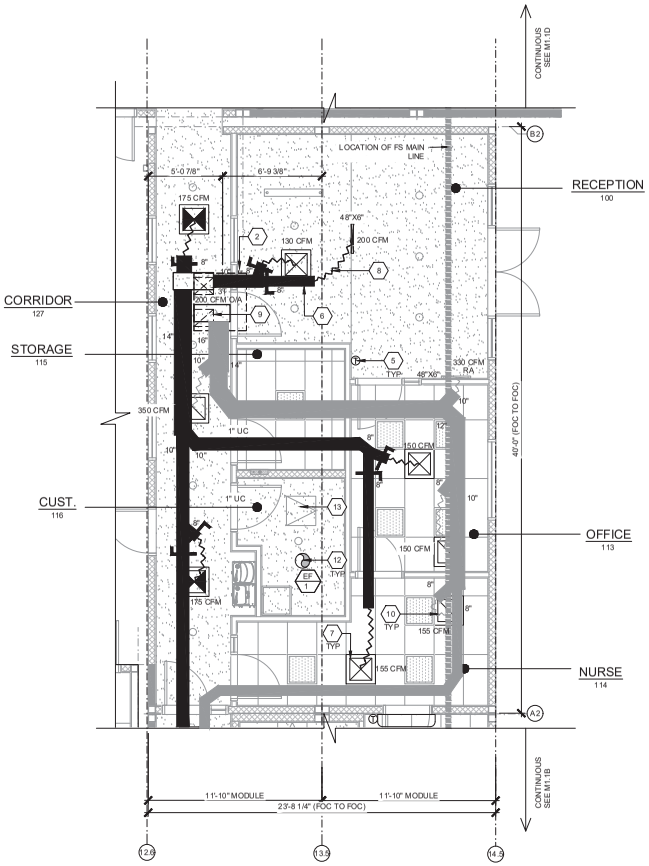
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
MECHANICAL PLAN - BUILDING B

SHEET NUMBER:
M1.1B



MECHANICAL PLAN - BLDG C

SCALE: 1/8" 1'-0"

MARK	DESCRIPTION	CFM	WATTS	S.P.	VOLT/PH	
EF 1	EXHAUST FAN	110	47.3	.10"	120-1	NUTONE AN110 CEILING MOUNTED 180W INPUT 10 LBS (OR E UAL)
EF 2	EXHAUST FAN	210	127	12"	120-1	~~BROAN L200 CEILING-MOUNTED 180W INPUT 23 LBS (OR EQUAL)~~

NOTES:
1. VENT EXHAUST FAN THROUGH ROOF.
2. FANS MUST WEIGH LESS THAN 25 LBS.
3. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90 FROM SHOWN TO MATCH T-GRID LAYOUT.
4. FOR INSTALLATION DETAILS REFER TO 11 16/M1.6

NOT USED

SHEET NOTES

1. WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE E UIPPED WITH A DUCT SMOKE DETECTOR FOR AUTOMATIC SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM.
2. AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE TO ENCLOSED SPACES WITHIN THE BUILDING SHALL BE E UIPPED WITH AN AUTOMATIC SHUTOFF.
3. AUTOMATIC SHUT-OFF IS NOT RE UIRED WHEN OCCUPIED ROOMS SERVED BY THE AIR HANDLING E UIPMENT HAVE A DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FT. (PER C.M.C. 608.1 EXCEPTION 2.)
4. LIGHTING FIXTURE MAY BE INSTALLED ROTATED 90 FROM SHOWN TO MATCH T-GRID.
5. FOR T-BAR CEILING SPECIFICATIONS, SEE M1.7.

KEY NOTES

1. NOT USED
2. ROOF MOUNT UNIT - SEE 11/M1.4.
3. NOT USED
3A. AIR HANDLER UNIT (IN ROOM) - SEE 3/M1.5.
3B. AIR HANDLER UNIT (ABOVE CEILING) - SEE DETAIL 3/M1.5. INSTALL FRESH AIR INTAKE THRU ROOF INTAKE, PENETRATION PER 2/M1.6 SIM.
4. NOT USED
5. THERMOSTAT - 48" A.F.F., MAX TO TOP OF BOX
6. CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING - SEE 1/M1.4.
7. TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SI E MAY VARY PER CEILING LAYOUT AND BUILDING SI E - SEE 7/M1.5.
8. FLEX DUCT - NOMINAL 10" MIN. (MAY VARY) - SEE 8/M1.5.
9. RETURN AIR AS PART OF UNIT.
10. RETURN AIR REGISTER - SEE 7/M1.5.
11. STRUT/SPLAY WIRE ASSEMBLY, SEE 5/M1.4 FOR DETAILS
12. EXHAUST FAN
13. 24"x24" CEILING ACCESS
14. NOT USED

NOTE: FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4 AND CMC 603.4.1

NOT USED

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APP: 04-120944 INC:
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DATE: 08/30/2022

AMS
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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK J. KELLY No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

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REVISIONS

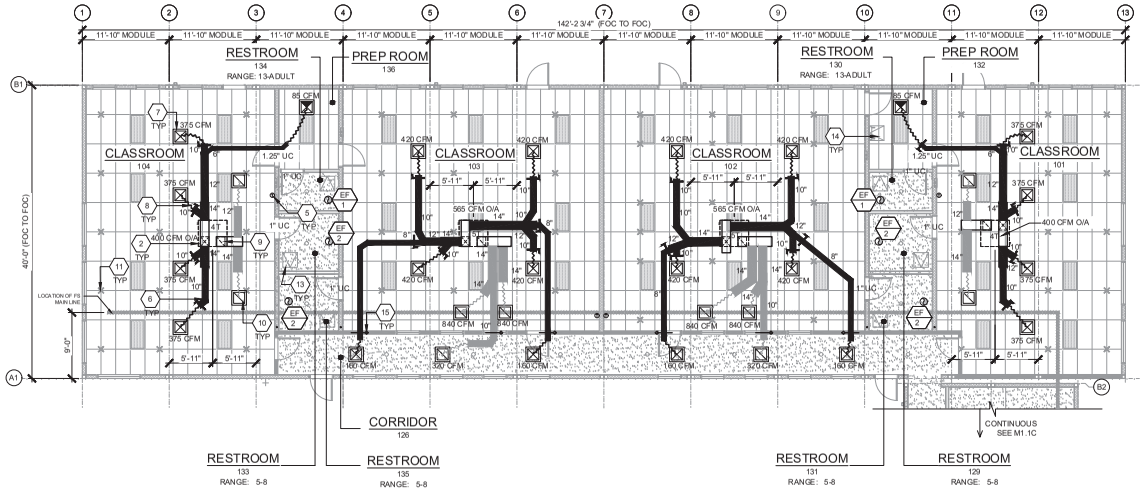
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

MECHANICAL PLAN - BUILDING C

SHEET NUMBER:

M1.1C



MECHANICAL PLAN - BLDG D

SCALE: 1/8"=1'-0" 1

EXHAUST FAN SCHEDULE

MARK	DESCRIPTION	CFM	WATTS	S.P.	VOLT/PH	
EF 1	EXHAUST FAN	110	47.3	.10"	120-1Ø	NUTONE AN110 CEILING MOUNTED 180W INPUT 10 LBS (OR EQUAL)
EF 2	EXHAUST FAN	210	127	.125"	120-1Ø	BROAN L200 CEILING MOUNTED 180W INPUT 23 LBS (OR EQUAL)

NOTES:
1. VENT EXHAUST FAN THROUGH ROOF.
2. FANS MUST WEIGH LESS THAN 25 LBS.
3. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID LAYOUT.
4. FOR INSTALLATION DETAILS REFER TO 11 & 16/M1.6

SHEET NOTES

1. WHERE TWO OR MORE HVAC UNITS SERVE A COMMON SPACE, UNITS SHALL BE EQUIPPED WITH A DUCT SMOKE DETECTOR FOR AUTOMATIC SHUTDOWN. INTERCONNECT WITH FIRE ALARM SYSTEM.
2. AIR-MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE TO ENCLOSED SPACES WITHIN THE BUILDING SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF.
3. AUTOMATIC SHUT-OFF IS NOT REQUIRED WHEN OCCUPIED ROOMS SERVED BY THE AIR HANDLING EQUIPMENT HAVE A DIRECT EXIT TO THE EXTERIOR AND THE TRAVEL DISTANCE DOES NOT EXCEED 100 FT. (PER C.M.C. 608.1 EXCEPTION #2.)
4. LIGHTING FIXTURE MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-GRID.
5. FOR T-BAR CEILING SPECIFICATIONS, SEE M1.7.

KEY NOTES

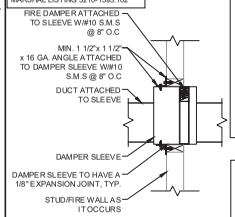
1. NOT USED
2. ROOF MOUNT UNIT - SEE 11/M1.4.
3. NOT USED
3A. NOT USED
3B. AIR HANDLER UNIT (ABOVE CEILING) - SEE DETAIL 3/M1.5. INSTALL FRESH AIR INTAKE THRU ROOF INTAKE, PENETRATION PER 2/M1.6 SIM.
4. NOT USED
5. THERMOSTAT - 4'-8" A.F.F, MAX TO TOP OF BOX
6. CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING - SEE 1/M1.4.
7. TYPICAL 4-WAY SUPPLY AIR REGISTER LOCATION AND SIZE MAY VARY PER CEILING LAYOUT AND BUILDING SIZE - SEE 7/M1.5.
8. FLEX DUCT - NOMINAL 10" MIN. (MAY VARY) - SEE 8/M1.5.
9. RETURN AIR AS PART OF UNIT.
10. RETURN AIR REGISTER - SEE 7/M1.5.
11. STRUT/SPLAY WIRE ASSEMBLY, SEE 5/M1.4 FOR DETAILS
12. EXHAUST FAN
13. 24"x24" CEILING ACCESS
14. ROOF HATCH/LADDER - PER 11/A7.1
15. FIRE/SMOKE DAMPER MODEL # FSLF120 TYP. CULUS ACC. TO UL60730-1A/2-14, CAN/CSA E60730-1-02, LISTED TO UL 2043. CA STATE FIRE MARSHAL LISTING 3210-1593:102. PER DETAIL 2/-

NOTE: FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4 AND CMC 603.4.1

FIRE DAMPER DETAIL

SCALE: 1"=1'-0" 2

LISTED TO UL 2043. CA STATE FIRE MARSHAL LISTING 3210-1593:102



NOTES
THE ANNULAR SPACE BETWEEN DAMPER SLEEVE AND WALL OPENING MUST NOT BE FILLED WITH FIRESTOP MATERIALS SUCH AS FILL, VOID, OR CAVITY MATERIALS. HOWEVER, IF OPTIONAL SEALING BETWEEN THE MOUNTING ANGLE (OR FLANGE) LEG AND THE SURFACE OF THE PARTITION, WALL, OR FLOOR AND/OR BETWEEN THE MOUNTING ANGLE LEG AND THE SURFACE OF THE DAMEPR SLEEVE IS REQUIRED, ANY OF THE FOLLOWING SEALANTS MAY BE USED: DOW-CORNING 700 OR 732 GE RTV 108 OR SCS 1201 RTV. THESE SEALANTS MUST BE APPLIED SUCH THAT THEY DO NOT INTRUDE INTO THE ANNULAR SPACE BETWEEN THE OUT-SIDE SURFACE OF THE DAMPER SLEEVE AND THE OPENING OF THE PARTITION, WALL OR FLOOR INTO WHICH THE DAMPER/SLEEVE IS BEING INSTALLED.

GENERAL NOTES
INSTALL DAMPERS IN ACCORDANCE WITH THE APPROPRIATE DAMPER INSTALLATION INSTRUCTIONS SHEET. REPLACE CONVENTIONAL 2-SIDED MOUNTING ANGLES WITH SINGLE-SIDED MOUNTING ANGLES AS APPROPRIATE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
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DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
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www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK J. SHEA
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

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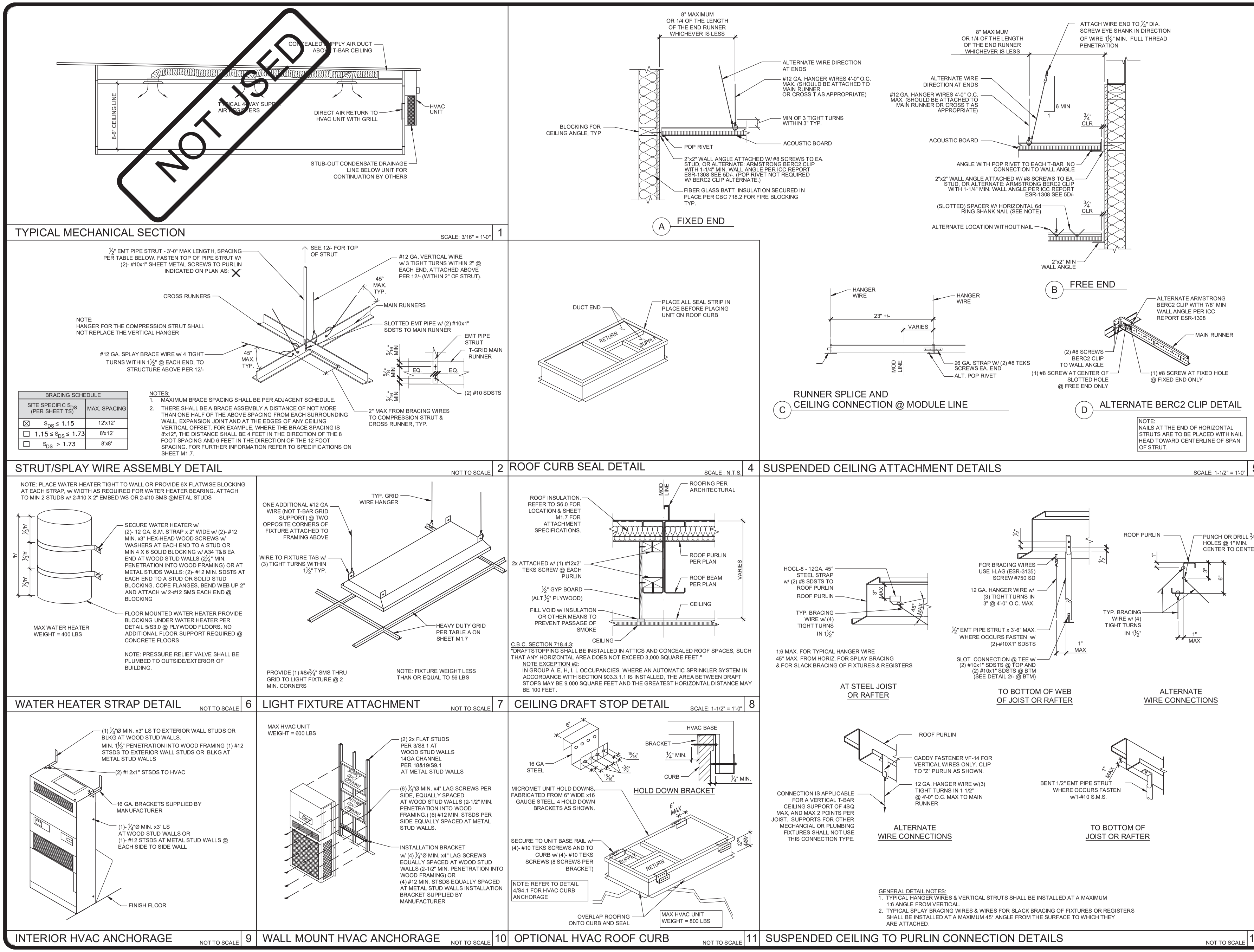
REVISIONS
1
2
3
4

DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	08/29/22
PROJECT NO:	1674-21

SHEET TITLE:
MECHANICAL PLAN - BUILDING D

SHEET NUMBER:
M1.1D



TYPICAL MECHANICAL SECTION
SCALE: 3/16" = 1'-0"
1
NOT USED
CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING
TYPICAL 4-WAY SUPPLY AIR DIFFUSERS
DIRECT AIR RETURN TO HVAC UNIT WITH GRILL
HVAC UNIT
8'-6" CEILING LINE
STUB-OUT CONDENSATE DRAINAGE LINE BELOW UNIT FOR CONTINUATION BY OTHERS
STRUT/SPLAY WIRE ASSEMBLY DETAIL
NOT TO SCALE
2
1/2" EMT PIPE STRUT - 3'-0" MAX LENGTH, SPACING PER TABLE BELOW. FASTEN TOP OF PIPE STRUT W/ (2)- #10x1" SHEET METAL SCREWS TO PURLIN INDICATED ON PLAN AS: X
SEE 12/- FOR TOP OF STRUT
#12 GA. VERTICAL WIRE w/ 3 TIGHT TURNS WITHIN 2" @ EACH END, ATTACHED ABOVE PER 12/- (WITHIN 2" OF STRUT).
45° MAX. TYP.
CROSS RUNNERS
MAIN RUNNERS
NOTE: HANGER FOR THE COMPRESSION STRUT SHALL NOT REPLACE THE VERTICAL HANGER
SLOTTED EMT PIPE w/ (2) #10x1" SDSTS TO MAIN RUNNER
EMT PIPE STRUT
T-GRID MAIN RUNNER
#12 GA. SPLAY BRACE WIRE w/ 4 TIGHT TURNS WITHIN 1½" @ EACH END, TO STRUCTURE ABOVE PER 12/-
5/16" MIN
EQ.
(2) #10 SDSTS
BRACING SCHEDULE
SITE SPECIFIC S_{DS} (PER SHEET T3) | MAX. SPACING
☒ $S_{DS} \le 1.15$ | 12'x12'
☐ $1.15 \le S_{DS} \le 1.73$ | 8'x12'
☐ $S_{DS} > 1.73$ | 8'x8'
NOTES:
1. MAXIMUM BRACE SPACING SHALL BE PER ADJACENT SCHEDULE.
2. THERE SHALL BE A BRACE ASSEMBLY A DISTANCE OF NOT MORE THAN ONE HALF OF THE ABOVE SPACING FROM EACH SURROUNDING WALL, EXPANSION JOINT AND AT THE EDGES OF ANY CEILING VERTICAL OFFSET. FOR EXAMPLE, WHERE THE BRACE SPACING IS 8'x12", THE DISTANCE SHALL BE 4 FEET IN THE DIRECTION OF THE 8 FOOT SPACING AND 6 FEET IN THE DIRECTION OF THE 12 FOOT SPACING. FOR FURTHER INFORMATION REFER TO SPECIFICATIONS ON SHEET M1.7.
2" MAX FROM BRACING WIRES TO COMPRESSION STRUT & CROSS RUNNER, TYP.
A FIXED END
8" MAXIMUM OR 1/4 OF THE LENGTH OF THE END RUNNER WHICHEVER IS LESS
ALTERNATE WIRE DIRECTION AT ENDS
#12 GA. HANGER WIRES 4'-0" O.C. MAX. (SHOULD BE ATTACHED TO MAIN RUNNER OR CROSS T AS APPROPRIATE)
MIN OF 3 TIGHT TURNS WITHIN 3" TYP.
BLOCKING FOR CEILING ANGLE, TYP
ACOUSTIC BOARD
POP RIVET
2"x2" WALL ANGLE ATTACHED W/ #8 SCREWS TO EA. STUD, OR ALTERNATE: ARMSTRONG BERC2 CLIP WITH 1-1/4" MIN. WALL ANGLE PER ICC REPORT ESR-1308 SEE 5D/- (POP RIVET NOT REQUIRED W/ BERC2 CLIP ALTERNATE.)
FIBER GLASS BATT INSULATION SECURED IN PLACE PER CBC 718.2 FOR FIRE BLOCKING TYP.
B FREE END
ATTACH WIRE END TO 1/4" DIA. SCREW EYE SHANK IN DIRECTION OF WIRE 1½" MIN. FULL THREAD PENETRATION
6 MIN
3/4" CLR
ANGLE WITH POP RIVET TO EACH T-BAR NO CONNECTION TO WALL ANGLE
(SLOTTED) SPACER W/ HORIZONTAL 6d RING SHANK NAIL (SEE NOTE)
ALTERNATE LOCATION WITHOUT NAIL
2"x2" MIN WALL ANGLE
C RUNNER SPLICE AND CEILING CONNECTION @ MODULE LINE
HANGER WIRE
23" +/-
VARIES
MOD LINE
26 GA. STRAP W/ (2) #8 TEKS SCREWS EA. END
ALT. POP RIVET
D ALTERNATE BERC2 CLIP DETAIL
ALTERNATE ARMSTRONG BERC2 CLIP WITH 7/8" MIN WALL ANGLE PER ICC REPORT ESR-1308
MAIN RUNNER
(2) #8 SCREWS BERC2 CLIP TO WALL ANGLE
(1) #8 SCREW AT CENTER OF SLOTTED HOLE @ FREE END ONLY
(1) #8 SCREW AT FIXED HOLE @ FIXED END ONLY
NOTE: NAILS AT THE END OF HORIZONTAL STRUTS ARE TO BE PLACED WITH NAIL HEAD TOWARD CENTERLINE OF SPAN OF STRUT.
ROOF CURB SEAL DETAIL
SCALE : N.T.S.
4
DUCT END
PLACE ALL SEAL STRIP IN PLACE BEFORE PLACING UNIT ON ROOF CURB
RETURN
SUPPLY
SUSPENDED CEILING ATTACHMENT DETAILS
SCALE: 1-1/2" = 1'-0"
5
WATER HEATER STRAP DETAIL
NOT TO SCALE
6
NOTE: PLACE WATER HEATER TIGHT TO WALL OR PROVIDE 6X FLATWISE BLOCKING AT EACH STRAP, w/ WIDTH AS REQUIRED FOR WATER HEATER BEARING. ATTACH TO MIN 2 STUDS w/ 2-#10 X 2" EMBED WS OR 2-#10 SMS @METAL STUDS
SECURE WATER HEATER w/ (2)- 12 GA. S.M. STRAP x 2" WIDE w/ (2)- #12 MIN. x3" HEX-HEAD WOOD SCREWS w/ WASHERS AT EACH END TO A STUD OR MIN 4 X 6 SOLID BLOCKING w/ A34 T&B EA END AT WOOD STUD WALLS (2¼" MIN. PENETRATION INTO WOOD FRAMING) OR AT METAL STUDS WALLS: (2)- #12 MIN. SDSTS AT EACH END TO A STUD OR SOLID STUD BLOCKING. COPE FLANGES, BEND WEB UP 2" AND ATTACH w/ 2-#12 SMS EACH END @ BLOCKING
MAX WATER HEATER WEIGHT = 400 LBS
FLOOR MOUNTED WATER HEATER PROVIDE BLOCKING UNDER WATER HEATER PER DETAIL 5/S3.0 @ PLYWOOD FLOORS. NO ADDITIONAL FLOOR SUPPORT REQUIRED @ CONCRETE FLOORS
NOTE: PRESSURE RELIEF VALVE SHALL BE PLUMBED TO OUTSIDE/EXTERIOR OF BUILDING.
LIGHT FIXTURE ATTACHMENT
NOT TO SCALE
7
ONE ADDITIONAL #12 GA WIRE (NOT T-BAR GRID SUPPORT) @ TWO OPPOSITE CORNERS OF FIXTURE ATTACHED TO FRAMING ABOVE
TYP. GRID WIRE HANGER
WIRE TO FIXTURE TAB w/ (3) TIGHT TURNS WITHIN 1½" TYP.
HEAVY DUTY GRID PER TABLE A ON SHEET M1.7
PROVIDE (1) #8x3/4" SMS THRU GRID TO LIGHT FIXTURE @ 2 MIN. CORNERS
NOTE: FIXTURE WEIGHT LESS THAN OR EQUAL TO 56 LBS
CEILING DRAFT STOP DETAIL
SCALE: 1-1/2" = 1'-0"
8
ROOF INSULATION. REFER TO S6.0 FOR LOCATION & SHEET M1.7 FOR ATTACHMENT SPECIFICATIONS.
MOD LINE
ROOFING PER ARCHITECTURAL
2x ATTACHED w/ (1) #12x2" TEKS SCREW @ EACH PURLIN
ROOF PURLIN PER PLAN
1/2" GYP BOARD (ALT 1/2" PLYWOOD)
ROOF BEAM PER PLAN
VARIES
FILL VOID w/ INSULATION OR OTHER MEANS TO PREVENT PASSAGE OF SMOKE
CEILING
C.B.C. SECTION 718.4.3:
"DRAFTSTOPPING SHALL BE INSTALLED IN ATTICS AND CONCEALED ROOF SPACES, SUCH THAT ANY HORIZONTAL AREA DOES NOT EXCEED 3,000 SQUARE FEET."
NOTE EXCEPTION #2:
IN GROUP A, E, H, I, L OCCUPANCIES, WHERE AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 IS INSTALLED, THE AREA BETWEEN DRAFT STOPS MAY BE 9,000 SQUARE FEET AND THE GREATEST HORIZONTAL DISTANCE MAY BE 100 FEET.
HOCL-8 - 12GA. 45° STEEL STRAP w/ (2) #8 SDSTS TO ROOF PURLIN
ROOF PURLIN
TYP. BRACING WIRE w/ (4) TIGHT TURNS IN 1½"
1:6 MAX. FOR TYPICAL HANGER WIRE
45° MAX. FROM HORIZ. FOR SPLAY BRACING & FOR SLACK BRACING OF FIXTURES & REGISTERS
AT STEEL JOIST OR RAFTER
FOR BRACING WIRES USE I-LAG (ESR-3135) SCREW #750 SD
12 GA. HANGER WIRE w/ (3) TIGHT TURNS IN 3" @ 4'-0" O.C. MAX.
1/2" EMT PIPE STRUT x 3'-6" MAX. WHERE OCCURS FASTEN w/ (2)-#10X1" SDSTS
1" MAX
SLOT CONNECTION @ TEE w/ (2) #10x1" SDSTS @ TOP AND (2) #10x1" SDSTS @ BTM (SEE DETAIL 2/- @ BTM)
TO BOTTOM OF WEB OF JOIST OR RAFTER
ROOF PURLIN
PUNCH OR DRILL 3/16" HOLES @ 1" MIN. CENTER TO CENTER
TYP. BRACING WIRE w/ (4) TIGHT TURNS IN 1½"
1" MAX
ALTERNATE WIRE CONNECTIONS
INTERIOR HVAC ANCHORAGE
NOT TO SCALE
9
(1) 1/4"Ø MIN. x3" LS TO EXTERIOR WALL STUDS OR BLKG AT WOOD STUD WALLS.
MIN. 1½" PENETRATION INTO WOOD FRAMING (1) #12 STSDS TO EXTERIOR WALL STUDS OR BLKG AT METAL STUD WALLS
(2) #12x1" STSDS TO HVAC
16 GA. BRACKETS SUPPLIED BY MANUFACTURER
(1)- 1/4"Ø MIN. x3" LS AT WOOD STUD WALLS OR (1)- #12 STSDS AT METAL STUD WALLS @ EACH SIDE TO SIDE WALL
FINISH FLOOR
WALL MOUNT HVAC ANCHORAGE
NOT TO SCALE
10
MAX HVAC UNIT WEIGHT = 600 LBS
(2) 2x FLAT STUDS PER 3/S8.1 AT WOOD STUD WALLS
14GA CHANNEL PER 18&19/S9.1 AT METAL STUD WALLS
(6) 1/4"Ø MIN. x4" LAG SCREWS PER SIDE, EQUALLY SPACED AT WOOD STUD WALLS (2-1/2" MIN. PENETRATION INTO WOOD FRAMING.) (6) #12 MIN. STSDS PER SIDE EQUALLY SPACED AT METAL STUD WALLS.
INSTALLATION BRACKET w/ (4) 1/4"Ø MIN. x4" LAG SCREWS EQUALLY SPACED AT WOOD STUD WALLS (2-1/2" MIN. PENETRATION INTO WOOD FRAMING) OR (4) #12 MIN. STSDS EQUALLY SPACED AT METAL STUD WALLS INSTALLATION BRACKET SUPPLIED BY MANUFACTURER
OPTIONAL HVAC ROOF CURB
NOT TO SCALE
11
16 GA STEEL
BRACKET
HVAC BASE
1/4" MIN.
CURB
HOLD DOWN BRACKET
MICROMET UNIT HOLD DOWNS, FABRICATED FROM 6" WIDE x16 GAUGE STEEL. 4 HOLD DOWN BRACKETS AS SHOWN.
SECURE TO UNIT BASE RAIL w/ (4)- #10 TEKS SCREWS AND TO CURB w/ (4)- #10 TEKS SCREWS (8 SCREWS PER BRACKET)
NOTE: REFER TO DETAIL 4/S4.1 FOR HVAC CURB ANCHORAGE
OVERLAP ROOFING ONTO CURB AND SEAL
MAX HVAC UNIT WEIGHT = 800 LBS
SUSPENDED CEILING TO PURLIN CONNECTION DETAILS
NOT TO SCALE
12
ROOF PURLIN
CADDY FASTENER VF-14 FOR VERTICAL WIRES ONLY. CLIP TO "Z" PURLIN AS SHOWN.
12 GA. HANGER WIRE w/(3) TIGHT TURNS IN 1 1/2" @ 4'-0" O.C. MAX TO MAIN RUNNER
CONNECTION IS APPLICABLE FOR A VERTICAL T-BAR CEILING SUPPORT OF 4SQ MAX. AND MAX 2 POINTS PER JOIST. SUPPORTS FOR OTHER MECHANICAL OR PLUMBING FIXTURES SHALL NOT USE THIS CONNECTION TYPE.
ALTERNATE WIRE CONNECTIONS
BENT 1/2" EMT PIPE STRUT WHERE OCCURS FASTEN w/1-#10 S.M.S.
TO BOTTOM OF JOIST OR RAFTER
GENERAL DETAIL NOTES:
1. TYPICAL HANGER WIRES & VERTICAL STRUTS SHALL BE INSTALLED AT A MAXIMUM 1:6 ANGLE FROM VERTICAL.
2. TYPICAL SPLAY BRACING WIRES & WIRES FOR SLACK BRACING OF FIXTURES OR REGISTERS SHALL BE INSTALLED AT A MAXIMUM 45° ANGLE FROM THE SURFACE TO WHICH THEY ARE ATTACHED.

