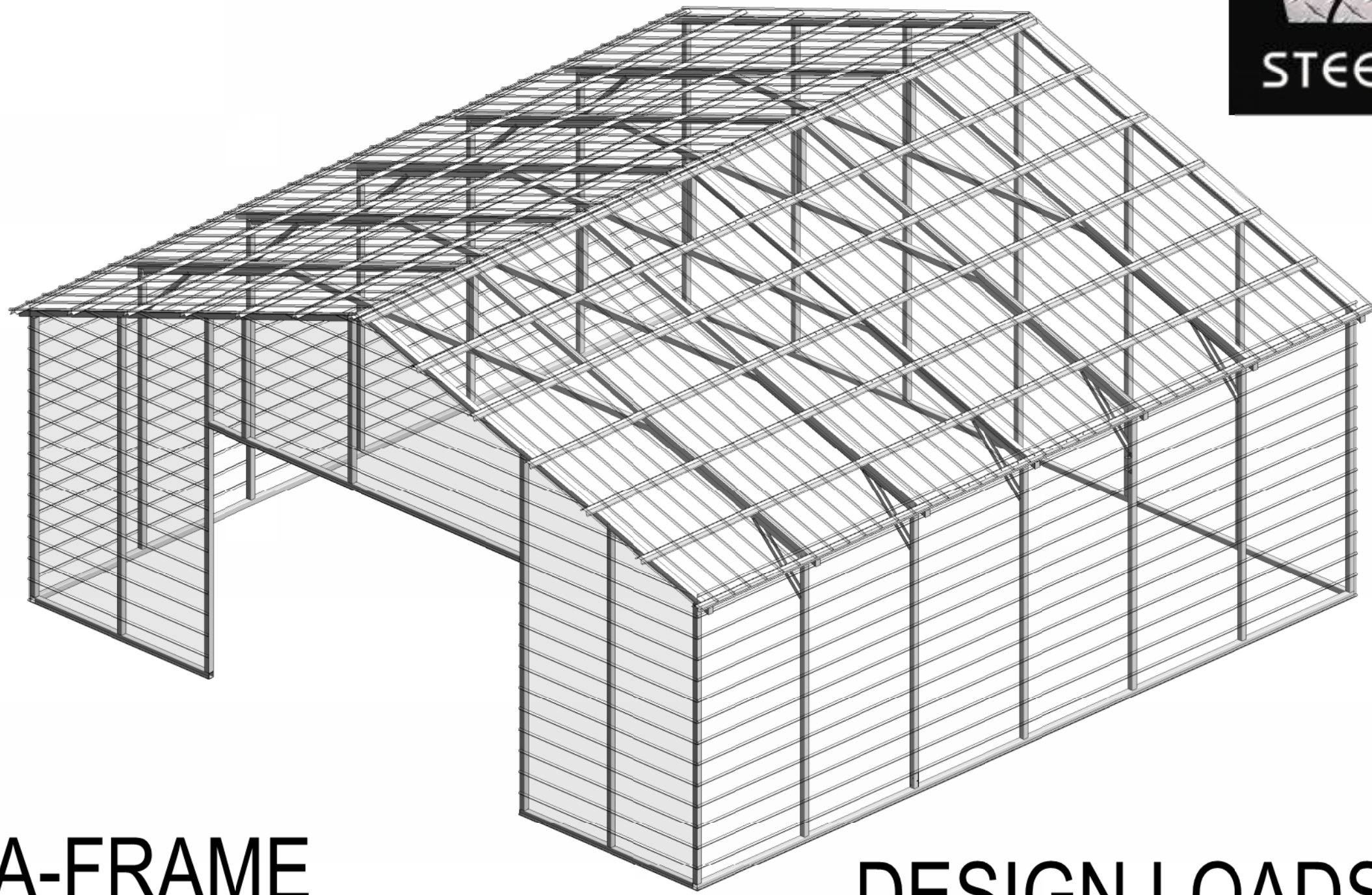
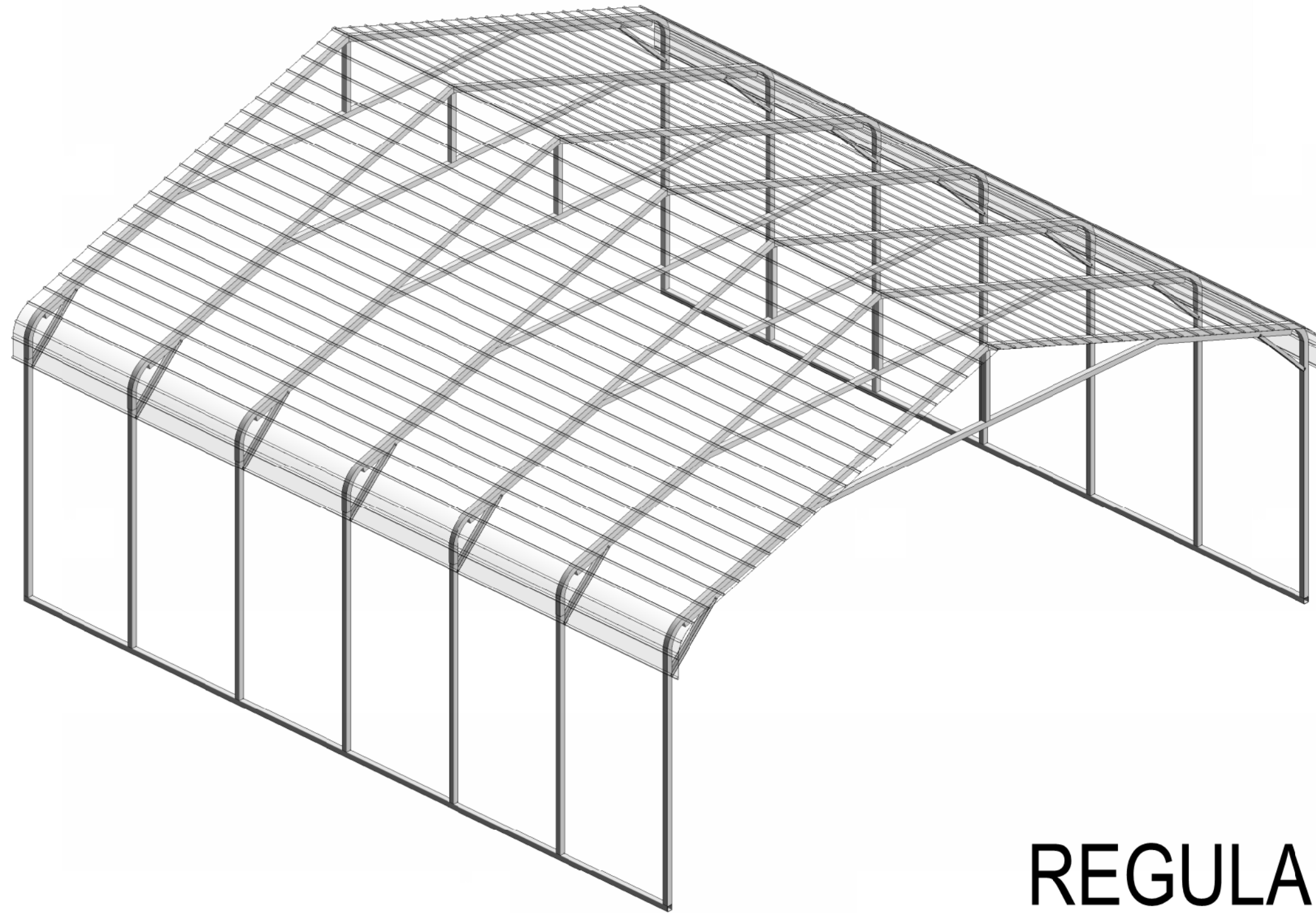


REV.



ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
STATE OF OHIO

REGULAR / A-FRAME
30'-0" WIDE
CARPORT STYLE BUILDING

DESIGN LOADS

BUILDING CODE:
2021 INTERNATIONAL BUILDING CODE
2024 OHIO BUILDING CODE

- A) SNOW LOAD:
I) GROUND SNOW (Pg).....30 - 40 PSF
II) SLOPED ROOF SNOW LOAD (Ps).....20 - 27 PSF
(AS PER SNOW LOAD SEE TABLE A3)
- B) DEAD LOAD.....4 PSF
- C) WIND LOAD:
105 MPH OR 115 MPH
CAT. I lw = 0.9
EXPOSURE C
- D) SEISMIC
(ANALYSIS BASED ON EQUIVALENT LATERAL
FORCE PROCEDURE)
I) SPECTRAL RESPONSE ACCELERATION
AT 1 SEC, S..... 0.25 MAX
II) SPECTRAL RESPONSE ACCELERATION
AT SHORT PERIODS, S.....0.23 MAX
III) SITE CLASS.....D

COLD-FORMED SPECIFICATION: AISI 2016, US LRFD
STATIC METHOD: FIRST ORDER ANALYSIS
MATERIAL: ASTM A653 GRADE 50 (W/ AISI COLD-FORMING
STRENGTH INCREASE)

SHEET LIST	
SHEET NUMBER	SHEET NAME
T01	COVER PAGE
A01	SCHEDULES & MEMBER SECTIONS
A02	FRAME SECTIONS & DETAILS
A03	SPACING SCHEDULES & ENCLOSURE NOTES
A04	PURLIN & GIRT SPACING SCHEDULES
A05	SHEATHING OPTIONS & DETAILS
A06	SIDEWALL FRAMING & OPENINGS
A07	SIDEWALL FRAMING DETAILS
A08	ENDWALL FRAMING
A09	ENDWALL FRAMING DETAILS
A10	CORNER BRACING DETAILS
A11	OPTIONAL LEAN-TO ADDITION
F01	FOUNDATION OPTION 1 - CONCRETE SLAB
F02	FOUNDATION OPTION 2 - CONCRETE STRIP
F03	FOUNDATION OPTION 3 - CONCRETE PIERS
F04	FOUNDATION OPTION 4 - SOIL ANCHORS
F05	CONCRETE NOTES

THIS DOCUMENT IS TO SERVE FOR "NEW" STRUCTURE DOCUMENTED
HERE-IN ONLY AT ADDRESS LISTED. ALL OTHER STRUCTURAL AND CIVIL
DESIGN OUTSIDE OF THE SCOPE OF THESE DRAWINGS BY OTHERS.

BUILDING DATA

BUILDING USE: CARPORTS, BARNS
OCCUPANCY GROUP: U
CONSTRUCTION TYPE: VB - 0 HOUR RATING
HEIGHT ALLOWED: 40'-0"
ACTUAL HEIGHT: 17'-5" (MAX)
AREA ALLOWED: 5,500 SQ. FT.
BUILDING AREA: 1,500 SQ. FT. (MAX)
1,500 < 5,500

REV	PERMIT
DWN	GSM
JOB#	252771
SHT	17/17
DWN	GSM
CKD	TSM



CUSTOMER INFORMATION	DESIGN LOADS	BUILDING INFORMATION	CERTIFICATION VALIDITY NOTICE
OWNER: Keagan Morris ADDRESS: 2682 Bellwood Ave Bexley OH 43209 614 679 6257	GROUND SNOW (40PSF MAX): 30 SLOPED ROOF SNOW LOAD (28 PSF MAX): 28 ULTIMATE WIND SPEED (115 MPH MAX): 115	WIDTH (30' MAX): 26 LENGTH: 24 HEIGHT (12' MAX): 9 FRAME TYPE: <input checked="" type="checkbox"/> A. FRAME <input type="checkbox"/> REGULAR ENCLOSURE TYPE: <input checked="" type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> OPEN	DATE OF PLANS EXPIRATION: 12/31/2025 CERTIFICATION ON THIS DRAWING IS VALID UNTIL THE EXPIRATION DATE HAS BEEN REACHED