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DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS®
American Modular Systems

PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
PATRICK CAVANAGH
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

REVISIONS

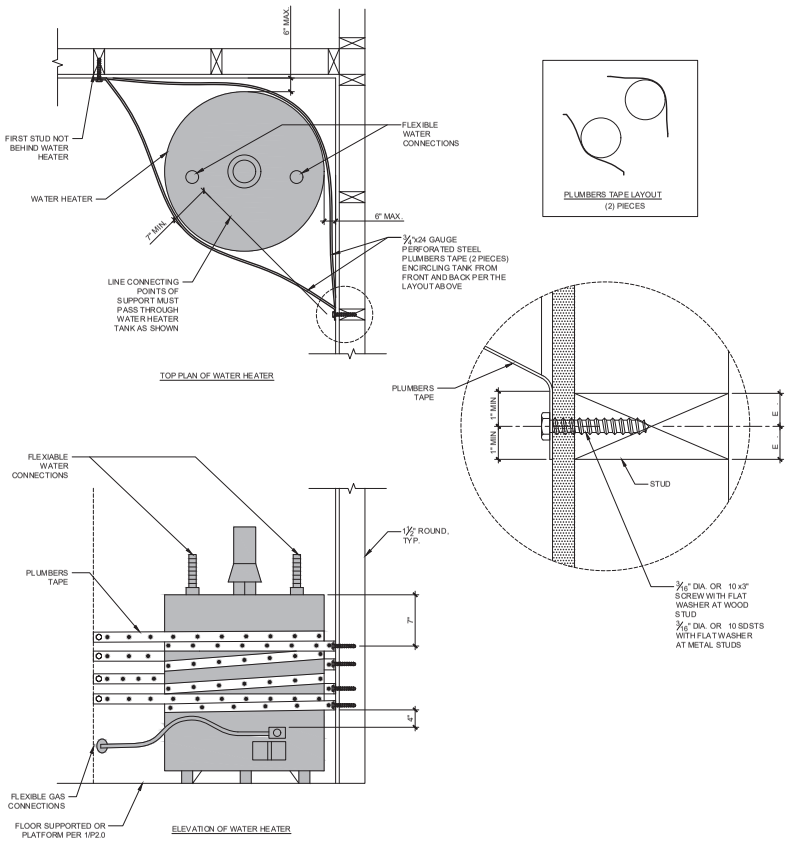
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

MECHANICAL AND CEILING DETAILS

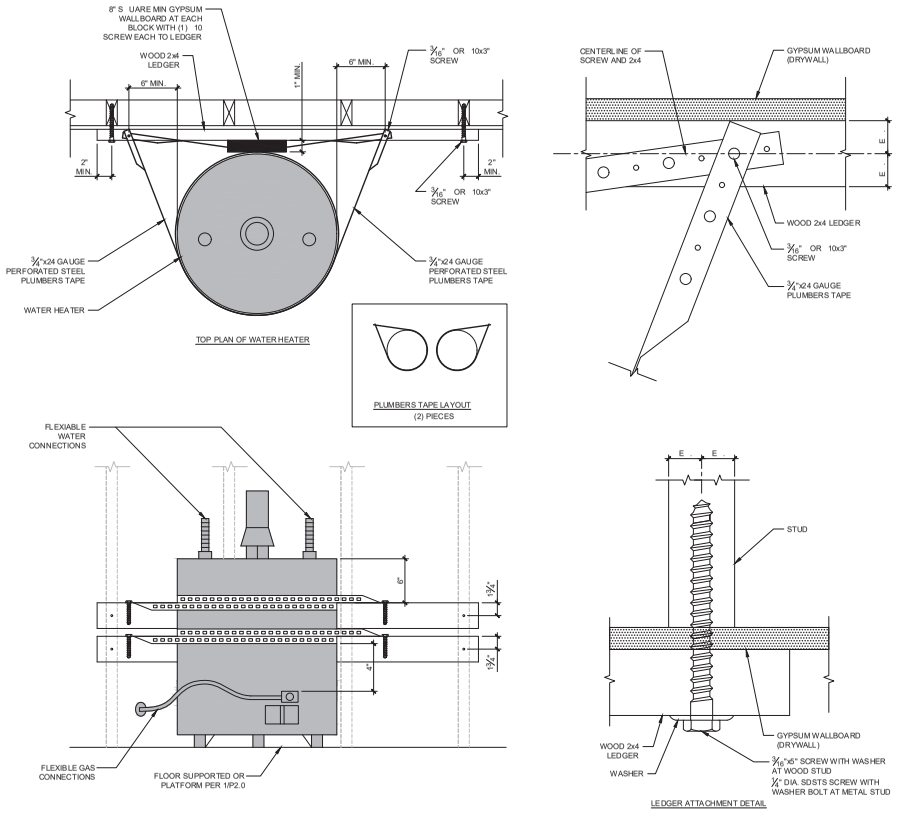
SHEET NUMBER:

M1.4



WATER HEATER CORNER BRACING DETAIL

SCALE: 1-1/2" 1'-0" | 1



WATER HEATER MID-WALL BRACING DETAIL

SCALE: 1-1/2" 1'-0" | 2

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MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
JAMES MARKA
No. C12631
Ren. 3-31-23
STATE OF CALIFORNIA

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REVISIONS

DRAWN BY:	JM/MKA
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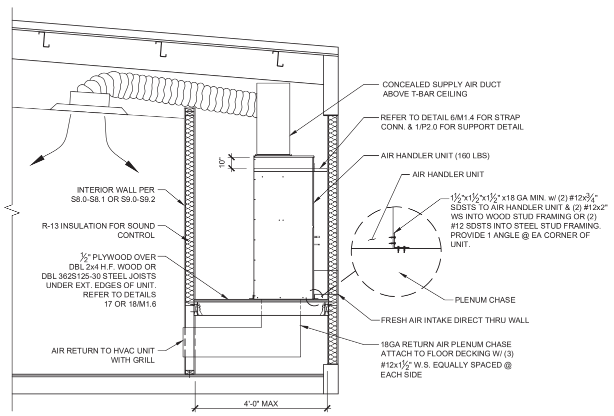
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

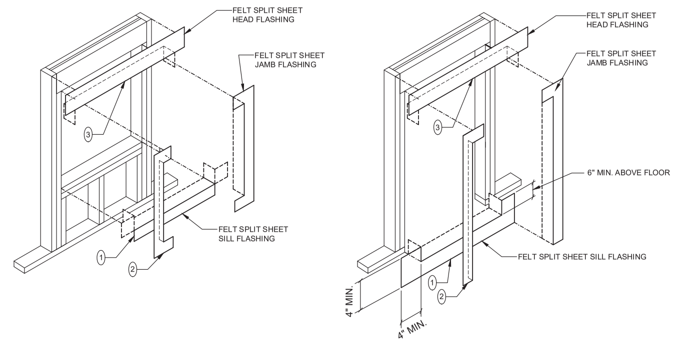
MECHANICAL
AND CEILING
DETAILS

SHEET NUMBER:

M1.4A

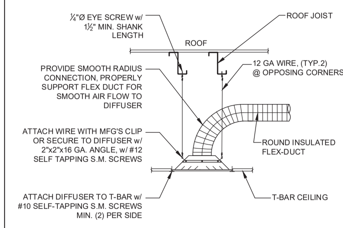

CONCEALED SUPPLY AIR DUCT ABOVE T-BAR CEILING
REFER TO DETAIL 6/M1.4 FOR STRAP CONN. & 1/P2.0 FOR SUPPORT DETAIL
AIR HANDLER UNIT (160 LBS)
AIR HANDLER UNIT
1½"x1½"x1½" x18 GA MIN. w/ (2) #12x¾" SDSTS TO AIR HANDLER UNIT & (2) #12x2" WS INTO WOOD STUD FRAMING OR (2) #12 SDSTS INTO STEEL STUD FRAMING. PROVIDE 1 ANGLE @ EA CORNER OF UNIT.
PLENUM CHASE
FRESH AIR INTAKE DIRECT THRU WALL
18GA RETURN AIR PLENUM CHASE ATTACH TO FLOOR DECKING W/ (3) #12x1½" W.S. EQUALLY SPACED @ EACH SIDE
INTERIOR WALL PER S8.0-S8.1 OR S9.0-S9.2
R-13 INSULATION FOR SOUND CONTROL
½" PLYWOOD OVER DBL 2x4 H.F. WOOD OR DBL 362S125-30 STEEL JOISTS UNDER EXT. EDGES OF UNIT. REFER TO DETAILS 17 OR 18/M1.6
AIR RETURN TO HVAC UNIT WITH GRILL
10"
4'-0" MAX

SPLIT SYSTEM CROSS SECTION — SCALE: 1/2" = 1'-0" — 1



(#) = SEQUENCE OF ORDER

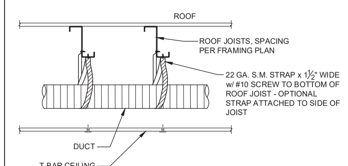
FLASHING @ WALL OPENINGS — NOT TO SCALE — 2


½"Ø EYE SCREW w/ 1½" MIN. SHANK LENGTH
ROOF
ROOF JOIST
12 GA WIRE, (TYP.2) @ OPPOSING CORNERS
PROVIDE SMOOTH RADIUS CONNECTION, PROPERLY SUPPORT FLEX DUCT FOR SMOOTH AIR FLOW TO DIFFUSER
ATTACH WIRE WITH MFG'S CLIP OR SECURE TO DIFFUSER w/ 2"x2"x16 GA. ANGLE, w/ #12 SELF TAPPING S.M. SCREWS
ROUND INSULATED FLEX-DUCT
ATTACH DIFFUSER TO T-BAR w/ #10 SELF-TAPPING S.M. SCREWS MIN. (2) PER SIDE
T-BAR CEILING

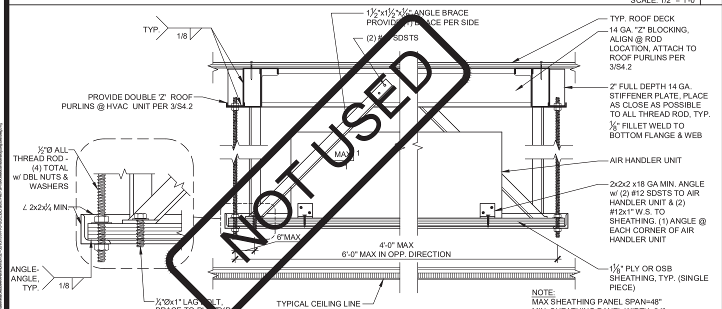
REGISTER MOUNTING DETAIL — NOT TO SCALE — 7

NOTES:

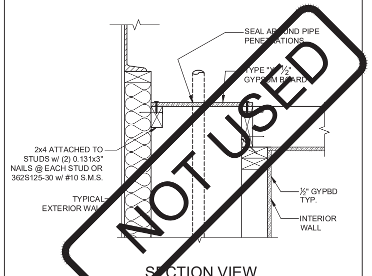
1. DUCTWORK SHALL BE SUPPORTED FROM ROOF JOISTS AT 4'-0" O.C.MAX TO ELIMINATE SAGGING.
2. FLEX DUCT (5'-0" MAX LENGTH) SHALL BE PULLED TIGHT TO ELIMINATE SAGGING.
3. DUCT TO PLENUM ATTACHMENT SHALL BE (3) #8 SCREWS & COVERED WITH 367-17 TAPE (UL181B-FX).
4. FOR DUCT ATTACHMENT TO DIFFUSER - SEE DETAIL 7/-.
5. ALL DUCTS TO BE SEALED WITH 367 MASTIC TAPE. OUTSIDE OF THE INSULATING LINER ON THE FLEX DUCT TO BE SEALED WITH 558CA CODE APPROVED DUCT TAPE.



FLEX DUCTING SUPPORT DETAIL — NOT TO SCALE — 8

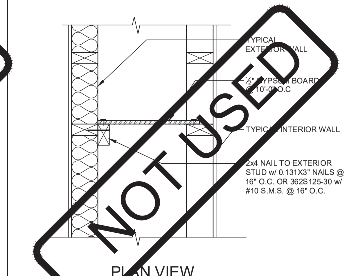

NOT USED
TYP.
1/8
PROVIDE DOUBLE 'Z' ROOF PURLINS @ HVAC UNIT PER 3/S4.2
½"Ø ALL-THREAD ROD - (4) TOTAL w/ DBL NUTS & WASHERS
∠ 2x2x¼ MIN.
ANGLE-ANGLE, TYP.
1/8
¼"Øx1" LAG BOLT. BRACE TO PLY, TYP.
TYPICAL CEILING LINE
1½"x1½"x¼" ANGLE BRACE PROVIDE 1 BRACE PER SIDE
(2) SDSTS
6" MAX
4'-0" MAX
6'-0" MAX IN OPP. DIRECTION
TYP. ROOF DECK
14 GA. "Z" BLOCKING, ALIGN @ ROD LOCATION, ATTACH TO ROOF PURLINS PER 3/S4.2
2" FULL DEPTH 14 GA. STIFFENER PLATE, PLACE AS CLOSE AS POSSIBLE TO ALL THREAD ROD, TYP. ⅛" FILLET WELD TO BOTTOM FLANGE & WEB
AIR HANDLER UNIT
2x2x2 x18 GA MIN. ANGLE w/ (2) #12 SDSTS TO AIR HANDLER UNIT & (2) #12x1" W.S. TO SHEATHING. (1) ANGLE @ EACH CORNER OF AIR HANDLER UNIT
⅛" PLY OR OSB SHEATHING, TYP. (SINGLE PIECE)
NOTE: MAX SHEATHING PANEL SPAN=48" MIN. SHEATHING PANEL WIDTH=24"

HVAC ATTIC MOUNTED SPLIT SYSTEM — NOT TO SCALE — 3

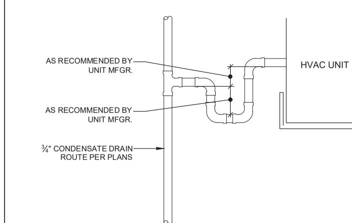


NOTE: REFER TO DETAIL 8/M1.6 AND 13/M1.6 FOR ADDITIONAL FRAMING DETAILS

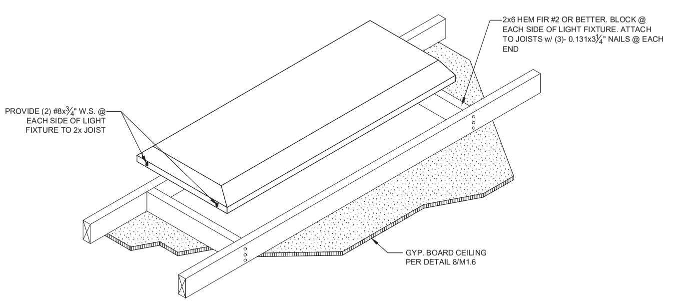
DRAFT STOP @ PLUMBING CHASE — SCALE: 1" = 1'-0" — 4



DRAFT STOP @ PLUMBING CHASE — SCALE: 1" = 1'-0" — 5

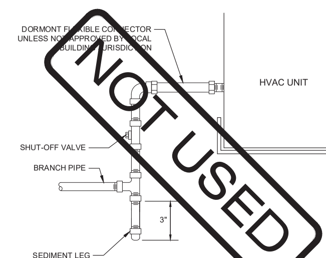


CONDENSATE DETAIL — NOT TO SCALE — 9



LIGHT FIXTURE ATTACHMENT DETAIL — NOT TO SCALE — 6A

LIGHT FIXTURE ATTACHMENT DETAIL w /METAL STUDS — NOT TO SCALE — 6B



GAS CONNECTION DETAIL — NOT TO SCALE — 10

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MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
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LICENSED ARCHITECT — PATRICK C. KAVANAGH — No. C12631 — Ren. 3-31-23 — STATE OF CALIFORNIA

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REVISIONS

DRAWN BY:	JMA/KA
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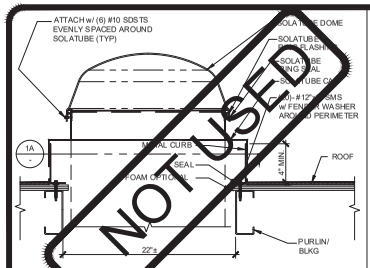
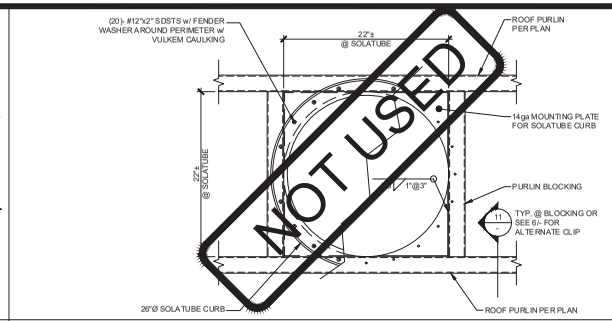
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:
MECHANICAL & CEILING DETAILS

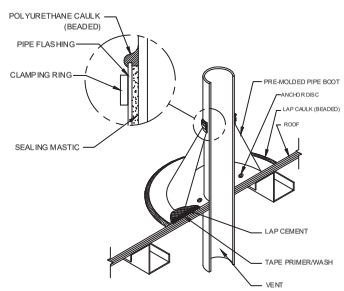
SHEET NUMBER:
M1.5



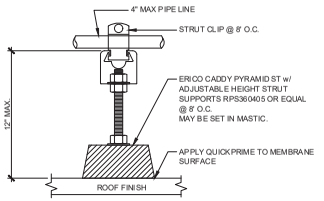
SOLATUBE ATTACHMENT DETAIL — SCALE: 1-1/2" = 1'-0" — 1



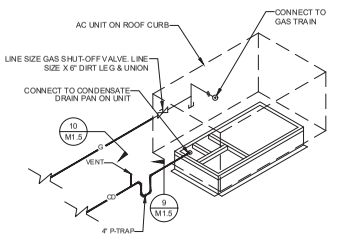
SOLATUBE CURB ATTACHMENT DETAIL — SCALE: 1-1/2" = 1'-0" — 1A



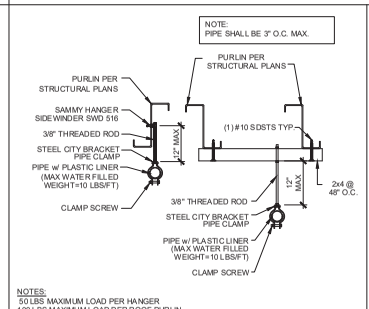
VENT THRU ROOF PENETRATION DETAIL — NOT TO SCALE — 2



ROOF-TOP PIPE SUPPORT BLOCK — NOT TO SCALE — 3

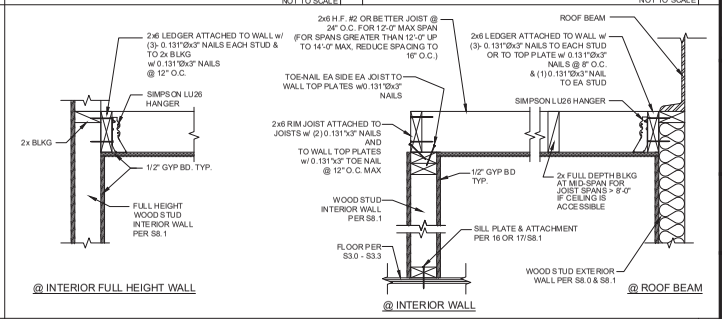


HVAC UNIT PIPING — NOT TO SCALE — 4

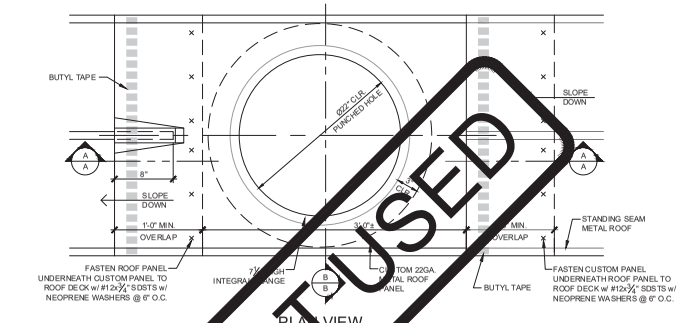


PIPE HANGER DETAIL — SCALE: 1-1/2" = 1'-0" — 5

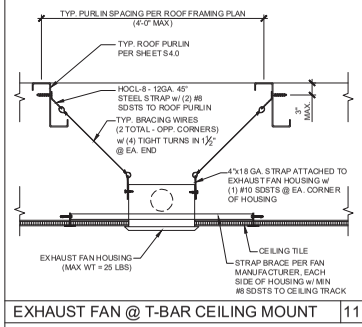
SOLATUBE SECTION (ALT. CLIP) — SCALE: 1-1/2" = 1'-0" — 6



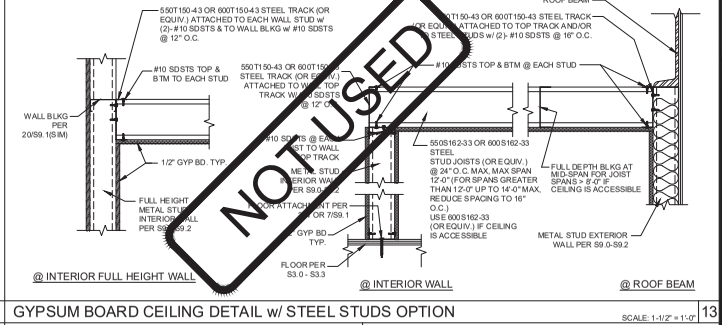
GYPSUM BOARD CEILING DETAIL w/ WOOD STUDS OPTION — SCALE: 1-1/2" = 1'-0" — 8



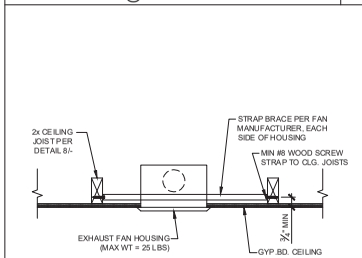
OPTIONAL SOLATUBE DETAILS — SCALE: 1-1/2" = 1'-0" — 15



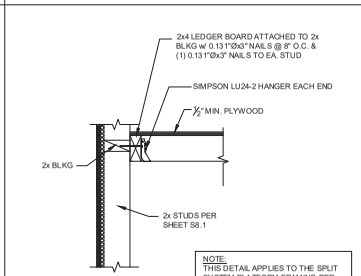
EXHAUST FAN @ T-BAR CEILING MOUNT — 11



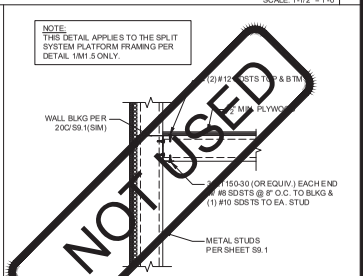
GYPSUM BOARD CEILING DETAIL w/ STEEL STUDS OPTION — SCALE: 1-1/2" = 1'-0" — 13



EXHAUST FAN @ GYP.BD. CEILING MOUNT — 16



DETAIL @ WOOD STUD OPTION — SCALE: 1-1/2" = 1'-0" — 17



DETAIL @ STEEL STUD OPTION — SCALE: 1-1/2" = 1'-0" — 18

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SITE SPECIFIC PROJECT NAME
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CHILD DEVELOPMENT CENTER
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LICENSED ARCHITECT — REGISTERED PROFESSIONAL — No. C 12631 — Ren. 3-31-23 — STATE OF CALIFORNIA

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REVISIONS
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2
3
4

DRAWN BY:	JM/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:
MECHANICAL ROOF DETAILS

SHEET NUMBER:
M1.6

1. CEILING SYSTEM GENERAL NOTES

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635 AND SECTION 5.1 OF ASTME580.

1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635.

1.03 CEILING SYSTEMS. THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT:

MANUFACTURER: ***REFER TO TABLE A (BELOW)***
PRODUCT NAME: ***REFER TO TABLE A (BELOW)***
EVALUATION REPORT TYPE AND NUMBER: ***REFER TO TABLE A (BELOW)***
MAIN RUNNER PART, MODEL, OR CATALOG NUMBER: ***REFER TO TABLE A (BELOW)***
CROSS RUNNER PART, MODEL, CATALOG NUMBER: ***REFER TO TABLE A (BELOW)***

1.04 SEISMIC WALL CLIP:

MANUFACTURER'S MODEL: ***[RDP TO SPECIFY IF USED]***

1.05 CEILING PANELS SHALL NOT SUPPORT ANY LUMINAIRES, AIR TERMINALS OR DEVICES.

1.06 FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE ¾" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE ¾" CLEARANCE BETWEEN THE CEILING PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP. CLEARANCE BETWEEN CEILING GRID RUNNERS/MEMBERS AND WALLS SHALL COMPLY WITH THE DETAILS ON THESE DRAWINGS REGARDLESS OF CEILING TILE MATERIAL.

2. MATERIALS

2.01 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVANIZED) CARBON STEEL CONFORMING TO ASTM A641. WIRE SHALL BE #12 GAUGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM ULTIMATE TENSILE STRENGTH = 70 KSI.

2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUTS/POST) SHALL CONFORM TO ASTM A653, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A3.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, (AISI S100). MATERIAL 43 MIL (18 GAUGE) AND LIGHTER SHALL HAVE MINIMUM YIELD STRENGTH OF 33 KSI. MATERIAL 54 MIL (16 GAUGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.

2.03 ELECTRICAL METALLIC TUBE (EMT) SHALL BE ANSI C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH (F_y) OF 30 KSI AND MINIMUM ULTIMATE STRENGTH (F_u) OF 48 KSI.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC.

3.02 HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO PIPING, DUCTWORK, CONDUIT AND EQUIPMENT.

3.03 HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.

3.04 SLACK SAFETY WIRES SHALL BE CONSIDERED HANGER WIRES FOR INSTALLATION AND TESTING REQUIREMENTS.

3.05 HANGER AND BRACING WIRE ANCHORAGE TO THE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHORAGE ALIGNS CLOSELY WITH THE DIRECTION OF THE WIRE (E.G., BRACING WIRE CEILING CLIPS MUST BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, SCREW EYES IN WOOD MUST BE INSTALLED SO THEY ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, ETC.).

4. FASTENERS AND WELDING

4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513 AND ASME B18.6.3. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.

5. TESTING

5.01 ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.

6. LUMINAIRES

6.01 ALL LUMINAIRES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE LUMINAIRE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LUMINAIRE, PER ASTM E580 SECTION 5.3.1.

6.02 SURFACE-MOUNTED LUMINAIRES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE-CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAUGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAUGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN A LUMINAIRE IS 8 FEET OR LONGER OR EXCEEDS 56 POUNDS. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED 8 FEET.

6.03 LUMINAIRES WEIGHING LESS THAN OR EQUAL TO 10 POUNDS MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, SHALL HAVE A MINIMUM OF ONE #12 GAUGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.

6.04 LUMINAIRES WEIGHING GREATER THAN 10 POUNDS BUT LESS THAN OR EQUAL TO 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO #12 GAUGE SLACK SAFETY WIRES CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
EXCEPTION: ALL LUMINAIRES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56 POUNDS SHALL HAVE A #12 GAUGE SLACK SAFETY WIRE AT EACH CORNER.

6.05 ALL LUMINAIRES WEIGHING GREATER THAN 56 POUNDS SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR TAUT #12 GAUGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR TAUT #12 GAUGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR TIMES THE WEIGHT OF THE FIXTURE.

7. SERVICES WITHIN THE CEILING

7.01 ALL FLEXIBLE SPRINKLER HOSE FITTING MOUNTING BRACKETS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.

7.02 CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 POUNDS SHALL HAVE ONE #12 GAUGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

7.03 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 POUNDS BUT LESS THAN OR EQUAL TO 56 POUNDS SHALL HAVE TWO #12 GAUGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.

7.04 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 POUNDS SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR TAUT #12 GAUGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

8. OTHER DEVICES WITHIN THE CEILING

8.01 ALL LIGHTWEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. IN ADDITION, DEVICES WEIGHING MORE THAN 10 POUNDS SHALL HAVE A #12 GAUGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 POUNDS SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

TABLE A - HEAVY DUTY GRID COMPONENTS

MANUFACTURER	MAIN TEE	H.D. 4' CROSS TEE	H.D. 2' CROSS TEE	RUNNER SPLICE DETAIL	ICBO ER REPORT
~~DONN/USG~~	~~DX 26~~	~~DX 424~~	~~DX 216~~	N/A	~~ICC-ESR-1222~~
ARMSTRONG	7301	XL7341	XL8320	N/A	ICC-ESR-1308
~~CHICAGO/ROCKFON~~	~~200.01~~	~~1274.01~~	~~1292.01~~	N/A	~~ICC-ESR-2631~~

NOTE: ALL GRID COMPONENTS SHALL BE BY THE SAME MANUFACTURER

METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

HVAC CFM CHART

	MODEL #	DESCRIPTION	MAX. CFM	UNIT WEIGHT (LBS)	EER	COP	CLIMATE ZONE(S)
BARD WALL HUNG	W36HB	3 TON HEAT PUMP	1145	500	11	3.3	1-16
	W42HC	¾ TON HEAT PUMP	1140	500	11	3.3	1-16
	W48HC	4 TON HEAT PUMP	1650	505	11	3.3	1-16
	W60HC	4½ TON HEAT PUMP	1855	515	11	3.3	1-16

HVAC CFM CHART

	MODEL #	DESCRIPTION	MAX. CFM	UNIT WEIGHT (LBS)	EER	SEER	CLIMATE ZONE(S)
CARRIER ROOF MOUNT	50VT-C36---3--TP	3 TON HEAT PUMP	1200	371	12.0	14.5	1-16
	~~50VT-C42---3--TP~~	~~3½ TON HEAT PUMP~~	~~1400~~	~~412~~	~~12.0~~	~~14.5~~	~~1-16~~
	50VT-C48---3--TP	4 TON HEAT PUMP	1600	432	12.0	14.5	1-16
	50VT-C60---3--TP	4½ TON HEAT PUMP	1750	462	12.0	14.2	1-16

HVAC CFM CHART

	MODEL #	DESCRIPTION	AIR HANDLER MODEL # (INTERIOR OR ATTIC MOUNTED)	MAX. CFM	UNIT WEIGHT (LBS)	EER	SEER	CLIMATE ZONE(S)
CARRIER SPLIT DX SYSTEM	25HCE436A003	3 TON HEAT PUMP	FX4DN037	1200	157	11.5	14.0	1-16
	25HCE442A003	¾ TON HEAT PUMP	FX4DN043	1400	157	11.5	14.0	1-16
	25HCE448A003	4 TON HEAT PUMP	FX4DN049	1600	185	11.5	14.0	1-16
	25HCE460A003	4½ TON HEAT PUMP	FX4DN061	2000	201	11.5	14.0	1-16

HVAC SCHEDULE

BUILDING SIZE	# OF HVAC CLIMATE ZONES 1-14				# OF HVAC CLIMATE ZONE 15				# OF HVAC CLIMATE ZONE 16			
	3 TON HVAC	3½ TON HVAC	4 TON HVAC	4½ TON HVAC	3 TON HVAC	3½ TON HVAC	4 TON HVAC	4½ TON HVAC	3 TON HVAC	3½ TON HVAC	4 TON HVAC	4½ TON HVAC
☐ 24'x40'		1					1			1		
☐ 36'x40'				1	2						1	
☐ 48'x40'		2					2			2		
☐ 60'x40'				2	4						2	
☐ 72'x40'		3					3			3		
☐ 84'x40'				3	6						3	
☐ 96'x40'		4					4			4		
☐ 108'x40'				4	8						4	
☐ 120'x40'		5					5			5		

MINIMUM INSULATION SCHEDULE

ZONE	WALL	ROOF			FLOORS (NON-CONCRETE)	CONCRETE FLOORS
		BATTS	RIGID (w/ SHEATHING)	RIGID (w/o SHEATHING)		
1-2	*R-13	**R-19	R-10	***R-1	R-13	N/A
3-15	*R-13	**R-19	R-5	***R-1	R-13	N/A
16	*R-13	**R-19	R-15	***R-1	R-13	N/A

* IN ADDITION TO R-13 BATT INSULATION, R-4 RIGID INSULATION TO BE USED OVER METAL FRAMED WALLS
** SECURED w/ 22 GA WIRE @ 16" O.C.
*** R-1 MAY BE ACHEIVED w/ POLYSTYRENE OR INSULATION TAPE APLLIED TO THE TOP FLANGE OF PURLINS, TYP.

ADDITIONAL HVAC NOTES:
MANUAL OVERRIDE CONTROLS ARE A MANDATORY MEASURE UNDER ENERGY CODE SECTION 120.2(e).
ALL HVAC SYSTEMS SHALL HAVE A MANUAL OVERRIDE ACCESSIBLE TO THE OCCUPANTS THAT ALLOWS THEM TO TURN ON THE HVAC SYSTEM DURING NORMAL UNOCCUPIED TIMES. THIS CAN BE A MANUAL OVERRIDE FOR UP TO 4 HOURS, OCCUPANCY SENSOR, OR A 4 HOUR MANUALLY OPERATED TIMER.