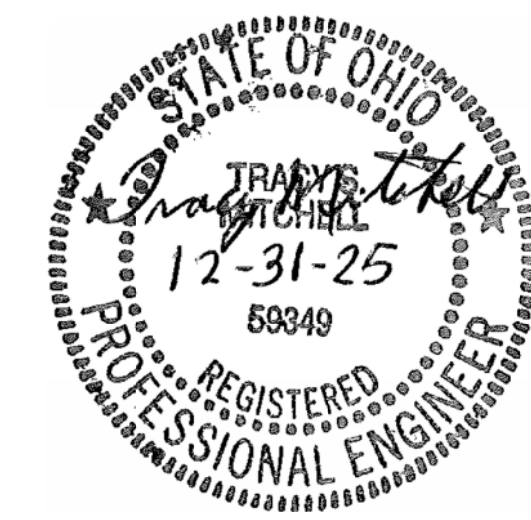
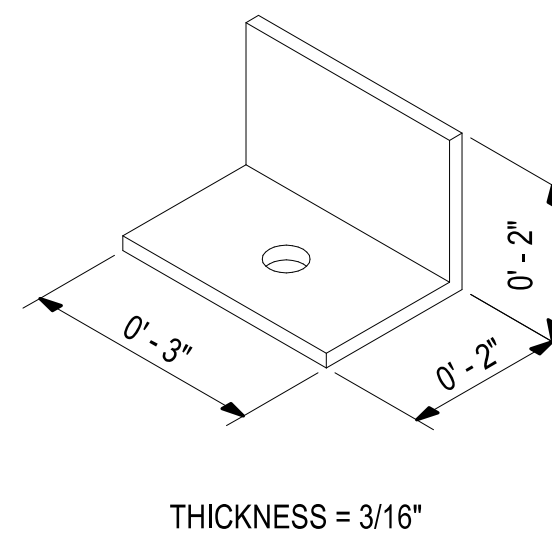
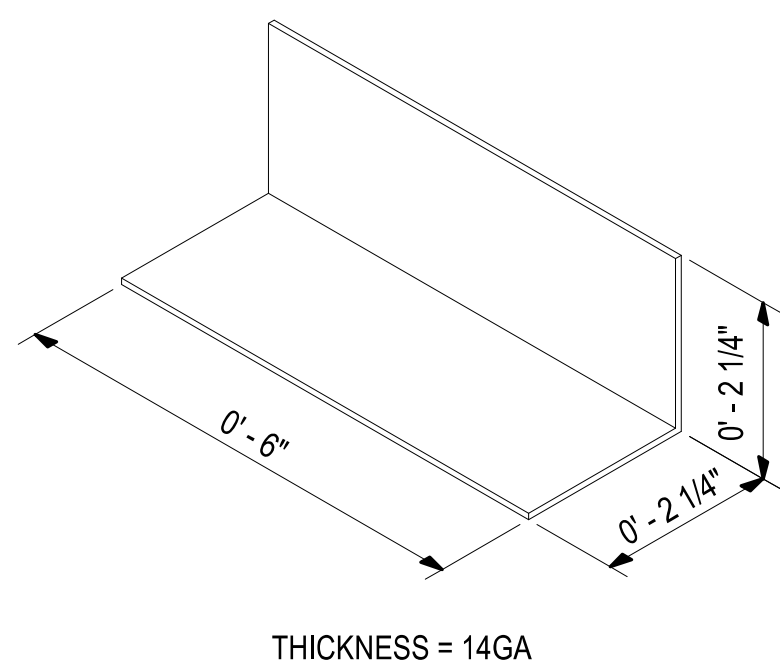
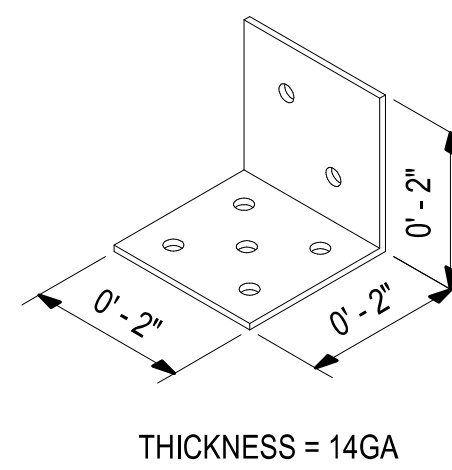
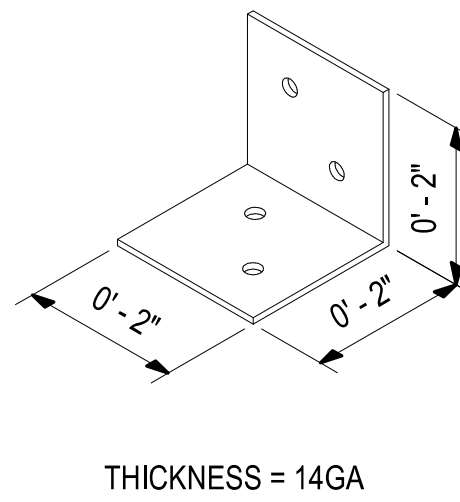
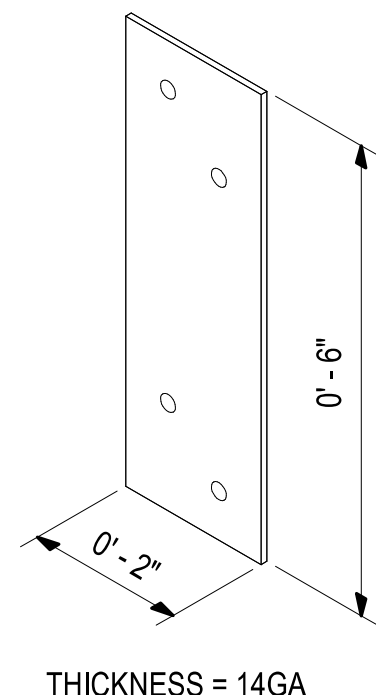
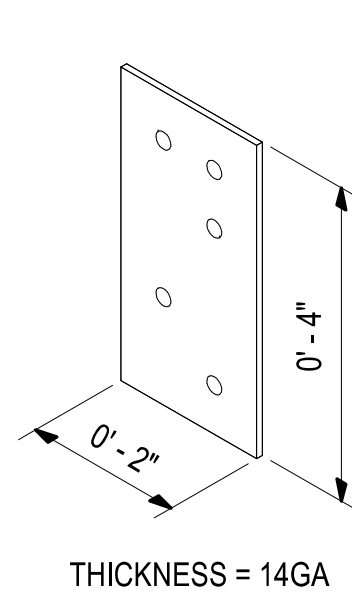
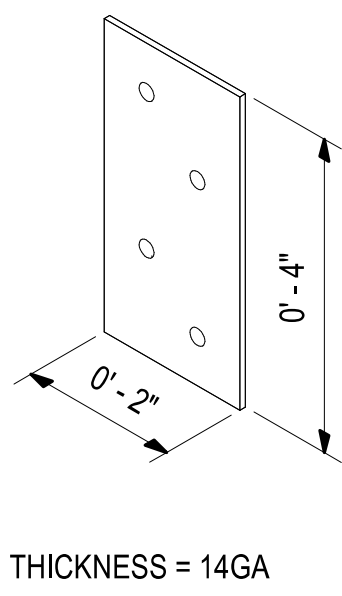
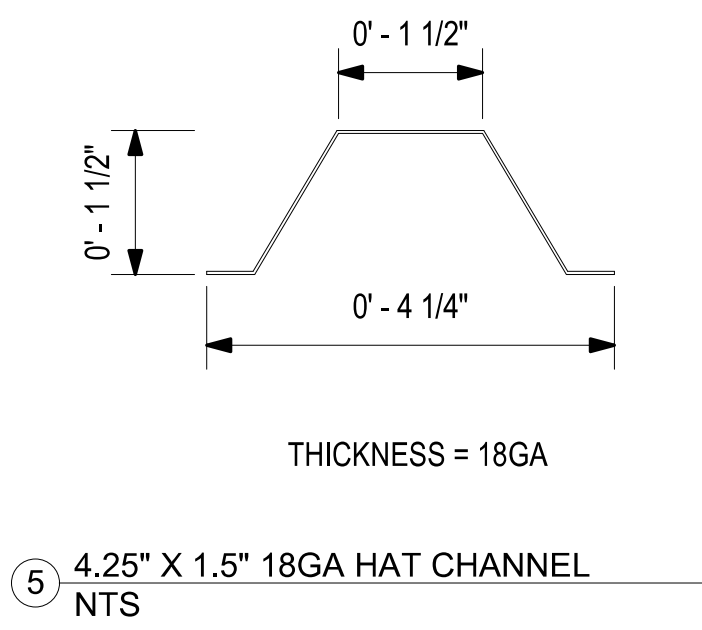
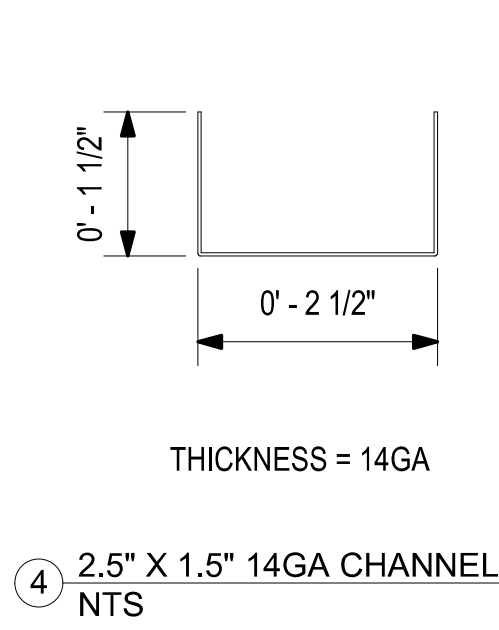
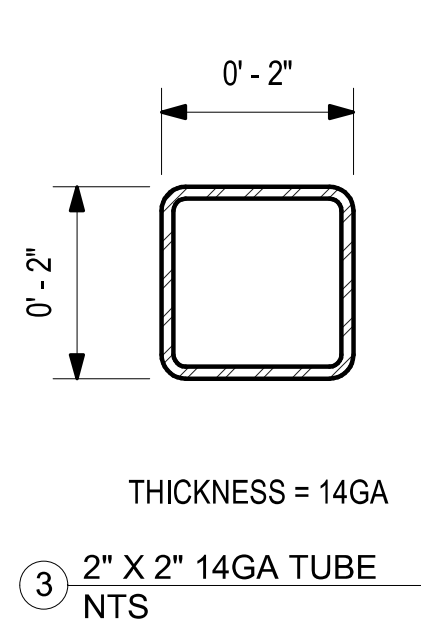
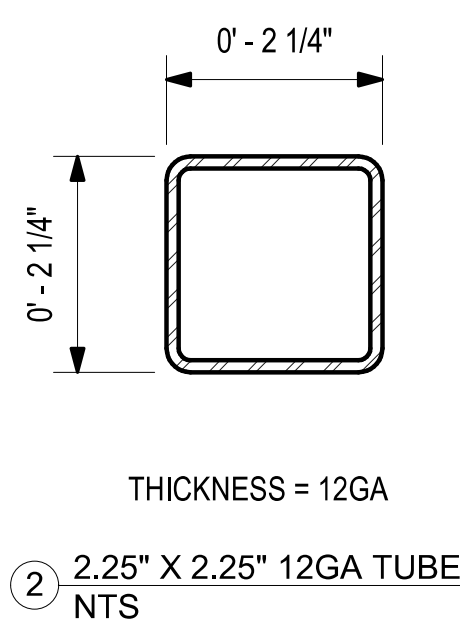
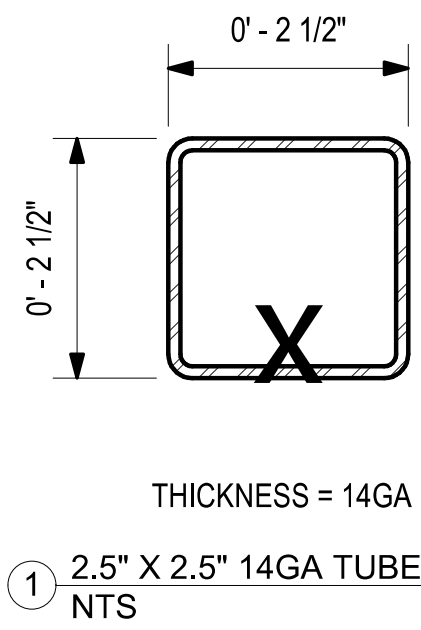
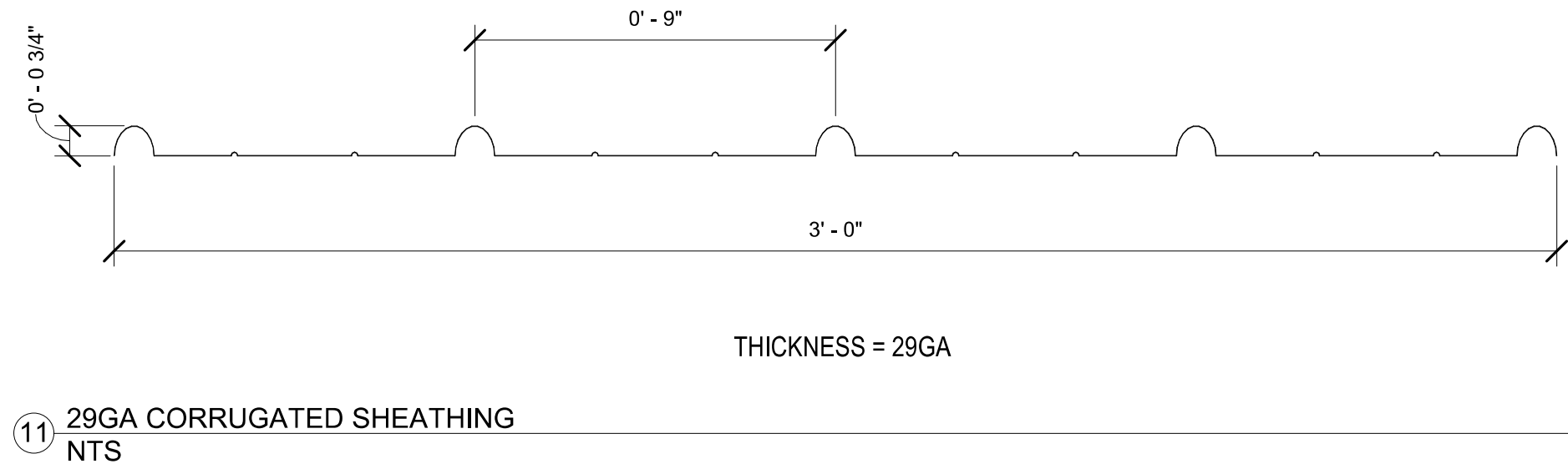
REV.

TABLE A1.1 - MEMBER PROPERTY			
NO.	LABEL	PROPERTY	DETAIL NO.
1	COLUMN POST	2.5" X 2.5" X 14GA TUBE	1
2	ROOF BEAM	2.5" X 2.5" X 14GA TUBE	1
3	BASE RAIL	2.5" X 2.5" X 14GA TUBE	1
4	PEAK BRACE	2.5" X 2.5" X 14GA TUBE	1
5	KNEE BRACE	2.5" X 1.5" X 14GA CHANNEL	4
6	CONNECTOR SLEEVE	2.25" X 2.25" X 12GA TUBE	2
7	BASE ANGLE	2" X 2" X 3" LONG X 3/16" ANGLE	13
8	PURLIN	4.25" X 1.5" X 18GA HAT CHANNEL	5
9	GIRT	2.5" X 2.5" X 14GA TUBE	1
10	SHEATHING	29GA CORRUGATED SHEET	11
11	END WALL POST	2.5" X 2.5" X 14GA TUBE	1
12	DOOR POST	2.5" X 2.5" X 14GA TUBE	1
13	SINGLE HEADER	2.5" X 2.5" X 14GA TUBE	1
14	DOUBLE HEADER	DOUBLE 2.5" X 2.5" X 14GA TUBE	1
15	SERVICE DOOR / WINDOW FRAMING	2.5" X 2.5" X 14GA TUBE	1
16	ANGLE BRACKET - 4 FASTENERS	2" X 2" X 2" LONG X 14GA ANGLE	9
17	ANGLE BRACKET - 7 FASTENERS	2" X 2" X 2" LONG X 14GA ANGLE	10
18	STRAIGHT BRACKET - 4 FASTENERS	2" X 2" X 4" LONG X 14GA PLATE	6
18B	STRAIGHT BRACKET - 5 FASTENERS	2" X 2" X 4" LONG X 14GA PLATE	7
19	LONG STRAIGHT BRACKET	2" X 2" X 6" LONG X 14GA PLATE	8
20	PB SUPPORT	2.5" X 2.5" X 14GA TUBE	1
21	DIAGONAL BRACE	2" X 2" X 14GA TUBE	3
22	GABLE BRACE	2" X 2" X 14GA TUBE	3
23	DB BRACKET	2.25" X 2.25" X 6" LONG X 14GA ANGLE	12
24	TRUSS SPACER	2.5" X 2.5" X 14GA TUBE	1
25	ALL FASTENERS	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER	

TABLE A1.2 - SHEATHING FASTENER SCHEDULE				
LOCATION	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
SPACING	9" C/C	MIN. 1	4 1/2" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER
*SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.

TABLE A1.3 - GAUGE THICKNESS				
GAUGE	29	18	14	12
THICKNESS (IN)	0.0135	0.049	0.083	0.109



ANS STEEL PROTOTYPE BUILDING
30" WIDE MAXIMUM
STATE OF OHIO

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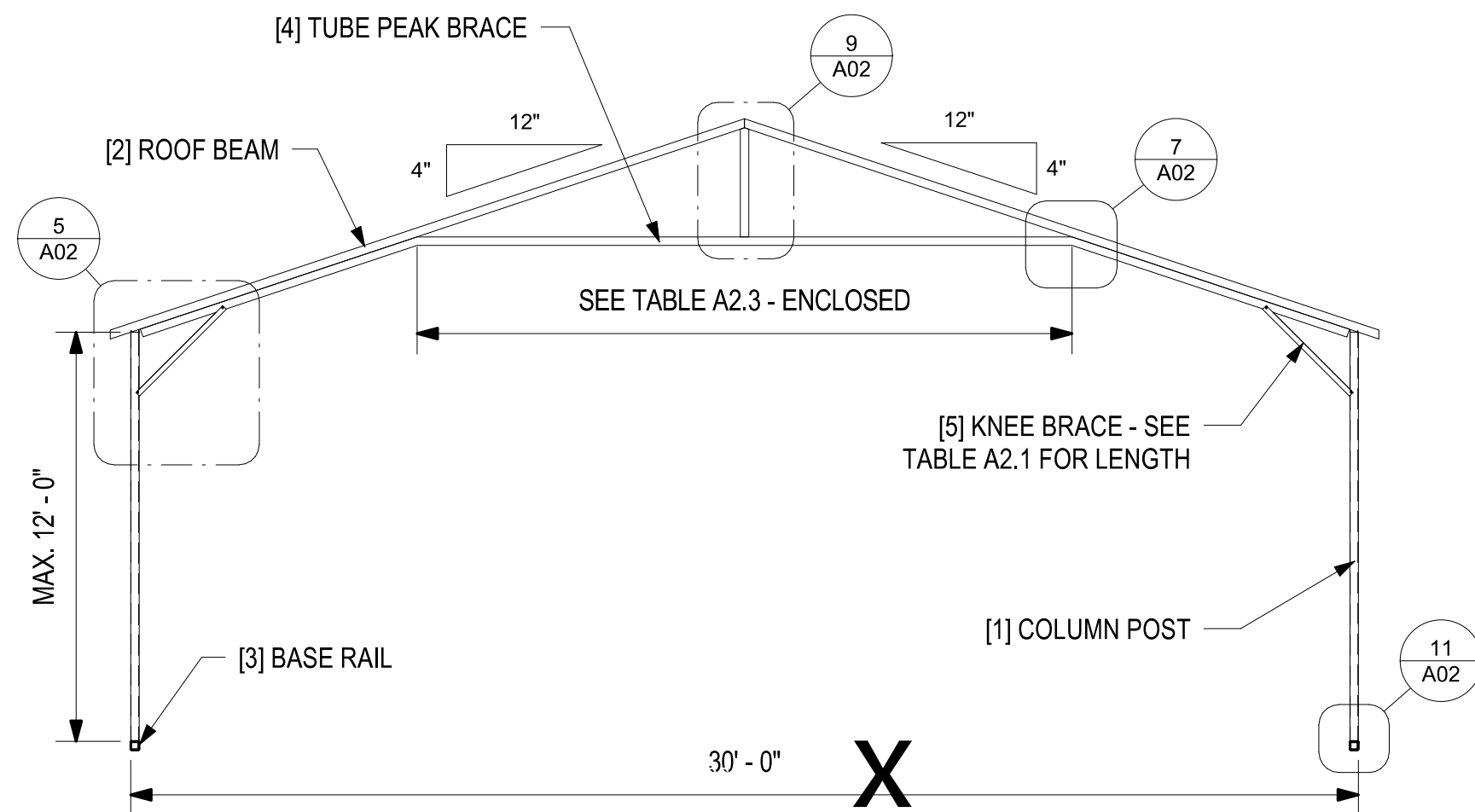
DWN GSM

CKD TSM

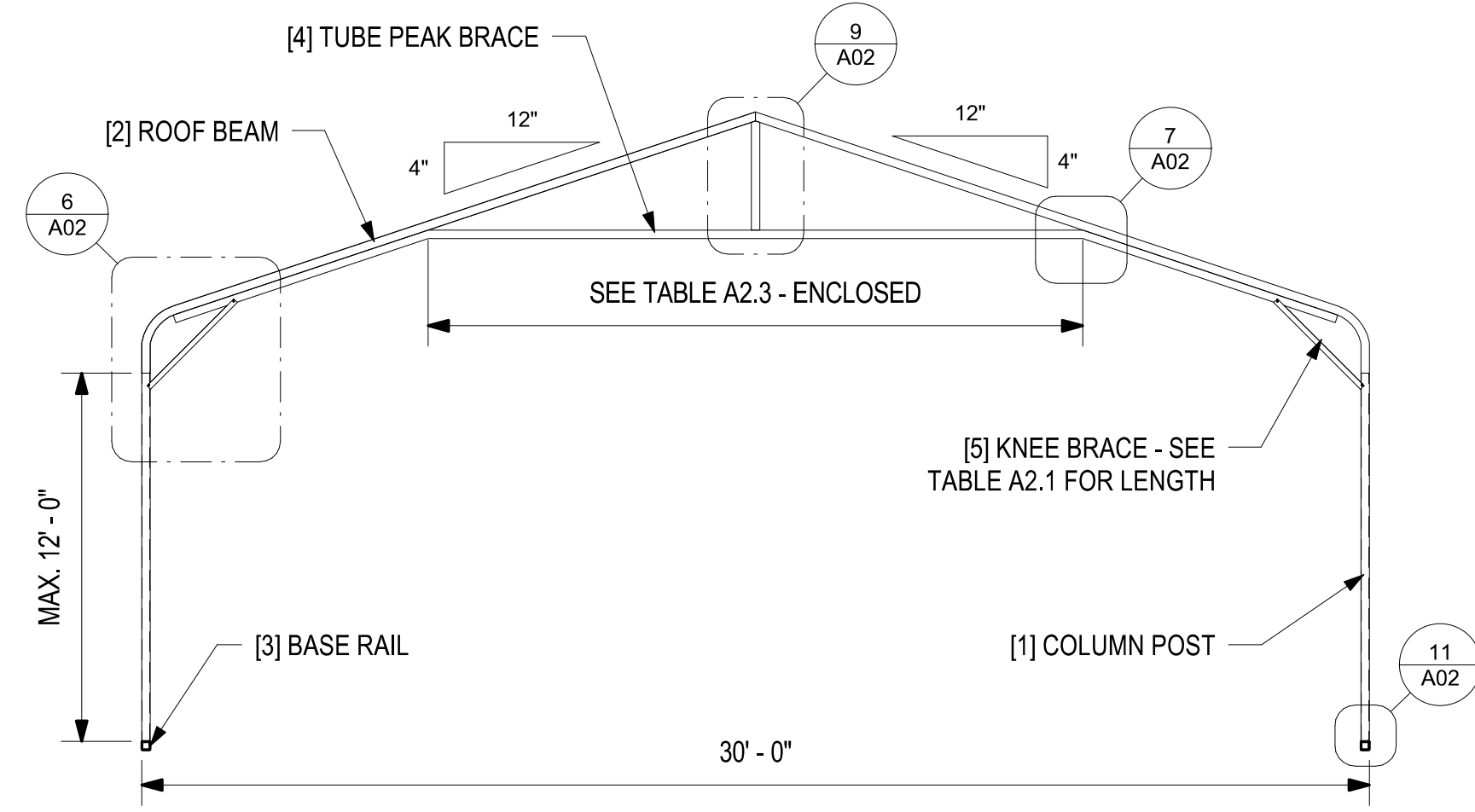


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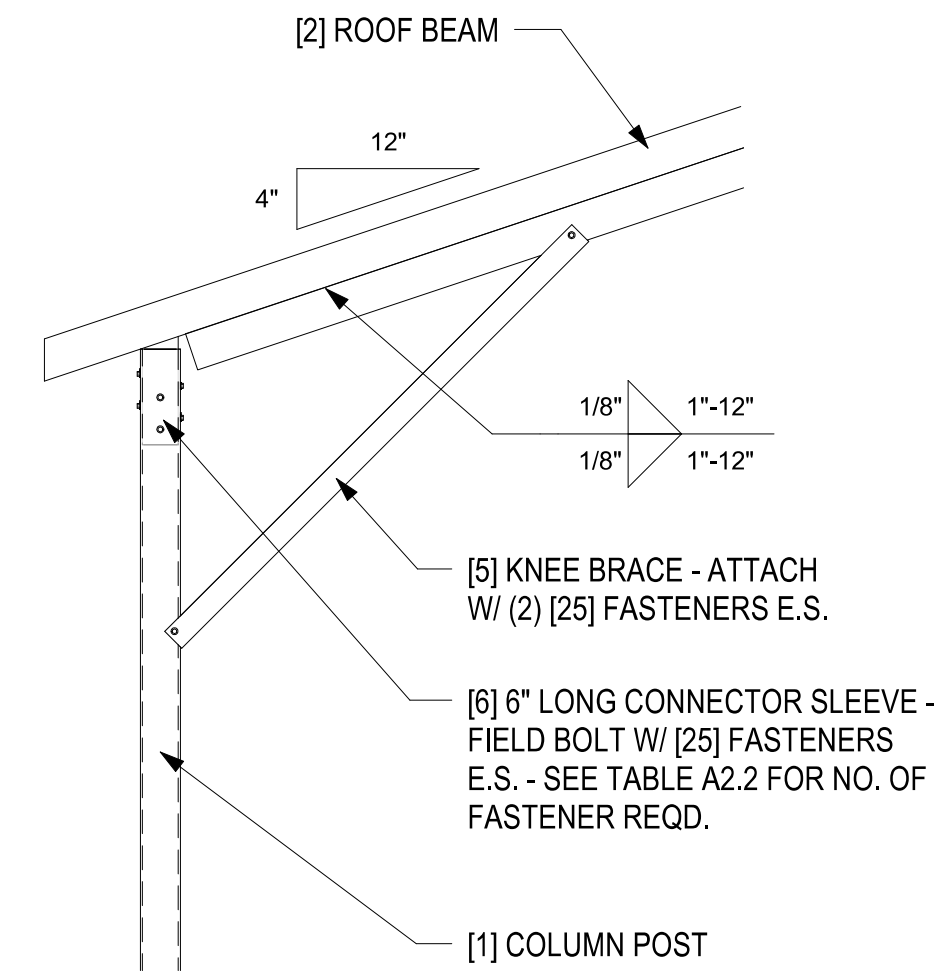
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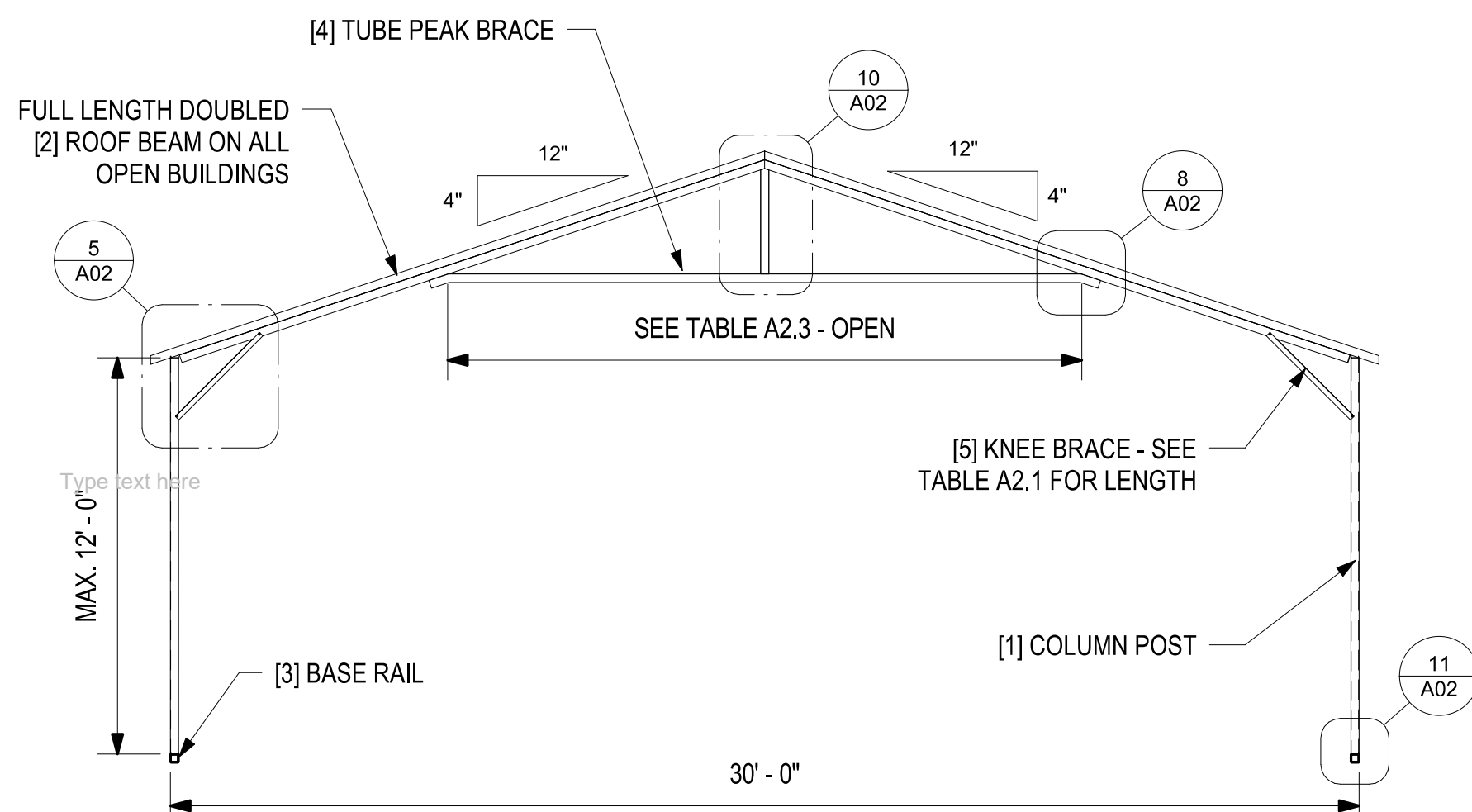
1 TYP. A-FRAME SECTION - ENCLOSED BUILDING
1/4" = 1'-0"



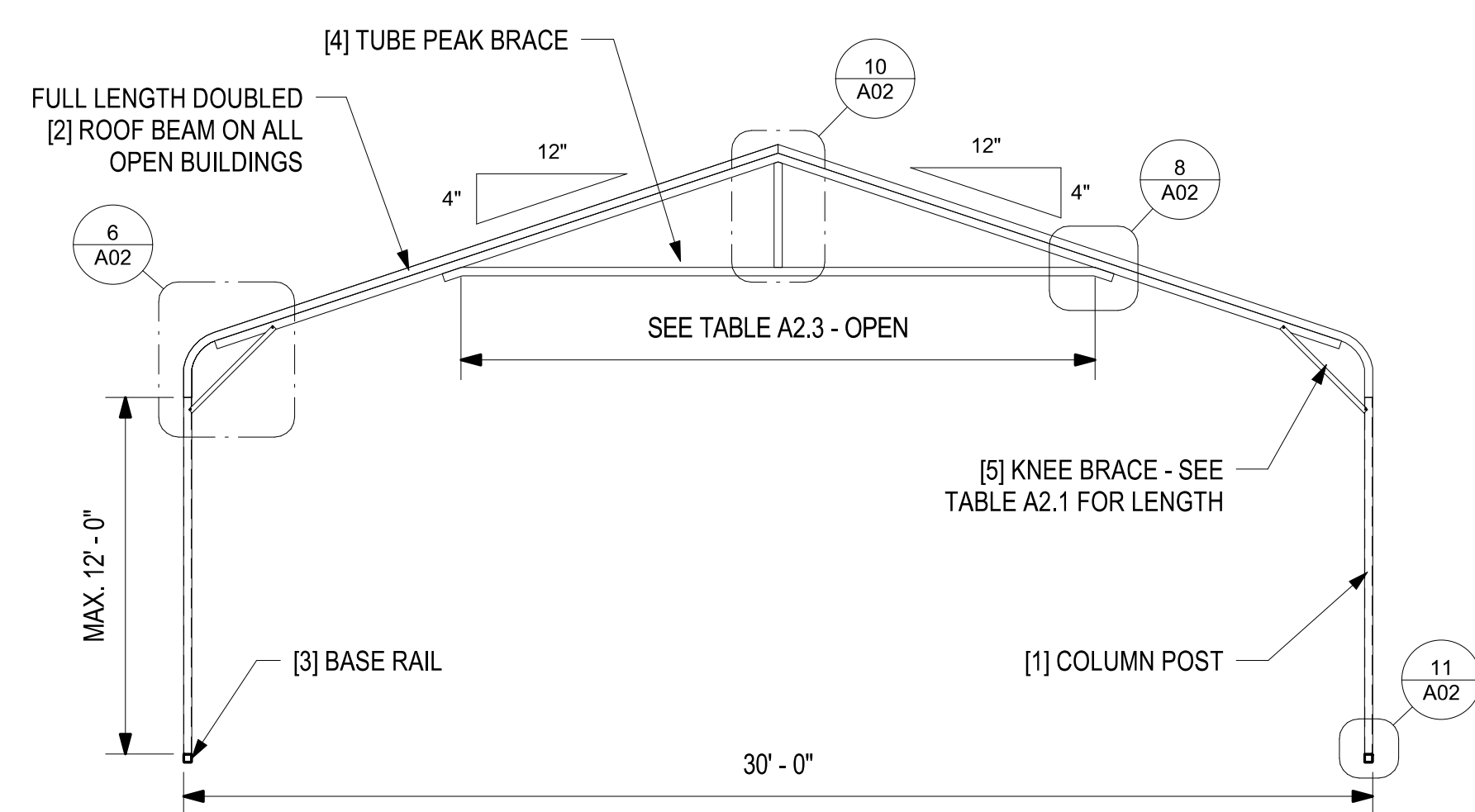
2 TYP. REGULAR FRAME SECTION - ENCLOSED BUILDING
1/4" = 1'-0"