HVAC SCHEDULES

HEATING VENTILATING AND AIR CONDITIONING (HVAC)

1. HEAT PUMP: SINGLE PACKAGE WALL-MOUNTED AIR-TO-AIR ELECTRIC HEAT PUMP UNIT SHALL BE RATED IN ACCORDANCE WITH A.R.I. STANDARD 240-77. MAXIMUM AC SIZE FOR THIS BUILDING WILL BE A 5-TON UNIT. ALL UNITS SHALL BE 230/208 VOLT, 1 PHASE SYSTEM, UL TESTED & APPROVED OR COMPARABLE, AND MEET CURRENT ENERGY STANDARDS.
   A. THE SYSTEM SHALL MAINTAIN AN AUTOMATICALLY CONTROLLED INDOOR CLASSROOM TEMPERATURE OF 78 DEGREES F. WHEN THE OUTDOOR DRY BULB TEMPERATURE VARIES BETWEEN 100 DEGREES F. IN THE SUMMER.
   B. THE SYSTEM MUST MAINTAIN THE ABOVE TEMPERATURE WHEN THE DAMPER IS ADJUSTED TO USE APPROXIMATELY ONE-THIRD FRESH AIR.
2. DUCTWORK
   A. CONSTRUCT ALL DUCTWORK OF GALVANIZED SHEET METAL IN ACCORDANCE WITH C.M.C., ASHRAE GUIDE EQUIPMENT VOLUME, AND SMACNA LOW VELOCITY DUCT CONSTRUCTION MANUAL, LATEST EDITIONS. ALL DUCTWORK SHALL BE INSULATED WITH 1" THICK FIBERGLASS DUCT WRAP WITH VAPOR BARRIER. PROVIDE 1" DUCT ATTENUATION AT ALL DUCTWORK WITHIN 2'-0" OF HVAC UNIT.
   B. NON-METALLIC DUCTWORK OPTION: IN ACCESSIBLE CONCEALED PORTIONS OF DUCT SYSTEM, RIGID 1" FIBERGLASS OR INSULATED FLEX-DUCT WITH VAPOR BARRIER MAY BE SUBSTITUTED FOR SHEET METAL DUCTWORK. ALL DUCTWORK WITHIN 2'-0" OF THE HVAC UNIT AND ALL INTERFACE CONNECTIONS SHALL BE METAL. DUCTWORK AND REINFORCEMENT SHALL BE DESIGNED FOR 2" STATIC PRESSURE. REFERENCE BRANDS: OWENS-CORNING FIBERGLASS DUCTBOARD, 1" THICK, AND MICRO-AIRE TYPE 475. NON-METALLIC DUCTWORK SHALL CONFORM TO NFPA 90-A AND SMACNA CLASS 1 RATING.
   C. DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4' INTERVALS, WITH HANGING STRAPS A MINIMUM 1-1/2" WIDE. DUCTS MUST BE PULLED TIGHT'S WITH A MAXIMUM SAG OF 1/2" PER FOOT OF HORIZONTAL RUN. DUCTS SHALL NOT BE KINKED OR CRUSHED. BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.
   D. SIZES OF SUPPLY AND RETURN DUCTS SHALL BE SPECIFIED ON PLANS. HVAC CURB SUPPLY AND RETURN DUCTS SHALL BE THE SAME SIZE AND ALLIGN WITH THE HVAC UNIT.
   E. FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4 AND CMC 603.4.1
3. AIR DUCT INSULATION AND LININGS SHALL COMPLY WITH FLAME SPREAD LESS THAN OR EQUAL TO 25, SMOKE GENERATION LESS THAN OR EQUAL TO 50.
4. SUPPLY AIR DIFFUSERS SHALL BE 675 CFM MAXIMUM, 12" ROUND. 1" FIBERGLASS OR FLEXDUCT DUCTWORK SPECIFICALLY DESIGNED TO PROVIDE AIR THERMAL COOLING SYSTEMS, 24"x8"x1" MICRO-AIRE TYPE #475 OWENS-CORNING, KNAUF, CERTAINTEED, OR EQUAL AND 90-B: UL #131 TEST, CLASS 1 RATING WITH "SMACNA".
5. REGISTERS AND DIFFUSERS: PROVIDE THREE (MINIMUM) 4-WAY THROW AIR DIFFUSERS AS MANUFACTURED BY CARNES, TITUS, HART AND COOLEY, METALAIRE, SHOEMAKER, BARBER-COLEMAN OR KRUEGER COMMERCIAL GRADE GRILLS AND REGISTERS.
6. AIR CONDITIONING CONTROLS: PROVIDE ELECTRONIC PROGRAMMABLE THERMOSTAT. THERMOSTAT SHALL BE PROGRAMMED WITH EXPECTED OCCUPIED TIMERS. AIR HANDLER FAN WILL BE PROGRAMMED TO RUN DURING ALL OCCUPIED TIMES. PRE-OCCUPANCY PURGE SHALL BE PROGRAMMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED.
   THERMOSTAT SHALL HAVE THE FOLLOWING FUNCTIONS:
   A. 5 AND 2 WEEKDAY/WEEKEND PROGRAMMING DAYS WITH 4 SEPARATE TIME/TEMPERATURE SETTINGS FOR A 24-HOUR PERIOD.
   B. KEY BOARD LOCKOUT SWITCH.
   C. PROGRAMMABLE DISPLAY.
   D. 2-HOUR OVERRIDE MINIMUM.
   E. STATUS INDICATED LED'S.
   F. BATTERY BACK-UP.
   G. PROVIDE LOCKING CLEAR THERMOSTAT COVER WITH THERMOSTAT COVER WITH ACCESS HOLE FOR PROGRAM OVERRIDE. WHITE RODGERS IF92-371. MOUNT TOP OF BOX @ 48" A.F.F. MAX. (WHERE SEALED, SETTINGS & ADJUSTMENTS CAN BE DONE BY SERVICE PERSONNEL ONLY.)
7. THERMAL INSULATION
   A. ROOF INSULATION: R-19 WITH 22 GA. WIRE @ 16" O.C. & R-1 TOP OF PURLINS.
   B. WALLS INSULATION: R-13 KRAFT FACED. (R-4 INSULATION OVER METAL FRAMED WALLS)
   C. NON-CONCRETE FLOORS INSULATION: R-13
   D. CONCRETE FLOORS INSULATION: N/A
   E. FLAME SPREAD AND SMOKE DEVELOPMENT SHALL CONFORM TO CALIFORNIA BUILDING CODE SEC. 720.
8. FACTORY-MADE AIR DUCTS
   A. FACTORY-MADE AIR DUCTS SHALL BE APPROVED FOR THE USE INTENDED OR SHALL CONFORM TO THE REQUIREMENTS OF C.M.C. SECTION 601.0.
   B. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BE IDENTIFIED BY THE MANUFACTURER WITH A LABEL OR OTHER SUITABLE IDENTIFICATION INDICATING COMPLIANCE WITH C.M.C. SECTION 601.0 AND IT'S CLASS DESIGNATION. THESE DUCTS SHALL BE LISTED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE TERMS OF THEIR LISTING AND THE REQUIREMENTS OF C.M.C. SECTION 601.0.
   C. DUCT SUPPORT FLEX DUCT TO BE SUPPORTED WITH 1-1/2" WIDE x26 GA. GALV. STRAP @ MAX 4'-0" O.C. ATTACH TO RAFTER WITH TWO #8 S.M.S. @ EACH END.
   D. SUPPLY AIR PLENUM TO BE SUPPORTED WITH 1-1/2" WIDE x26 GA. GALV. STRAPS MINIMUM 2 PER PLENUM.
   E. SUPPLY AIR BOX AND DIFFUSERS TO BE SUPPORTED WITH (2) 12 GA. HANGER WIRES TO BOX @ OPPOSITE CORNERS.
   F. SUPPLY AIR BOX AND DIFFUSERS TO BE BRACED WITH (2) 12 GA. SLACK WIRES TO BOX @ OPPOSITE CORNERS. ATTACH SUPPLY AIR DIFFUSERS TO CEILING GRID TO RESIST A LATERAL LOAD EQUAL TO THE WEIGHT OF THE DIFFUSER AND SUPPLY AIR BOX WITH TWO #8 S.M.S.
9. FIREBLOCKING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:
   A. IN CONCEALED SPACES OF STUD WALLS AND PARTITIONS, INCLUDING FURRED SPACES;
   B. AT THE CEILING AND FLOOR LEVELS;
   C. AND AT 10-FOOT (3048mm) INTERVALS BOTH VERTICAL AND HORIZONTAL.
   REFERENCE 2019 CBC SECTION 718.
10. THE INTERIOR ENVIRONMENT SHALL BE ASSEMBLED WITH PRODUCTS THAT CONTRIBUTE TO A HEALTHY INDOOR AIR QUALITY (IAQ). THE FOLLOWING SHALL COMPLY TITLE 24, PART 11 ("CAL-GREEN"), SECTION 5.504.4. (SEE SHEET N1.0, SECTION 9C "INTERIOR AIR QUALITY CONTROL")
11. HVAC FILTER
    A. FILTERS SHALL HAVE A "MINIMUM EFFICIENCY REPORTING VALUE" OF 13 WITH 2" DEPTH MIN. (MERV 13) AND SHALL BE INSTALLED PRIOR TO OCCUPANCY AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL, PER 2019 CEC SECTION 5.504.5.3.
    B. INSTALLED FILTERS SHALL BE CLEARLY LABELED BY THE MANUFACTURER INCLUDING THE MERV RATING, PER 2019 CBC SECTION 5.504.5.3.1
12. ROOF MOUNTED HVAC
    A. A GASKET SHALL BE PLACED BETWEEN THE CURB AND THE HVAC UNIT. MASTIC SEALANT SHALL BE USED TO SEAL ALL SEAMS BETWEEN THE HVAC UNIT AND DUCTS.
13. HVAC CONTROLS
    A. THERMOSTAT (BY OTHERS) WILL BE PROGRAMMED WHEN THE MODULAR BUILDING IS PLACED ON A SITE TO ENSURE THE MINIMUM AIR RATE WILL BE SUPPLIED TO THE SPACE AT ALL USUALLY OCCUPIED TIMES AND PROGRAMMED TO PROVIDE A PRE-OCCUPANCY PURGE ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED PER ENERGY CODE 120.1(c)1.
14. UPON SITE PLACEMENT OR SITE CONSTRUCTION, THE OPERATION AND MAINTENANCE DOCUMENTATION FOR ALL MECHANICAL AND LIGHTING SYSTEMS AND CONTROLS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR FOR THE PERMANENT MODULAR RELOCATABLE BUILDING AND DELIVERED TO THE OWNER.

HVAC NOTES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS
American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT
JAMES PATRICK AKA
No. C12631
Exp. 3-31-23
STATE OF CALIFORNIA

REVISIONS
1
2
3
4

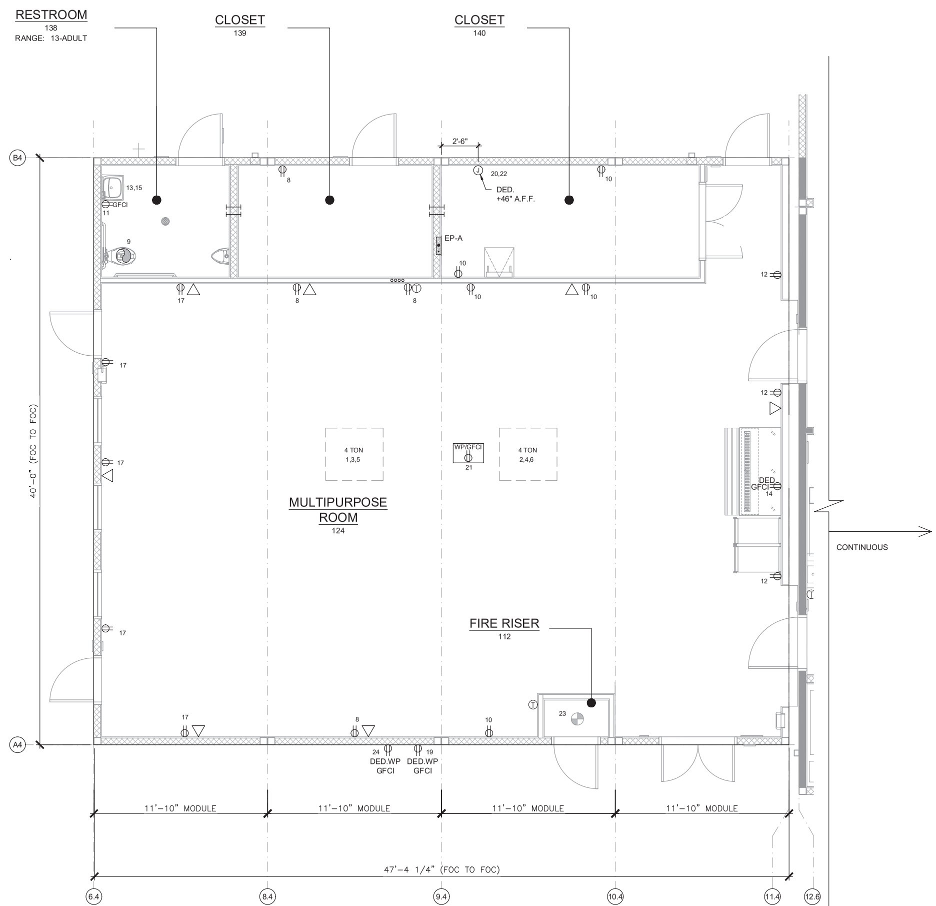
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

CEILING & MECHANICAL
NOTES & SCHEDULES

SHEET NUMBER:

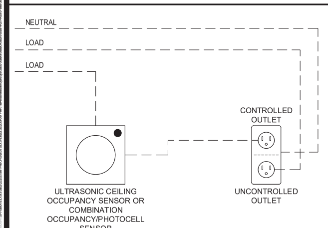
M1.7



TOP OF BOX = T.O.B.

ELECTRICAL PLAN - BLDG A

SCALE: 1/8" = 1' - 0" 1



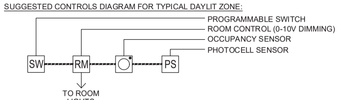
NOTE:
REQUIRED FOR OFFICES, LOBBY, AND MEETING ROOMS ONLY.

TYP. CONTROLED/UNCONTROLED RECEPTACLE WIRING DIAGRAM

N.T.S. 2

ENERGY CONTROLS

1. AUTOMATIC DAYLIGHTING CONTROLS:
NOT REQUIRED IN ROOMS WHERE COMBINED INSTALLED LIGHTING POWER IN COMBINED SKYLIT & PRIMARY DAYLIT ZONES ARE <120 WATTS. INSTALLED WATTAGE IN PRIMARY SIDELIT DAY LIT ZONE IS 90 WATTS (2x 45w, AS SHOWN IN THE SHADED AREAS). THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1.1. WHEN DAYLIT CONTROLS ARE REQUIRED, PROVIDE COMBINATION OCCUPANCY/PHOTOCELL SENSOR.
2. ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) CONNECTION:
PER TITLE 24 CODE, "AN EMCS MAY BE INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ONE OR MORE LIGHTING CONTROLS IF IT MEETS THE MINIMUM REQUIREMENTS". PC MAY CONTAIN OCCUPANCY SENSORS AND PHOTOCELL CONTROL LIGHTING, IN THAT CASE, AN EMCS IS NOT REQUIRED FOR THIS PC.
3. SOLAR-READY ZONE REQUIREMENTS:
REQUIREMENTS & TABLE CAN BE FOUND ON SHEET A2.0
4. SUGGESTED CONTROLS DIAGRAM FOR TYPICAL DAYLIT ZONE:



NOTE: ANT MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THE BASE PC.

ENERGY NOTES

1. THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT & SMOKE DETECTORS, EVACS AND PULL STATIONS, AND COMPLETE FIRE ALARM SYSTEM WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3.
2. ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THIS BASE PC.
3. PULL STATIONS ARE REQUIRED AT EVERY EXIT. AT ANY SPACE REQUIRING 2 OR MORE EXITS, PROVIDE EXIT SIGNS (CBC 1013) AND EMERGENCY EXIT ILLUMINATION (CBC 1008).
4. SEE PLANS FOR LOCATIONS OF ALL DEVICES.
5. STUB-OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES ARE SHOWN DIAGRAMMATICAL ONLY. EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
6. STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT.
7. THE LIGHTS FOR EACH ROOM OVER 250 SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR: WATT STOPPER W-500A, W-1000A, OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE, IN CONJUNCTION WITH BI-LEVEL SWITCHING.
8. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
9. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-BAR GRID LAYOUT.

DEMAND RESPONSE CONTROLS

1. DEMAND RESPONSE CONTROLS ARE REQUIRED IN BUILDINGS LARGER THAN 10,000 S.F.
2. DEMAND RESPONSE CONTROLS, WHERE REQUIRED, ARE TO BE PROVIDED BY OTHERS.
3. DEMAND RESPONSE CONTROLS AND EQUIPMENT SHALL BE CAPABLE OF RECEIVING AND AUTOMATICALLY RESPONDING TO AT LEAST ONE STANDARD-BASED MESSAGING PROTOCOL WHICH ENABLES DEMAND RESPONSE AFTER RECEIVING A DEMAND SIGNAL.
4. SITE-SPECIFIC PROJECTS WHICH REQUIRE DEMAND RESPONSE CONTROLS MUST INCLUDE THE SUBMITTAL OF FORM NRCC-ELC-O1-E TO DSA (BY OTHERS).

GENERAL NOTES

- ELECTRICAL PANEL - MOUNT FLUSH WITH WALL FINISH, U.O.N.
- UNCONTROLLED-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- COMBO-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- FOURPLEX WALL OUTLET - MOUNT @ +18" A.F.F. TO CENTER LINE - U.O.N.
- WP/GFCI: WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- WP/GFCI: ROOF MOUNT WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT ON ROOF - U.O.N.
- GFCI: GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- T: THERMOSTAT - TOP OF BOX MOUNTED @ +46" A.F.F.
- J: JUNCTION BOX - SIZE / LOCATION A.F.F. / TYPE AS NOTED
- J: ELECTRICAL CROSSOVER - J-BOX - ABOVE CEILING - #1- 4"x1", #22- 4"x2"
- S: SPEAKER - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +84" A.F.F. TO CENTERLINE - DEVICE BY OTHERS
- CONDUIT CROSSOVER @ FULL HEIGHT WALLS - 2"C. U.O.N. - IN WALL ABOVE CEILING
- DATA/COMMUNICATION - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- SEC: SECURITY CAMERA - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +126" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 1" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- INTERCOM/TELEPHONE - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT TOP OF BOX @ +46" A.F.F. U.O.N. AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- BELOW FLOOR LOW VOLTAGE POC: (4) 2" CONDUITS FROM ATTIC STUBBED DOWN BELOW FF

STANDARD ELECTRICAL SYMBOLS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD

REVISIONS

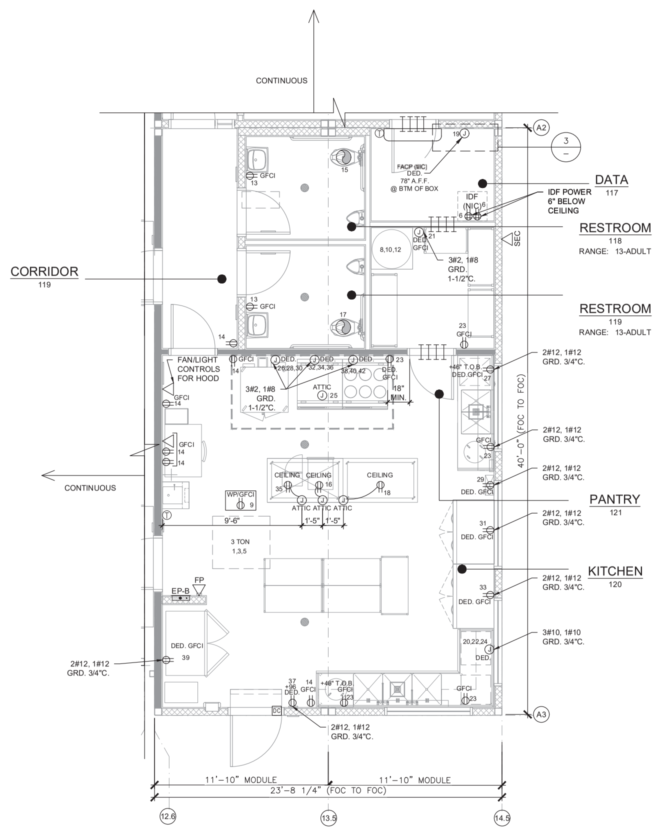
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/15/22
PROJECT NO:	1674-21

SHEET TITLE:

ELECTRICAL PLAN - BLDG A

SHEET NUMBER:

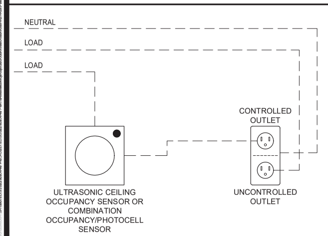
E1.0A



TOP OF BOX = T.O.B.

ELECTRICAL PLAN - BLDG B

SCALE: 1/8" = 1' - 0" 1

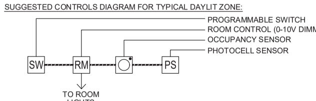


NOTE:
REQUIRED FOR OFFICES, LOBBY, AND MEETING ROOMS ONLY.

TYP. CONTROLED/UNCONTROLED RECEPTACLE WIRING DIAGRAM N.T.S. 2

ENERGY CONTROLS

1. AUTOMATIC DAYLIGHTING CONTROLS:
NOT REQUIRED IN ROOMS WHERE COMBINED INSTALLED LIGHTING POWER IN COMBINED SKYLIT & PRIMARY DAYLIT ZONES ARE <120 WATTS. INSTALLED WATTAGE IN PRIMARY SIDELIT DAY LIT ZONE IS 90 WATTS (2x 45w, AS SHOWN IN THE SHADED AREAS). THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1.1. WHEN DAYLIT CONTROLS ARE REQUIRED, PROVIDE COMBINATION OCCUPANCY/PHOTOCELL SENSOR.
2. ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) CONNECTION:
PER TITLE 24 CODE, "AN EMCS MAY BE INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ONE OR MORE LIGHTING CONTROLS IF IT MEETS THE MINIMUM REQUIREMENTS". PC MAY CONTAIN OCCUPANCY SENSORS AND PHOTOCELL CONTROL LIGHTING, IN THAT CASE, AN EMCS IS NOT REQUIRED FOR THIS PC.
3. SOLAR-READY ZONE REQUIREMENTS:
REQUIREMENTS & TABLE CAN BE FOUND ON SHEET A2.0
4. SUGGESTED CONTROLS DIAGRAM FOR TYPICAL DAYLIT ZONE:



NOTE: ANT MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THE BASE PC.

ENERGY NOTES

1. THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT & SMOKE DETECTORS, EVACS AND PULL STATIONS, AND COMPLETE FIRE ALARM SYSTEM WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3.

2. ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THIS BASE PC.

3. PULL STATIONS ARE REQUIRED AT EVERY EXIT. AT ANY SPACE REQUIRING 2 OR MORE EXITS, PROVIDE EXIT SIGNS (CBC 1013) AND EMERGENCY EXIT ILLUMINATION (CBC 1008).

4. SEE PLANS FOR LOCATIONS OF ALL DEVICES.

5. STUB-OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES ARE SHOWN DIAGRAMMATICAL ONLY. EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.

6. STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT.

7. THE LIGHTS FOR EACH ROOM OVER 250 SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR: WATT STOPPER W-500A, W-1000A, OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE, IN CONJUNCTION WITH BI-LEVEL SWITCHING.

8. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.

9. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-BAR GRID LAYOUT.

DEMAND RESPONSE CONTROLS

1. DEMAND RESPONSE CONTROLS ARE REQUIRED IN BUILDINGS LARGER THAN 10,000 S.F.

2. DEMAND RESPONSE CONTROLS, WHERE REQUIRED, ARE TO BE PROVIDED BY OTHERS.

3. DEMAND RESPONSE CONTROLS AND EQUIPMENT SHALL BE CAPABLE OF RECEIVING AND AUTOMATICALLY RESPONDING TO AT LEAST ONE STANDARD-BASED MESSAGING PROTOCOL WHICH ENABLES DEMAND RESPONSE AFTER RECEIVING A DEMAND SIGNAL.

4. SITE-SPECIFIC PROJECTS WHICH REQUIRE DEMAND RESPONSE CONTROLS MUST INCLUDE THE SUBMITTAL OF FORM NRCC-ELC-O1-E TO DSA (BY OTHERS).

GENERAL NOTES

ELECTRICAL PANEL - MOUNT FLUSH WITH WALL FINISH, U.O.N.

UNCONTROLLED-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.

COMBO-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.

FOURPLEX WALL OUTLET - MOUNT @ +18" A.F.F. TO CENTER LINE - U.O.N.

WP/GFCI — WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.

WP/GFCI — ROOF MOUNT WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT ON ROOF - U.O.N.

GFCI — GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.

THERMOSTAT - TOP OF BOX MOUNTED @ +46" A.F.F.

JUNCTION BOX - SIZE / LOCATION A.F.F. / TYPE AS NOTED

ELECTRICAL CROSSOVER - J-BOX - ABOVE CEILING - #1- 4"x1", #22- 4"x2"

SPEAKER - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +84" A.F.F. TO CENTERLINE - DEVICE BY OTHERS

CONDUIT CROSSOVER @ FULL HEIGHT WALLS - 2"C. U.O.N. - IN WALL ABOVE CEILING

DATA/COMMUNICATION - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS

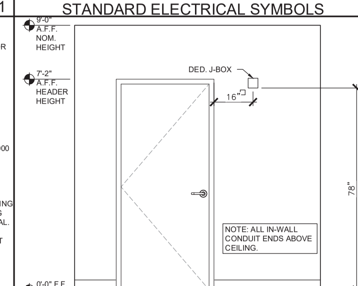
SEC — SECURITY CAMERA - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +126" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 1" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS

INTERCOM/TELEPHONE - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT TOP OF BOX @ +46" A.F.F. U.O.N. AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS

FP — FIRE PULL - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT TOP OF BOX @ +46" A.F.F. U.O.N. AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS

DC — DOOR CONTACT - PROVIDE (1) EMPTY 1/2" DIA EMT THROUGH DOOR HEADER - STUBBED ABOVE CEILING - DEVICE BY OTHERS

STANDARD ELECTRICAL SYMBOLS



DATA WALL ELEVATION SCALE:1/2"-1'-0" 3

IDENTIFICATION STAMP
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APP: 04-120944 INC:
REVIEWED FOR
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DATE: 08/30/2022

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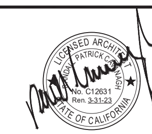
PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES



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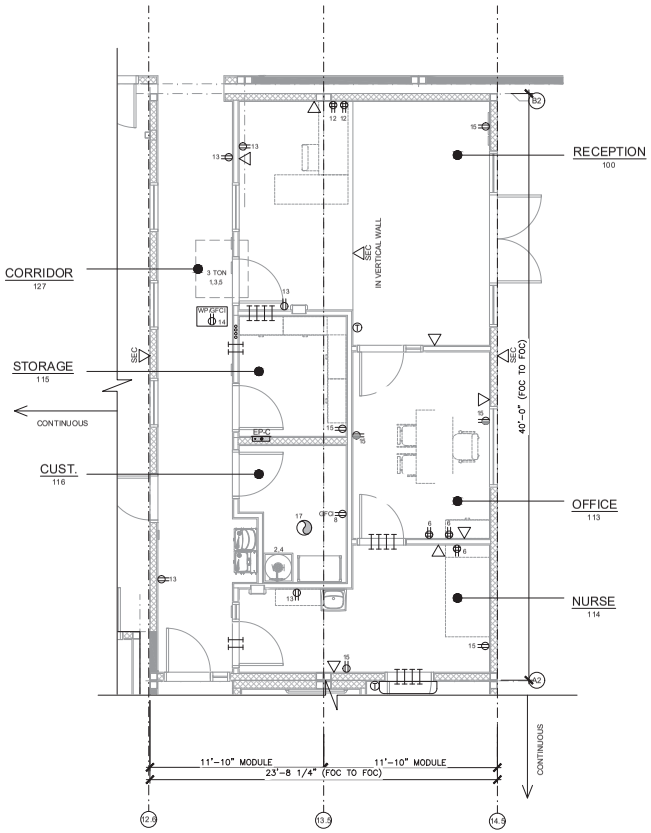
REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	07/15/22
PROJECT NO:	1674-21

SHEET TITLE:
ELECTRICAL PLAN - BLDG B

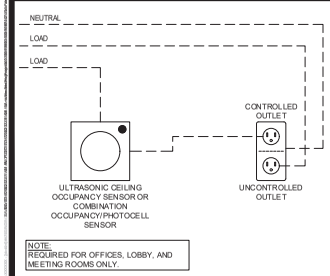
SHEET NUMBER:
E1.0B



TOP OF BOX = T.O.B.

ELECTRICAL PLAN BLDG C

SCALE: 1/8" = 1'-0" | 1



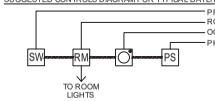
NOTE:
REQUIRED FOR OFFICES, LOBBY, AND MEETING ROOMS ONLY.

TYP. CONTROLED/UNCONTROLED RECEPTACLE WIRING DIAGRAM

N.T.S. | 2

ENERGY CONTROLS

1. AUTOMATIC DAYLIGHTING CONTROLS:
   NOT REQUIRED IN ROOMS WHERE COMBINED INSTALLED LIGHTING POWER IN COMBINED SKYLIT & PRIMARY DAYLIT ZONES ARE <120 WATTS. INSTALLED WATTAGE IN PRIMARY SIDELIT DAY LIT ZONE IS 90 WATTS (2x 45w, AS SHOWN IN THE SHADED AREAS). THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1.1. WHEN DAYLIT CONTROLS ARE REQUIRED, PROVIDE COMBINATION OCCUPANCY/PHOTOCELL SENSOR.
2. ENERGY MANAGEMENT CONTROL SYSTEM (EMCS) CONNECTION:
   PER TITLE 24 CODE, "AN EMCS MAY BE INSTALLED TO COMPLY WITH THE REQUIREMENTS OF ONE OR MORE LIGHTING CONTROLS IF IT MEETS THE MINIMUM REQUIREMENTS". PC MAY CONTAIN OCCUPANCY SENSORS AND PHOTOCELL CONTROL LIGHTING, IN THAT CASE, AN EMCS IS NOT REQUIRED FOR THIS PC.
3. SOLAR-RE ADY ZONE REQUIREMENTS:
   REQUIREMENTS & TABLE CAN BE FOUND ON SHEET A2.0
4. SUGGESTED CONTROLS DIAGRAM FOR TYPICAL DAYLIT ZONE:



NOTE: ANT MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THE BASE PC.

ENERGY NOTES

GENERAL NOTES

1. THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT & SMOKE DETECTORS, EVACS AND PULL STATIONS, AND COMPLETE FIRE ALARM SYSTEM WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3.
2. ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THIS BASE PC.
3. PULL STATIONS ARE REQUIRED AT EVERY EXIT. AT ANY SPACE REQUIRING 2 OR MORE EXITS, PROVIDE EXIT SIGNS (CBC 1013) AND EMERGENCY EXIT ILLUMINATION (CBC 1008).
4. SEE PLANS FOR LOCATIONS OF ALL DEVICES.
5. STUB-OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES ARE SHOWN DIAGRAMMATICAL ONLY. EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
6. STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT.
7. THE LIGHTS FOR EACH ROOM OVER 250 SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR: WATT STOPPER W-500A, W-100A, OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE, IN CONJUNCTION WITH BI-LEVEL SWITCHING.
8. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
9. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-BAR GRID LAYOUT.

DEMAND RESPONSE CONTROLS

1. DEMAND RESPONSE CONTROLS ARE REQUIRED IN BUILDINGS LARGER THAN 10,000 S.F.
2. DEMAND RESPONSE CONTROLS, WHERE REQUIRED, ARE TO BE PROVIDED BY OTHERS.
3. DEMAND RESPONSE CONTROLS AND EQUIPMENT SHALL BE CAPABLE OF RECEIVING AND AUTOMATICALLY RESPONDING TO AT LEAST ONE STANDARD-BASED MESSAGING PROTOCOL WHICH ENABLES DEMAND RESPONSE AFTER RECEIVING A DEMAND SIGNAL.
4. SITE-SPECIFIC PROJECTS WHICH REQUIRE DEMAND RESPONSE CONTROLS MUST INCLUDE THE SUBMITTAL OF FORM NRCC-ELC-O1-E TO DSA (BY OTHERS).

STANDARD ELECTRICAL SYMBOLS

- ELECTRICAL PANEL - MOUNT FLUSH WITH WALL FINISH, U.O.N.
- UNCONTROLLED-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- COMBO-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- FOURPLEX WALL OUTLET - MOUNT @ +18" A.F.F. TO CENTER LINE - U.O.N.
- WPGFCI — WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- WPGFCI — ROOF MOUNT WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT ON ROOF - U.O.N.
- GFCI — GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- THERMOSTAT - TOP OF BOX MOUNTED @ +46" A.F.F.
- JUNCTION BOX - SIZE / LOCATION A.F.F. / TYPE AS NOTED
- ELECTRICAL CROSSOVER - J-BOX - ABOVE CEILING - #1- 4"x1", #22 - 4"x2"
- SPEAKER - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +84" A.F.F. TO CENTERLINE - DEVICE BY OTHERS
- CONDUIT CROSSOVER @ FULL HEIGHT WALLS - 2"C. U.O.N. - IN WALL ABOVE CEILING
- DATA/COMMUNICATION - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- SEC — SECURITY CAMERA - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +126" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 1" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- INTERCOM/TELEPHONE - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT TOP OF BOX @ +46" A.F.F. U.O.N. AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- BELOW FLOOR LOW VOLTAGE POC: (4) 2" CONDUITS FROM ATTIC STUBBED DOWN BELOW FF

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
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LICENSED ARCHITECT
PATRICK LAMONTAGNE
No. C12631
Exp. 3-31-25
STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ARCHITECT OF RECORD

REVISIONS

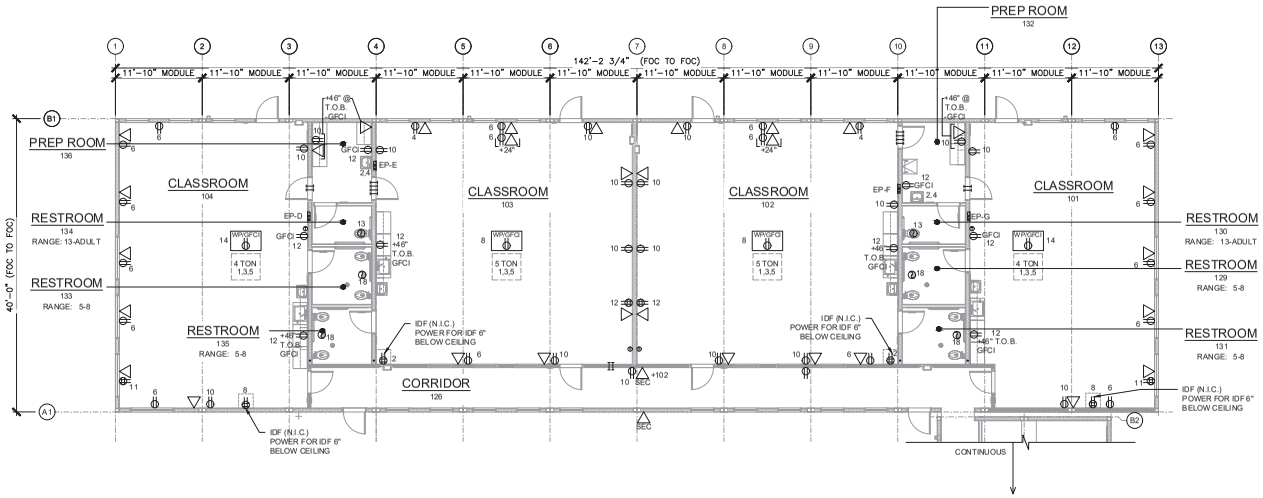
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/15/22
PROJECT NO:	167421

SHEET TITLE:

ELECTRICAL PLAN - BLDG C

SHEET NUMBER:

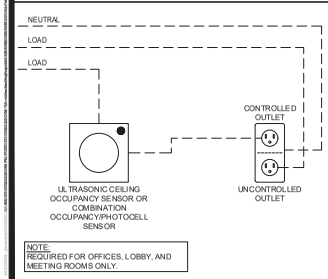
E1.0C



TOP OF BOX = T.O.B.

ELECTRICAL PLAN - BLDG D

SCALE: 1/8" = 1' - 0" | 1



NOTE:
REQUIRED FOR OFFICES, LOBBY, AND MEETING ROOMS ONLY.

TYP. CONTROLED/UNCONTROLED RECEPTACLE WIRING DIAGRAM N.T.S | 2

ENERGY CONTROLS

1. AUTOMATIC DAYLIGHTING CONTROLS:
   NOT REQUIRED IN ROOMS WHERE COMBINED INSTALLED LIGHTING POWER IN COMBINED SKYLIT & PRIMARY DAYLIT ZONES ARE <120 WATTS. INSTALLED WATTAGE IN PRIMARY SIDELIT DAYLIT ZONE IS 90 WATTS (2x 45w, AS SHOWN IN THE SHADED AREAS). THEREFORE, AUTOMATIC DAYLIGHTING CONTROLS ARE ONLY REQUIRED WHEN "SOLATUBES" ARE INSTALLED. SEE A1.1. WHEN DAYLIT CONTROLS ARE REQUIRED, PROVIDE COMBINATION OCCUPANCY/PHOTOCELL SENSOR.
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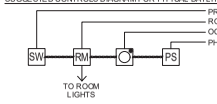

NOTE: ANT MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THE BASE PC.

ENERGY NOTES

GENERAL NOTES

1. THE PROJECT ARCHITECT SHALL BE RESPONSIBLE FOR THE PLACEMENT OF HEAT & SMOKE DETECTORS, EVACS AND PULL STATIONS, AND COMPLETE FIRE ALARM SYSTEM WHEN THE SITE SPECIFIC PROJECT IS REQUIRED TO MEET THE PROVISIONS OF SB 575 & CBC 907.2.3.
2. ANY MONITORING EQUIPMENT OR ASSOCIATED SENSORS ARE SITE SPECIFIC AND ARE NOT INCLUDED IN THIS BASE P.C.
3. PULL STATIONS ARE REQUIRED AT EVERY EXIT. AT ANY SPACE REQUIRING 2 OR MORE EXITS, PROVIDE EXIT SIGNS (CBC 1013) AND EMERGENCY EXIT ILLUMINATION (CBC 1008).
4. SEE PLANS FOR LOCATIONS OF ALL DEVICES.
5. STUB-OUT LOCATIONS FOR ELECTRICAL PANEL, FIRE ALARM, AND DATA BOXES ARE SHOWN DIAGRAMMATICAL ONLY. EXACT LOCATIONS MAY VARY +/- SEVERAL FEET. PLEASE CONTACT AMERICAN MODULAR SYSTEMS FOR EXACT LOCATIONS. POINT OF CONNECTION WILL BE AT FACE OF BUILDING.
6. STUB-UP ALL FIRE ALARM JUNCTION BOXES TO ACCESSIBLE ATTIC SPACE WITH 1/2" MIN. GALV. THIN WALL TUBING (EMT). DO NOT CONNECT FIRE ALARM CONDUIT WITH ANY OTHER ELECTRICAL CONDUIT.
7. THE LIGHTS FOR EACH ROOM OVER 250 SQ FT SHALL BE CONTROLLED BY ULTRASONIC OCCUPANCY SENSOR: WATT STOPPER W-500A, W-1000A, OR W-2000A (OR EQUAL) BASED ON THE ROOM SIZE, IN CONJUNCTION WITH BI-LEVEL SWITCHING.
8. FIXTURE MOUNTING SHALL COMPLY WITH CALIFORNIA SEISMIC REGULATIONS.
9. LIGHTING FIXTURES MAY BE INSTALLED ROTATED 90° FROM SHOWN TO MATCH T-BAR GRID LAYOUT.

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GENERAL NOTES

STANDARD ELECTRICAL SYMBOLS

- ELECTRICAL PANEL - MOUNT FLUSH WITH WALL FINISH. U.O.N.
- UNCONTROLLED-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- COMBO-DUPLEX WALL CONVENIENCE OUTLET - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N.
- FOURPLEX WALL OUTLET - MOUNT @ +18" A.F.F. TO CENTER LINE - U.O.N.
- WPGFCI WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- WPGFCI ROOF MOUNT WEATHER-PROOF GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT ON ROOF - U.O.N.
- GFCI GROUND FAULT CIRCUIT INTERRUPT OUTLET - MOUNT @ 18" A.F.F. TO CENTERLINE - U.O.N.
- T THERMOSTAT - TOP OF BOX MOUNTED @ +46" A.F.F.
- J JUNCTION BOX - SIZE / LOCATION A.F.F. / TYPE AS NOTED
- J ELECTRICAL CROSSOVER - J-BOX - ABOVE CEILING - #1 - 4"x1", #22- 4"x2"
- S SPEAKER - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +84" A.F.F. TO CENTERLINE - DEVICE BY OTHERS
- CONDUIT CROSSOVER @ FULL HEIGHT WALLS - 2"C. U.O.N. - IN WALL ABOVE CEILING
- DATA/COMMUNICATION - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +18" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- SEC SECURITY CAMERA - OUTLET ONLY - 4" SQ BOX WITH SINGLE DEVICE RING AND COVER - MOUNT @ +126" A.F.F. TO CENTERLINE, U.O.N., AND PROVIDE A 1" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- INTERCOM/TELEPHONE - OUTLET ONLY - 4" SQ. BOX WITH SINGLE DEVICE RING AND COVER - MOUNT TOP OF BOX @ +46" A.F.F. U.O.N. AND PROVIDE A 3/4" CONDUIT STUBBED ABOVE CEILING - DEVICE BY OTHERS
- BELOW FLOOR LOW VOLTAGE POC: 2" CONDUITS FROM ATTIC STUBBED DOWN BELOW FF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK [illegible] No. C12631 Exp. 3-31-25 STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS OTHERWISE NOTED BY THE ENGINEER OF RECORD

REVISIONS

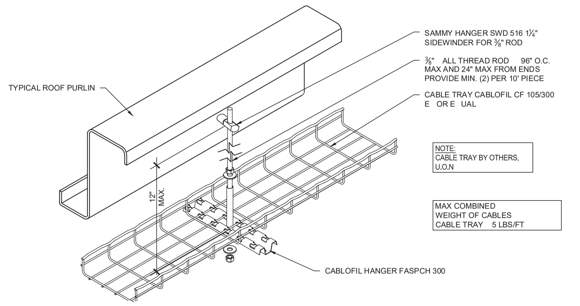
DRAWN BY:	JM/AKA
SCALE:	AS NOTED
DATE:	07/19/22
PROJECT NO:	1674-21

SHEET TITLE:

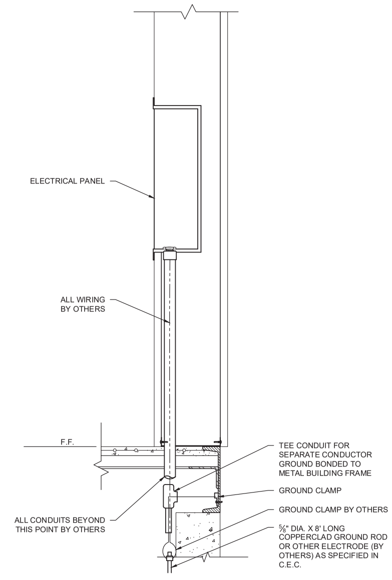
ELECTRICAL PLAN - BLDG D

SHEET NUMBER:

E1.0D



CABLE TRAY DETAIL — SCALE: N.T.S. — 1



1. SI E OF CONDUCTORS SHALL COMPLY w/CEC A
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL METAL BUILDING FRAME (CEC). IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10' INTO THE SOIL IF AVAILABLE (CEC).
3. ELECTRICAL BOND MODULES TOGETHER W/ 8 CU MODLINE. BY MANUFACTURER. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS (CEC) AS RE UIRED. GROUNDING DETAIL PER DSA IR E-1. INSPECTOR TO WITNESS GROUNDING TEST.

ELECTRICAL PANEL CONNECTION DETAIL - UNDERFLOOR OPTION — SCALE: 1-1/2" 1' - 0" — 3

LOAD PANEL CALCULATIONS

Panel: EP-A — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 150 — BUSS (AMPS): 225 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
4 TON HVAC-COOLING	3000	1	X	3000				3		1	X			2		3		3000			X	1	3000	4 TON HVAC-COOLING
	3000		X		3000					3		X		4					3000		X		3000	
	3000		X			3000				5			X	6						3000	X		3000	
RR Rnd Lighting	35	2		70			20	1	#12	7	X			8	#12	1	20	720				4	180	DUPLEX
Exhaust Fan	144	1			144		20	1	#12	9		X		10	#12	1	20		900			5	180	DUPLEX
Duplex - GFCI	180	1				180	20	1	#12	11			X	12	#12	1	20			720		4	180	DUPLEX
Instahot	2080	1	X	2080			20	1	#10	13	X			14	#12	1	20	720				1	720	DED. DUPLEX GFCI
	2080	1	X		2080					15		X		16	#12	1	20		175			5	35	EXT.AMS LIGHTING
Duplex	180	5				900	20	1	#12	17			X	18	#12	1	20			1029		21	49	INT. AMS LIGHTING
DED Duplex - WP GFCI	240	1		240			20	1	#12	19	X			20				24			X	1	24	LIGHTING PANEL (NIC)
Duplex - WP GFCI(ROOF)	180	1			180		20	1	#12	21		X		22					216.3			1	216.3	PARKING SITE LIGHT (NIC)
Fire Sprinkler Bell	1200	1	X			1200	20	1	#12	23			X	24	#12	1	20			240	X	1	240	DED Duplex - WP GFCI
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			5390	5404	5280												4464	4291	4989	LEG TOTALS			

LCL=5546+29818.3=35364.3
TOTAL WATTS: 35364 — LEG BALANCE: 2.9% — TOTAL AMPS: 98.28

Panel: EP-B — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 400 — BUSS (AMPS): 400 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
3 TON HVAC-COOLING	3000	1	X	3000				3		1	X			2	#12	1	20	35				1	35	EXT.AMS LIGHTING
	3000				3000					3		X		4	#12	1	20		441			9	49	INT. AMS LIGHTING
	3000					3000				5			X	6	#12	1	20			720		2	360	IDF QUAD
RR Rnd Lighting	35	4		140			20	1	#12	7	X			8	#12	1	20	4000			X	1	4000	WATER HEATER
Duplex - WP GFCI(ROOF)	180	1			180		20	1	#12	9		X		10					4000				4000	
Corridor Rnd Lighting	35	2				70	20	1	#12	11			X	12						4000			4000	
Duplex - GFCI	180	2		360			20	1	#12	13	X			14	#12	1	20	1260				7	180	Duplex - GFCI
Exhaust Fan	218	1			218		20	1	#12	15		X		16	#12	1	20		720			1	720	TABLE
Exhaust Fan	218	1				218	20	1	#12	17			X	18	#12	1	20			720		1	720	TABLE
DED. J-BOX (FA FACP (NIC)	180	1		180			20	1	#12	19	X			20	#12	3		2246			X		2246	DED. DISHWASHER
DED. J-BOX	180	1			180		20	1	#12	21		X		22					2246				2246	
Duplex - GFCI	180	6				1080	20	1	#12	23			X	24						2246			2246	
DED. HOOD	1800	1		1800			20	1	#12	25	X			26	#12	3		7072			X		7072	DBL CONV. OVEN
DED. TABLE	720	1			720		20	1	#12	27		X		28					7072				7072	
DED. CADDY	720	1				720	20	1	#12	29			X	30						6448			6448	
DED. REF.	708	1		708			20	1	#12	31	X			32	#12	3		8250			X		8250	ELEC. GRIDDLE
DED. REF.	1128	1			1128		20	1	#12	33		X		34					8250				8250	
DED. MICROWAVE	1560	1				1560	20	1	#12	35			X	36						6000			6000	
DED. AIR CURTIAN	1080	1		1080			20	1	#12	37	X			38	#12	3		6000			X		6000	ELEC. RANGE
DED. REF.	708	1			708		20	1	#12	39		X		40					7800				7800	
DED. ANSUL	180	1				180	20	1	#12	41			X	42						7800			7800	
				0						43	X			44				0						
					0					45		X		46					0					
						0				47			X	48						0				
				0						49	X			50				0						
					0					51		X		52					0					
						0				53			X	54						0				
	LEG TOTALS			7268	6134	6828												28863	30529	27934	LEG TOTALS			

LCL=2311.5+107556=109867.5
TOTAL WATTS: 109868 — LEG BALANCE: 2.7% — TOTAL AMPS: 305.32

NOTE:
- FOR CKT 6,8,10 (WATER HEATER), 20,22,24 (DISHWASHER), 26,28,30 (DBL CONV. OVEN), 32,34,36 (ELEC. GRIDDLE), AND 38,40,42 (ELEC. RANGE TO HAVE LOCK OUT BREAKERS OR DISCONNECT.
- CKT 19 MUST HAVE RED MARKING OR LABEL.

NOTE:
- FOR CKT 6,8,10 (WATER HEATER), 20,22,24 (DISHWASHER), 26,28,30 (DBL CONV. OVEN), 32,34,36 (ELEC. GRIDDLE), AND 38,40,42 (ELEC. RANGE TO HAVE LOCK OUT BREAKERS OR DISCONNECT.
- CKT 19 MUST HAVE RED MARKING OR LABEL.

Panel: EP-C — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 100 — BUSS (AMPS): 125 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
3 TON HVAC-COOLING	3000	1	X	3000				3		1	X			2	#10	2	30	2250			X	1	2250	20 Gal Water Heater
	3000		X		3000					3		X		4					2250				2250	
	3000		X			3000				5			X	6	#12	1	20			1080		3	360	QUAD
Corridor Rnd Lighting	35	10		350			20	1	#12	7	X			8	#12	1	20	180				1	180	Duplex - GFCI
Strip Lighting	28	1			28		20	1	#12	9		X		10	#12	1	20		35			1	35	EXT.AMS LIGHTING
INT. AMS LIGHTING	49	9				441	20	1	#12	11			X	12	#12	1	20			720		2	360	QUAD
Duplex	180	5		900						13	X			14	#12	1	20	180				1	180	Duplex - WP GFCI(ROOF)
Duplex	180	6			1080					15		X		16					0					
Exhaust Fan	110	1				110				17			X	18						0				
				0						19	X			20				0						
					0					21		X		22					0					
						0				23			X	24						0				
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			4250	4108	3551												2610	2285	1800	LEG TOTALS			

LCL=2812.5+18604=21416.5
TOTAL WATTS: 21417 — LEG BALANCE: 12.4% — TOTAL AMPS: 59.52

Panel: EP-D — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 100 — BUSS (AMPS): 125 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
4 TON HVAC-COOLING	3000	1	X	3000				3		1	X			2	#10	2	20	2080			X	1	2080	Instahot
	3000		X		3000					3		X		4					2080				2080	
	3000		X			3000				5			X	6	#12	1	20			1080		6	180	Duplex
EXT. AMS LIGHTING	35	6		210						7	X			8	#12	1	20	360				1	360	Quad - IDF
INT. AMS LIGHTING	49	11			539					9		X		10	#12	1	20		720			4	180	Duplex
QUAD	360	1				360				11			X	12	#12	1	20			720		4	180	Duplex - GFCI
Exhaust fan	110	1		110			20	1	#12	13	X			14	#12	1	20	180				1	180	Duplex - WP GFCI(ROOF)
					0					15		X		16					0					
						0				17			X	18	#12	1	20			220		1	220	Exhaust Fan
				0						19	X			20				0						
					0					21		X		22					0					
						0				23			X	24						0				
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			3320	3539	3360												2620	2800	2020	LEG TOTALS			

LCL=2770+17659=20429
TOTAL WATTS: 20429 — LEG BALANCE: 8.2% — TOTAL AMPS: 56.77

Panel: EP-E — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 100 — BUSS (AMPS): 125 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
5 TON HVAC-COOLING	4000	1	X	4000				3		1	X			2	#12	1	20	360				1	360	Quad - IDF
	4000		X		4000					3		X		4	#12	1	20		180			1	180	Duplex
	4000		X			4000				5			X	6	#12	1	20			540		3	180	Duplex
Corridor Rnd Lighting	35	7		245						7	X			8	#12	1	20	180				1	180	Duplex - WP GFCI(ROOF)
INT. AMS LIGHTING	49	10			490					9		X		10	#12	1	20		900			5	180	Duplex
						0				11			X	12	#12	1	20			360		1	360	Quad
				0						13	X			14				0						
					0					15		X		16					0					
						0				17			X	18	#12	1	20			220		1	220	Exhaust Fan
				0						19	X			20				0						
					0					21		X		22					0					
						0				23			X	24						0				
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			4245	4490	4000												540	1080	1120	LEG TOTALS			

LCL=3000+15475=18475
TOTAL WATTS: 18475 — LEG BALANCE: 7.6% — TOTAL AMPS: 51.34

Panel: EP-F — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 100 — BUSS (AMPS): 125 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
5 TON HVAC-COOLING	4000	1	X	4000				3		1	X			2	#12	1	20	360				1	360	Quad - IDF
	4000		X		4000					3		X		4	#12	1	20		180			1	180	Duplex
	4000		X			4000				5			X	6	#12	1	20			540		3	180	Duplex
Corridor Rnd Lighting	35	7		245			20	1	#12	7	X			8	#12	1	20	180				1	180	Duplex - WP GFCI(ROOF)
INT. AMS LIGHTING	49	10			490		20	1	#12	9		X		10	#12	1	20		900			5	180	Duplex
						0				11			X	12	#12	1	20			360		1	360	Quad
				0						13	X			14				0						
					0					15		X		16					0					
						0				17			X	18	#12	1	20			220		1	220	Exhaust Fan
				0						19	X			20				0						
					0					21		X		22					0					
						0				23			X	24						0				
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			4245	4490	4000												540	1080	1120	LEG TOTALS			

LCL=3000+15475=18475
TOTAL WATTS: 18475 — LEG BALANCE: 7.6% — TOTAL AMPS: 51.34

Panel: EP-G — PHASE: 3 Phase — VOLTS: 120/208 — MAIN (AMPS): 100 — BUSS (AMPS): 125 — LOCATION: INTERIOR — FEED: BOTTOM - BELOW FLOOR — MOUNTING: RECESSED

OBJECT DESCRIPTION	WATTS PER	QTY	LCL	WATTS A	WATTS B	WATTS C	BRK	POLE	WIRE SIZE	CKT #	LEGS A	LEGS B	LEGS C	CKT #	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	WATTS C	LCL	QTY	WATTS PER	OBJECT DESCRIPTION
4 TON HVAC-COOLING	3000	1	X	3000				3		1	X			2	#10	2	20	2080			X	1	2080	Instahot
	3000		X		3000					3		X		4					2080				2080	
	3000		X			3000				5			X	6	#12	1	20			1080		6	180	Duplex
				0						7	X			8	#12	1	20	360				1	360	Quad - IDF
INT. AMS LIGHTING	49	11			539		20	1	#12	9		X		10	#12	1	20		720			4	180	Duplex
						0				11			X	12	#12	1	20			720		4	180	Duplex - GFCI
Exhaust Fan	110	1		110			20	1	#12	13	X			14	#12	1	20	180				1	180	Duplex - WP GFCI(ROOF)
					0					15		X		16					0					
						0				17			X	18	#12	1	20			220		1	220	Exhaust Fan
				0						19	X			20				0						
					0					21		X		22					0					
						0				23			X	24						0				
				0						25	X			26				0						
					0					27		X		28					0					
						0				29			X	30						0				
				0						31	X			32				0						
	LEG TOTALS			3110	3539	3000												2620	2800	2020	LEG TOTALS			

LCL=2770+17089=19859
TOTAL WATTS: 19859 — LEG BALANCE: 11.6% — TOTAL AMPS: 55.19

NOTE:
FIRE ALARM DEDICATED CIRCUIT SHALL BE IDENTIFIED WITH A RED MARKED DISCONNECT WITH LOCK-ON CAPABILITY (NFPA 72 10.6.5.2)

LOAD PANEL CALCULATIONS

FIRE ALARM SYSTEM

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE AND THE CALIFORNIA BUILDING CODE.
2. INSTALLATION OF THE FIRE ALARM SYSTEM SHALL NOT BE STARTED UNTIL DETAILED PLANS AND SPECIFICATIONS, INCLUDING CALIFORNIA STATE FIRE MARSHAL LISTINGS FOR EACH COMPONENT OF THE SYSTEM, HAVE BEEN APPROVED BY DSA.
3. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING AGENCY.
4. JUNCTION BOXES - GALVANI ED SHEET METAL, S UARE OR RECTANGULAR WITH BLANK COVERS. LOCATE ONE BOX AT REAR OF BUILDING NEAR MAIN ELECTRICAL PANEL 18" ABOVE FINISH FLOOR FOR FUTURE CONNECTION.
5. COVERS - INSTALL GASKETED, METAL, WATERPROOF, FINISH COVERS AT EXTERIOR LOCATIONS. INSTALL FINISH COVERS AT INTERIOR LOCATIONS.
6. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED, AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHALL'S REGULATIONS (CBC SEC. 907.2.3) AND THE 2016 EDITION OF NFPA 72.
7. THE LOCATION OF AUTOMATIC DETECTORS, MANUAL STATIONS AND OTHER FIRE ALARM E UIPMENT AND DEVICES, AS SHOWN ON PLAN, ARE FOR REFERENCE ONLY AND DO NOT CONSTITUTE SHOP DRAWINGS WHICH ARE RE UIRED FOR REVIEW AND APPROVAL.
8. ALARM-INDICATING DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL CAUSE A LEVEL OF AUDIBILITY OF NOT LESS THAN 15 dBA ABOVE THE AVERAGE AMBIENT NOISE LEVELS OR 5dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF 60 SECONDS, WHICHEVER IS GREATER, MEASURED 5' ABOVE THE FLOOR. AMBIENT NOISE LEVELS MEANS THE LEVEL WHICH CAN NORMALLY BE EXPECTED WHEN THE FACILITY, BUILDING, ROOM, OR AREA IS FUNCTIONING UNDER NORMAL OPERATING OR WORKING CONDITIONS (NFPA 72, SEC. 18.4.1).
9. THE ALARM SYSTEM SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL WARNINGS SHALL HAVE A FLASH RATE NOT EXCEEDING TWO FLASHES PER SECOND (2 H), NOR BE LESS THAN ONE FLASH EVERY SECOND (1 H). STROBE SIGNALING DEVICES FOR THE HEARING IMPAIRED SHALL BE STATE FIRE MARSHALL APPROVED AND LISTED (NFPA 72, SEC. 18.5.3).
10. AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS RE UIRED BY NFPA 72 CHAPTER 26 AS AMENDED BY ARTICLE 91. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE RE UIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER. IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15d OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE RE UIRED BY THE ENFORCING AGENCY.

NOTE:
SEE SHEET M1.0 FOR ALL BRACING AND ANCHORAGE NOTES.

GENERAL NOTES

1. GROUNDING ELECTRODE CONDUCTOR SI ED PER CEC.
2. PROVIDE BONDS TO BLDG. STEEL PANEL (8 CU)
3. PANEL TO LISTED FOR USE AS SERVICE E UIPMENT.
4. ALL PANELS, SWITCHES, DISCONNECTS, BREAKERS, METERS, AND OTHER ELECTRICAL ELEMENTS SHALL BE PLACED ABOVE THE ELEVATION RE UIRED BY ASCE 24-14, SECTION 7.2.
5. WHERE FLEXIBLE CONDUIT IS PASSING BETWEEN BUILDING SEPARATION JOINTS, PROVIDE SUFFICIENT LENGTH OF CONDUIT TO PERMIT DIFFERENTIAL DISPLACEMENTS BETWEEN BUILDINGS IN COMPLIANCE WITH ASCE 7 SECTION 13.6.9 DSA IR PC-2 SECTION 1.18. ADDITIONAL CONDUIT JOINT DETAIL SHALL BE PROVIDED BY OTHERS.

FIXTURE NOTES:

1. ALL FLUORESCENT LIGHT FIXTURES SHALL HAVE ENERGY SAVING LAMPS AND BALLASTS.
2. LUMINARIES/BALLASTS SHALL BE CERTIFIED PER CALIFORNIA BUILDING CODE, TITLE 24.
3. FLUORESCENT LIGHT FIXTURE TYPE "A" SHALL BE CONTROLLED TO PROVIDE TWO LEVELS OF LIGHTING. SWITCH (SA) SHALL CONTROL THE TWO OUTER LAMPS AND SWITCH (SB) SHALL CONTROL THE TWO INNER LAMPS.
4. ELECTRICAL SERVICE DROP AND CONNECTIONS SUPPLIED BY OTHERS.
5. MANUFACTURER TO PROVIDE STUB-OUT FROM BACK OF ELECTRICAL PANEL THROUGH THE EXTERIOR WALL OR TO BELOW FLOOR FOR RECEIVING EITHER UNDERGROUND OR OVERHEAD SERVICE FITTING FOR GROUNDING CABLE.
6. ELECTRICAL PANEL BOARD SHALL BE RECESS MOUNTED INSIDE THE BUILDING, SI ED TO ACCOMMODATE ALL CONNECTED LOADS INCLUDING SPACES AS SHOWN. OVERCURRENT PROTECTIVE DEVICES IN THE PANEL BOARDS SHALL HAVE ADE UATE SHORT CIRCUIT INTERRUPTING CAPACITY. ALL BUSES INCLUDING BUS SHALL BE COPPER OR ALUMINUM.
7. 2X4 FLUORESCENT FIXTURES SHALL HAVE A STEEL FRAME, LENS SHALL BE HINGED AND LOCKED IN PLACE BY TWO LOCKING DEVICES. THE LENS DIFFUSERS SHALL BE KHS, INC. KSH-2, CAROLITE, INC. C-12 OR PLASKOLITE, INC. PL21A. MINIMUM LENS THICKNESS SHALL BE 0.125 INCHES.
8. FLUORESCENT BALLAST SHALL BE ENERGY SAVER WHILE MAINTAINING FULL LIGHT OUTPUT, CLASS "P" E UIPPED WITH THERMAL PROTECTORS, GUARANTEED AGAINST FAILURE FOR (2) YEARS AND BE REPLACEABLE FROM INSIDE THE FIXTURE.
9. CLOCK - 12" DIAL CLOCK ON CLOCK OUTLET.
   - A. CLOCK SHALL BE GENERAL ELECTRIC MODEL 2912 129V 60 CYCLE
   - B. CLOCK OUTLET SHALL BE BRYANT 2828 OR E UAL WITH SEPARABLE HANGING CLIP APP'D RECEPT. THE H.V.A.C. UNIT FEEDER CIRCUIT - PANEL CIRCUIT BREAKER, FEEDER WIRE, UNIT DISCONNECT AND FUSES (WHERE USED) - IS TO BE COORDINATED WITH THE NAME PLATE DATA AT THE TIME OF MANUFACTURE. H.V.A.C. UNITS HAVING KVA RATINGS LARGER THAN THAT INDICATED ON THIS PANEL SCHEDULE WILL NOT BE ALLOWED TO BE INSTALLED ON THIS BUILDING.
   - C. IF 60 DEGREES WIRE IS TO BE USED IN THIS INSTALLATION, CALCULATIONS DEMONSTRATING AMPACITY SHALL BE PROVIDED ON THE DRAWING.

GENERAL NOTES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

AMS
American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING CONSISTING OF 40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT — PATRICK C. ... NAGH — No. C12631 — Ren. 3-31-23 — STATE OF CALIFORNIA

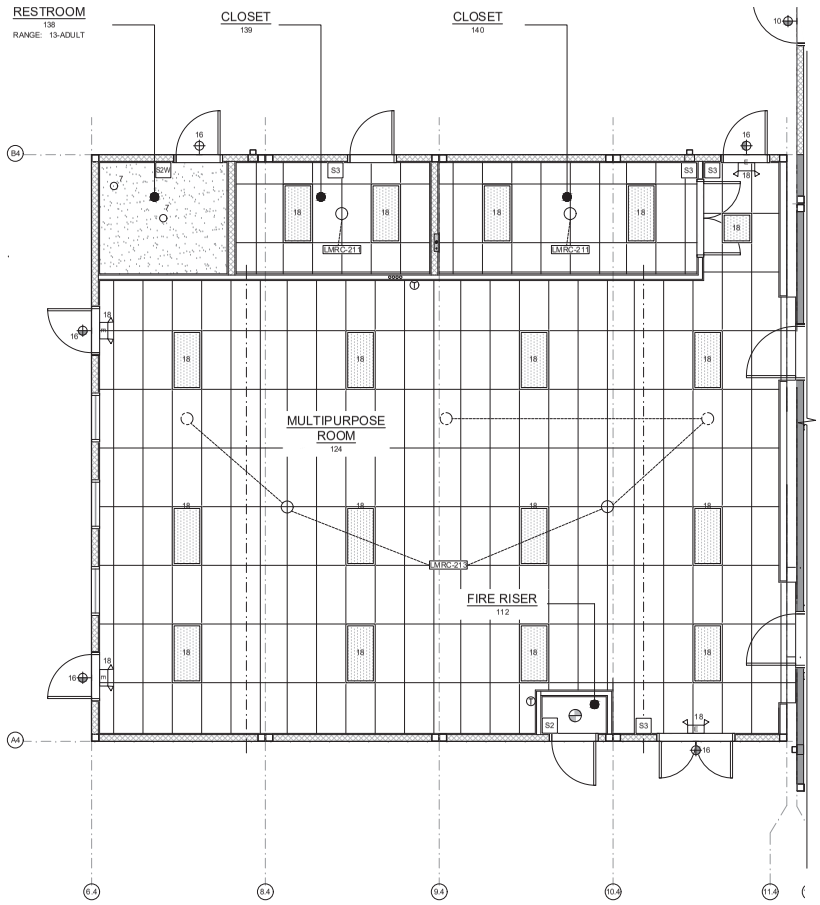
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
1
2
3
4

DRAWN BY: JMA/KA
SCALE: AS NOTED
DATE: 08/19/22
PROJECT NO: 1674-21

SHEET TITLE:
ELECTRICAL NOTES DETAILS

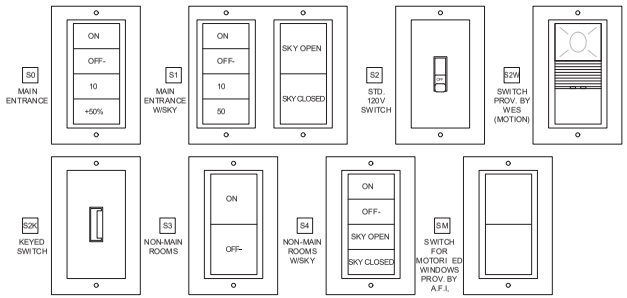
SHEET NUMBER:
E1.2



LIGHTING PLAN - BUILDING A

SCALE: 1/4" 1' - 0" | 1

SWITCH TYPE INFORMATION



LIGHTING INFORMATION

- EMERGENCY EXIT LIGHT, - WHERE THERE ARE TWO OR MORE EXITS, AN EXIT SIGN WITH INTEGRAL EMERGENCY LIGHTING W/MINIMUM 90-MINUTE BATTERY BACK-UP IS RE UIRED.
- EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL (MAX 35W) - WHERE THERE ARE TWO OR MORE EXITS, A MINIMUM 90 MIN. BATTERY BACK-UP IS RE UIRED
- EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL
- CONTROLLED-SINGLE POLE LIGHT SWITCHES - MOUNT 46" A F.F. MAX TO TOP OF BOX. - HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATION IS GRADE.
- 2'x4' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4,000 K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL
- 2'x2' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4,000 K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL
- LED 6" DOWNLIGHT (EM FOR EMERGENCY BATTERY BACK UP)

- LMRC-213 DIMMING 3 RELAY
- LMRC-212 DIMMING 2 RELAY
- LMRC-211 DIMMING 1 RELAY
- RIB01P RELAY FOR SKYLIGHTS
- LMPL-101 PLUG LOAD CONTROLLER
- LMRC-101 ON/OFF 1 RELAY CONTROLLER
- DT DT-355 DIAL TECH LINE VOLTAGE
- UT UT-355-1 ULTRASONIC LINE VOLTAGE
- LMDX-100 CORNER DT LINE VOLTAGE
- LMLS-400-L PHOTOSENSOR
- LMDC-100 DUAL TECH OCC LV
- LMDC-100 ULTRASONIC OCC LV

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
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LICENSED ARCHITECT
CONTRACTOR
No. C 12631
Ren. 2-31-23
STATE OF CALIFORNIA

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REVISIONS

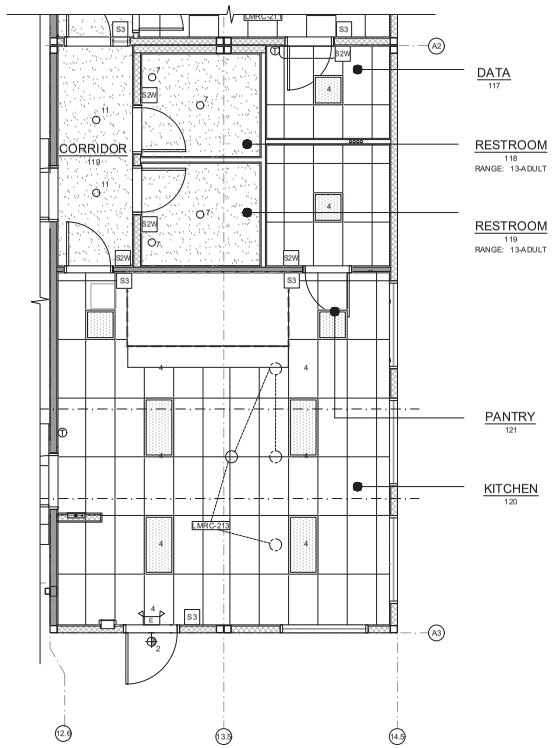
DRAWN BY:	JMAKA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

LIGHTING PLAN
BUILDING A

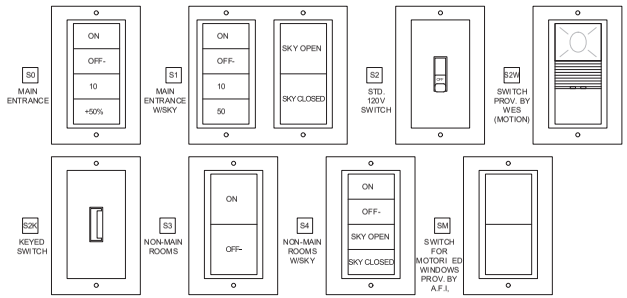
SHEET NUMBER:

E1.3A



LIGHTING PLAN - BUILDING B

SCALE: 1/4" 1' - 0" | 1



SWITCH TYPE INFORMATION

- EMERGENCY EXIT LIGHT, - WHERE THERE ARE TWO OR MORE EXITS, AN EXIT SIGN WITH INTEGRAL EMERGENCY LIGHTING W/MINIMUM 90-MINUTE BATTERY BACK-UP IS RE UIRED.
- EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL (MAX 35W) - WHERE THERE ARE TWO OR MORE EXITS, A MINIMUM 90 MIN. BATTERY BACK-UP IS RE UIRED
- EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL
- CONTROLLED-SINGLE POLE LIGHT SWITCHES - MOUNT 46" A F.F. MAX TO TOP OF BOX - HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.
- 2x4' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4000K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL
- 2x2' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4000K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL
- LED 6" DOWNLIGHT (EM FOR EMERGENCY BATTERY BACK UP)

- LMRC-213 DIMMING 3 RELAY
- LMRC-212 DIMMING 2 RELAY
- LMRC-211 DIMMING 1 RELAY
- RIB01P RELAY FOR SKYLIGHTS
- LMPL-101 PLUG LOAD CONTROLLER
- LMRC-101 ON/OFF 1 RELAY CONTROLLER
- DT DT-355 DIAL TECH LINE VOLTAGE
- UT UT-355-1 ULTRASONIC LINE VOLTAGE
- DT LMDX-100 CORNER DT LINE VOLTAGE
- LMLS-400-L PHOTOSENSOR
- LMDC-100 DUAL TECH OCC LV
- LMDC-100 ULTRASONIC OCC LV

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MODULAR BUILDING
CONSISTING OF
40' 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
JAMES M. KAKA
No. C 12631
Exp. 3-31-23
STATE OF CALIFORNIA

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REVISIONS

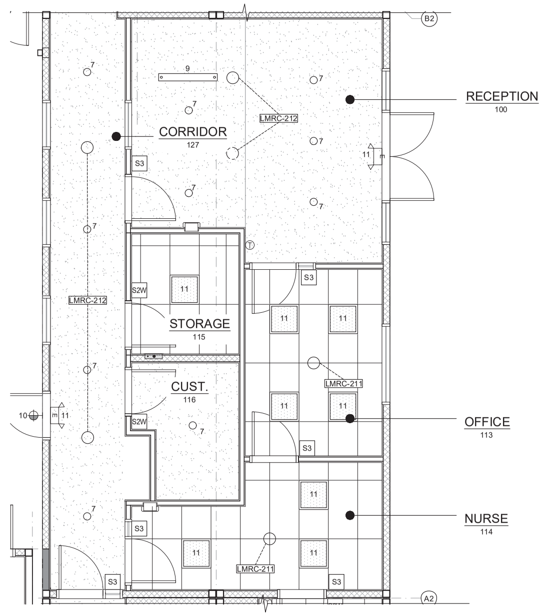
DRAWN BY:	JMAKA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

LIGHTING PLAN
BUILDING B

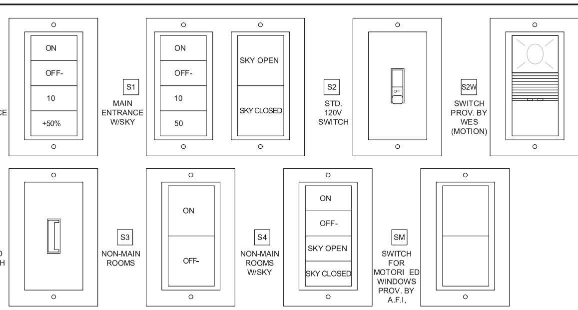
SHEET NUMBER:

E1.3B



LIGHTING PLAN - BUILDING C

SCALE: 1/4" 1' - 0" 1



S0 MAIN ENTRANCE

S1 MAIN ENTRANCE W/SKY

S2 STD. 120V SWITCH

S2W SWITCH PROV. BY WES (MOTION)

S2K KEYED SWITCH

S3 NON-MAIN ROOMS

S4 NON-MAIN ROOMS W/SKY

SM SWITCH FOR MOTORI ED WINDOWS PROV. BY A.F.I.