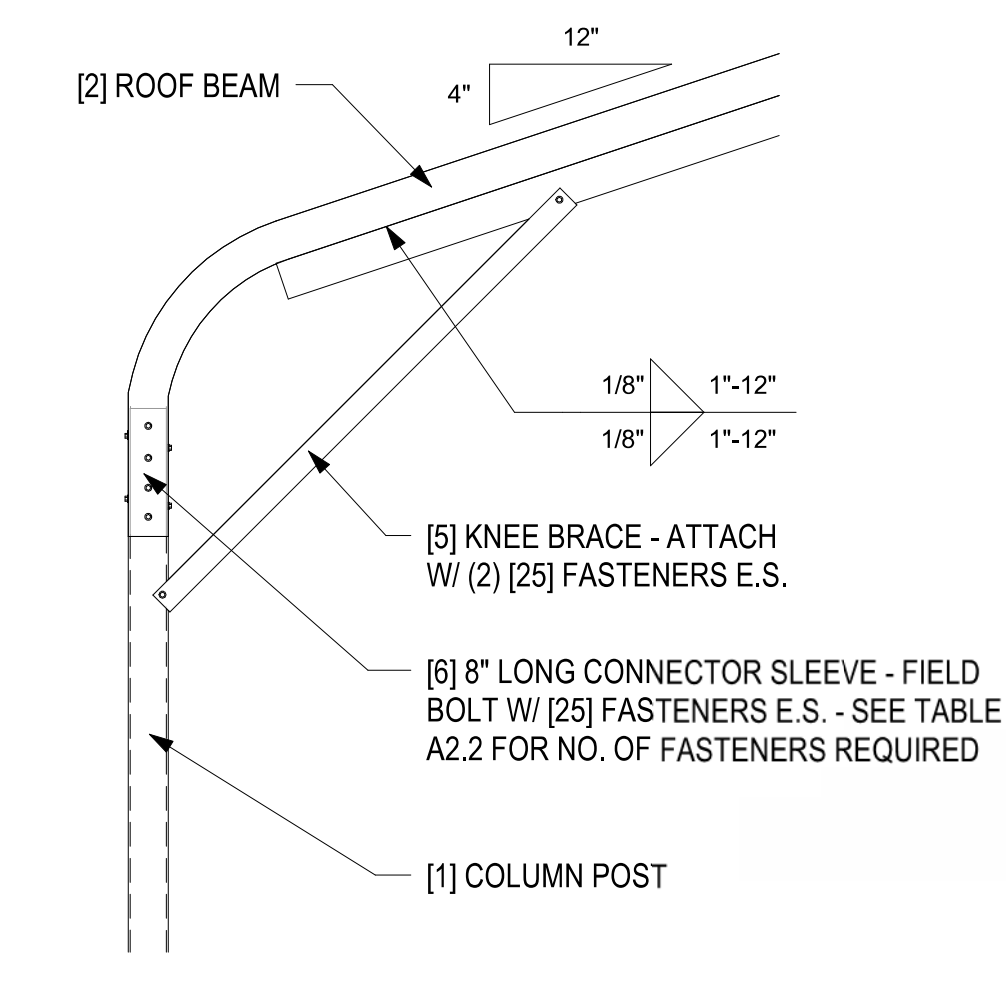
5 EAVE DETAIL - A-FRAME
1" = 1'-0"



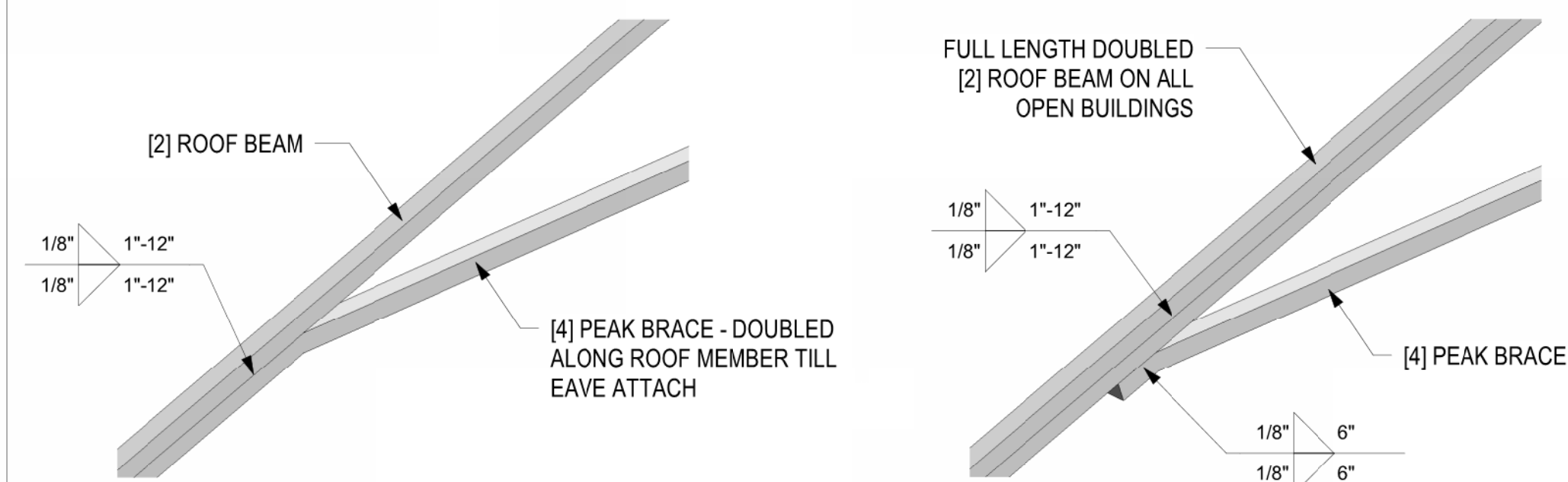
3 TYP. A-FRAME SECTION - OPEN BUILDING
1/4" = 1'-0"



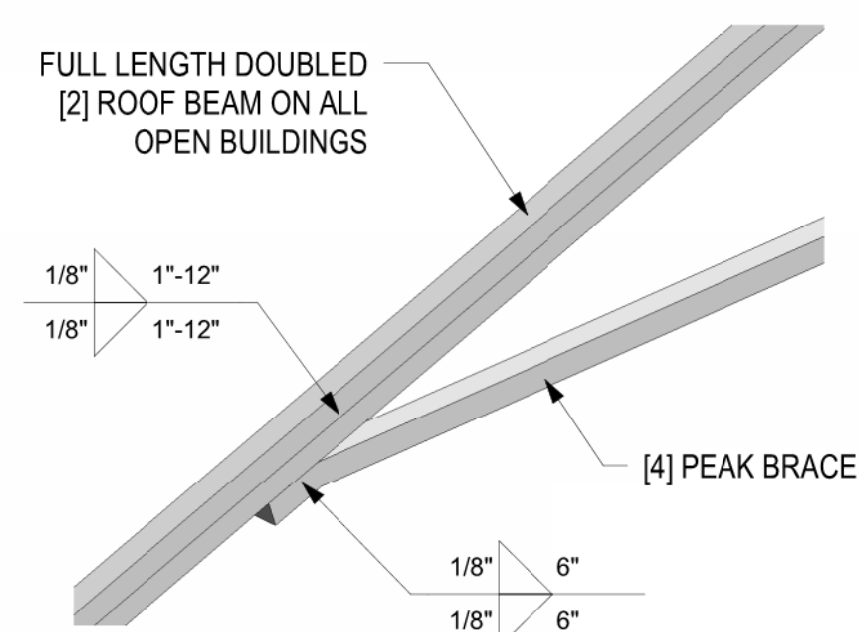
4 TYP. REGULAR FRAME SECTION - OPEN BUILDING
1/4" = 1'-0"



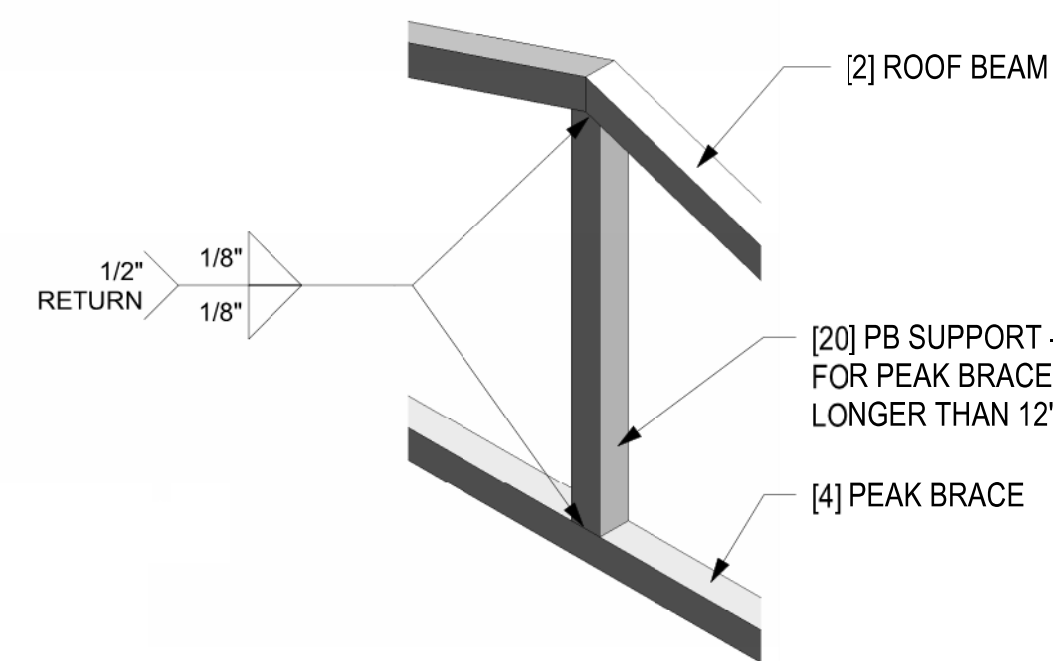
6 EAVE DETAIL - REGULAR FRAME
1" = 1'-0"



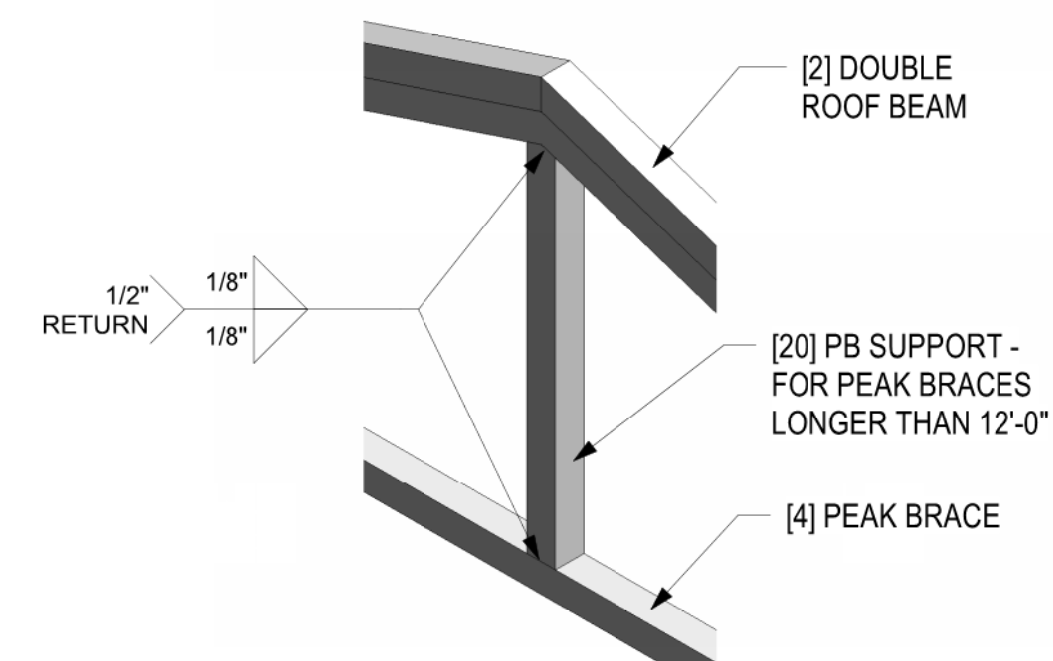
7 PEAK BRACE CONNECTION DETAILS - ENCLOSED BUILDING
NTS



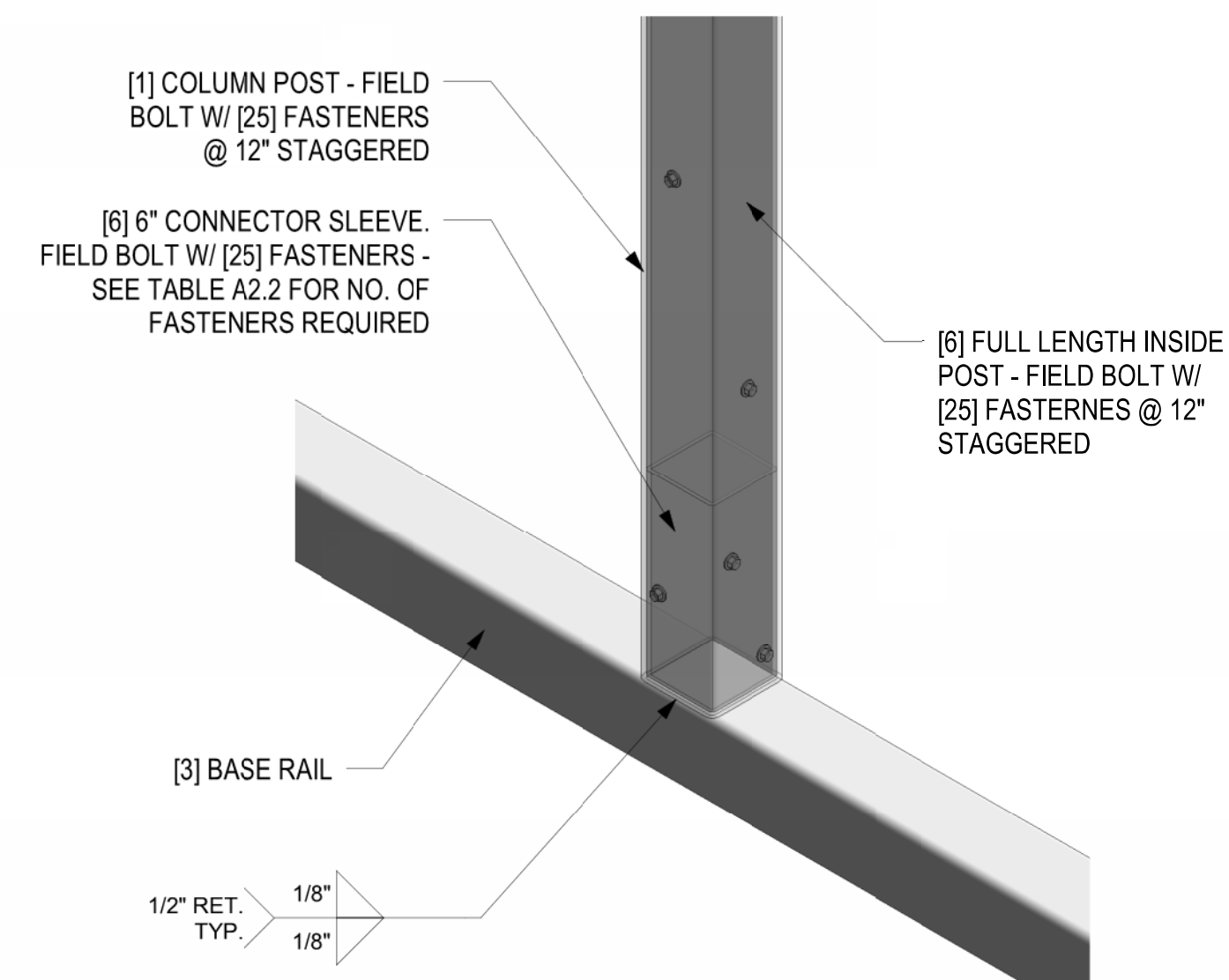
8 PEAK BRACE CONNECTION DETAILS - OPEN BUILDING
NTS



9 PEAK BRACE SUPPORT DETAIL - ENCLOSED BUILDING
NTS



10 PEAK BRACE SUPPORT DETAIL - OPEN BUILDING
NTS



11 BASE DETAIL
NTS

TABLE A2.1 - KNEE BRACE LENGTH		
EAVE HEIGHT	ENCLOSED	OPEN
10' TO 12'	4'	5.5'
7' TO 9'	4'	5'
UP TO 6'	4'	4.5'

NOTE: KNEE BRACES ON OPEN BUILDINGS W/ LEAN-TO ADDITION SHOULD BE 4FT MAXIMUM. KNEE BRACES ON LEAN-TO SHOULD MATCH THE EQUIVALENT HEIGHT IN TABLE A2.1. SEE DETAIL 1 ON PAGE A11.