SWITCH TYPE INFORMATION

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- EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL (MAX 35W) - WHERE THERE ARE TWO OR MORE EXITS, A MINIMUM 90 MIN. BATTERY BACK-UP IS RE UIRED
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- LED 6" DOWNLIGHT (EM FOR EMERGENCY BATTERY BACK UP)

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- LMRC-212 DIMMING 2 RELAY
- LMRC-211 DIMMING 1 RELAY
- RIB01P RELAY FOR SKYLIGHTS
- LMPL-101 PLUG LOAD CONTROLLER
- LMRC-101 ON/OFF 1 RELAY CONTROLLER
- DT DT-355 DIAL TECH LINE VOLTAGE
- UT UT-355-1 ULTRASONIC LINE VOLTAGE
- DT LMDX-100 CORNER DT LINE VOLTAGE
- LMLS-400-L PHOTOSENSOR
- LMDC-100 DUAL TECH OCC LV
- LMDC-100 ULTRASONIC OCC LV

- THIN-LINE LED PENDANT LIGHT - 4' OPTION (28 WATT) OR E UAL

LIGHTING INFORMATION

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PRE-CHECKED SET NAME

MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT PATRICK CAVANAGH No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

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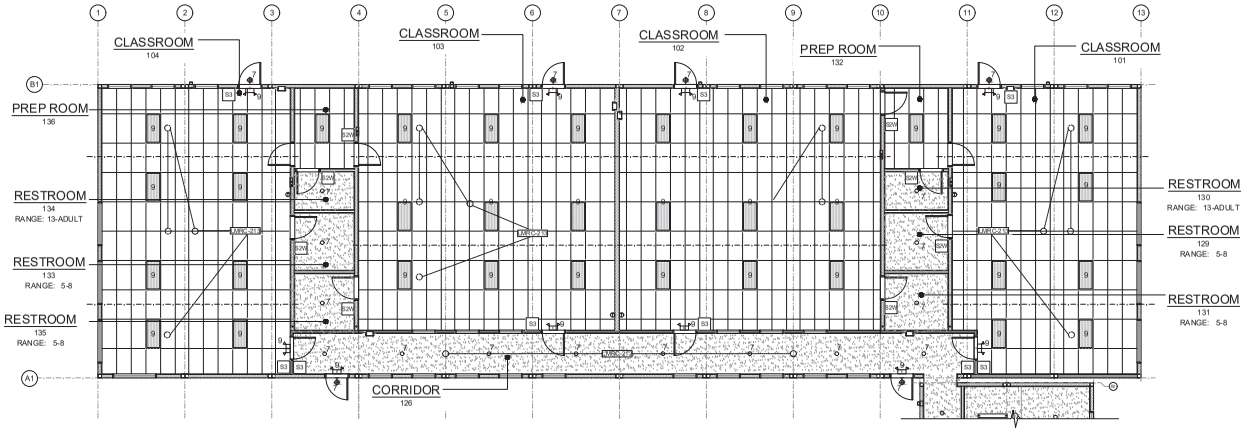
REVISIONS

DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

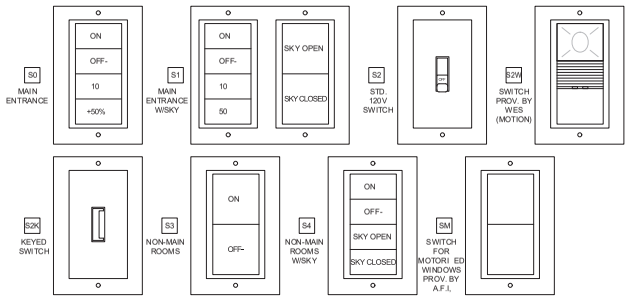
SHEET TITLE:
LIGHTING PLAN
BUILDING C

SHEET NUMBER:
E1.3C



LIGHTING PLAN - BUILDING D

SCALE: 1/8" 1' - 0" | 1



SWITCH TYPE INFORMATION

E — EMERGENCY EXIT LIGHT, - WHERE THERE ARE TWO OR MORE EXITS, AN EXIT SIGN WITH INTEGRAL EMERGENCY LIGHTING W/MINIMUM 90-MINUTE BATTERY BACK-UP IS RE UIRED.

EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL (MAX 35W) - WHERE THERE ARE TWO OR MORE EXITS, A MINIMUM 90 MIN. BATTERY BACK-UP IS RE UIRED

EXTERIOR LIGHT FIXTURE EACH DOOR, LED OR E UAL

$ — CONTROLLED-SINGLE POLE LIGHT SWITCHES - MOUNT 46" A.F.F. MAX TO TOP OF BOX - HUBBELL PREMIUM, BRYANT HEAVY DUTY, OR LEVITON SPECIFICATIONS GRADE.

2x4' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4000K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL

2x2' LED DROP IN FIXTURE, MODEL: LITHONIA, VTLED 2VTL4, 4000K SP41 - 40 WATTS MAX (60 WATTS ALLOWABLE AT C N 16) OR E UAL

LED 6" DOWNLIGHT (EM FOR EMERGENCY BATTERY BACK UP)

LMRC-213 DIMMING 3 RELAY
LMRC-212 DIMMING 2 RELAY
LMRC-211 DIMMING 1 RELAY
RIB01P RELAY FOR SKYLIGHTS
LMPLT01 PLUG LOAD CONTROLLER
LMRC-101 ON/OFF 1 RELAY CONTROLLER

DT — DT-355 DIAL TECH LINE VOLTAGE
UT — UT-355-1 ULTRASONIC LINE VOLTAGE
DT — LMDX-100 CORNER DT LINE VOLTAGE
LMLS-400-L PHOTOSENSOR
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LMDC-100 ULTRASONIC OCC LV

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EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

LICENSED ARCHITECT
REGISTERED PROFESSIONAL
No. C 12631
Ren 3-31-23
STATE OF CALIFORNIA

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REVISIONS
1
2
3
4

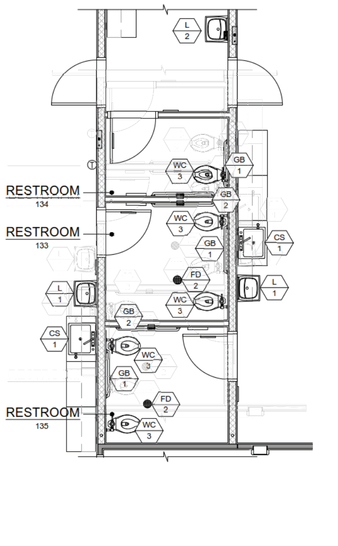
DRAWN BY:	JMAKA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:

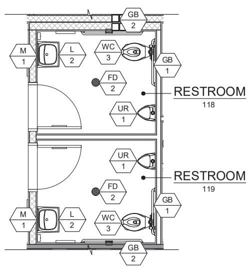
LIGHTING PLAN
BUILDING D

SHEET NUMBER:

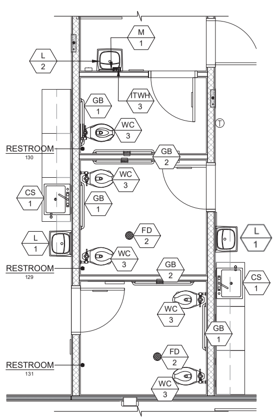
E1.3D



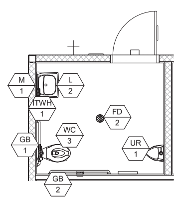
RESTROOM 134, 133 135 SCALE: 1/4" 1'-0" 1



RESTROOM 118 119 SCALE: 1/4" 1'-0" 2



RESTROOM 130,129 131 SCALE: 1/4" 1'-0" 3

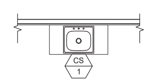


RESTROOM 138 SCALE: 1/4" 1'-0" 4

MARK	FIXTURE[1]	TYPE AT KINDERGARTEN (AGES 3-4)	TYPE AT ELEMENTARY (AGES 5-8)	TYPE AT MIDDLE SCHOOL (AGES 9-12)	TYPE AT HIGH SCHOOL (AGES 13-ADULT)	REMARKS
WC 1 [2] ADA	WATER CLOSET	CANNOT USE	WALL MOUNT TYPE KOHLER 'KINGSTON' MODEL K-4325 OR E UAL. LOWEST AT 12" A.F.F. - FLOW RATE OF 1.28 G.P.F.	WALL MOUNT TYPE KOHLER 'KINGSTON' MODEL K-4325 OR E UAL. LOWEST AT 15" A.F.F. - FLOW RATE OF 1.28 G.P.F.	WALL MOUNT TYPE KOHLER 'KINGSTON' MODEL K-4325 OR E UAL. LOWEST AT 17" A.F.F. - FLOW RATE OF 1.28 G.P.F.	FLUSH VALVE ZURN MODEL Z6000AV-HET - 1.28 G.P.F OR EQUAL. LOCATE AS SPECIFIED ON FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE.
WC 2	WATER CLOSET	FLOOR MOUNT TANK TYPE AMERICAN STANDARD 3128.001 FOR BOWL 4019.228 LEFT TANK 4019.828 RIGHT TANK	FLOOR MOUNT TANK TYPE AMERICAN STANDARD w/2L2050T SEAT (2" THICK) 3128.001 FOR BOWL 4019.228 LEFT TANK 4019.828 RIGHT TANK	FLOOR MOUNT TANK TYPE KOHLER 'WELLWORTH' MODEL K-3998 OR E UAL	FLOOR MOUNT TANK TYPE KOHLER 'WELLWORTH' MODEL K-3999 OR E UAL ADA COMPLIANT	WC/2 FIXTURE MAX FLOW RATE OF 1.28 G.P.F - LOCATE AS SPECIFIED ON FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE.
WC 3 ADA OPTIONAL	WATER CLOSET	FLOOR MOUNT FLUSH VALVE TYPE KOHLER 'PRIMARY' MODEL K-96064 OR E UAL. FLOW RATE OF 1.28 G.P.F.	FLOOR MOUNT FLUSH VALVE TYPE KOHLER 'JUVENILE ULTRA' MODEL K-96059 OR E UAL - FLOW RATE OF 1.28 G.P.F.	FLOOR MOUNT FLUSH VALVE TYPE KOHLER 'WELLCOMME ULTRA' MODEL K-96053 OR E UAL - FLOW RATE OF 1.28 G.P.F.	FLOOR MOUNT FLUSH VALVE TYPE KOHLER 'HIGHCLIFF ULTRA' MODEL K-96057 OR E UAL - FLOW RATE OF 1.28 G.P.F.	FLUSH VALVE ZURN MODEL Z6000AV-HET - 1.28 G.P.F OR EQUAL. LOCATE AS SPECIFIED ON FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE.
L 1	BOYS/GIRLS LAVATORY	KOHLER 'KINGSTON' MODEL K-2007-0				BOY/GIRL RESTROOM - ZURN MODEL 86100-XL-3M - COLD WATER ONLY - SINGLE SPOUT MOUNT AS SPECIFIED IN FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE 10/P2.0 - FLOW RATE OF 0.5 G.P.M. METER FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MIN.
L 2	ADULT LAVATORY	KOHLER 'KINGSTON' MODEL K-2005-0				ADULT RESTROOM - ZURN MODEL Z7440-XL-FC HOT/COLD WATER - 4" ON CENTER HOLE. MOUNT AS SPECIFIED IN FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE - FLOW RATE OF 0.5 G.P.M.
UR 1	URINAL	WALL MOUNT TYPE KOHLER MODEL DEXTER K-5452-ET-0 OR E UAL FLOW RATE 0.125 gp				FLUSH VALVE URN MODEL 6003-ULF (0.125gp) OR E UAL. MOUNT AS SPECIFIED IN FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER SCHEDULE.
M 1	MIRROR	WALL MOUNT TYPE BOBRICK MODEL B165 18X30 OR E UAL				MOUNT AS SPECIFIED IN FLOOR PLANS. MOUNT ACCESSIBLE MIRROR PER SCHEDULE.
GB 1	36" GRAB BARS	WALL MOUNT TYPE CREATIVE SPECIALTIES INTERNATIONAL MODEL 8736 8748 (1 1/4" CONCEALED SCREW 36" 48") OR E UAL				18 GA. 304 STAINLESS STEEL SATIN FINISH MOUNT AS SPECIFIED IN FLOOR PLANS AND PER SCHEDULE 10/P2.0. (STRUCTURAL STRENGTH OF GRAB BARS 250 MIN.)
GB 2	48" GRAB BARS					
WH 1	WATER HEATER	RHEEM 20 GALLON ELECTRIC WATER HEATER MODEL PROE20-1-RH-POU 240 VOLT SINGLE PHASE				AVAILABLE IN 6, 10, 20 AND 30 GALLON MODELS (MAX WATER HEATER WEIGHT) PER 6/M1.4 OR 1/P2.0
ITWH 1	INSTANT-TEMP WATER HEATER	CHRONOMITE INSTANT-TEMP WATER HEATER MODEL M20L/240 INSTANT SINGLE PHASE 104				CHRONOMITE MODEL M20L/208 OR E UAL SEE DETAIL 3/P2.0
FS 1	CUSTODIAN SINK	FLORESTONE FLOOR SINK MOLDED MOP RECEPTORS MODEL MSR-2424 W/ 3" DRAIN OR E UAL				URN 843-MI-RC OR E UAL
ULS 1	UTILITY SINK	WALL MOUNT TYPE FLORESTONE FM OR E UAL				CAITLIN CBK110CP OR E UAL
FD 1	FLOOR DRAIN	WOOD FLOOR DRAIN SIOUIX CHIEF MODEL MODEL 822-2DNRV OR E UAL				LOCATE AS SPECIFIED ON FLOOR PLANS.
FD 2	FLOOR DRAIN	CONCRETE FLOOR DRAIN URN MODEL P415-CC W/ STANDARD GRATE URN 33160-002 OR E UAL				LOCATE AS SPECIFIED ON FLOOR PLANS. (FLOOR DRAIN TO BE USED ON CONCRETE ONLY.) 1/4" MAX. OPENING IN ALL DIRECTIONS AT DRAIN GRATE
CS 1	CLASSROOM SINK	ROC MODEL 25103 25X22 SINGLE BOWL SINK OR E UAL				FAUCET - URN MODEL 2871-B4-XL W/WRIST BLADES. LOCATE AS SPECIFIED ON FLOOR PLANS. MOUNT ACCESSIBLE FIXTURES PER DETAILS 4 6/P2.0
DF 1	DRINKING FOUNTAIN	ELKAY MODEL EDFP217C WALL MOUNT WATER FOUNTAIN OR E UAL				ELKAY MODEL EDFP217C SEE DETAIL 5/P2.0
HB 1	HOSE BIBB	STANDARD HOSE BIBB ARROWHEAD MODEL 353LKLF OR E UAL				LOCATE AS SPECIFIED ON FLOOR PLANS.

NOTES:
1. ALL WATER FIXTURES MUST MEET RE UIREMENTS OF CAL-GREEN TITLE 24, PART 11, SECTION 5.303.3 "WATER CONSERVING PLUMBING FIXTURES FITTINGS".
2. FOR OPTIONAL ACCESSIBLE FLOOR-MOUNT WATER CLOSET, SEE PLUMBING SCHEDULE MARK WC/3 (NOT SHOWN ON PLAN).
3. NOT ALL ITEMS LISTED MAY OCCUR IN THIS PROJECT.
4. THERE SHOULD BE NO SHARP OR ABRASIVE UNDER LAVS OR SINKS.
5. REFER TO DETAIL 7/P3.0 FOR SCHEDULE OF ACCESSIBLE HEIGHTS AT FIXTURES.

PLUMBING FIXTURE SCHEDULE



CLASSROOM SINK PLAN SCALE: 1/4" 1'-0" 8

A 1 PLUMBING FIXTURE I.D. - SEE SCHEDULE ABOVE

SYMBOLS LEGEND

PLUMBING NOTE

MODULAR MFR. TO STUB THROUGH FLOOR ALL PLUMBING LINES. BUILDING PERIMETER POC'S SHOWN ARE FOR COORDINATION PURPOSES ONLY. ALL UNDER-FLOOR CONNECTIONS ARE BY SITE CONTRACTOR, U.O.N.

1. DIMENSIONS ARE TO FACE OF FINISH (F.O.F.) UNLESS NOTED OTHERWISE (i.e. F.O.C., ℄)
2. RESTROOM CONFIGURATION MAY VARY PER BUILDING CONFIGURATION.
3. RESTROOM MODULE OCCURS ONLY AT END OF BUILDING. SINGLE RESTROOMS MAY OCCUR IN ANY PART OF A BUILDING.
4. RESTROOM MODULE CANNOT STAND ALONE AND SHALL BE ASSEMBLED TOGETHER WITH AT LEAST ONE OTHER 12'x40' MODULE.
5. INTERIOR WALLS MAY OCCUR THROUGHOUT BUILDING. REFER TO SHEET S8.1 OR S9.1 FOR ATTACHMENTS.
6. REFER TO SCHEDULE 10/P2.0 FOR ACCESSIBLE HEIGHTS AT TOILETS.
7. REFER TO DETAILS 1, 3, 4 5, SHEET A7.1 FOR TOILET PARTITION ANCHORAGE BLOCKING.
8. SEWER AND WATER STUB OUTS SHALL BE LOCATED WITHIN THE ALLOWABLE AREA AS SHOWN ON FLOOR PLAN AND CONNECTIONS SHALL BE EASILY ACCESSIBLE FOR FUTURE RELOCATION. STUB OUT HEIGHT SHALL BE COORDINATED BY THE MANUFACTURER.
9. PIPING MATERIAL
   a. WATER: COPPER TYPE "L", 95/5 SOLDER.
   . WASTE DRAIN AND VENT: ABS.
10. REFER TO SHEET M1.0 FOR TYPICAL BRACING AND ANCHORAGE NOTES.

GENERAL NOTES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME
MODULAR BUILDING
CONSISTING OF
40' 24' MODULES
EVOLVE

SITE SPECIFIC PROJECT NAME
PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER
(1)48' x 40',(2)24'x40' (1)144'x40' MODULES

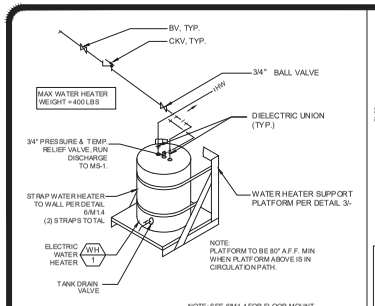
THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED SIGNED BY THE ENGINEER OF RECORD.

REVISIONS
1
2
3
4

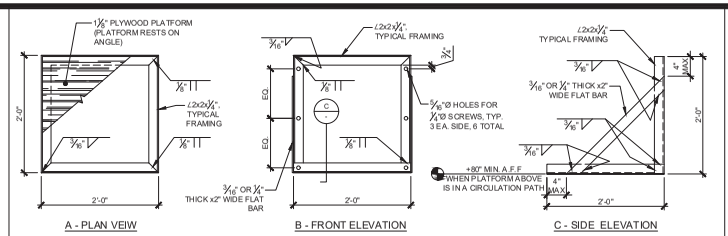
DRAWN BY:	JMA/KA
SCALE:	AS NOTED
DATE:	06/29/22
PROJECT NO:	1674-21

SHEET TITLE:
RESTROOM OPTIONS
PLUMBING PLAN
FIXTURE SCHEDULE

SHEET NUMBER:
P1.0



WATER HEATER SUPPORT DETAIL NOT TO SCALE 1

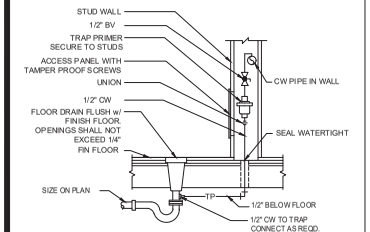


ATTACHMENT TO WOOD STUD WALL
ATTACH TO (2) 3x PLAT PER 3/SS.1 INTERNAILED w/ 0.131"Ø3" NAILS @ 12" O.C. STAGGERED w/ (3) ¼"Ø MIN. x4" LAG SCREWS EACH SIDE (2) ½" MIN. PENETRATION INTO WOOD FRAMING).
CENTER ATTACHMENTS ON ONE OF THE TWO DOUBLE STUDS.
MAY BE ATTACHED TO EXTERIOR WALL OR INTERIOR PARTITION WALL.

ATTACHMENT TO STEEL STUD WALL
ATTACH TO 14GA CHANNEL PER 14C/S9.2 w/ (3) #14 SDSTS EACH SIDE.
MAY BE ATTACHED TO EXTERIOR WALL OR INTERIOR PARTITION WALL.
PLATFORM NOT INTENDED TO BE INSTALLED OVER RIGID WALL INSULATION AS DETAILED.

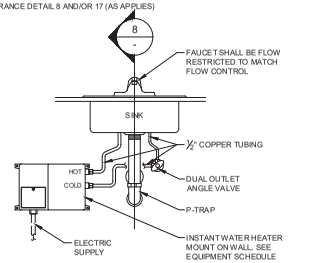
MAX WATER HEATER WEIGHT = 400 LBS

WATER HEATER PLATFORM DETAIL NOT TO SCALE 3

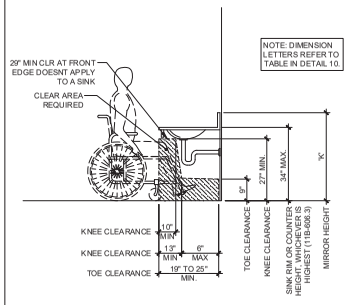


TRAP PRIMER DETAIL NOT TO SCALE 6

NOTE:
INSULATE WATER SUPPLY AND DRAIN PIPING AT ACCESSIBLE SINKS OR LAVS WITH "TRUEBRO® LAV GUARD 2" OR "TRUEBRO® SOFT GUARD PLUS" SHIELDS.
IWH SHALL NOT BE LOCATED IN THE REQUIRED TOE CLEARANCE.
REFERANCE DETAIL 8 AND/OR 17 (AS APPLIES)



INSTANT WATER HEATER DETAIL NOT TO SCALE 7



ACCESSIBLE CLASSROOM SINK NOT TO SCALE 8

HEIGHTS FOR ACCESSIBLE FEATURES IN TOILET FACILITIES

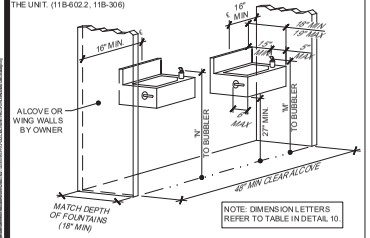
	FIXTURE & MEASUREMENT POINT	PRIMARY USERS AGES 3-4	PRIMARY USERS AGES 5-8	PRIMARY USERS AGES 9-12	PRIMARY USERS AGES 13 -ADULT	NOTES
A	TOILET, CENTERLINE FROM FACE OF WALL	12" SUGGESTED	12" TO 15" SUGGESTED	15" TO 18" SUGGESTED	17" MIN. TO 18" MAX.	
B	TOILET, TOP OF SEAT HEIGHT	11" TO 12" SUGGESTED	12" TO 15" SUGGESTED	15" TO 17" SUGGESTED	17" MIN. TO 19" MAX.	
C	TOILET, TOP OF FLUSH CONTROLS	36" MAX.	36" MAX.	36" MAX.	44" MAX.	FLUSH CONTROLS SHALL BE LOCATED ON OPEN SIDE OF TOILET.
D	GRAB BAR, TOP OF BAR	18" TO 20" SUGGESTED	20" TO 25" SUGGESTED	25" TO 27" SUGGESTED	33" MIN. TO 36" MAX.	
E	TOILET PAPER DISPENSER, HEIGHT TO OUTLET	14" SUGGESTED	14" TO 17" SUGGESTED	17" TO 19" SUGGESTED	15" MIN.	CENTERLINE OF DISPENSER OUTLET SHALL BE BETWEEN 7" TO 9" IN FRONT OF THE TOILET. OUTLET OF DISPENSER MUST BE BELOW GRAB BAR. DISPENSER (INCLUDING FULL TOILET PAPER ROLL) MUST NOT ENCROACH INTO REQ'D GRAB BAR CLEARANCE.
F	TOILET SEAT COVER, HEIGHT TO TOP OF OUTLET	24" TO 32" SUGGESTED	30" TO 32" SUGGESTED	32" TO 36" SUGGESTED	40" MAX.	
G	URINAL, LIP HEIGHT	12" TO 15" SUGGESTED	13" TO 15" SUGGESTED	15" TO 17" SUGGESTED	17" MAX.	
H	URINAL, HEIGHT OF FLUSH HANDLE	36" MAX.	36" MAX.	36" MAX.	44" MAX.	
I	LAVATORY, HEIGHT TO HIGHEST POINT AT FRONT OF LAV. OR COUNTER	24" TO 28" SUGGESTED	31" MAX.	31" MAX.	34" MAX.	
J	LAVATORY, VERTICAL KNEE CLEARANCE		24" MIN.	24" MIN.	29"-27" OVER THE 8" DEPTH SHOWN	29" MIN TO BOTTOM FRONT EDGE OF LAV; 27" MIN @ 8" DEEP
K	MIRROR (ABOVE LAVATORY OR COUNTERTOP), LOWEST POINT OF REFLECTIVE SURFACE	24" TO 32" SUGGESTED	30" TO 32" SUGGESTED	32" TO 36" SUGGESTED	40" MAX.	MIRROR NOT LOCATED ABOVE LAVATORY OR COUNTERTOP SHALL BE MOUNTED SO THAT LOWEST EDGE OF REFLECTING SURFACE IS 35" MAX. ABOVE FINISH FLOOR.
L	DISPENSERS, DRYERS, HEIGHT TO TOP OF OUTLET, HANDLE OR OPERATING MECHANISM (WHICHEVER IS HIGHEST)	24" TO 32" SUGGESTED	30" TO 32" SUGGESTED	32" TO 36" SUGGESTED	40" MAX.	ACCESSORIES SHALL COMPLY WITH 11B-307.2
M	LO DRINKING FOUNTAIN, HEIGHT TO BUBBLER	24" TO 30" * SUGGESTED	30" TO 32" * SUGGESTED	32" TO 36" SUGGESTED	36" MAX.	KNEE CLEARANCE 27" H. AT 8" DEEP IS REQ'D IF HIGHER THAN 30" A.F.F.
N	HI DRINKING FOUNTAIN, HEIGHT TO BUBBLER	same as ADULT	same as ADULT	same as ADULT	38" MIN. TO 43" MAX.	

NOTES:
1. THIS TABLE AND RELATED DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF CALIF. TITLE 24 (2019 C.B.C. SECTION 11B-601) AND IS SHOWN HERE ONLY AS AN AID FOR CONSTRUCTION AND INSTALLATION.
2. ACCESSORIES ARE NOT IN MANUFACTURER'S SCOPE OF WORK.
3. DIMENSIONS GIVEN ARE FROM FACE OF FINISH, UNLESS OTHERWISE NOTED.
4. NOT ALL ITEMS LISTED MAY OCCUR IN THE PROJECT.
5. HEIGHTS CHOSEN FOR CHILDREN'S WATER CLOSETS & ACCESSORIES D & E SHALL BE CONSISTENTLY APPLIED FOR THE AGE GROUP.

M* WHERE A.D.F. FOR CHILDREN IS MOUNTED MAXIMUM 30" A.F.F., THE SPOUT SHALL BE MAXIMUM 3-1/2" FROM THE FRONT EDGE OF THE UNIT

ACCESSIBLE HEIGHTS TABLE 10

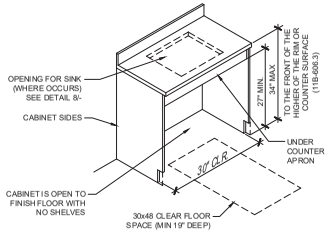
NOTE:
ALL DRINKING FOUNTAINS SHALL BE LOCATED COMPLETELY WITHIN ALCOVES, BETWEEN WING WALLS, OR OTHERWISE POSITIONED SO AS NOT TO ENCROACH INTO PEDESTRIAN WAYS (PER C.B.C. SECTION 11B-602.9), AND SHALL BE ACCESSIBLE PER 11B-206.5, SHALL BE APPROACHABLE PER SECTION 11B-305.6 AND HAVE MANEUVERING CLEARANCES PER SECTION 11B-305.7.
THE ACCESSIBLE D.F. SHALL HAVE 30"X48" CLEAR FLOOR SPACE, WITH KNEE AND TOE CLEARANCE POSITIONED FOR FORWARD APPROACH MIN. 17" UNDER AND CENTERED ON THE UNIT. (11B-602.2, 11B-306)



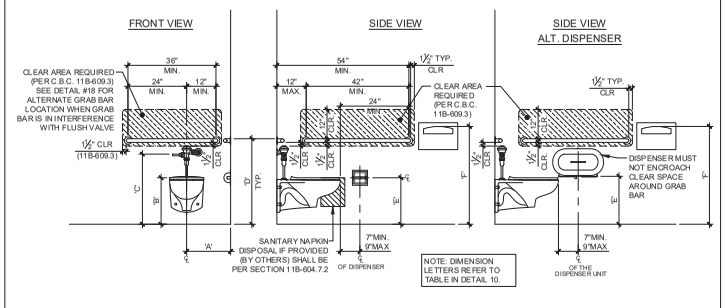
NOTE: DIMENSION LETTERS REFER TO TABLE IN DETAIL 10.

HI-LO DRINKING FOUNTAIN NOT TO SCALE 11

NOTES:
1. MODIFY BASE AS SHOWN FOR ADULT WHEELCHAIR ACCESS.
2. CABINET IS FOR ADULT USE ONLY.
3. ALL EXTERIOR SURFACES TO BE PLASTIC LAMINATE.
4. CABINET DOORS ARE NOT ALLOWED @ SINKS.

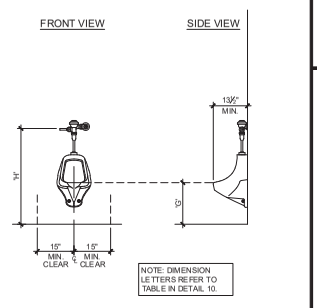


ACCESSIBLE CABINET DETAIL NOT TO SCALE 12



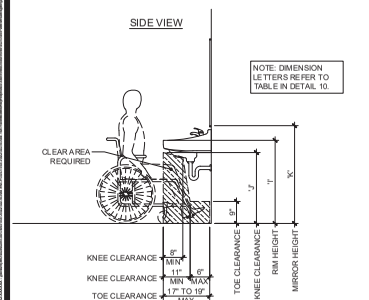
NOTE: DIMENSION LETTERS REFER TO TABLE IN DETAIL 10.

ACCESSIBLE TOILET AND ACCESSORIES SCALE: 1/2" = 1'-0" 14

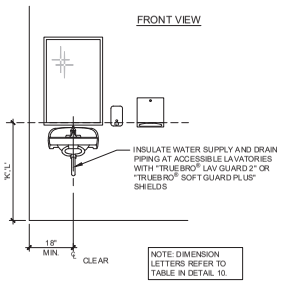


NOTE: DIMENSION LETTERS REFER TO TABLE IN DETAIL 10.

ACCESSIBLE URINAL SCALE: 1/2" = 1'-0" 15

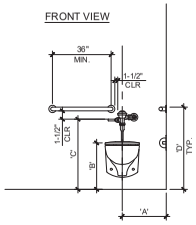


LAVATORY & ACCESSORIES SCALE: 1/2" = 1'-0" 17



WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THEN THE REAR GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA.

(PER CBC 11B-604.5.2 EXCEPTION 2)



DETAIL 18

NOT USED 19

1. DWV PIPING SHALL BE ABS PLASTIC
2. COLD WATER SUPPLY SHALL BE TYPE L COPPER
3. MIN SLOPE 1/4" PER FOOT MAY SLOPE 4" CI AT 1/8" PER FOOT VENTS SHALL TERMINATE NOT LESS THAN 10 FEET FROM OR AT LEAST 3 FT. ABOVE ANY WINDOW, DOOR, AIR INTAKE OR VENT SHAFT, NOR LESS THAN 3FT. IN EVERY DIRECTION FROM ANY LOT LINE, ALLEY AND STREET EXCEPTED, EXTEND 6" ABOVE THE ROOF

PLUMBING NOTES 20

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Spreckels Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

MODULAR BUILDING CONSISTING OF 40' & 24' MODULES

EVOLVE

SITE SPECIFIC PROJECT NAME

PALO VERDE COLLEGE CHILD DEVELOPMENT CENTER (1)48' x 40',(2)24'x40' & (1)144'x40' MODULES

LICENSED ARCHITECT — JAMES M. ANDERSON — No. C 12631 — Ren 8-31-23 — STATE OF CALIFORNIA

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD.

REVISIONS

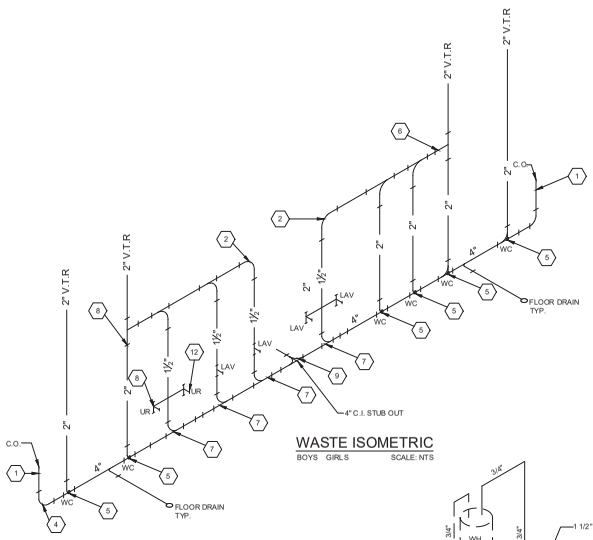
DRAWN BY:	JM/KA
SCALE:	AS NOTED
DATE:	07/5/22
PROJECT NO:	1674-21

SHEET TITLE:

PLUMBING DETAILS & ACCESSIBLE DETAILS

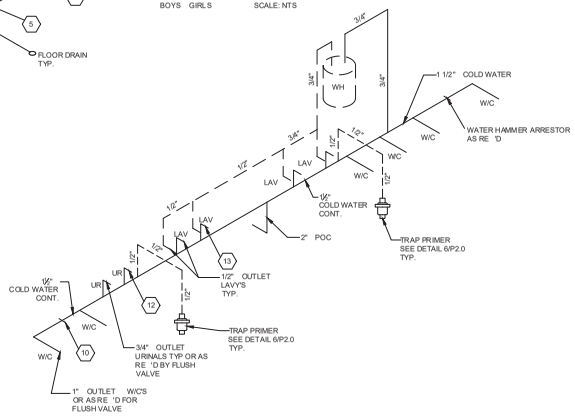
SHEET NUMBER:

P2.0



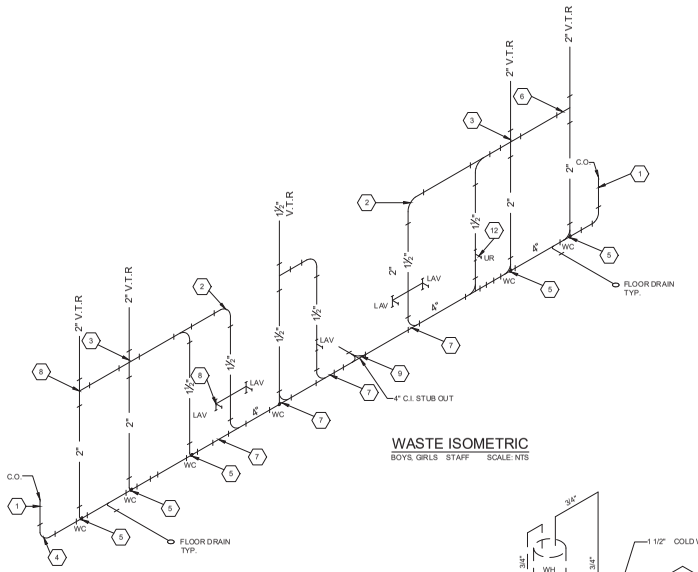
WASTE ISOMETRIC

BOYS GIRLS SCALE: NTS



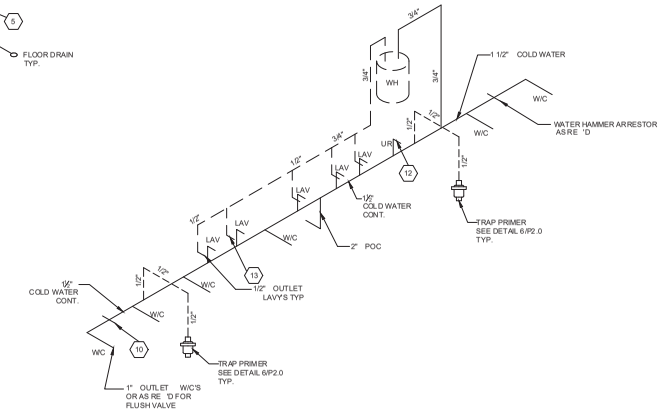
WATER SUPPLY ISOMETRIC

BOYS GIRLS SCALE: NTS



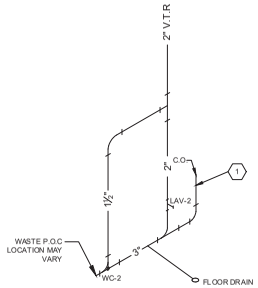
WASTE ISOMETRIC

BOYS, GIRLS STAFF SCALE: NTS



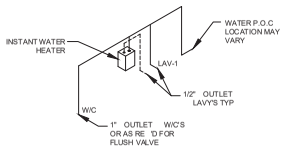
WATER SUPPLY ISOMETRIC

BOYS, GIRLS STAFF SCALE: NTS



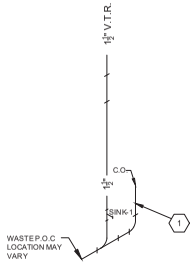
WASTE ISOMETRIC

SINGLE TOILET OPTION SCALE: NTS



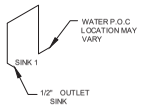
WATER SUPPLY ISOMETRIC

SINGLE TOILET OPTION SCALE: NTS



WASTE ISOMETRIC

CLASSROOM SINK OPTION SCALE:NTS



WATER SUPPLY ISOMETRIC

CLASSROOM SINK OPTION SCALE: NTS

KEY NOTES

1. 4" CLEAN OUT
2. VENT 90
3. VENT CROSS
4. 4" UARTER BEND
5. SMITH 0600 CARRIER
6. 2" SANITARY TAP TEE
7. 4x4x2 COMBINATION WYE 1/8 BEND
8. 2x2x1 1/2 SANITARY TEE
9. 4" DOUBLE COMBINATION
10. 2"x18" LONG CU AIR CHAMBER
11. 1" CW STUB AT WATER CLOSETS
12. 3/4" CW STUB AT URINALS
13. 1/2 CW STUB AT LAVATORIES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

American Modular Systems
787 Sprec els Ave., Manteca, CA 95336
Phone (209) 825-1921 Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

24' x 40' THRU 120' x 40'
STANDARD MODULAR BUILDING
(LOW SEISMIC)

FORM

SITE SPECIFIC PROJECT NAME

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.
.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-118577 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 08/09/2021

2019 CBC PRE-CHECK (PC) DOCUMENT
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS RE UIRED

MANUFACTURER PROFESSIONAL OF RECORD ON PC

LICENSED ARCHITECT PATRICK J. [illegible] No. C12631 Ren. 3-31-23 STATE OF CALIFORNIA

REVISIONS

DRAWN BY:	
SCALE:	AS NOTED
DATE:	MM/DD/YY
PROJECT NO:	XXXX-20

SHEET TITLE:

PLUMBING
ISOMETRICS DRAWINGS

SHEET NUMBER:

P3.0

DSA–OVERHEAD FIRE SPRINKLER SYSTEM GENERAL NOTES

1. A COPY OF THE ORIGINAL, PREVIOUSLY APPROVED DSA UNDERGROUND PIPING PLANS OR OTHER WATER SUPPLY COMPONENTS, SUCH AS WATER TANKS, FIRE PUMPS, ETC., FOR THE PROJECT SHALL BE INCLUDED IN ALL AUTOMATIC FIRE SPRINKLER SUBMITTAL PLAN PACKAGES. ALL DEVIATIONS FROM THE PREVIOUSLY APPROVED PLANS SHALL BE JUSTIFIED AND SUBMITTED TO DSA VIA THE CCD PROCESS AS APPLICABLE. UNDERGROUND PIPING SIZE IS NOT THE RESPONSIBILITY OF DSA, AND THE ARCHITECT OF RECORD SHALL ASSUME FULL LIABILITY FOR UNDERSIZED PIPING SHOULD THE FINAL DESIGN OF THE FIRE SPRINKLER SYSTEM REQUIRE LARGER PIPING, ADDITIONAL WATER SUPPLY, FIRE PUMPS, OR OTHER EQUIPMENT OR ITEMS.
2. 2016 NFPA–13, SEC. 8.16.4.1.1: THE DESIGNER SHALL INDICATE ON THE PLANS, ALL PIPING SUBJECT TO FREEZING (WHERE WATER TEMPERATURE CANNOT BE MAINTAINED ABOVE 40–DEGREES FAHRENHEIT) AND PROVIDE APPROVED PROTECTION.
3. 2016 NFPA–13 SEC. 10.10.2.1.1: UNDERGROUND MAINS AND LEAD–IN CONNECTIONS TO SYSTEM RISERS SHALL BE COMPLETELY FLUSHED BEFORE CONNECTION IS MADE TO THE OVERHEAD SPRINKLER PIPING. WHERE UNDERGROUND PIPING IS FLUSHED AND NOT IMMEDIATELY CONNECTED TO THE OVERHEAD PIPING, THE RISER SHALL BE CAPPED OR OTHERWISE PROTECTED TO PREVENT DEBRIS, DIRT, OR ANIMALS FROM ENTERING INTO THE UNDERGROUND PIPING. (THIS MUST BE WITNESSED BY THE PROJECT INSPECTOR.)
4. PROVIDE (WET SIGNED) WATER FLOW TEST INFORMATION NO MORE THAN 12 MONTHS OLD, AND INDICATE THE LOCATIONS AND HEIGHT ELEVATION(S) OF THE TEST RESIDUAL FLOW HYDRANTS. WATER FLOW TEST INFORMATION MUST BE PROVIDED BY, OR WITNESSED BY, THE LOCAL WATER PURVAYOR, UTILITY COMPANY OR LOCAL FIRE DEPARTMENT. (2016 CFC, 508.4)
5. ARCHITECT OF RECORD (AOR), MECHANICAL ENGINEER (ME) AND FIRE PROTECTION CONTRACTOR (C–16) SHALL AFFIX THEIR SEAL, STAMP AND SIGN ALL SUBMITTALS, OR PROVIDE DOCUMENTATION PER DSA A–18.
6. 2016 NFPA–13 SEC. 6.2.9.5 AND SEC. 6.2.9.6: PROVIDE A SPARE SPRINKLER HEAD CABINET, SPRINKLER WRENCH, AND NO FEWER THAN SIX (6) SPRINKLER HEADS MATCHING THE TYPES AND TEMPERATURE RATING IN EACH PROTECTED AREA FOR SYSTEMS LESS THAN 300 SPRINKLERS (12 SPARE SPRINKLER HEADS FOR SYSTEMS OF 300 TO 1,000 SPRINKLERS.)
7. 2016 NFPA–13 SEC. 8.17.2.4.7.1: SIGNAGE SHALL BE PROVIDED AS REQUIRED.
8. 2016 NFPA–13 SEC. 9.3.6.3: THE END (LAST) SPRINKLER ON EACH LINE SHALL BE RESTRAINED AGAINST EXCESSIVE VERTICAL AND LATERAL MOVEMENT.
9. 2016 NFPA–13 FIGURE 10.10.1: A COPY OF THE COMPLETED AND SIGNED "CONTRACTOR'S MATERIAL & TEST CERTIFICATE FOR UNDERGROUND PIPING" SHALL BE INCLUDED WITH THE SUBMITTAL.
10. 2016 NFPA–13 SEC. 10.10.2.2.1: ALL PIPING AND ATTACHED APPURTENANCES SUBJECTED TO WORKING PRESSURE SHALL BE HYDROSTATICALLY TESTED AT 200–PSI, OR 50–PSI IN EXCESS OF SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE WITHOUT LOSS FOR 2 HOURS. (TEST TO BE WITNESSED BY PROJECT INSPECTOR.)
11. 2016 NFPA–13 FIGURE 25.1: SPRINKLER CONTRACTOR SHALL COMPLETE AND SIGN THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR THE ABOVE GROUND PIPING. THIS FORM SHALL BE GIVEN TO THE PROJECT INSPECTOR WHO WILL FORWARD IT TO DSA FOR FILING IN PROJECT RECORDS.
12. 2016 NFPA–13 SEC. 25.5.1: A PERMANENT HYDRAULIC CALCULATION DESIGN INFORMATION PLACARD SHALL BE ATTACHED TO EACH RISER.
13. 2016 NFPA–13 SEC. 25.6: A GENERAL INFORMATION SIGN SHALL BE ATTACHED TO EACH RISER.
14. 2016 NFPA–13 SEC. 25.2.3.1: THE SPRINKLER FLOW SWITCH SHALL BE TESTED TO CONFIRM THAT WHEN THE INSPECTOR'S TEST VALVE IS OPENED, AN ALARM WILL SOUND NO MORE THAN 90–SECONDS AFTER THE INITIAL FLOW. (TEST TO BE WITNESSED BY THE PROJECT INSPECTOR.)
15. 2019 CBC, SEC. 903.4.1: THE MAIN FIRE ALARM PANEL VALVE MONITORING, WATER–FLOW AND TROUBLE SIGNALS SHALL BE DISTINCTLY DIFFERENT, AND SHALL AUTOMATICALLY BE TRANSMITTED TO AN APPROVED CENTRAL STATION MONITORING COMPANY.
16. 2016 NFPA–13 SEC. 6.9.1: AND 2013 CBC, 903.4.2: THE FLOW SWITCH SHALL BE CONNECTED TO AN APPROVED EXTERIOR ALARM BELL OR OTHER AUDIBLE ALARM DEVICE (SIZE NOT MANDATED BY CODE) AT EACH RISER. APPROVED IDENTIFICATION SIGNS STATING "SPRINKLER FIRE ALARM–WHEN ALARM SOUNDS CALL 911/FIRE DEPARTMENT" SHALL BE INSTALLED ON THE EXTERIOR ALARM BELL.
17. 2019 CBC, SEC. 904.4.3: CONNECTIONS TO PROTECTED PREMISES AND SUPERVISING STATION FIRE ALARM SYSTEMS SHALL BE TESTED TO VERIFY PROPER IDENTIFICATION AND TRANSMISSION OF ALARM SIGNALS FROM AUTOMATIC FIRE EXTINGUISHING SYSTEMS. (TEST TO WITNESSED BY PROJECT INSPECTOR.)
18. 2019 CBC, 903.4.2 AND 2016 NFPA–13 SEC. 8.17.4.2.1 THRU SEC. 8.17.4.2.4: THE INSPECTOR'S TEST VALVE LOCATION SHALL BE INSTALLED DOWNSTREAM OF THE ALARM DEVICE (WATERFLOW SWITCH). THE PIPE SIZE SHALL BE NO LESS THAN 1–INCH, WITH A SMOOTH BORE, CORROSION RESISTANT ORIFICE, PROVIDED EQUIVALENT FLOW OF THE SMALLEST ORIFICE OF THE SPRINKLER TYPES INSTALLED ON THE SYSTEM. THE DISCHARGE SHALL BE TO THE EXTERIOR OF THE BUILDING.
19. CCR TITLE–19 (PUBLIC SAFETY), ARTICLE 906 (A): A LABEL OF THE SELF–ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION (FDC) OR ON THE RISER FOR THE FIRE SPRINKLER SYSTEM, INDICATING THE DATE OF THE INSTALLATION AND/OR THE DATE SERVICE WAS PERFORMED, AND THE LICENSE NUMBER OF THE PERSON PERFORMING THE SERVICE WORK.

GENERAL NOTES

1. THIS PLAN DETAILS THE FIRE SPRINKLER SYSTEM FOR:

   PALO VERDE COLLEGE CHILD DEV CNTR
   141 S.2ND ST.
   BLYTHE, CA

2. BUILDING CONSTRUCTION TYPE: VB
3. BUILDING OCCUPANCY: E
   BUILDING AREA: BUILDING 9,600 sq. ft. TOTAL
4. ALL DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13—2016 EDITION.
5. SYSTEM IS DESIGNED FOR LIGHT HAZARD OCCUPANCY @0.10 GPM/SQ.FT. OVER THE HYDRAULICALLY MOST REMOTE AREA + 100 GPM OUTSIDE HOSE STREAM ALLOWANCE. (AREA REDUCED PER NFPA–13, WITH USE OF QUICK RESPONSE HEADS.) BELOW CEILING SPRINKLERS ARE @ MAXIMUM 225 SQ.FT. SPACING. ATTIC SPRINKLERS ARE AT MAX. 168 SQ.FT. SPACING.
6. MAIN FITTING NOTES:
   A. ALL SPRINKLER MAIN PIPING 2"–4" TO BE SCH.10 PER NFPA–13
   B. ALL MAIN OUTLETS TO BE UL LISTED (GROOVED AND OR FEMALE THREADED FOR MECH. TEES)
   C. WELDING TO BE PERFORMED I.A.W. NFPA–13, IF REQUIRED.
   D. ALL MAIN FITTINGS TO BE ROLL–GROOVED.
   E. ALL MAIN COUPLINGS TO BE ROLL–GROOVED, NON–FLEXIBLE, UNO.
7. BRANCH LINE FITTING NOTES:
   A. BRANCH LINE PIPING (THREADED) 1"–2" TO BE THREADED SCH–30 OR 40 PER NFPA–13, WITH STANDARD WEIGHT (125 LB.) SCREWED CAST OR DUCTILE IRON FITTINGS.
8. CLEARANCE SHALL BE PROVIDED AROUND ALL PIPING EXTENDING THROUGH WALLS AND FLOORS. HOLES SHALL BE 2" LARGER THAN THE DIAMETER FOR 1" TO 3" AND 4" LARGER THAN THE DIAMETER FOR PIPES 4" AND LARGER.
9. ALL FIRE SPRINKLER SYSTEM EQUIPMENT TO BE UNDERWRITER LABORATORY (UL) LISTED AND CONSISTENT WITH NFPA–13.
10. ALL PIPE HANGERS TO BE IN ACCORDANCE WITH NFPA–13 AND DWG.–DETAILS.
11. ALL SWAY (EARTHQUAKE) BRACING SIZE, LOCATION, SPACING, AND CONNECTIONS TO BE IN ACCORDANCE WITH NFPA–13, SEE DETAIL AND ZONE OF INFLUENCE CALCULATIONS FOR INFORMATION ON SPACING, BRACE TYPE, AND ATTACHMENT METHOD.
12. ALL ARM–OVERS TO BE 1" X 0–4" UNLESS NOTED OTHERWISE.
13. ON THE END HANGER, ATR SHALL BE TIGHTENED DOWN AGAINST THE TOP OF PIPE TO PREVENT MOVEMENT.
14. SPRINKLERS SHOWN IN ACOUSTICAL CEILINGS TILES ARE NOT NECESSARILY IN CENTER OF TILE.
15. ALL ELECTRICAL WIRING AND MONITORING OF ALARMS AND/OR SUPERVISORY SWITCHES ASSOCIATED WITH THE FIRE SPRINKLER SYSTEM TO BE PERFORMED BY OTHERS, PRIOR TO FINAL INSPECTION.
16. UPON COMPLETION OF THE INSTALLATION A 200 PSI HYDRO TEST FOR 2–HRS WILL BE PROVIDED FOR INSPECTION.
17. UNDERGROUND PIPING SHALL BE FLUSHED PER NFPA–13, PRIOR TO CONNECTION TO SPRINKLER SYSTEMS.
18. D & B FIRE EXTENT OF WORK TO BE AT BASE OF RISER—(SEE RISER DETAIL)
19. A SPARE HEAD BOX WITH HEADS AND WRENCH SHALL BE PROVIDED AT EACH RISER.
20. UPON COMPLETION, THE FOLLOWING SHALL BE PROVIDED TO OWNER: COMPLETED CONTRACTORS MATERIAL & TEST CERTIFICATE: COPY OF NFPA–25.
21. DEVIATIONS FROM APPROVED PLANS SHALL REQUIRE PERMISSION OF THE AUTHORITY HAVING JURISDICTION (NFPA–13–2016 EDITION, SECTION 23.1.2)

SEE SHEET FS–2 FOR ZONE OF INFLUENCE OUTLINE

PIPE SCH	PIPE SIZE, LENGTH, QUANTITY, LBS./FT.	WEIGHT OF WATER FILLED PIPE	COMBINED WEIGHT OF ALL PIPE IN ZONE (Wp)	Cp VALUE	ADJUSTED ASSIGNED LOAD
10	3" (5.89) X 48'	283 LBS.	283 LBS.	(1.14)	323 LBS.
		PERCENTAGE(15) FOR FITTINGS AND DEVICES:			48 LBS.
	LONGITUDINAL BRACE				TOTAL LOAD: 371 LBS. (Fp)

EARTHQUAKE BRACE CALCULATIONS

(Sp) VALUE 2.44 — ZONE OF INFLUENCE CALCULATIONS (PER 2016 NFPA 13–TABLE 9.3.5.9.3) — LATERAL BRACE

PIPE SCH	PIPE SIZE, LENGTH, QUANTITY, LBS./FT.	WEIGHT OF WATER FILLED PIPE	COMBINED WEIGHT OF ALL PIPE IN ZONE (Wp)	Cp VALUE	ADJUSTED ASSIGNED LOAD
10	3" (5.89) X 24'	141 LBS.			
40	1½"(2.93) X 15'	44 LBS.			
40	1" (2.05) X 54'	111 LBS.	296 LBS.	(1.14)	337 LBS.
		PERCENTAGE(15) FOR FITTINGS AND DEVICES:			51 LBS.
					TOTAL LOAD: 388 LBS. (Fp)

EARTHQUAKE BRACE CALCULATIONS

ASSIGNED LOAD: ADJUSTED (SEE ZONE OF INFLUENCE CALCULATIONS ABOVE)

SPRINKLER MAIN SIZE	MAX. BRACE SPACING	ADJUSTED ASSIGNED LOAD
2½"	24' LAT. – 48' LONG.	388 LBS. (Fp)

BRACE SPACING: TABLE 9.3.5.11.8(B)

BRACE PIPE SIZE	MAX LENGTH	MAX BRACE ANGLE	MAX HORIZ. LOAD
1"	7'–0"	59° FROM VERT.	1310 LBS.

FASTENER SIZE: TABLE 9.3.5.12.1 — PER STEEL CONN. & ANGLE OF BRACE

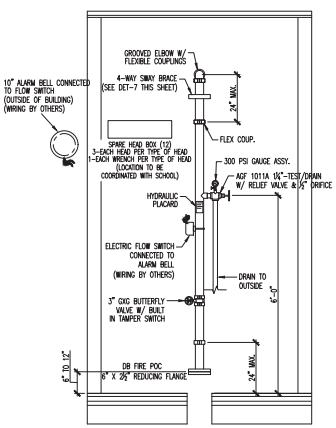
FASTENER SIZE/TYPE	BRACE ANGLE (DIAGRAM)	MAX ASSIGNED LOAD
⅜" X 1½" HEX BOLT	45°–59° FROM VERT.(FIG.E)(STEEL CONN.)	2050 LBS.

SEISMIC BRACE ATTACHMENT

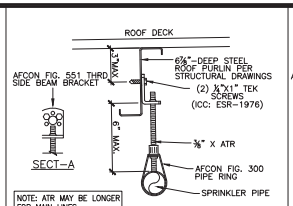
STRUCTURAL ATTACHMENT FITTING BRACING SYSTEM
MAKE:_AFCON_ MODEL:_077_
LISTED LOAD RATING:_2015_ ADJUSTED LOAD RATING PER 9.3.5.11.8: 1612 (.8)
SWAY BRACE (PIPE ATTACHMENT) FITTING:
MAKE:_AFCON_ MODEL:_001/020_
LISTED LOAD RATING:_800_ ADJUSTED LOAD RATING PER 9.3.5.11.8: 640 (.8)

HANGER/RESTRAINT NOTE

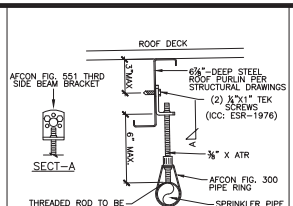
** LATERAL BRACING IS NOT REQUIRED ON PIPES LESS THAN 2" INDIVIDUALLY SUPPORTED BY RODS LESS THAN 6" LONG, PER 2016 NFPA–13, SECT–9.3.6.5
** THE END OF LINE RESTRAINT DETAIL #2 ON THIS PLAN WILL RESTRAIN END SPRINKLER AGAINST EXCESSIVE VERTICAL MOVEMENT; AND LATERAL MOVEMENT IS LIMITED BY THE SHORT RODS (6" OR LESS) WHICH MEET THE ABOVE EXCEPTION FOR LATERAL BRACING. NO ADDITIONAL BRACING OR SPLAY WIRE IS REQUIRED ON BRANCH LINES.



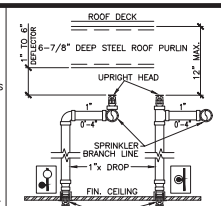
3"–ASR (inside)



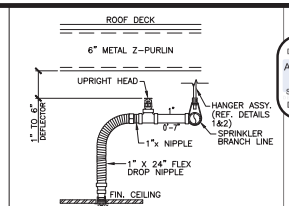
TYPICAL MAIN/BRANCH LINE HANGER — DETAIL–1



END OF LINE HANGER/RESTRAINT — DETAIL–2



UP & DOWN HEADS — DETAIL–3



UP & OVER DOWN HEADS (ALT.) — DETAIL–3a

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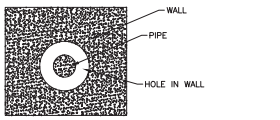
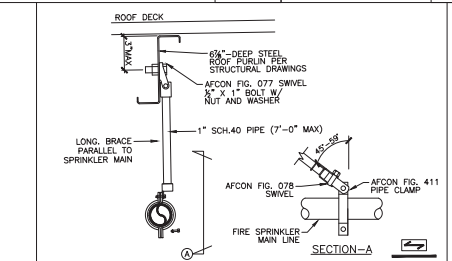
DATE: 08/30/2022



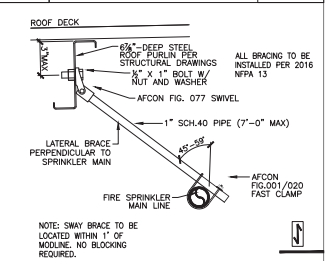
PIPE PENETRATION CLEARANCE

1" PIPE = 3" HOLE
1¼" PIPE = 3¼" HOLE
2½" PIPE = 4½" HOLE

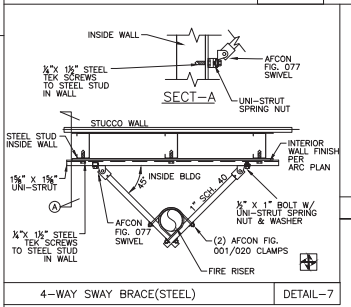
WALL PENETRATION DETAIL — DETAIL–4



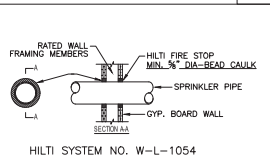
LONGITUDINAL SWAY BRACE — DETAIL–5



LATERAL SWAY BRACE — DETAIL–6

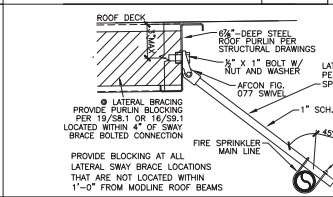


4–WAY SWAY BRACE(STEEL) — DETAIL–7



HILTI SYSTEM NO. W–L–1054
RATED WALL PENETRATION

WALL PENETRATION — DETAIL–9

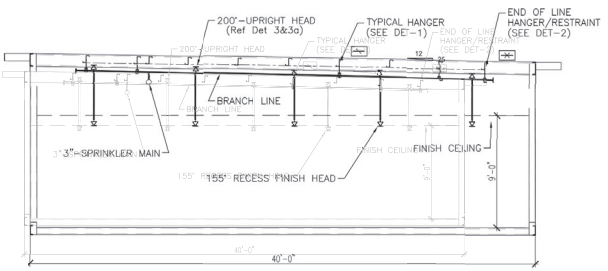


BLOCKING DETAIL — DETAIL–13

Table 8.6.3.1.2 Positioning of Sprinklers to Avoid Obstructions to Discharge [Standard Spray Upright/Standard Spray Pendent (SSU/SSP)]

Distance from Sprinklers to Side of Obstruction (A)	Maximum Allowable Distance of Deflector Above Bottom of Obstruction (B) [in. (mm)]
Less than 1 ft (300 mm)	0 (0)
1 ft (300 mm) to less than 1 ft 6 in. (450 mm)	2½ (65)
1 ft 6 in. (450 mm) to less than 2 ft (600 mm)	5½ (90)
2 ft (600 mm) to less than 2 ft 6 in. (750 mm)	5½ (140)
2 ft 6 (750 mm) in. to less than 3 ft (900 mm)	7½ (190)
3 ft (900 mm) to less than 3 ft 6 in. (1.1 m)	9½ (240)
3 ft 6 in. (1.1 m) to less than 4 ft (1.2 m)	12 (300)
4 ft (1.2 m) to less than 4 ft 6 in. (1.4 m)	14 (350)
4 ft 6 in. (1.4 m) to less than 5 ft (1.5 m)	16½ (420)
5 ft (1.5 m) to less than 5 ft 6 in. (1.7 m)	18 (450)
5 ft 6 in. (1.7 m) to less than 6 ft (1.8 m)	20 (510)
6 ft (1.8 m) to less than 6 ft 6 in. (2.0 m)	24 (600)
6 ft 6 in. (2.0 m) to less than 7 ft (2.1 m)	30 (750)
7 ft (2.1 m) to less than 7 ft 6 in. (2.3 m)	35 (875)

For SI units, 1 in. = 25.4 mm; 1 ft = 0.3048 m.
Note: For A and B, refer to Figure 8.6.3.1.2(a).



BUILDING CROSS SECTION - A
SCALE: 3/16" 1'–0"

TABLE 8.6.2.2.1(a) Sprinkler Head Protection area & spacing for Light Hazard

CONSTRUCTION TYPE:	SYSTEM TYPE:	MAXIMUM PROTECTION AREA	MAXIMUM SPACING
NON–COMBUSTIBLE UNOBSTRUCTED	HYDRO CALC'D	225sq.ft.	15 ft.
COMBUSTIBLE UNOBSTRUCTED	HYDRO CALC'D	168sq.ft.	15 ft.