TABLE A2.2 - FASTENER SCHEDULE	
WIND SPEED (MPH)	NO. OF FASTENERS
100	4

TABLE A2.3 - MINIMUM PEAK BRACE LENGTH		
EAVE HEIGHT	ENCLOSED	OPEN
10' TO 12'	3'	16'
7' TO 9'	3'	16'
UP TO 6'	6'	16'

NOTE: PEAK BRACES ON OPEN BUILDINGS W/ LEAN-TO ADDITION SHOULD BE 19FT MINIMUM.

NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING. MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.



ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
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ASG LLC
AMERICAN STRUCTURAL GROUP
CONSULTING STRUCTURAL ENGINEERS
225 SOUTH MAIN STREET
MONROE, OHIO 45050
PH 513-402-7600
WWW.ASG-ENG.COM
"Value Engineering the First Time"

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EAVE HEIGHT (FT)	TABLE A3 - FRAME SPACING CHART / ...		
	GROUND SNOW (PSF)	ENCLOSED BUILDING WIND SPEED (MPH)	OPEN BUILDING WIND SPEED (MPH)
10'-0" TO 12'-0"	30	100	100
	40	60	54
7'-0" TO 9'-0"	30	60	54
	40	48	36
UP TO 6'-0"	30	60	54
	40	48	42

NOTES:

- FRAME SPACING ARE IN UNITS OF INCHES (IN).
- WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
- SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF). WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).

ENCLOSURE CLASSIFICATION:

- ENCLOSED BUILDING** = ALL 4 WALLS FULLY ENCLOSED WITH DOORS/WINDOWS - USE ENCLOSED BUILDING SPACING CHART.
- OPEN BUILDING** = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
- 3FT PARTIALLY ENCLOSED** = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSED = USE OPEN BUILDING SPACING CHART.
- PARTIALLY ENCLOSED** = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
- 3 SIDED ENCLOSED** = ALL WALLS ARE ENCLOSED EXCEPT FOR 1 END-WALL = START WITH ENCLOSED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS.
- FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOVE, REFER TO SHEET A04 FOR SPACING AND DESIGN REQUIREMENTS.

GENERAL NOTES:

- THE MAX. BUILDING LENGTH FOR ENCLOSED BUILDING IS 50'-0"**. THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
- BUILDINGS WITH **PARTIALLY ENCLOSED END WALLS** NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE PARTIALLY ENCLOSED END WALL. (SEE FIGURE A ON SHEET A04).



ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
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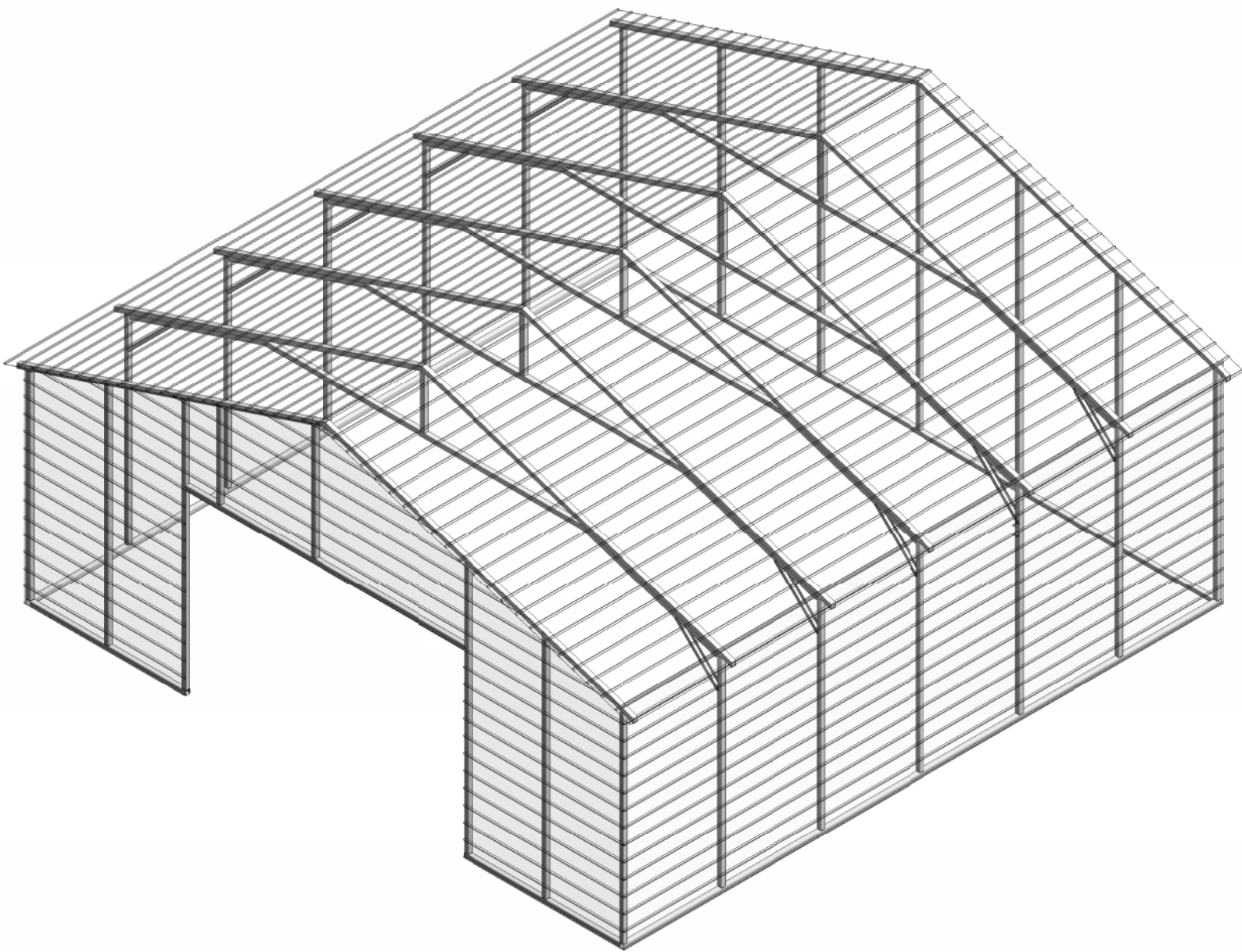
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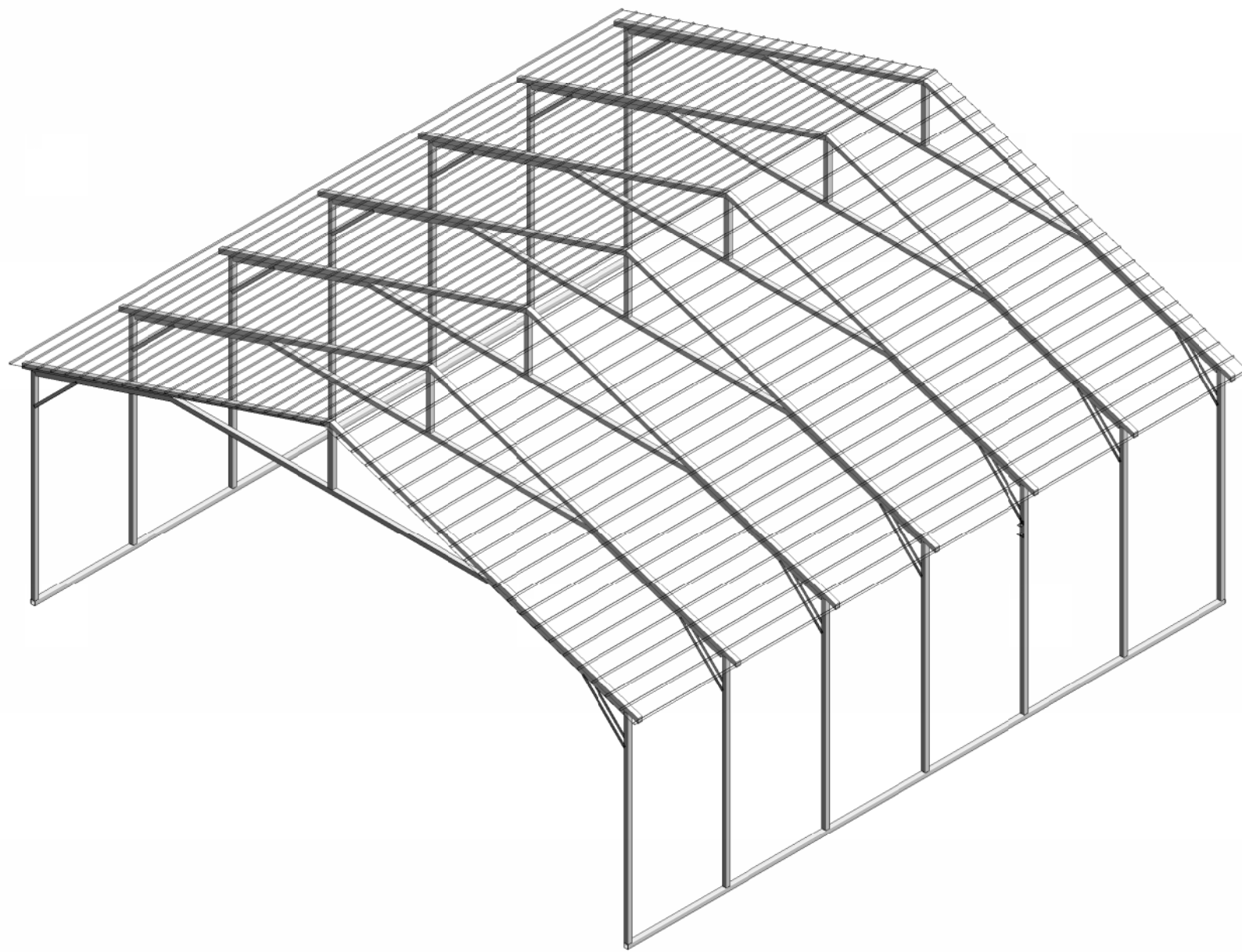
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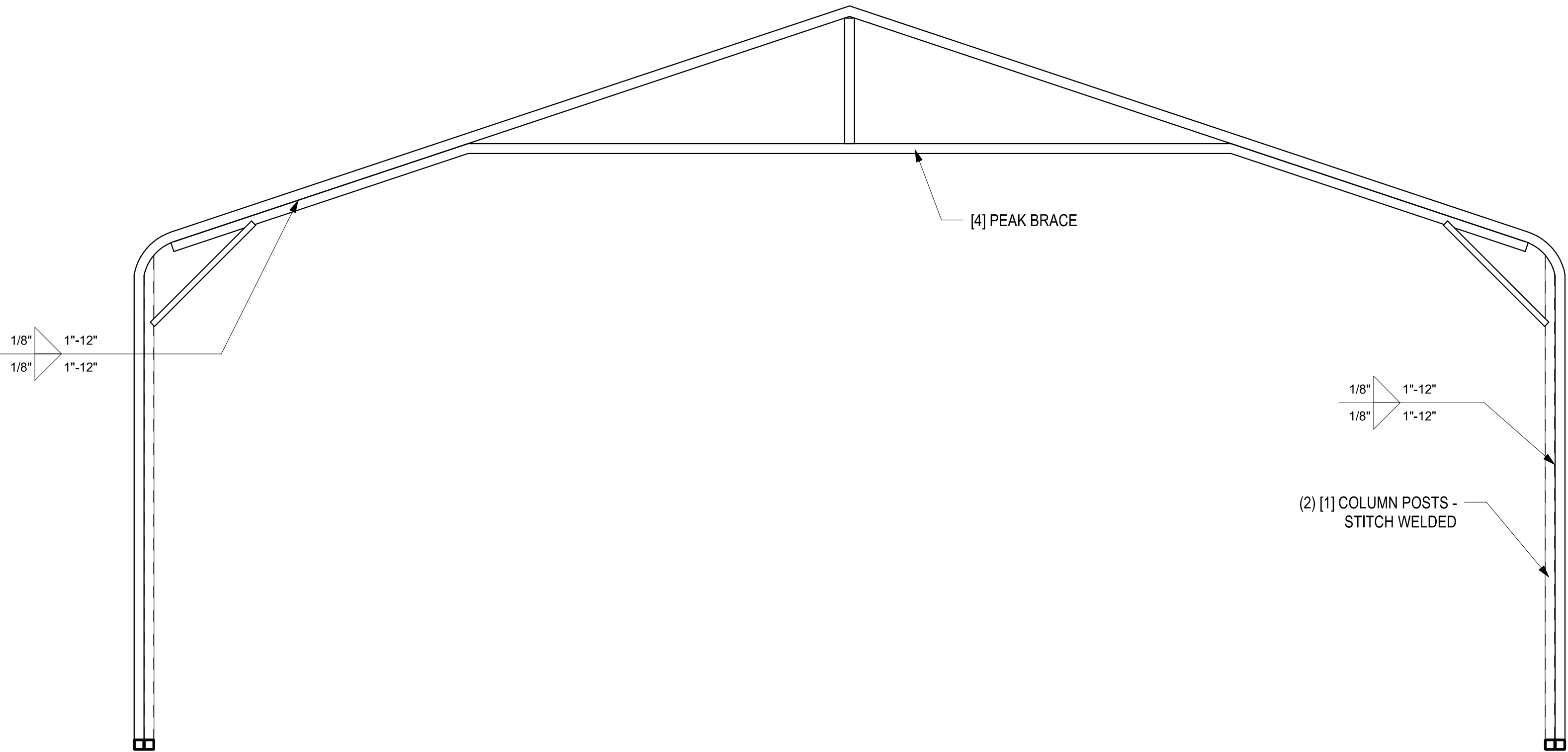
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1 TYP. ENCLOSED BUILDING
NTS



2 TYP. OPEN BUILDING
NTS



3 TYP. OPEN ENDWALL ON 3 SIDE ENCLOSED BUILDING
NTS

REV.

TABLE A4.1 - PURLIN SPACING SCHEDULE		
FRAME SPACING	GROUND SNOW (PSF)	18GA HAT CHANNEL PURLIN
		WIND SPEED (MPH)
5'-0"	30	28
	40	32
4'-6"	30	28
	40	32
4'-0"	30	28
	40	32
3'-6"	30	28
	40	32
3'-0" OR LOWER	30	28
	40	32

NOTES:

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE A3.
- PURLINS TO BE EVENLY SPACED.

IRREGULAR BUILDING NOTES:

- FIGURES A, B, C, & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 6" FROM OPEN BUILDING SPACING TABLE. SEE SHEET A3 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.

TABLE A4.2 - GIRT SPACING SCHEDULE	
FRAME SPACING	WIND SPEED (MPH)
	100
5'-0"	60
4'-0"	60
3'-6"	60

NOTES:

- GIRT SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE A3.
- GIRTS TO BE EVENLY SPACED.

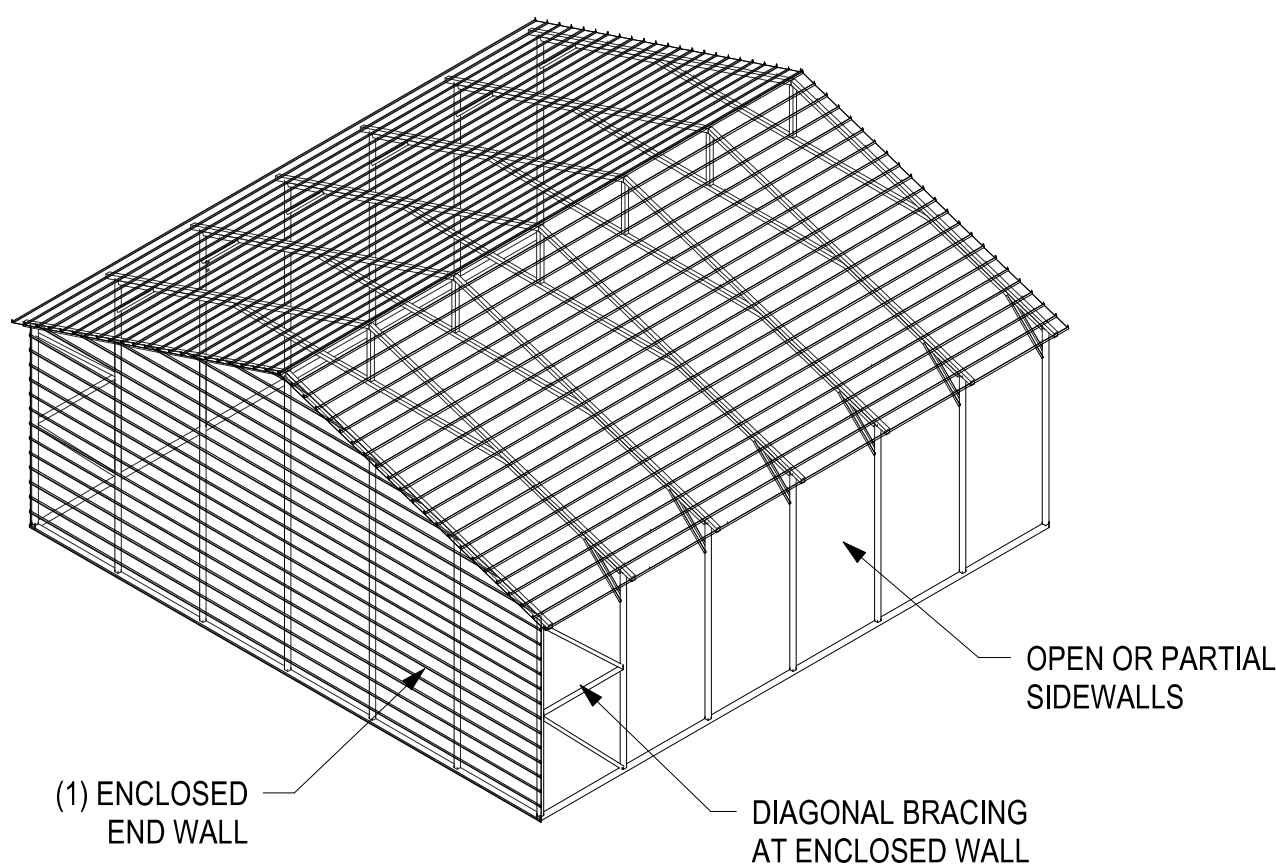


FIGURE A

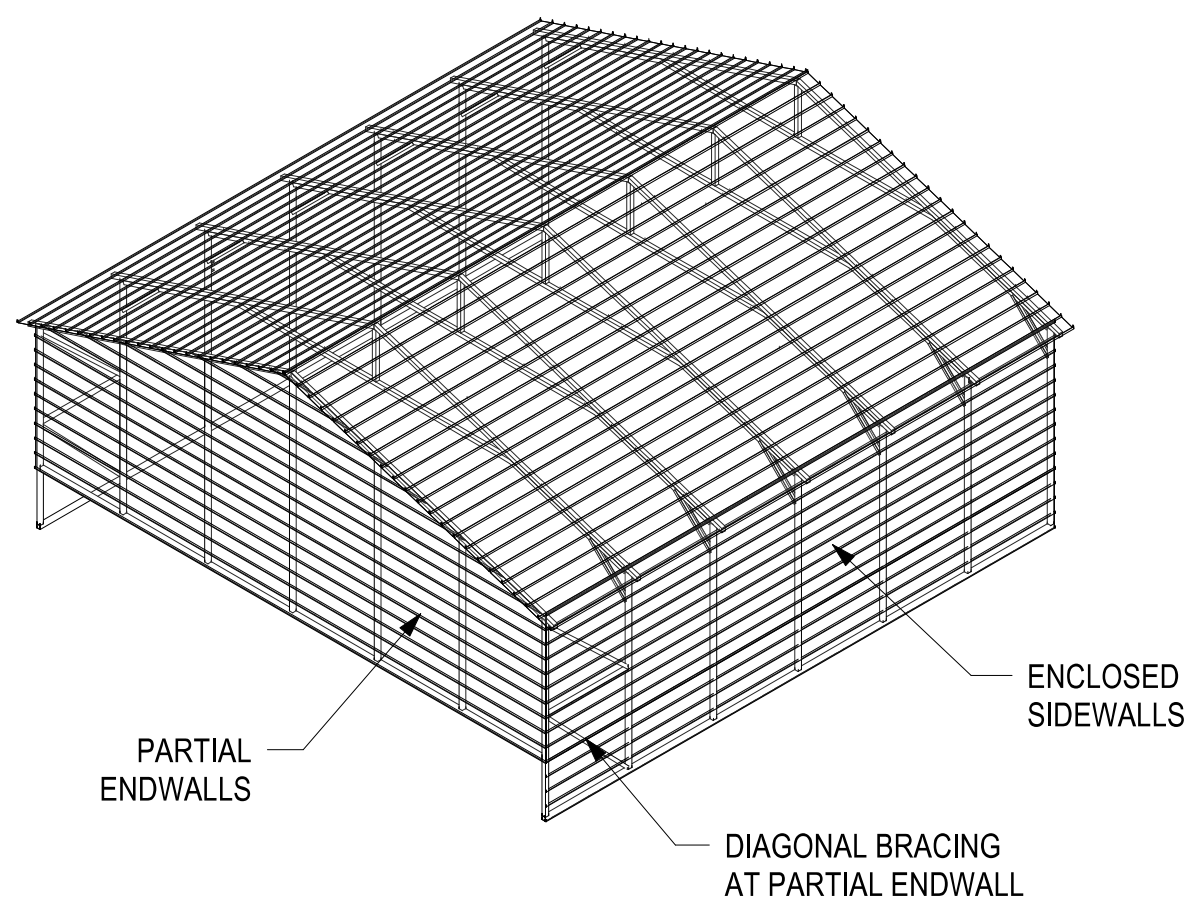


FIGURE B

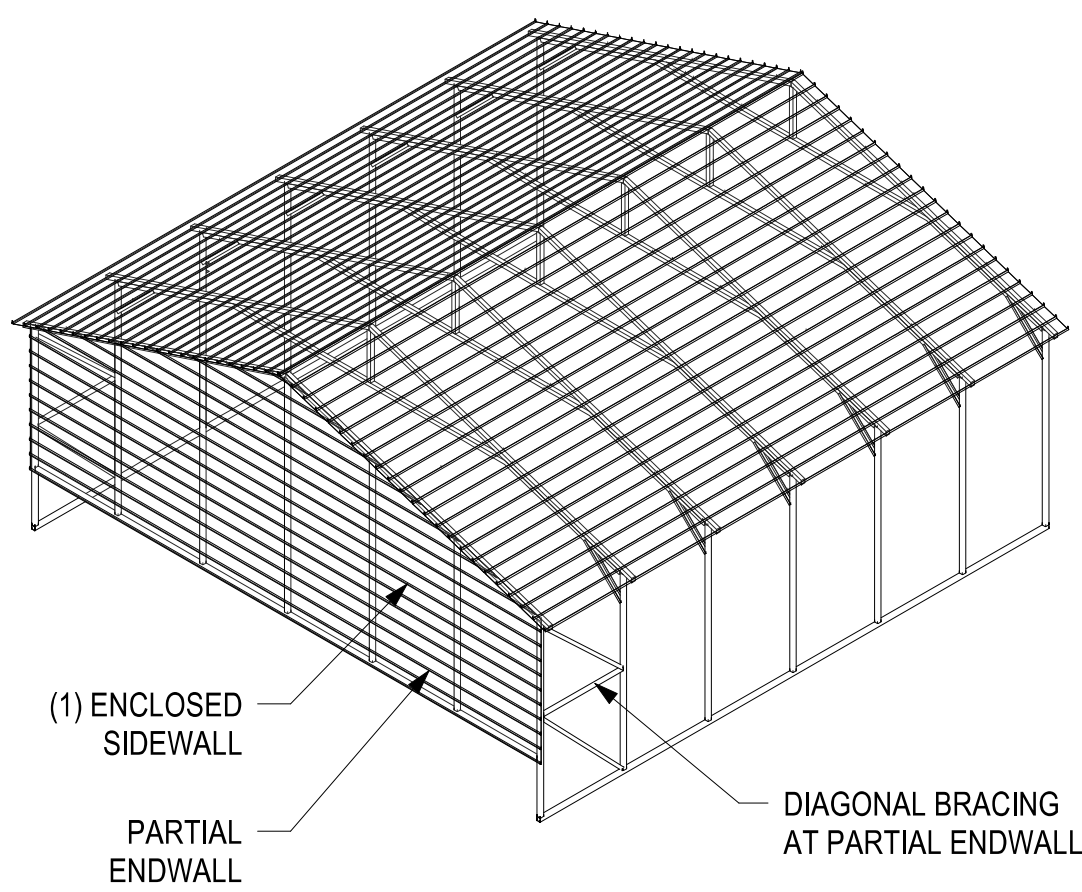


FIGURE C

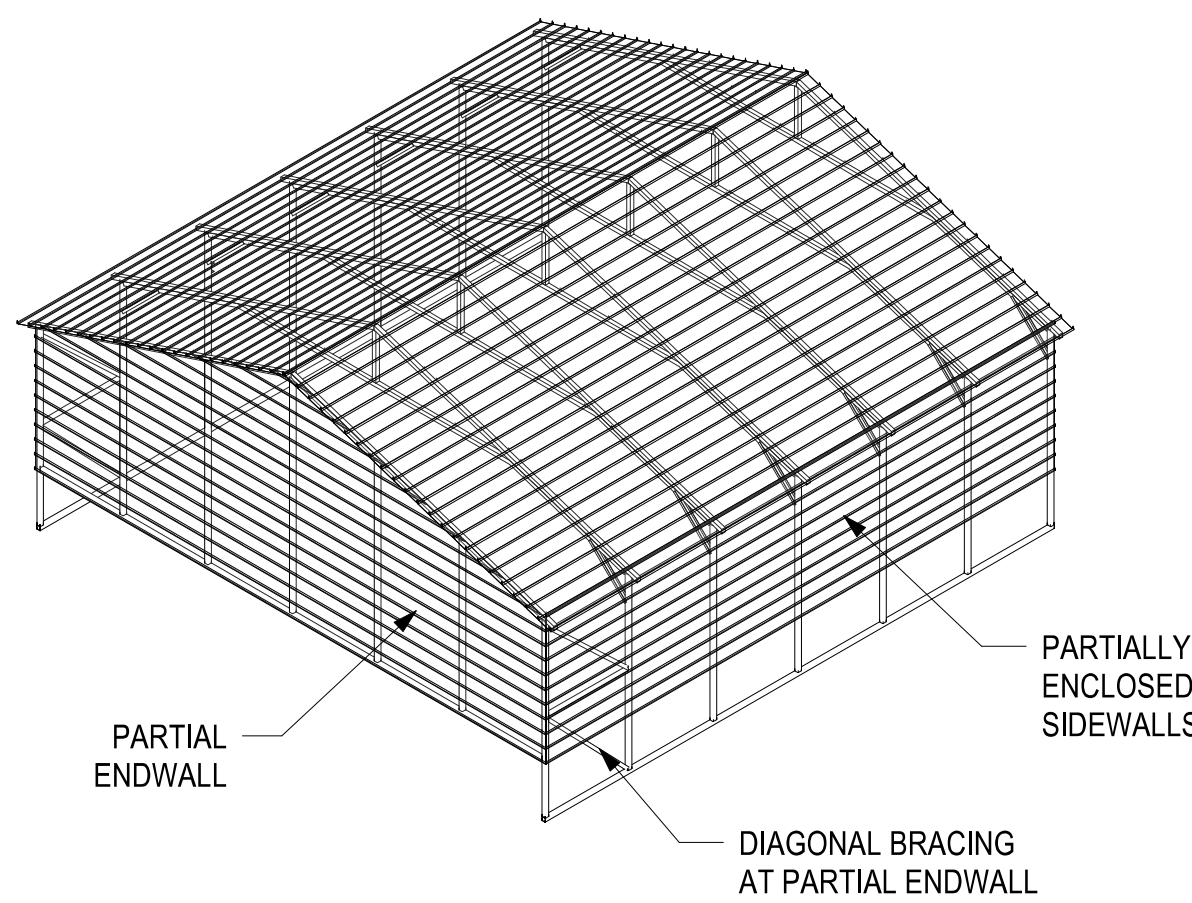
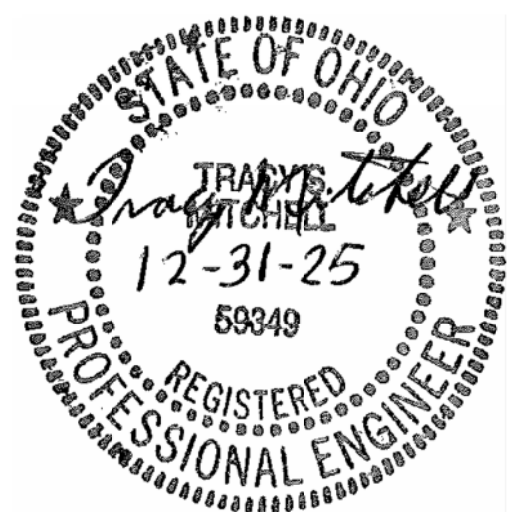


FIGURE D



ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
STATE OF OHIO

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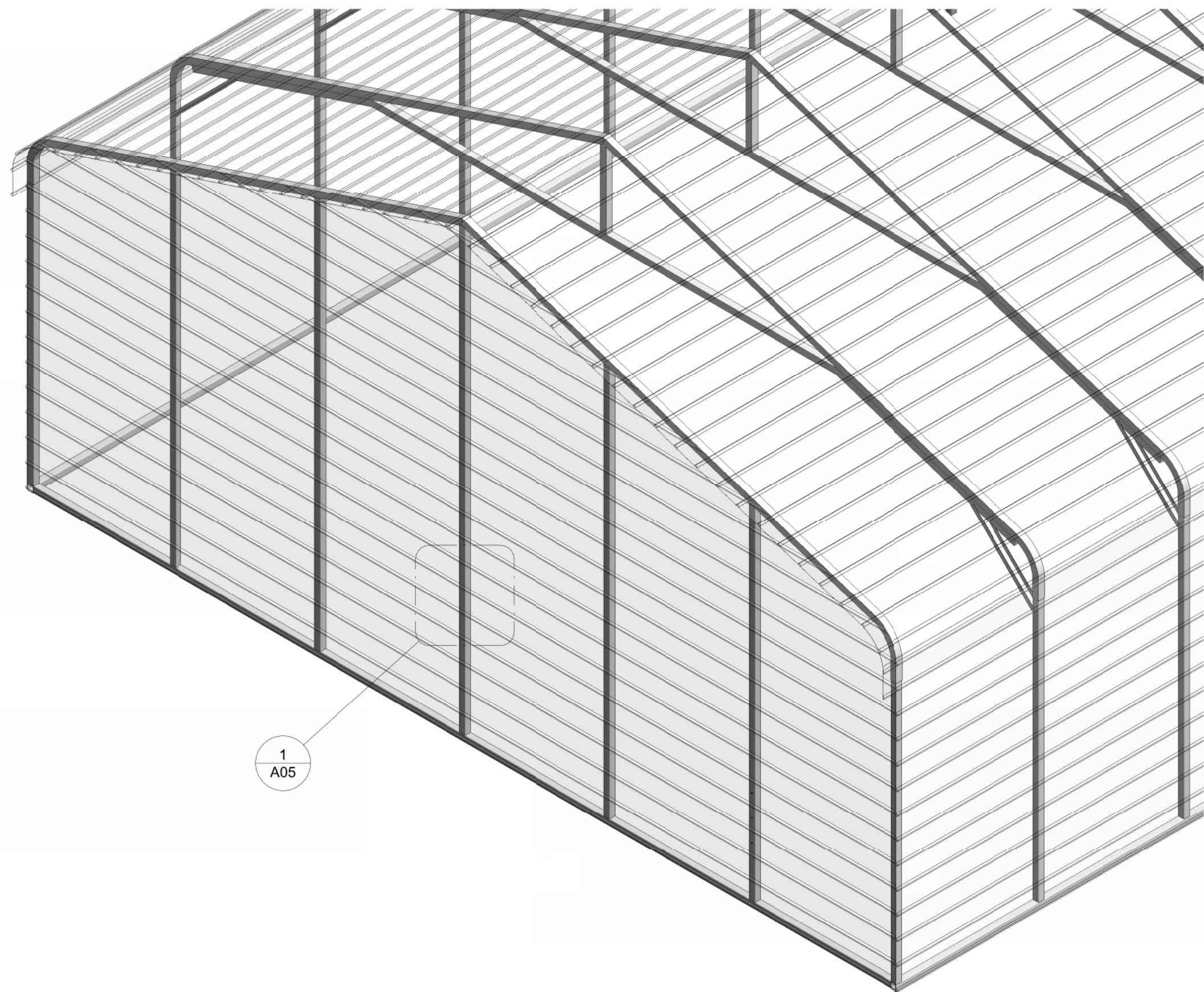
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CKD TSM

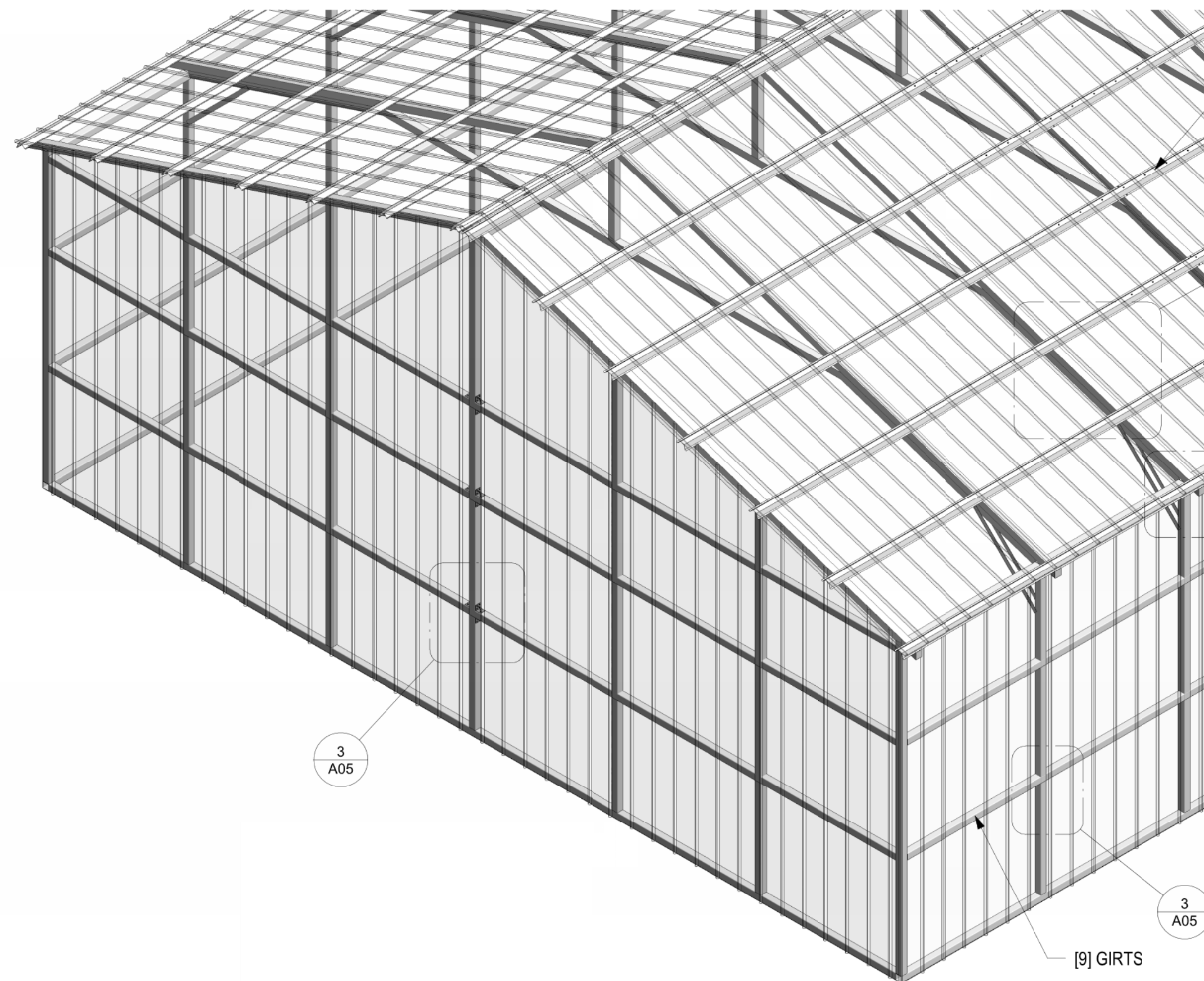


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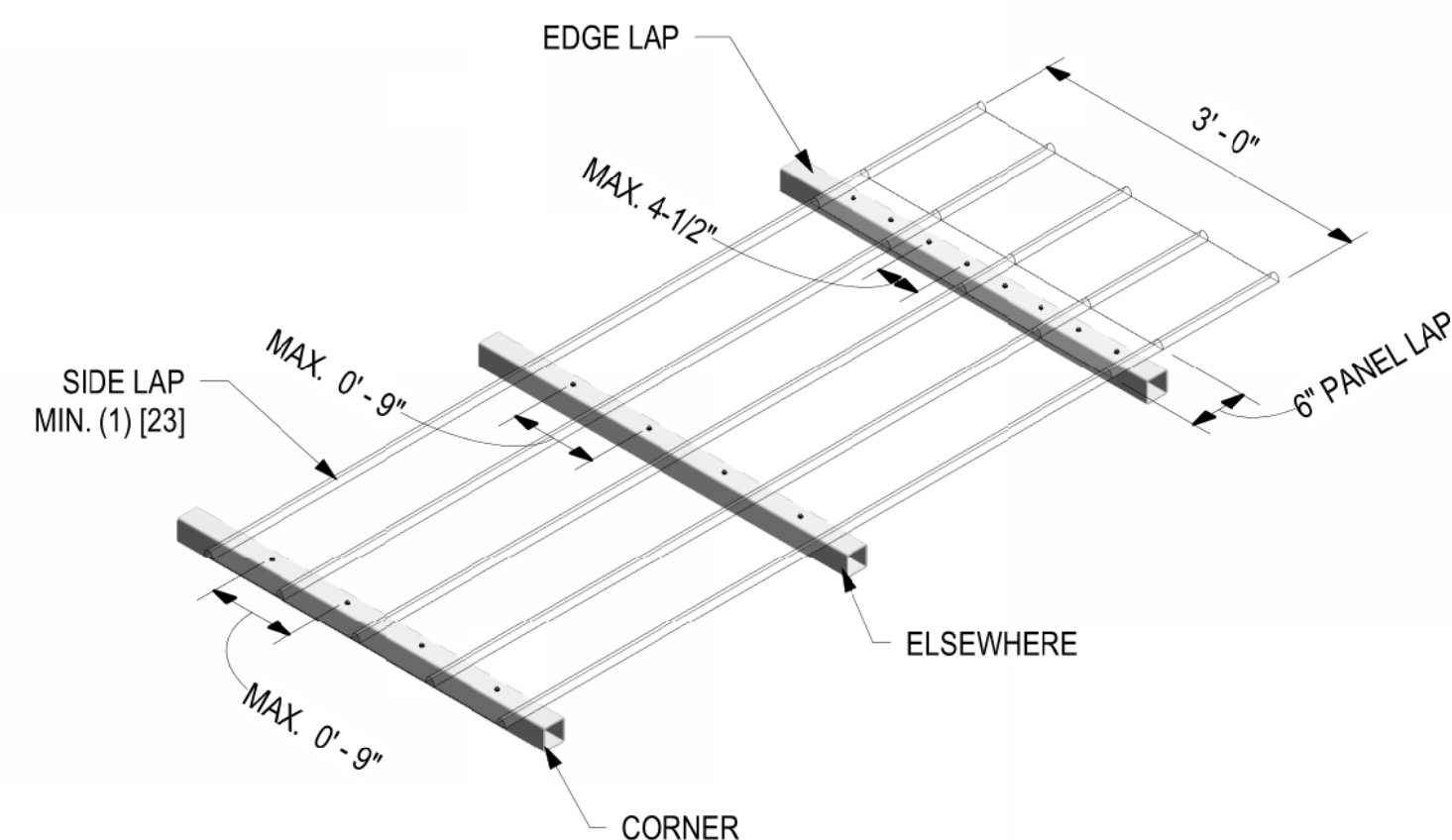
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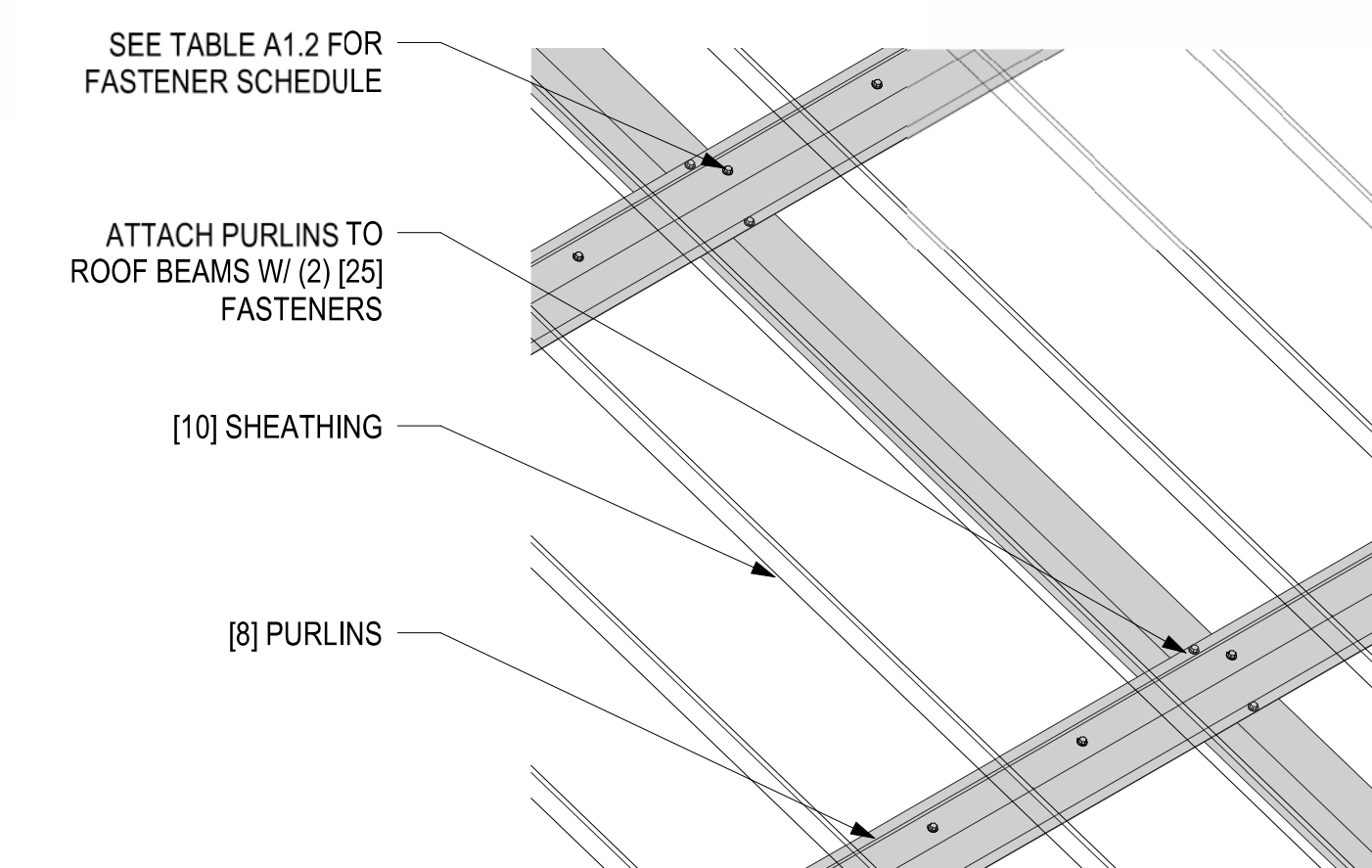
○ TYP. HORIZONTAL SHEATHING
NTS



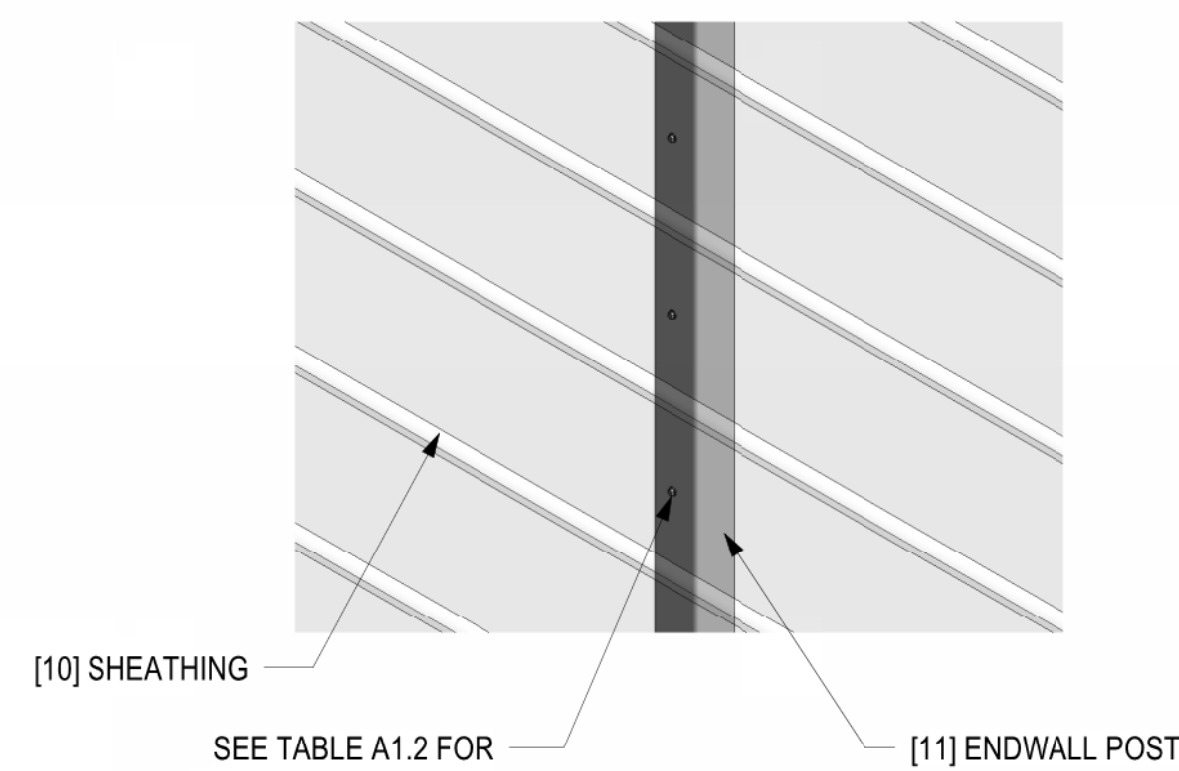
○ TYP. VERTICAL SHEATHING
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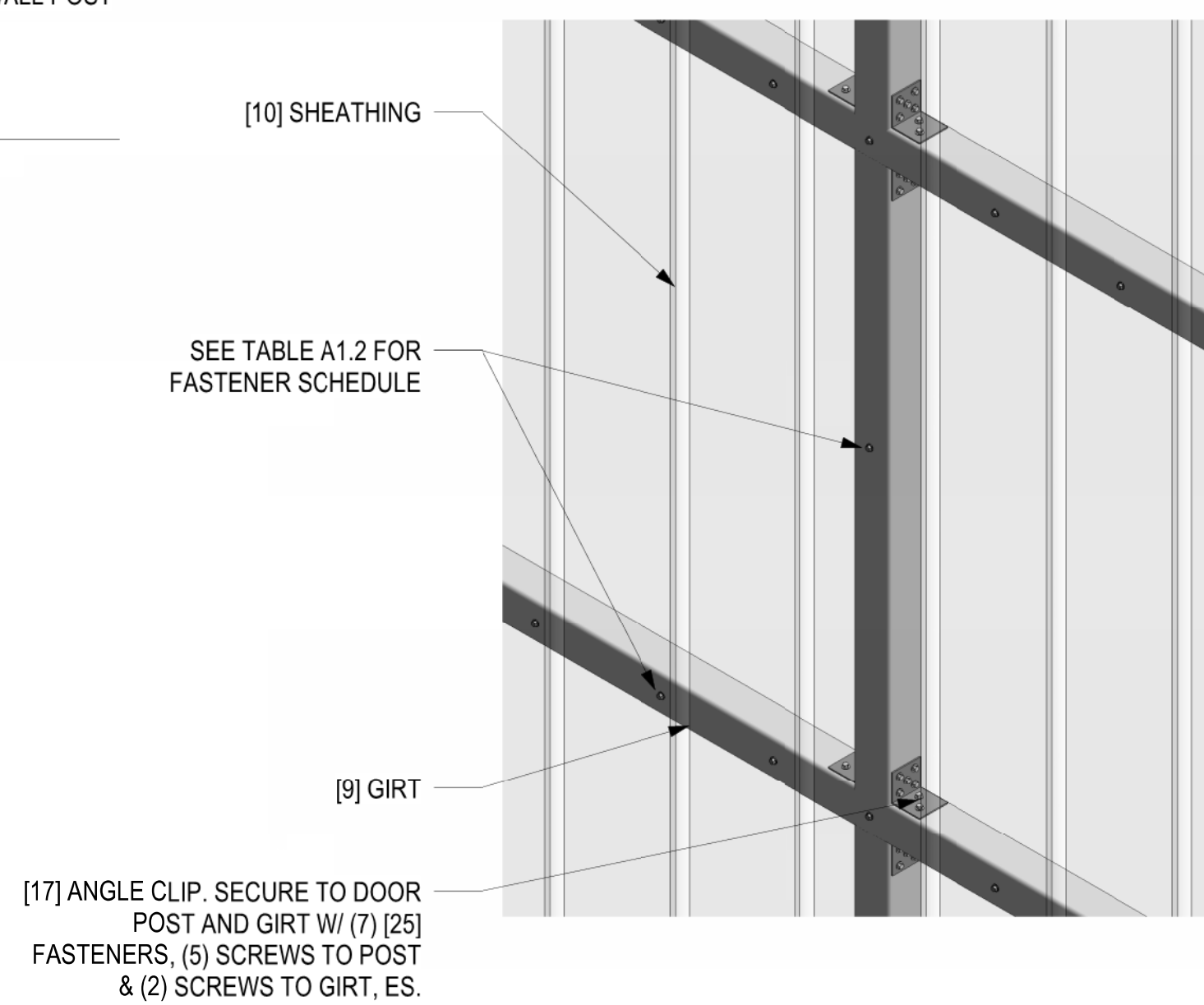
○ TYP. SHEATHING FASTENER SCHEDULE
NTS



② ROOF VERTICAL SHEATHING DETAIL
NTS



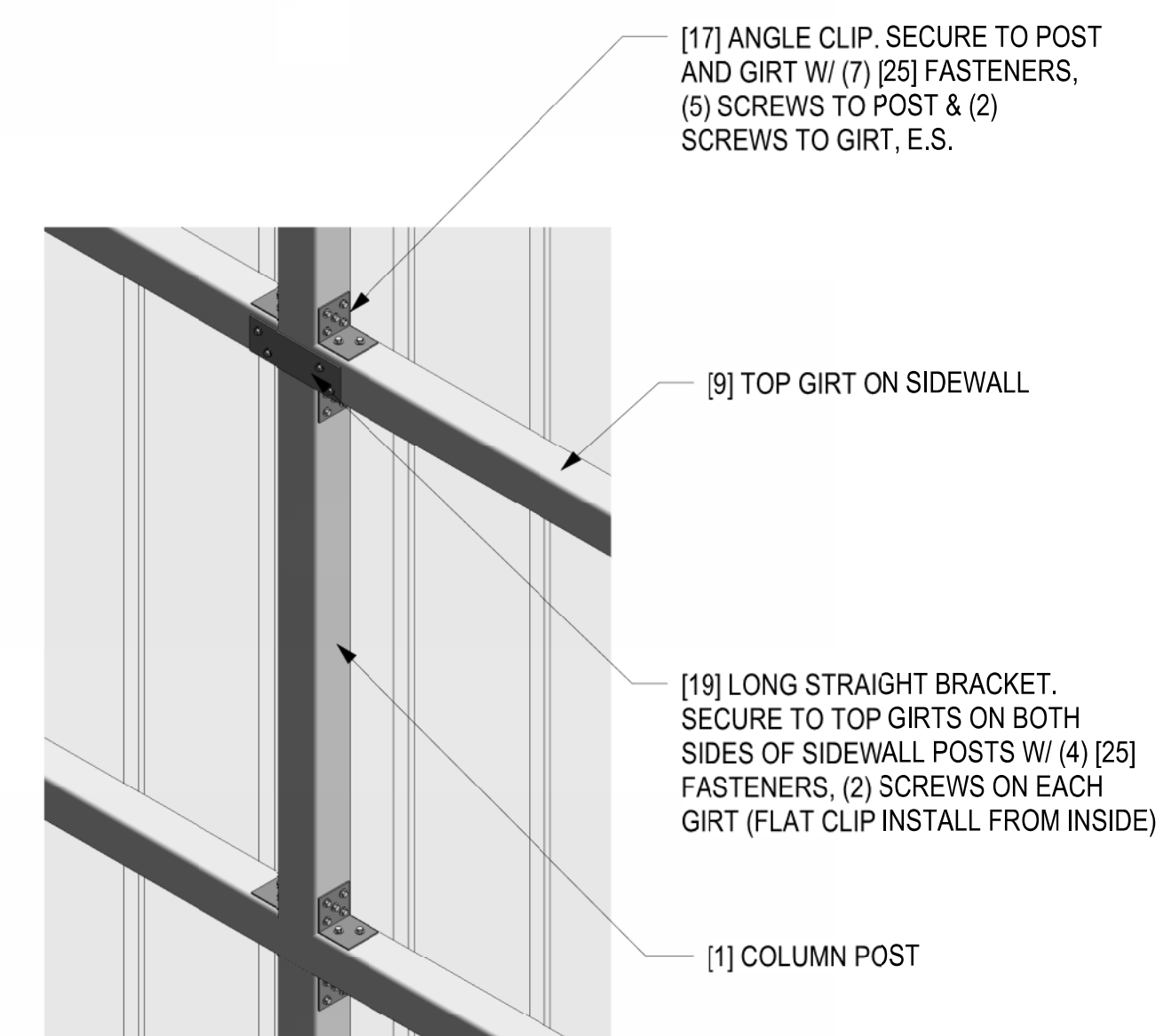
① TYP. HORIZONTAL SHEATHING DETAIL
NTS



③ WALL VERTICAL SHEATHING
NTS

GENERAL SHEATHING NOTES:

1. REGULAR STYLE BUILDINGS CAN ONLY HAVE HORIZONTAL SHEATHING ON ROOF AND WALLS.
2. A-FRAME STYLE BUILDINGS CAN HAVE ANY COMBINATION OF HORIZONTAL OR VERTICAL SHEATHING ON ROOFS AND WALLS.
3. BOTH HORIZONTAL AND VERTICAL ROOF SHEATHING CAN HAVE MAX. 6" OVERHANG.
4. USING VERTICAL SHEATHING MAY ALLOW FOR GREATER FRAME SPACING. SEE NOTE 2 UNDER TABLE A3.
5. VERTICAL SHEATHING RECOMMENDED FOR BUILDING 30' OR LONGER.



④ TOP GIRT CONNECTION DETAIL
NTS



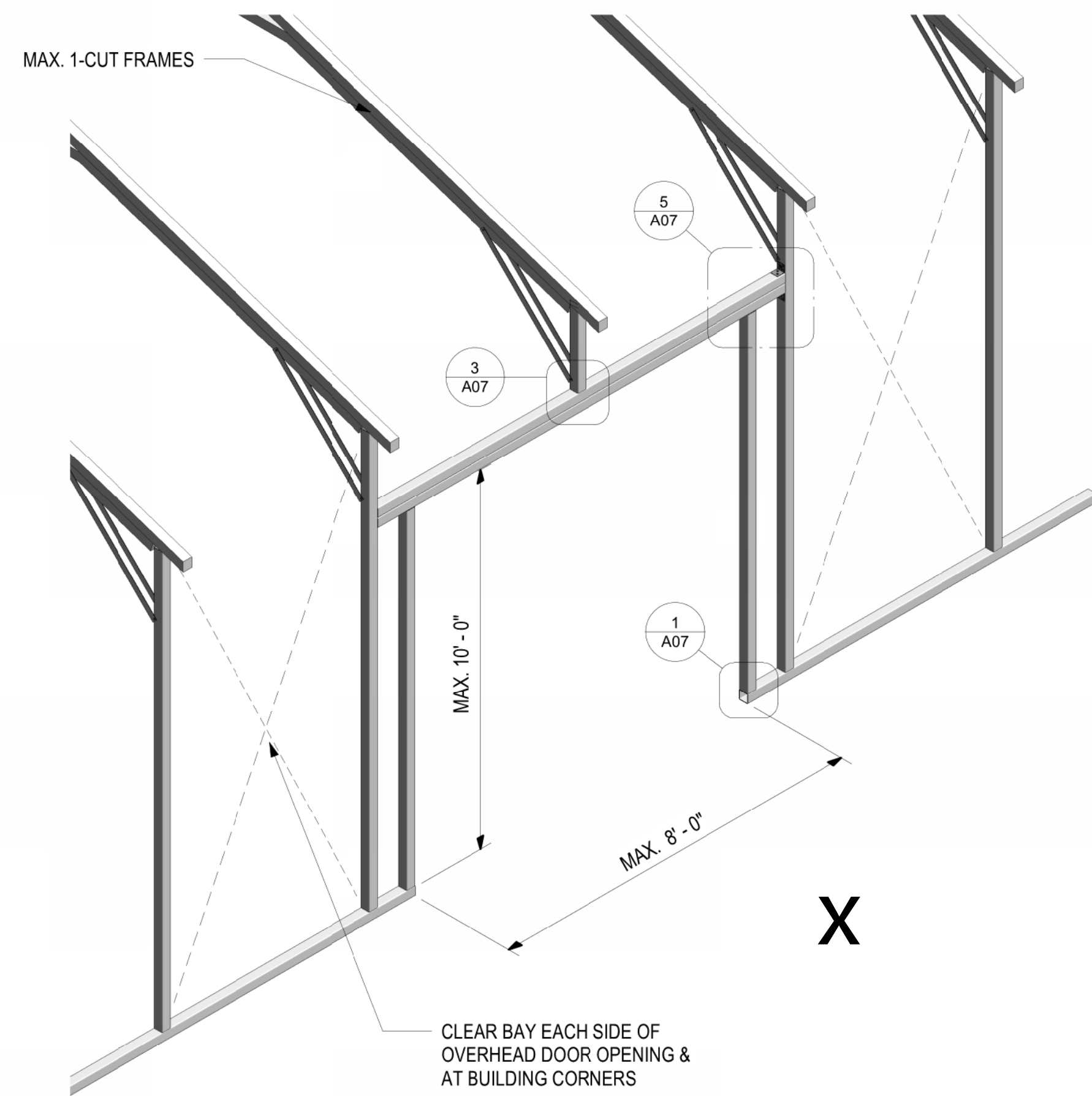
ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
STATE OF OHIO

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