WATER FLOW INFO.	
STATIC:	52 PSI
RESIDUAL:	40 PSI
FLOW:	950 GPM
INFORMATION FROM:	
CITY OF BLYTHE	
DATED: 12–20–21	

HYDRAULIC CALC. REFERENCE POINT
4–WAY SWAY BRACE
LONG./LAT. SWAY BRACE
FIRE RISER
TYP. HANGER
END OF LINE HANGER/RESTRAINT

HANGER LEGEND

UNDERGROUND FIRE MAIN
NEW UNDERGROUND PIPING
EXISTING UNDERGROUND PIPING
POST INDICATOR VALVE (PIV)
KEY VALVE
FIRE DEPARTMENT CONNECTION (FDC)
FIRE HYDRANT

AUTHORITY HAVING JURISDICTION

#	DATE:	BY:	REVISIONS:
1			
2			
3			
4			
5			

American Modular Systems, Inc.
787 Sycamore Ave. Manteca, CA 95336
Phone (209) 825–1921 - Fax (209) 825–7018
americanmodular.com

FIRE PROTECTION, INC.
1923 LESTON LANE CORONA, CALIFORNIA 92879
(951) 737–4965 FAX (951) 737–4860 LICENSE NO. C16–410294

TITLE: FIRE SPRINKLER COVER SHEET:
PALO VERDE COLLEGE CHILD DEV CNTR
141 S.2ND ST.
BLYTHE, CA

JOB NO.:	
SCALE:	AS NOTED
DRAWN BY:	AR/PM
DATE:	2/2022
SHEET NO.:	FS–1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION	SEE PLAN

SPRINKLER INFORMATION

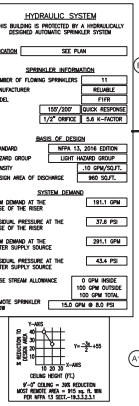
NUMBER OF FLOWING SPRINKLERS	11
MANUFACTURER	REGIBLE
MODEL	FIFR
155°/200°	QUICK RESPONSE
1/2" ORIFICE	5.6 K-FACTOR

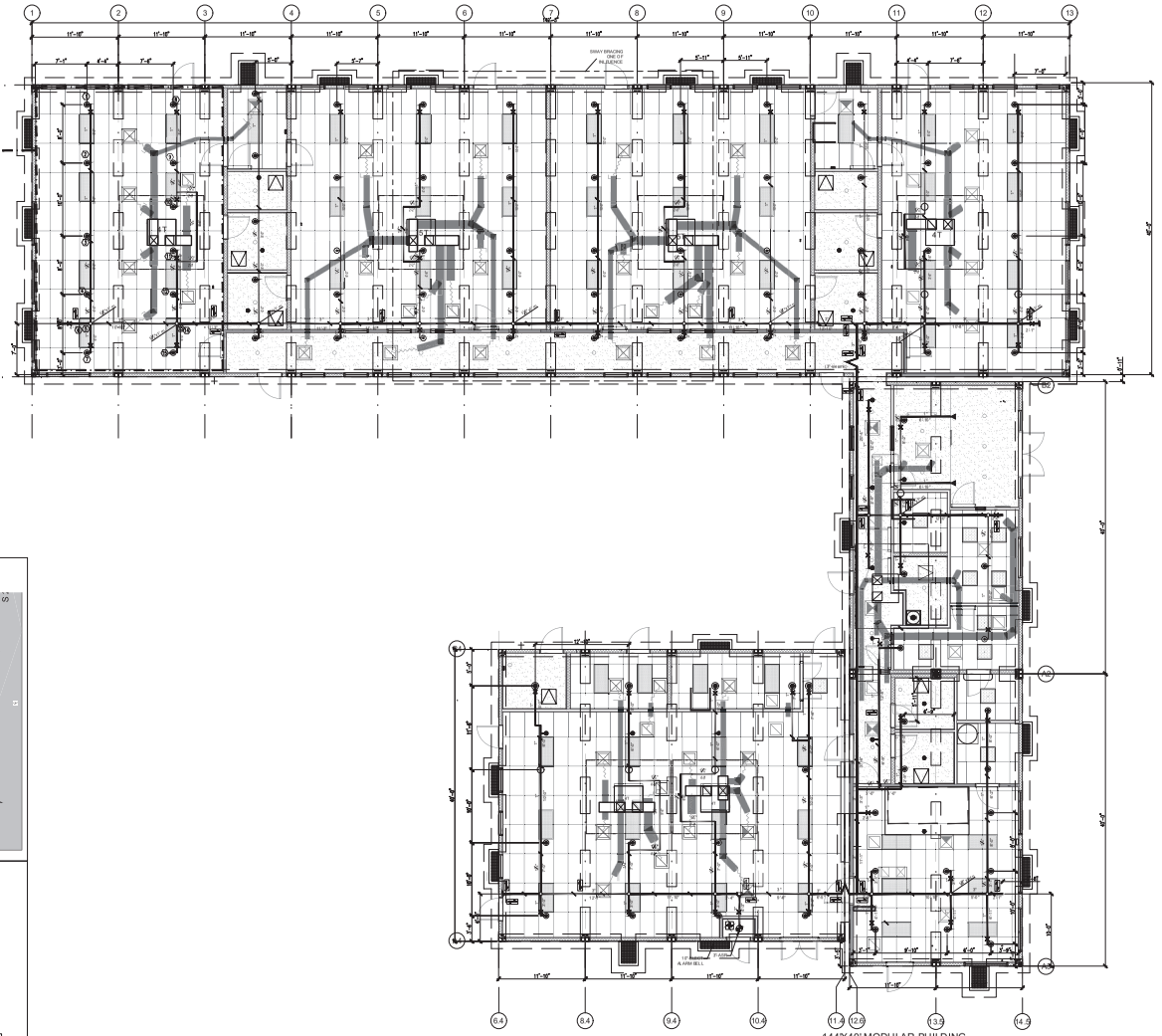
BASIS OF DESIGN

STANDARD	NFPA 13, 2016 EDITION
HAZARD GROUP	LIGHT HAZARD GROUP
DENSITY	.10 GPM/SQ.FT.
DESIGN AREA OF DISCHARGE	900 SQ.FT.

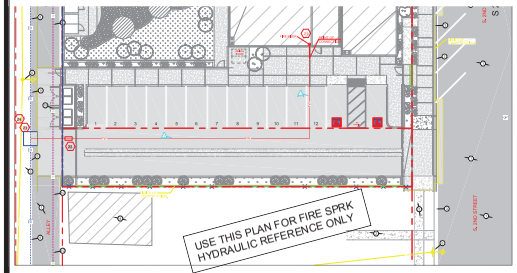
SYSTEM DEMAND

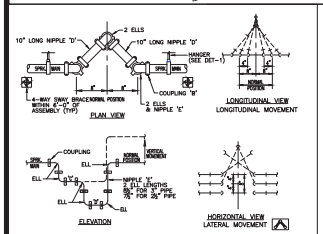
GPM DEMAND AT THE BASE OF THE RISER	191.1 GPM
RESIDUAL PRESSURE AT THE BASE OF THE RISER	37.6 PSI
GPM DEMAND AT THE WATER SUPPLY SOURCE	291.1 GPM
RESIDUAL PRESSURE AT THE WATER SUPPLY SOURCE	43.4 PSI
HOSE STREAM ALLOWANCE	0 GPM INSIDE 100 GPM OUTSIDE 100 GPM TOTAL
REMOTE SPRINKLER FLOW	15.2 GPM @ 8.5 PSI



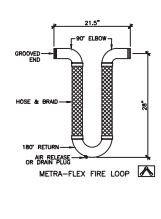


FOR REFERENCE ONLY





SEISMIC CONNECTION ASSEMBLY



SEISMIC CONNECTION FIRE LOOP

WATER FLOW INFO.

STATIC:	52 PSI
RESIDUAL:	40 PSI
FLOW:	950 GPM

INFORMATION FROM:
CITY OF BLYTHE
DATED: 12-29-21

- HYDRAULIC CALC. REFERENCE POINT
- 4-WAY SWAY BRACE
- LONG./LAT. SWAY BRACE
- FIRE RISER
- TYP. HANGER
- END OF LINE HANGER/RESTRAINT

HANGER LEGEND

UNDERGROUND FIRE MAIN

- NEW UNDERGROUND PIPING
- EXISTING UNDERGROUND PIPING
- POST INDICATOR VALVE (PIV)
- KEY VALVE
- FIRE DEPARTMENT CONNECTION (FDC)
- FIRE HYDRANT

FIRE SPRINKLER HEAD LEGEND

SYM.	MAKE AND MODEL	K-FAC	SIZE	TEMP	TYPE	FINISH	CANOPY	QTY.
○	TYCO FRB	5.6	½"	200°	UPRIGHT	BRASS	N/A	92
●	TYCO FRB	5.6	½"	155°	PENDENT	CHROME	CHR. RECESSED	100
◉	DENOTES UP OVER DOWN HEAD SYMBOL							

TOTAL SPRINKLER HEADS THIS SHEET 192

AUTHORITY HAVING JURISDICTION

	DATE:	BY:	REVISIONS:
1			
2			
3			
4			
5			

LICENSED FIRE SPRINKLER CONTRACTOR
Class C-16
License 410204
Expires 8-2022
STATE OF CALIFORNIA

CAMS
American Modular Systems, Inc.
787 Spreckels Ave. Manteca, CA 95336
Phone (209) 825-1921 - Fax (209) 825-7018
americanmodular.com

FIRE PROTECTION, INC.
1623 LESSON LANE CORONA, CALIFORNIA 92879
(951) 737-1965 FAX (951) 737-4860 LICENSE NO. C16-410294

TITLE: FIRE SPRINKLER LAYOUT/PIPING PLAN
PALO VERDE COLLEGE CHILD DEV CNTR
141 S.2ND ST.
BLYTHE, CA

JOB NO.:
SCALE: AS NOTED
DRAWN BY: AR/PM
DATE: 2/2022
SHEET NO.: FS-2

GENERAL REQUIREMENTS

GENERAL REQUIREMENTS

1. Work performed shall comply with the following:
2. These General Requirements unless otherwise noted on plans or specifications.
3. Building Code - CBC 2019
4. All applicable local, State and Federal Codes, Ordinances, Laws, regulations and Protective Covenants governing the site of work.
5. Standard Specifications of ASTM as noted herein and as required by the Building Code.
6. All work needs to be performed by qualified and experienced contractors familiar with this type of project.
7. In case of conflict, the more stringent requirement shall govern.
8. On site verification of all dimensions and conditions shall be the responsibility of the contractor and sub-contractors. Noted dimensions take precedence over scale of drawings.
9. Engineer or architect of record is to be notified immediately by the contractor should any question arise or any discrepancy be found pertaining to the working drawings and/or specifications.
10. No deviations from these requirements and structural details shall be made without the written approval of E.O.R.. Approval by the inspector does not constitute authority to deviate from plans or specifications.
11. The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc., is the sole responsibility of the contractor, and has not been considered by the architect or engineer. The contractor is responsible for the stability of the structure prior to the application of all shear walls, roof and floor diaphragms, and finish materials. The contractor shall provide the necessary bracing to provide stability prior to the application of the aforementioned materials. Observation visits to the site by the architect or structural engineer shall not imply the assumption of any responsibility in this regard.
    The builder has requested, contracted with and is compensating E.O.R. for the limited services of providing the minimum structural engineering drawings required, when combined with the other builders' consultants drawings, to obtain a building permit for this project. These drawings are not intended to, nor do they detail all conditions, identify all materials, or define or limit the scope of work required to complete the project. The builder has requested, accepted, and represented that the he will select all materials and manufacturers, qualify and select all installers, direct all ways and means of construction, and provide all subcontractors additional information, above and beyond these drawings, required to complete the project in conformance with all governing agencies and the work will meet or exceed accepted industry standards.
12. Special inspection per Building Code Sec.1704 Chapter 17A is required & applies to the types of work indicated on sheet S-0.11 (Note: Special inspectors qualification and responsibilities should comply with Building Code Section 1701 Requirements.) and in accordance with the DSA 103 form for this project.
13. Structural analysis for this project is done per applicable Building Code at the time of design considering standard of care.
14. Upon completion of above by the engineer & prior to start of construction, contractor is responsible to check all dimensions, coordinate with the work of other consultants & other trades to ensure compliance with his/her requirements.
15. E.O.R. shall have no liability for waterproofing or moisture transmission issues, whether related to concrete slabs, footings, foundations, or otherwise. The General Contractor Owner shall be responsible for the proper installation of the waterproofing and moisture protection specified by other.

DESIGN CRITERIA

1. SOILS
    Foundation engineering has been predicated on data and recommendations contained in the soils report by: LandMark Consultants, Inc.
    SOILS REPORT NO. LP21061, DATE: 12/03/2021, Soil Bearing Pressure: 2000 PSF
    Site Preparation, grading, tests and inspections/field observation recommended by Soils Report shall be strictly followed. Written Approval from soils engineer shall be obtained prior to construction of foundations. Verify minimum foundation depth, width, reinforcing steel & additional expansive soil requirements with the soils report and if they are more restrictive, notify E.O.R.
2. LATERAL LOADS:
    Occupancy Category: II
    Seismic Design Category: D — Wind Speed: 110 MPH
    Seismic Importance Factor (I) = 1.0 — Wind Exposure: C
    Site Class = E
    S_1 : 0.290 — S_{DS} : 0.442
    S_1 : 0.154 — S_{D1} : 0.385 — R_X : 1.25 — R_X : 1.25
    Total Design Base Shear: V_X = 0.353kW — V_X = 0.353kW
    Analysis Procedure: Equivalent lateral force procedure (ASCE 7-16 - 12.8.1)
3. DESIGN LOADS:
    Roof Loads (Curved Patio)
    Dead Load = 30 psf
    Live Load = 20 psf
    Total = 50 psf
4. TYPICAL ROOF SHEATHING
    15/32" APA rated sheathing Exp 1 with a min. panel index of 32/16.
    Refer to NER 108 for installation and conditions of use.
    B.N.:8d common nail at 6" o.c.
    E.N.:8d common nail at 6" o.c.
    F.N.:8d common nail at 12" o.c.
    *Note: All structural rated panels must be stamped by one of the following approved agencies, APA, PFS/TECO or Pittsburg.

COLD FORMED METAL FRAMING

1. All cold-formed metal framing shall confirm to AISI Standard S100-16 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
2. Shall meet all the requirement AISI 2016 Latest Edition.
3. Contractor shall provide effective, full time quality control over all fabrication and erection complying with the pertinent codes and regulations of government agencies having jurisdiction.
4. Provide all accessories including, but not limited to, tracks, clips web stiffeners, anchors, fastening devices, resilient clips, and other accessories required for a complete and proper installation, and as recommended by the manufacturer for the steel members used.
5. Fastening of components shall be with ICC approved self-drilling screws or welding, screws or welds shall be of sufficient size to insure the strength of the connection all welds of galvanized steel shall be touched up with a zin-rich paint. All welds of carbon sheet steel shall be touched up with paint. Wire tying of components shall not be permitted.
6. Uniform and level joist bearing shall be provides at foundation walls by means of shims and/or non-setting grout.
7. All material and workmanship shall conform to AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL", latest edition.
8. All welding shall be done by certified welders in full compliance with AWS D1.3
9. Unless noted otherwise on the drawings, screws shall be #10-16 self drilling, self tapping hex head screws with Head diameter of 0.333 in.
10. Provide minimum yield stress, F_y , of 50 ksi for 16 gauge (54 mil) and thicker and 33 ksi for 18 gauge (43 mil) and thinner.
11. Cold-formed steel joists shall have punched enlarged service holes with stiffened flanges.

STRUCTURAL STEEL

GENERAL

1. All structural steel materials and construction shall conform to the requirements specified in Building Code, Chapter 22 & Reference.

MATERIALS

2. Steel shall be primed with a rust resistance primer & should conform to ASTM A36 (fy=36 ksi) as a minimum, unless otherwise noted. All W shapes to be ASTM A992. (fy=50 ksi)
3. Steel pipe shall conform to ASTM A53, Grade B (Fy=35 ksi).
4. Round HSS tubing shall conform to ASTM A500 Grade B (Fy=42 ksi)
5. Rectangular and square HSS tubing shall conform to ASTM A500, Grade B (Fy=46 ksi).
6. HP sections shall conform to ASTM A572, Grade 50 (Fy=50 ksi).
7. All structural welding procedures and materials shall conform to Building Code, Section 2204.1. All welding shall be by the shield metal arc welding process or the submerged arc welding process using E70XX-low hydrogen electrodes, unless otherwise noted.
8. All bolts for connections of steel members shall conform to Building Code, Section 2204.2 & ASTM A325N, unless otherwise noted. Holes for bolts should be drilled or punched & shall be 1/16" larger than bolt diameter.
9. Prefabricated steel moment frames per manufacturer. Steel moment frame manufacturer shall submit shop drawing, design calculations, and approved moment frame test report (ICC, IAMPO, or test per Appendix 5 of AISC SEISMIC PROVISION) to E.O.R. for review.
10. All welding and fabrication must be performed by a certified welder and a special inspector shall inspect all structural welding. Both shall be approved by the Building Official.

REINFORCED CONCRETE

GENERAL

1. All reinforced concrete materials and construction shall conform to Building Code, chapter 19.

MATERIALS

2. Cement shall conform to Section 1903 of Building Code and shall correspond to that on which the selection of concrete proportions were based.
3. Concrete aggregates shall conform to Building Code Section 1903.
4. Portland cement shall be Type V cement.
5. Reinforcing steel shall conform to ASTM A615, Grade 60 for all sizes.
6. Dowels shall be equal in size and spacing.

STRENGTH

7. The (28 days) concrete compressive strength, Fc, shall be min 4500 psi U.N.O.
8. Special inspection is required for all concrete.
9. All reinforcing, dowels, holdowns, and other inserts shall be secured in position and approved by the local building official prior to the pouring of any concrete.
10. Min. concrete cover for reinforcing:
    a- Concrete, placed against earth not formed - 3"
    b- Concrete formed or troweled - 2"
    c- Walls and curbs - 1 1/2"
    d- Slab on grade - at center

FOUNDATION TRACK

1. All holdowns and post anchors to be installed according to most current Simpson Strong Tie specifications and requirements of ICC-ER reports & shall be tied in place prior to foundation inspection. Dimensions are not furnished to Simpson holdowns. It is the responsibility of the contractor's superintendent, the framing contractor and the concrete contractor to locate these anchors in the exact location. Refer to details for proper installation.
2. Min. concrete width to be 8" for receiving PA, HPA & STHD's. Verify locations of holdowns and anchor bolts with rough framing to assure accurate installation.
3. Provide #3 X 24" dowel at 24" o.c. and 12" from the corner at all concrete stoops and porches.
4. Provide min. (1) #4 reinforcing for electrical ground, location to be verified with the electrical contractor.
5. Verify min. foundation depth, width, reinforcing steel and additional expansive soil requirements with valid soils report and if more stringent, they shall supersede the above minimum requirements. See note #7 under reinforced concrete for concrete strength.
6. Admixtures in concrete mix. containing calcium chlorides shall not be used.
7. Footings shall be examined and certified in writing by the project soil/geology engineer prior to inspection and placement of concrete.
8. Concrete shall be to the strength and slump as specified per structural design, and consist of Portland cement ASTM C-150 Type V per soils engineer's recommendations and Building Code section 1904 (ACI 318 section 19.3.2.1) when exposed to sulfate containing solutions. Aggregates shall be per ASTM C-33. Water to be clean and potable.
9. Placement shall be in one continuous operation unless otherwise specified. Slab surface shall be cured with 'Hunts' compound or equal or cured with other methods in accordance with good construction practice at contractor's option.
10. Contractor shall dampen slab underlayment of sand/membrane just prior to concrete placement to assist uniform concrete curing. Slabs must not be poured during or immediately after rainstorms. The specified sand over visqueen should not be saturated at the time of the concrete pour. Any free water trapped in the sand layer must be removed prior to the concrete pour.
11. The bottoms of footing excavations shall be level, clean and free of loose material or water when concrete is placed. Over excavation shall be filled with concrete or properly compacted fill that has been tested and approved by the soils engineer. Backfill shall not be placed until supporting foundations, walls and slab have attained sufficient strength to support lateral soil pressure.
12. Concrete placement shall be monolithic in one continuous operation uniformly placed and must be vibrated and well consolidated unless shown otherwise on plans. Dual pour is defined by ACI as to when 1st. & 2nd. pour can not be vibrated together.
13. Floor slab shall be poured level to 1/8" in 10'.
14. Requirements for pre-saturation of subgrade soils and daylight setback of exterior footings from any descending slope shall comply with soil report recommendations.
15. Finish grade around the perimeter of slab shall be constructed such that rain and irrigation water is drained away from the slab.
16. All site and pad preparation, such as but not limited to shading, compacting of the fill, pre-saturation, and concrete slab base preparation, shall be performed in accordance with the soil engineer's recommendation and soils report.
17. Foundation drawings prepared by E.O.R. reflect the structural requirements. Refer to architectural plans for dimensions, depressions, slope, shelves, patios, stoops and porches not shown in foundation drawings. Accuracy of the dimensions and final fit of the building shall be reviewed by the architect and the contractor prior to construction.
18. Waiting period for concrete slabs-on-grade prior to start of construction is as follows:
    a. Do not walk on slab until 24 hours after concrete has been poured.
    b. Begin wall framing 4-5 days after concrete poured.
    c. Begin roof/floor framing 7-10 days after concrete poured.
    d. Do not load roof prior to 14 days after concrete poured.
19. No pipes or conduits shall extend under isolated column footing or under continuous wall footings unless specifically detailed or approved by the architect, structural engineer and the building official.
20. The contractor shall arrange for observation of the work by the soils engineer. The following are requirements of the soils engineer:
    a. All footing excavations shall be inspected and certified in compliance with the soils report by the soil engineer prior to placing of concrete or steel.
    b. Soil conditions, including compacting and moisture content, shall be inspected and certified to be in compliance with the soil report by the soils engineer prior to placing of concrete or steel.
    c. A certificate of compliance shall be submitted to the building official prior to his foundation inspection and to the architect and structural engineer.
21. Prior to the contractor requesting a Building Department foundation inspection, the soil engineer shall advise the building official in writing that:
    a. The building pad was prepared in accordance with the soil report.
    b. The utility trenches have been properly backfilled and compacted
    c. The foundation excavations, the soils expansive characteristics and bearing capacity conform to the soils report.

DEFERRED APPROVAL:

1. Elements of structure that are marked "by others" shall be excluded from this scope of work.
2. General contractor shall first submit separate drawings for the above elements to the EOR for their review and if approved, then submit to the building officials for their review and approval.
3. City approval shall be obtained prior to installation of element subjected to deferred approval.

SHOP DRAWINGS

1. Sufficient copies of shop drawings for any member or product designed by entity other than E.O.R. shall be submitted to E.O.R. prior to fabrication for review. Contractor shall submit shop drawings of reinforcement for concrete masonry walls, concrete components with compressive strength more than 2500 psi and structural steel to E.O.R. to review and obtain approval prior to fabrication. Shop Drawings shall be original drawings prepared for the project specific information, drawn accurately to scale. Direct copies and modified reproductions of the Contract Documents will not be accepted. Allow sufficient time from the receipt of complete submittal for review and processing by E.O.R..
2. Review of shop drawings by E.O.R. does not relieve the engineer responsible for the design or the contractor from compliance with Building Code.
3. E.O.R.s review of the shop drawings consists of checking general conformance with structural drawings. Design accuracy of such product, dimensions and quantity of the product is not reviewed by E.O.R..

SHEET INDEX

AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER BLYTHE

141 S 2ND STREET
BLYTHE CA, 92225

BUILDER

DESIGN CONSULTANT

SILLMAN
7515 Metropolitan Dr, Suite 400
San Diego, CA 92108
T 619.294.7515
F 619.294.97592
www.sillmanarch.com

DESIGN CONSULTANT

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From The Ground Up
23172 Plaza Pointe Dr, Suite 145
Laguna Hills, CA 92653
T 949.954.7244
info@corestructure.com

REGISTRATION STAMPS

REGISTERED PROFESSIONAL ENGINEER
SRIRAM NOOKALA
No. S 8772
EXP. 9/30/22
STRUCTURAL
STATE OF CALIFORNIA

CLIENT

PALO VERDE COLLEGE
WHERE KNOWLEDGE TAKES ROOT AND OPPORTUNITY GROWS

ISSUE

MARK	DATE	DESCRIPTION

DESIGNER PROJ. NO.	A#04-120944
DRAWN BY:	SILLMAN
CHECKED BY:	SILLMAN
SCALE:	
SUBMITTAL:	06/29/22

KEY PLAN

SHEET TITLE

GENERAL NOTES & REQUIREMENTS

SHEET NUMBER

S-0.10

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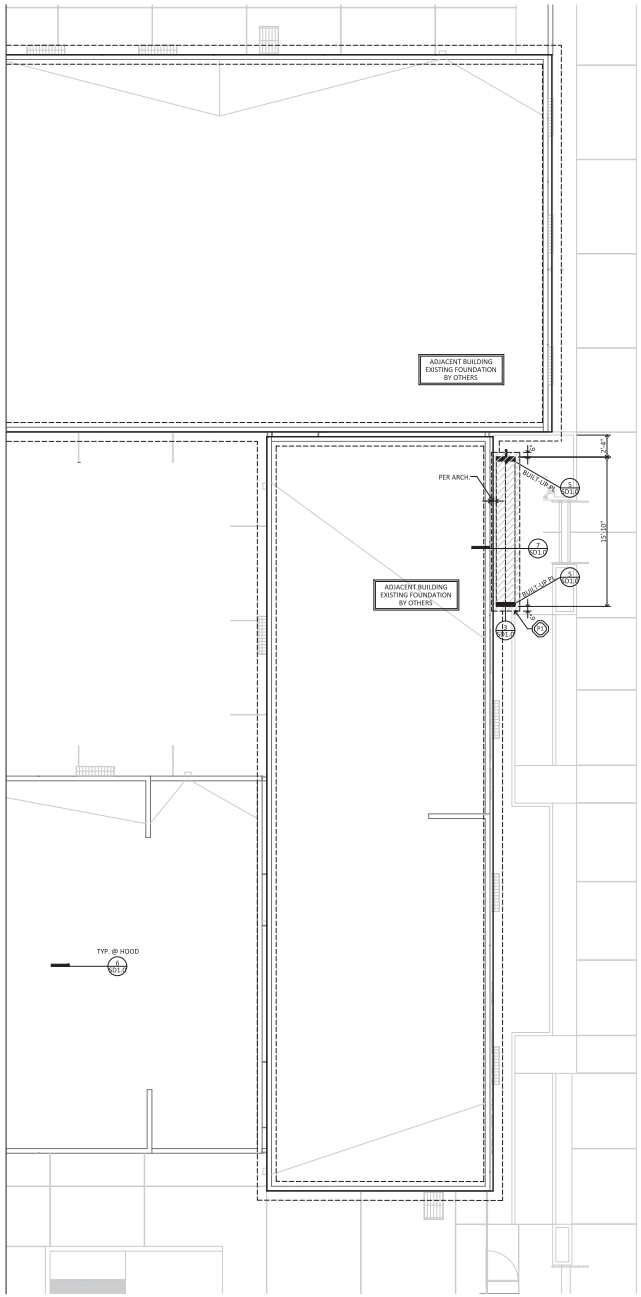
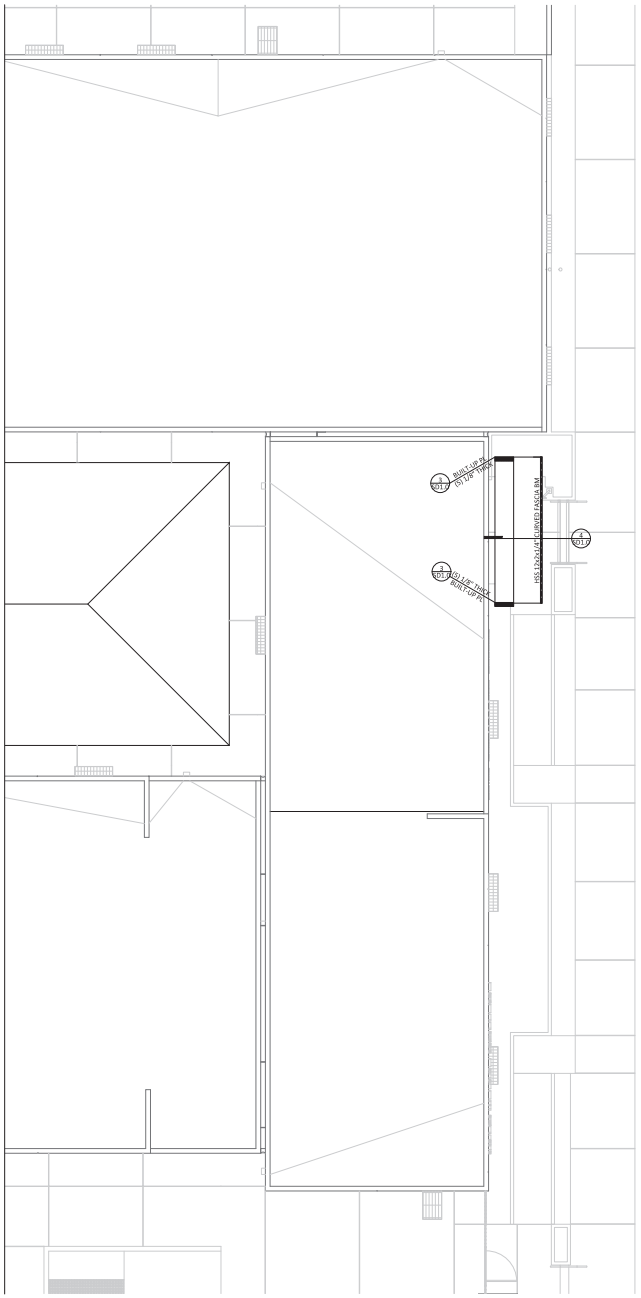


FOUNDATION PLAN

SCALE : 3/16" = 1'-0"



ROOF FRAMING PLAN

SCALE : 3/16" = 1'-0"

SYMBOLS LEGEND

EXISTING FOOTING — NEW FOOTING

DETAIL NUMBER DETAIL SHEET NUMBER

FOUNDATION NOTES

1. REFER TO S-0.10 SHEET FOR MORE INFORMATION.
2. TOP OF ALL EXTERIOR FOOTING, GRADE BEAM FOOTING, PAD FOOTING, OR FLAG POLE FOOTING TO BE MIN. 0" BELOW FINISH GRADE.

PAD SCHEDULE

SYM.	PAD TYPE
P1	36" WIDE x 18" DEEP PAD FOOTING w/(4)#5 E/W (U.N.O.)

SYMBOLS LEGEND

DETAIL NUMBER DETAIL SHEET NUMBER

FRAMING NOTES

1. REFER TO S0.10 SHEET FOR MORE INFORMATION.
2. ALL VERTICAL PIPES THROUGH PLATES AND/OR SOLID RIM BEAMS MUST BE DRILLED CLEAN CUT W/ 1/16" TOLERANCE. DO NOT NOTCH OR CUT PLATES.
3. USE SIMPSON S/LBV, S/B OR S/BA HANGERS FOR CONNECTION OF CFS JOISTS TO OTHER FRAMING MEMBERS (U.N.O.)

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REGISTRATION STAMPS

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SIVARAM NOOKA
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EXP. 9/30/22
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DRAWN BY:	SILLMAN
CHECKED BY:	SILLMAN
SCALE:	
SUBMITTAL:	06/29/22

KEY PLAN

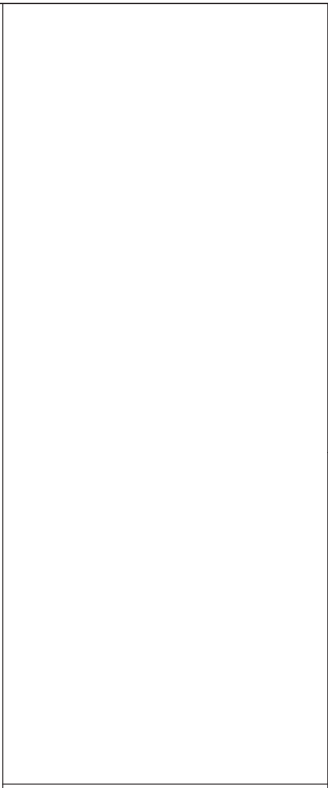
SHEET TITLE

FOUNDATION PLAN

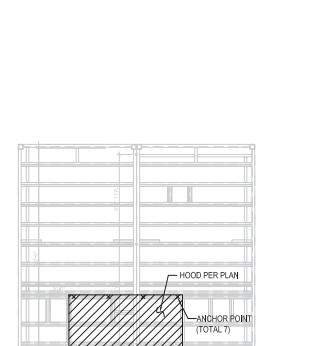
SHEET NUMBER

S-1.0

File Path:

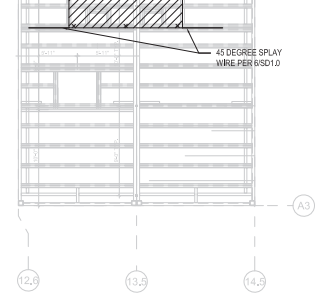


CMU WALL DETAIL 8

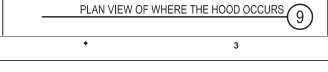


NOTE: SEE DETAIL 3 & S5D1.0 FOR MORE INFORMATION NOT SHOWN

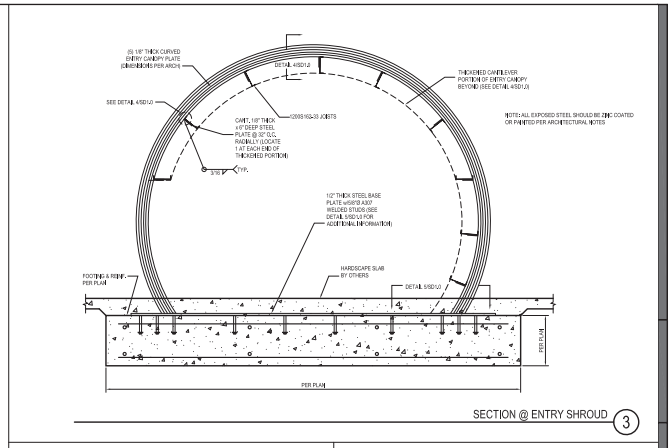
CONNECTION DETAIL 7



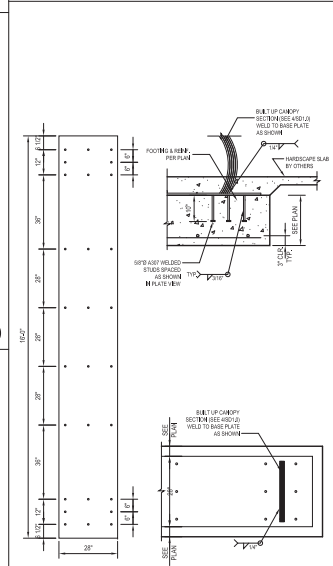
EXHAUST HOOD CONNECTION 6



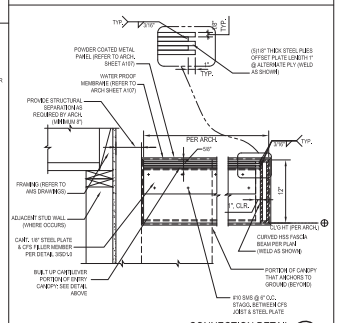
PLAN VIEW OF WHERE THE HOOD OCCURS 9



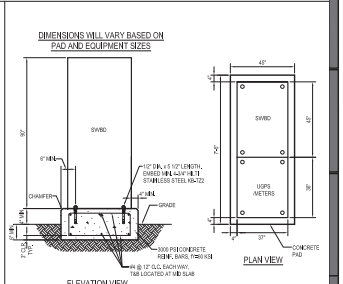
SECTION @ ENTRY SHROUD 3



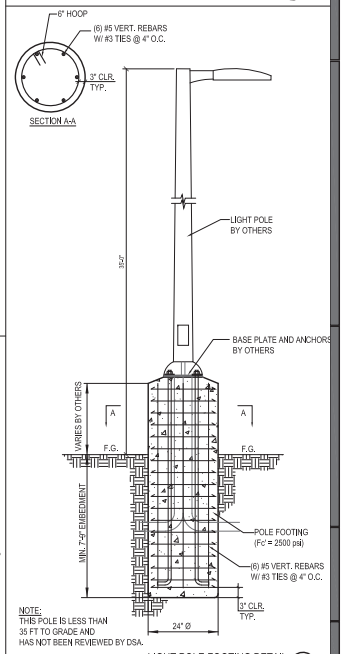
CONNECTION DETAIL 5



CONNECTION DETAIL 4
NOT TO SCALE



SWITCH BOARD ANCHORING DETAIL 2



NOTE:
THIS POLE IS LESS THAN 35 FT TO GRADE AND HAS NOT BEEN REVIEWED BY DSA.

LIGHT POLE FOOTING DETAIL 1

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REGISTERED PROFESSIONAL ENGINEER SIMHRAM NOORI No. S 6772 EXP. 9/30/22 STRUCTURAL STATE OF CALIFORNIA

CLIENT

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DESIGNER PROJ. NO.	A#04-120944
DRAWN BY:	SILLMAN
CHECKED BY:	SILLMAN
SCALE:	
SUBMITTAL:	06/29/22

KEY PLAN

SHEET TITLE

STRUCTURAL DETAILS

SHEET NUMBER

SD1.0

File Path:

GENERAL REQUIREMENTS

GENERAL REQUIREMENTS

1. Work performed shall comply with the following:
2. These General Requirements unless otherwise noted on plans or specifications.
3. Building Code - CBC 2019
4. All applicable local, State and Federal Codes, Ordinances, Laws, regulations and Protective Covenants governing the site of work.
5. Standard Specifications of ASTM as noted herein and as required by the Building Code.
6. All work needs to be performed by qualified and experienced contractors familiar with this type of project.
7. In case of conflict, the more stringent requirement shall govern.
8. On site verification of all dimensions and conditions shall be the responsibility of the contractor and sub-contractors. Noted dimensions take precedence over scale of drawings.
9. Engineer or architect of record is to be notified immediately by the contractor should any question arise or any discrepancy be found pertaining to the working drawings and/or specifications.
10. No deviations from these requirements and structural details shall be made without the written approval of E.O.R.. Approval by the inspector does not constitute authority to deviate from plans or specifications.
11. The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc., is the sole responsibility of the contractor, and has not been considered by the architect or engineer. The contractor is responsible for the stability of the structure prior to the application of all shear walls, roof and floor diaphragms, and finish materials. The contractor shall provide the necessary bracing to provide stability prior to the application of the aforementioned materials. Observation visits to the site by the architect or structural engineer shall not imply the assumption of any responsibility in this regard.
    The builder has requested, contracted with and is compensating E.O.R. for the limited services of providing the minimum structural engineering drawings required, when combined with the other builders' consultants drawings, to obtain a building permit for this project. These drawings are not intended to, nor do they detail all conditions, identify all materials, or define or limit the scope of work required to complete the project. The builder has requested, accepted, and represented that the he will select all materials and manufacturers, qualify and select all installers, direct all ways and means of construction, and provide all subcontractors additional information, above and beyond these drawings, required to complete the project in conformance with all governing agencies and the work will meet or exceed accepted industry standards.
12. Special inspection per Building Code Sec.1704 Chapter 17A is required & applies to the types of work indicated on sheet S-0.11 (Note: Special inspectors qualification and responsibilities should comply with Building Code Section 1701 Requirements.) and in accordance with the DSA 103 form for this project.
13. Structural analysis for this project is done per applicable Building Code at the time of design considering standard of care.
14. Upon completion of above by the engineer & prior to start of construction, contractor is responsible to check all dimensions, coordinate with the work of other consultants & other trades to ensure compliance with his/her requirements.
15. E.O.R. shall have no liability for waterproofing or moisture transmission issues, whether related to concrete slabs, footings, foundations, or otherwise. The General Contractor/ Owner shall be responsible for the proper installation of the waterproofing and moisture protection specified by other.

DESIGN CRITERIA

1. SOILS
    Foundation engineering has been predicated on data and recommendations contained in the soils report by: LandMark Consultants, Inc.
    SOILS REPORT NO. LP21061, DATE: 12/03/2021, Soil Bearing Pressure: 2000 PSF
    Site Preparation, grading, tests and inspections/field observation recommended by Soils Report shall be strictly followed. Written Approval from soils engineer shall be obtained prior to construction of foundations. Verify minimum foundation depth, width, reinforcing steel & additional expansive soil requirements with the soils report and if they are more restrictive, notify E.O.R.
2. LATERAL LOADS:
    Occupancy Category: II
    Seismic Design Category: D
    Seismic Importance Factor (I) = 1.0
    Wind Speed: 99 MPH
    Wind Exposure: C
    Site Class = D-Default
    S_s : 0.288 S_{DS} : 0.301 C_{CV} : 0.05 C_{AS} : 0.05
    S_1 : 0.154 S_{D1} : 0.235 R_V : 6.5 R_X : 6.5
    Total Design Base Shear: V_x = 0.031W V_y = 0.031W
    Basic Seismic Force Resisting System: CANTILEVERED STEEL COLUMN SYSTEM
    Analysis Procedure: Equivalent lateral force procedure
3. DESIGN LOADS:
    Roof Loads
    Dead Load = 15 psf
    Live Load = 20 psf
    Total = 35 psf
4. TYPICAL ROOF SHEATHING
    15/32" APA rated sheathing Exp 1 with a min. panel index of 32/16.
    Refer to NER 108 for installation and conditions of use.
    3/4" APA RATED SHEATHING EXP1
    B.N.: #10 SELF TAPPING SCREW @ 6" O.C.
    E.N.: #10 SELF TAPPING SCREW @ 6" O.C.
    F.N.: #10 SELF TAPPING SCREW @ 12" O.C.
    *Note: All structural rated panels must be stamped by one of the following approved agencies, APA, PFS/TECO or Pittsburg.

COLD FORMED METAL FRAMING

1. All cold-formed metal framing shall confirm to AISI Standard S100-16 "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
2. Shall meet all the requirement AISI 2016 Latest Edition.
3. Contractor shall provide effective, full time quality control over all fabrication and erection complying with the pertinent codes and regulations of government agencies having jurisdiction.
4. Provide all accessories including, but not limited to, tracks, clips web stiffeners, anchors, fastening devices, resilient clips, and other accessories required for a complete and proper installation, and as recommended by the manufacturer for the steel members used.
5. Fastening of components shall be with ICC approved self-drilling screws or welding, screws or welds shall be of sufficient size to insure the strength of the connection all welds of galvanized steel shall be touched up with a zin-rich paint. All welds of carbon sheet steel shall be touched up with paint. Wire tying of components shall not be permitted.
6. Uniform and level joist bearing shall be provides at foundation walls by means of shims and/or non-setting grout.
7. All material and workmanship shall conform to AISI "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL", latest edition.
8. All welding shall be done by certified welders in full compliance with AWS D1.3
9. Unless noted otherwise on the drawings, screws shall be #10-16 self drilling, self tapping hex head screws with Head diameter of 0.333 in.
10. Provide minimum yield stress, F_y , of 50 Ksi for 16 gauge (54 mil) and thicker and 33 ksi for 18 gauge (43 mil) and thinner.
11. Cold-formed steel joists shall have punched enlarged service holes with stiffened flanges.

STRUCTURAL STEEL

GENERAL

1. All structural steel materials and construction shall conform to the requirements specified in Building Code, Chapter 22 & Reference.

MATERIALS

2. Steel shall be primed with a rust resistance primer & should conform to ASTM A36 (fy=36 ksi) as a minimum, unless otherwise noted. All W shapes to be ASTM A992. (fy=50 ksi)
3. Steel pipe shall conform to ASTM A53, Grade B (Fy=35 ksi).
4. Round HSS tubing shall conform to ASTM A500 Grade B (Fy=42 ksi)
5. Rectangular and square HSS tubing shall conform to ASTM A500, Grade B (Fy=46 ksi).
6. HP sections shall conform to ASTM A572, Grade 50 (Fy=50 ksi).
7. All structural welding procedures and materials shall conform to Building Code, Section 2204.1. All welding shall be by the shield metal arc welding process or the submerged arc welding process using E70XX-low hydrogen electrodes, unless otherwise noted.
8. All bolts for connections of steel members shall conform to Building Code, Section 2204.2 & ASTM A325N, unless otherwise noted. Holes for bolts should be drilled or punched & shall be 1/16" larger than bolt diameter.
9. Prefabricated steel moment frames per manufacturer. Steel moment frame manufacturer shall submit shop drawing, design calculations, and approved moment frame test report (ICC, IAMPO, or test per Appendix S of AISC SEISMIC PROVISION) to E.O.R. for review.
10. All welding and fabrication must be performed by a certified welder and a special inspector shall continuously inspect all structural field welding. Both shall be approved by the Building Official.

REINFORCED CONCRETE

GENERAL

1. All reinforced concrete materials and construction shall conform to Building Code, chapter 19.

MATERIALS

2. Cement shall conform to Section 1903 of Building Code and shall correspond to that on which the selection of concrete proportions were based.
3. Concrete aggregates shall conform to Building Code Section 1903.
4. Portland cement shall be Type I or II conforming to ASTM C150. For concrete in contact with soil containing sulfate $So_4 \geq 0.1\%$ by weight use Type II cement, containing sulfate $So_4 \geq 0.2\%$ by weight useType V cement. Weight percentage of So_4 shall be per soils report. Refer to Section 1904 of the Building Code for special exposure conditions as required by soils engineer & see corrosion engineer's recommendations for concrete exposed to corrosive elements.
5. Reinforcing steel shall conform to ASTM A615, Grade 60 for all sizes.
6. Dowels shall be equal in size and spacing.

STRENGTH

7. The (28 days) concrete compressive strength, $F'c$, shall be min 3000 psi U.N.O.
8. The (28 days) concrete compressive strength, $F'c$, for concrete in contact with soil with weight percentage of sulfate (So_4) ≥ 1.0 shall be 4000 psi, and with weight percentage of sulfate (So_4) ≥ 2.0 shall be 4500 psi. Special inspection is not required.
9. Special inspection is required for all concrete.
10. All reinforcing, dowels, holdowns, and other inserts shall be secured in position and approved by the local building official prior to the pouring of any concrete.
11. Min. concrete cover for reinforcing:
    a- Concrete, placed against earth not formed - 3"
    b- Concrete formed or trowaled - 2"
    c- Walls and curbs - 1 1/2"
    d- Slab on grade - at center

FOUNDATION TRACK

1. All holdowns and post anchors to be installed according to most current Simpson Strong Tie specifications and requirements of ICC-ER reports & shall be tied in place prior to foundation inspection. Dimensions are not furnished to Simpson holdowns. It is the responsibility of the contractor's superintendent, the framing contractor and the concrete contractor to locate these anchors in the exact location. Refer to details for proper installation.
2. Min. concrete width to be 8" for receiving PA, HPA & STHD's. Verify locations of holdowns and anchor bolts with rough framing to assure accurate installation.
3. Provide #3 X 24" dowel at 24" o.c. and 12" from the corner at all concrete stoops and porches.
4. Provide min. (1) #4 reinforcing for electrical ground, location to be verified with the electrical contractor.
5. Verify min. foundation depth, width, reinforcing steel and additional expansive soil requirements with valid soils report and if more stringent, they shall supersede the above minimum requirements. See note #7 under reinforced concrete for concrete strength.
6. Admixtures in concrete mix. containing calcium chlorides shall not be used.
7. Footings shall be examined and certified in writing by the project soil/geology engineer prior to inspection and placement of concrete.
8. Concrete shall be to the strength and slump as specified per structural design, and consist of Portland cement ASTM C-150 Type V per soils engineer's recommendations and Building Code section 1904 (ACI 318 section 19.3.2.1) when exposed to sulfate containing solutions. Aggregates shall be per ASTM C-33. Water to be clean and potable.
9. Placement shall be in one continuous operation unless otherwise specified. Slab surface shall be cured with 'Hunts' compound or equal or cured with other methods in accordance with good construction practice at contractor's option.
10. Contractor shall dampen slab underlayment of sand/membrane just prior to concrete placement to assist uniform concrete curing. Slabs must not be poured during or immediately after rainstorms. The specified sand over visqueen should not be saturated at the time of the concrete pour. Any free water trapped in the sand layer must be removed prior to the concrete pour.
11. The bottoms of footing excavations shall be level, clean and free of loose material or water when concrete is placed. Over excavation shall be filled with concrete or properly compacted fill that has been tested and approved by the soils engineer. Backfill shall not be placed until supporting foundations, walls and slab have attained sufficient strength to support lateral soil pressure.
12. Concrete placement shall be monolithic in one continuous operation uniformly placed and must be vibrated and well consolidated unless shown otherwise on plans. Dual pour is defined by ACI as to when 1st. & 2nd. pour can not be vibrated together.
13. Floor slab shall be poured level to 1/8" in 10'.
14. Requirements for pre-saturation of subgrade soils and daylight setback of exterior footings from any descending slope shall comply with soil report recommendations.
15. Finish grade around the perimeter of slab shall be constructed such that rain and irrigation water is drained away from the slab.
16. All site and pad preparation, such as but not limited to shading, compacting of the fill, pre-saturation, and concrete slab base preparation, shall be performed in accordance with the soil engineer's recommendation and soils report.
17. Foundation drawings prepared by E.O.R. reflect the structural requirements. Refer to architectural plans for dimensions, depressions, slope, shelves, patios, stoops and porches not shown in foundation drawings. Accuracy of the dimensions and final fit of the building shall be reviewed by the architect and the contractor prior to construction.
18. Waiting period for concrete slabs-on-grade prior to start of construction is as follows:
    a. Do not walk on slab until 24 hours after concrete has been poured.
    b. Begin wall framing 4-5 days after concrete poured.
    c. Begin roof/floor framing 7-10 days after concrete poured.
    d. Do not load roof prior to 14 days after concrete poured.
19. No pipes or conduits shall extend under isolated column footing or under continuous wall footings unless specifically detailed or approved by the architect, structural engineer and the building official.
20. The contractor shall arrange for observation of the work by the soils engineer. The following are requirements of the soils engineer:
    a. All footing excavations shall be inspected and certified in compliance with the soils report by the soil engineer prior to placing of concrete or steel.
    b. Soil conditions, including compacting and moisture content, shall be inspected and certified to be in compliance with the soil report by the soils engineer prior to placing of concrete or steel.
    c. A certificate of compliance shall be submitted to the building official prior to his foundation inspection and to the architect and structural engineer.
21. Prior to the contractor requesting a Building Department foundation inspection, the soil engineer shall advise the building official in writing that:
    a. The building pad was prepared in accordance with the soil report.
    b. The utility trenches have been properly backfilled and compacted
    c. The foundation excavations, the soils expansive characteristics and bearing capacity conform to the soils report.

DEFERRED APPROVAL:

1. Elements of structure that are marked "by others" shall be excluded from this scope of work.
2. General contractor shall first submit separate drawings for the above elements to the EOR for their review and if approved, then submit to the building officials for their review and approval.
3. City approval shall be obtained prior to installation of element subjected to deferred approval.

SHOP DRAWINGS

1. Sufficient copies of shop drawings for any member or product designed by entity other than E.O.R. shall be submitted to E.O.R. prior to fabrication for review. Contractor shall submit shop drawings of reinforcement for concrete masonry walls, concrete components with compressive strength more than 2500 psi and structural steel to E.O.R. to review and obtain approval prior to fabrication. Shop Drawings shall be original drawings prepared for the project specific information, drawn accurately to scale. Direct copies and modified reproductions of the Contract Documents will not be accepted. Allow sufficient time from the receipt of complete submittal for review and processing by E.O.R..
2. Review of shop drawings by E.O.R. does not relieve the engineer responsible for the design or the contractor from compliance with Building Code.
3. E.O.R.s review of the shop drawings consists of checking general conformance with structural drawings. Design accuracy of such product, dimensions and quantity of the product is not reviewed by E.O.R..

SHEET INDEX

AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER BLYTHE

141 S 2ND STREET
BLYTHE CA, 92225

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REGISTRATION STAMPS

REGISTERED PROFESSIONAL ENGINEER
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Exp. 9/30/22
STRUCTURAL
STATE OF CALIFORNIA

CLIENT

PALO VERDE COLLEGE
WHERE KNOWLEDGE TAKES ROOT AND OPPORTUNITY GROWS

ISSUE

MARK	DATE	DESCRIPTION

DESIGNER PROJ. NO.	A#04-120944
DRAWN BY:	SILLMAN
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SUBMITTAL:	06/29/22

KEY PLAN

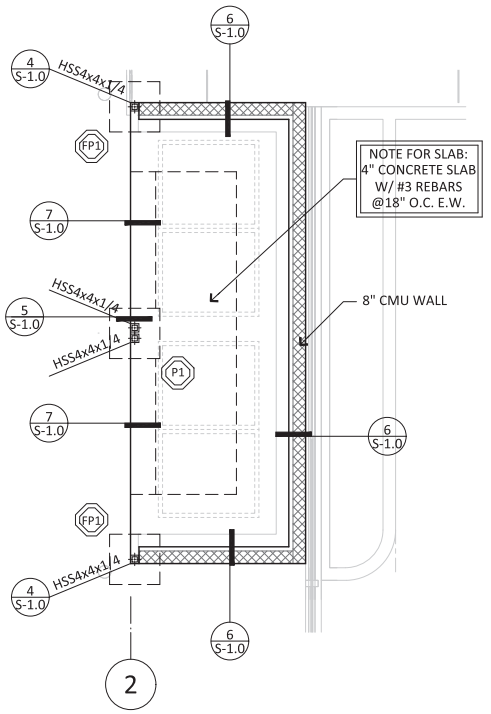
SHEET TITLE

GENERAL NOTES & REQUIREMENTS

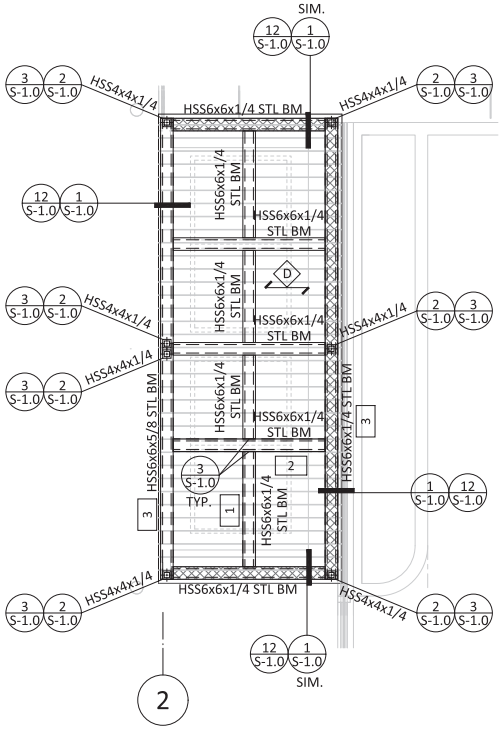
SHEET NUMBER

S-0.10

File Path:



FOUNDATION PLAN
TRASH ENCLOSURE
SCALE : 1/2" = 1'-0"



ROOF FRAMING PLAN
TRASH ENCLOSURE
SCALE : 1/2" = 1'-0"

SYMBOLS LEGEND

DIRECTION OF ROOF MEMBER PER SCHEDULE, REFER TO HATCHED WALLS ON PLANS FOR INTERMEDIATE BR'G

DETAIL NUMBER DETAIL SHEET NUMBER

BEAM NUMBER, REFER TO E.O.R. CALCULATIONS

FOOTING

REBAR

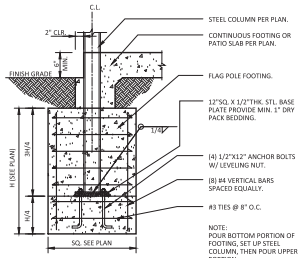
SHEAR LINE NUMBER, REFER TO E.O.R. CALCULATIONS

PAD SCHEDULE

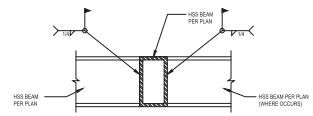
SYM.	PAD TYPE
C	2'-0" SQ. x 12" DEEP PAD W/ (3) #4 E.W.
D	2'-0" SQ. x 30" DEEP FLAGPOLE FOOTING

FRAMING SCHEDULE

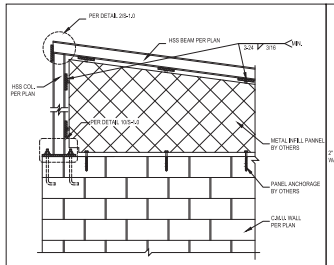
20 GAUGE TYPE B 1-1/2" METAL DECK BY VERCO OR EQUIVALENT WITH #12 SCREWS, MIN. 14 IN 36" WIDE PANEL SUPPORTS, AND SIDELAPS CONNECTED AT 24" O.C. #12 SCREWS SHALL BE SELF DRILLING, SELF TAPPING SCREWS WITH A MIN. WASHER DIAMETER OF 5/16" AND WASHER THICKNESS OF 0.05". THE SCREWS MUST BE COMPLIANT WITH ASTM C1513.



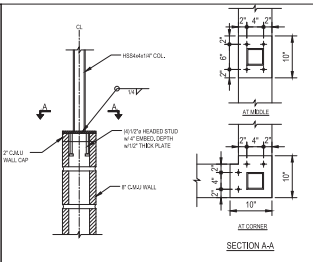
FLAG POLE FOOTING 4



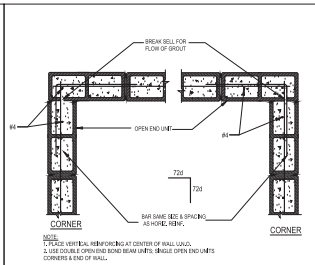
CONNECTION DETAIL 3



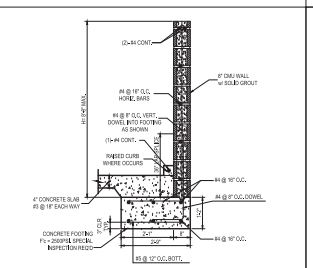
INFILL PANEL DETAIL 12



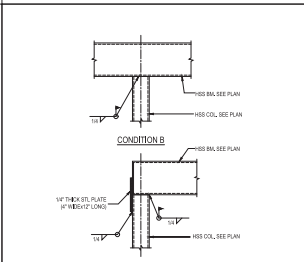
TYPICAL POST AT MASONRY WALL 10



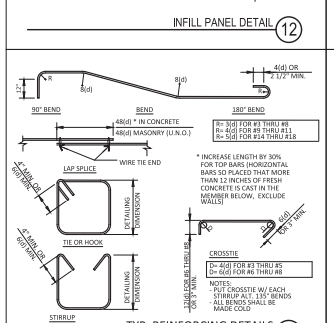
TYPICAL SINGLE CURTAIN REINFORCEMENT 8



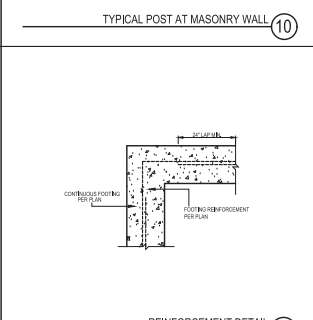
CMU WALL DETAIL 6



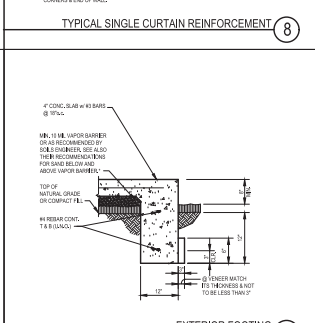
CONNECTION DETAIL 2



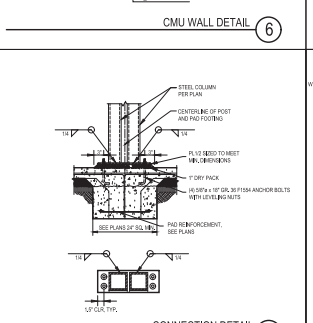
TYP. REINFORCING DETAILS 11



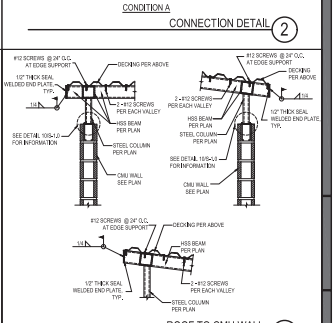
REINFORCEMENT DETAIL 9



EXTERIOR FOOTING 7



CONNECTION DETAIL 5



ROOF TO CMU WALL 1

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KEY PLAN

SHEET TITLE

STRUCTURAL PLAN
TRASH ENCLOSURE

SHEET NUMBER

S-1.0A

File Path:

ELECTRICAL LEGEND

GENERAL

- 1 / E0.1 — DETAIL NUMBER DESIGNATION; SHEET DETAIL APPEARS (ILLUSTRATED ON)
- 1 — NOTE REFERENCE

POWER

- 48" — INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR
- PH OR — PHASE
- JUNCTION OF OUTLET BOX CEILING OR WALL MOUNTED AS INDICATED. LOCATE ABOVE ACCESSIBLE CEILING UON.
- DUPLEX RECEPTACLE, FLUSH MOUNTED, THE CENTER SHALL BE INSTALLED NOT LESS THAN 15" AFF TO BOTTOM UNLESS NOTED OTHERWISE.
- GFI — DUPLEX RECEPTACLE, FLUSH MOUNTED, THE CENTER SHALL BE INSTALLED NOT LESS THAN 15" AFF TO BOTTOM OUTLET BOX UNLESS NOTED OTHERWISE. (GROUND FAULT INTERRUPTER)
- SURFACE MOUNTED PANELBOARD
- FLUSH MOUNTED PANELBOARD
- GROUND
- SWITCH AND FUSE DESIGNATION
  - 3P — NUMBER OF POLES
  - 60AF — FUSE SI E
  - 100AS — SWITCH SI E
- CIRCUIT BREAKER
  - 3P — NUMBER OF POLES
  - 225AT — AMPS TRIP
  - 225AF — AMPS FRAME
- F — DISCONNECT SWITCH "F" INDICATES FUSED TYPE LOCKABLE.
- COMBINATION DISCONNECT SWITCH AND MAGNETIC STARTER.
- M — MOTOR RATED TOGGLE SWITCH

RACEWAYS

- CONDUIT TERMINATED AND CAPPED
- WIRING OR CONDUIT CONCEALED IN WALL OR CEILING
- WIRING OR CONDUIT EXPOSED
- WIRING OR CONDUIT CONCEALED UNDERGROUND, OR IN FLOORS ABOVE GRADE LEVEL.
- FLEXIBLE CONDUIT
- 1ELA-1,3,5 — CONDUIT HOMERUN TO PANELBOARD. TEXT INDICATES ELECTRICAL PANEL DESIGNATION AND CIRCUIT NUMBERS. MINIMUM CONDUIT SI E SHALL BE 3/4". UNLESS OTHERWISE NOTED, PROVIDE BRANCH CIRCUIT AND FEEDER HOMERUNS WITH NOT MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRAL CONDUCTORS AND ONE GROUND CONDUCTOR IN A SINGLE RACEWAY. PROVIDE ALL BRANCH CIRCUITS WITH A SEPARATE NEUTRAL CONDUCTOR. MINIMUM CONDUCTOR SI E TO BE 12 AWG.

INFORMATION TECHNOLOGY

- WAP — WIRELESS ACCESS POINT-WAP (WALL/CEILING MOUNTED)
- SECURITY CAMERA. CEILING MOUNTED. (360 POWERED OVER ETHERNET) PROVIDE CONDUIT ONLY.
- SECURITY CAMERA. WALL/SURFACE MOUNTED. (360 POWER OVER ETHERNET) PROVIDE CONDUIT ONLY.
- SECURITY CAMERA. JUNCTION BOX RECESSED MOUNTED. (360 POWER OVER ETHERNET). PROVIDE CONDUIT ONLY.

ELECTRICAL GENERAL NOTES

1. ELECTRICAL INSTALLATION, MATERIALS, AND METHODS SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES INCLUDING THE CURRENT CALIFORNIA ELECTRICAL CODE (CEC).
2. UNLESS OTHERWISE NOTED OR SHOWN, THESE DRAWINGS AND SPECIFICATIONS DO NOT INDICATE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNI UES, SE UENCES AND PROCEDURES.
3. ALL E UIPMENT SUCH AS ENCLOSURES, METALLIC CONDUITS, JUNCTION BOXES, FIXTURES, AND ALL OTHER APPARATUS SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED PER CEC ART. 250.
4. ALL EMPTY CONDUITS SHALL BE E UIPPED WITH PULL ROPES.
5. ALL JUNCTION BOXES SHALL BE MOUNTED IN ACCESSIBLE LOCATIONS.
6. CONDUITS CROSSING STRUCTURAL SEPARATIONS SHALL BE CONSTRUCTED WITH FLEXIBLE CONNECTION AND ABLE TO ACCOMMODATE THE CALCULATED DIFFERENTIAL MOTION DURING EARTH UAKES.
7. COLOR CODING: CONDUCTORS AND CABLES SHALL BE COLOR CODED BY THE MANUFACTURER FOR THE ENTIRE LENGTH. WRAPPING COLOR TAPES ARE NOT PERMITTED. COLOR CODING SHALL BE AS FOLLOWS:

	120/208V SYSTEM
PHASE A:	BLACK
PHASE B:	RED
PHASE C:	BLUE
NEUTRAL:	WHITE
GROUND	GREEN

PROVIDE SEPARATE NEUTRAL WIRE FOR EACH BRANCH CIRCUIT. USE COLOR SPIRAL TO MATCH ASSOCIATED PHASE CONDUCTOR ON NEUTRAL WIRES.

ABBREVIATIONS

A	AMPERE	LTG	LIGHTING
ADA	AMERICAN DISABILITIES ACT	LV	LOW VOLTAGE
AC	ALTERNATING CURRENT		
AF	AMP FRAME	MDF	MAIN DISTRIBUTION FRAME
AFF	ABOVE FINISHED FLOOR	MCA	MINIMUM CIRCUIT AMPS
AIC	AMPERE INTERRUPTING CAPACITY	MOCP	MAXIMUM OVERCURRENT PROTECTION DEVICE
AMS	AMERICAN MODULAR SYSTEM	MTD	MOUNTED
AS	AMP SWITCH	MPOE	MAIN POINT OF ENTRY
C	CONDUCTOR, CONDUIT	NTS	NOT TO SCALE
CKT	CIRCUIT	NFPA	NATIONAL FIRE PROTECTION
CU	COPPER	NEC	NATIONAL ELECTRIC CODE
E	EXISTING	PROVIDE	FURNISH, INSTALL, CONNECT, AND TEST
ELEC	ELECTRICAL	TYP	TYPICAL
FA	FIRE ALARM	UL	UNDERWRITER'S LABORATORY
GALV	GALVANI ED		
GFI	GROUND FAULT INTERRUPTER	V	VOLTAGE
GND,G	GROUND	W	WIRE
HP	HORSEPOWER	WAP	WIRELESS ACCESS POINT
		WP	WEATHERPROOF
IDF	INTERMEDIATE DISTRIBUTION FRAME	W/	WITH
KVA	KILOVOLT-AMPERE	XFMR	TRANSFORMER
KW	KILOWATT		
LED	LIGHT-EMITTING MODE		

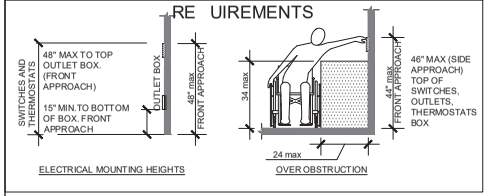
NFPA 72 10.6.5.2 COMPLIANCE

1. ENSURE THE CIRCUIT BREAKERS ARE PROVIDED WITH A RED LOCKING DEVICE TO LOCK THE HANDLE IN THE ON POSITION. PROVIDE ELOCK-FA CIRCUIT LOCKOUT KITS OR APPROVED E UAL.
2. ENSURE THE CIRCUIT BREAKERS ARE LABELED "FIRE ALARM CIRCUIT CONTROL"
3. FIRE ALARM PANEL TO BE IN DEDICATED CIRCUIT.
4. ENSURE THE CIRCUIT BREAKERS ID AND LOCATION ARE LABELED AT THE FIRE ALARM CONTROL PANEL AND REMOTE POWER SUPPLY PANELS
5. IDENTIFY ON PANEL SCHEDULES ALL FIRE ALARM CIRCUIT BREAKERS WITH RED MARKINGS.
6. FIRE ALARM PANEL TO BE LOCATED IN DATA ROOM 117(AUTHORIZED PERSONNEL ONLY).

KITCHEN NOTES

1. KITCHEN E UIPMENT TO HAVE LOCKABLE BREAKER.

ADA MOUNTING RE UIREMENTS



KEYNOTES

LEGEND

GENERAL NOTES

CLIENT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-120944 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 08/30/2022

PROJECT NAME

PALO VERDE COLLEGE
CHILD DEVELOPMENT CENTER BLYTHE

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BUILDER

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REGISTRATION STAMPS

REGISTERED PROFESSIONAL ENGINEER — 22213 — 10-31-23 — ELECTRICAL — STATE OF CALIFORNIA

AGENCY APPROVAL

ISSUE

MARK	DATE	DESCRIPTION

DESIGNER PROJ. NO.	
DRAWN BY:	SILLMAN
CHECKED BY:	SILLMAN
SCALE:	NONE
SUBMITTAL:	03/09/22

KEY PLAN

SHEET TITLE

GENERAL NOTES AND SYMBOLS

SHEET NUMBER

E0.1

File Path: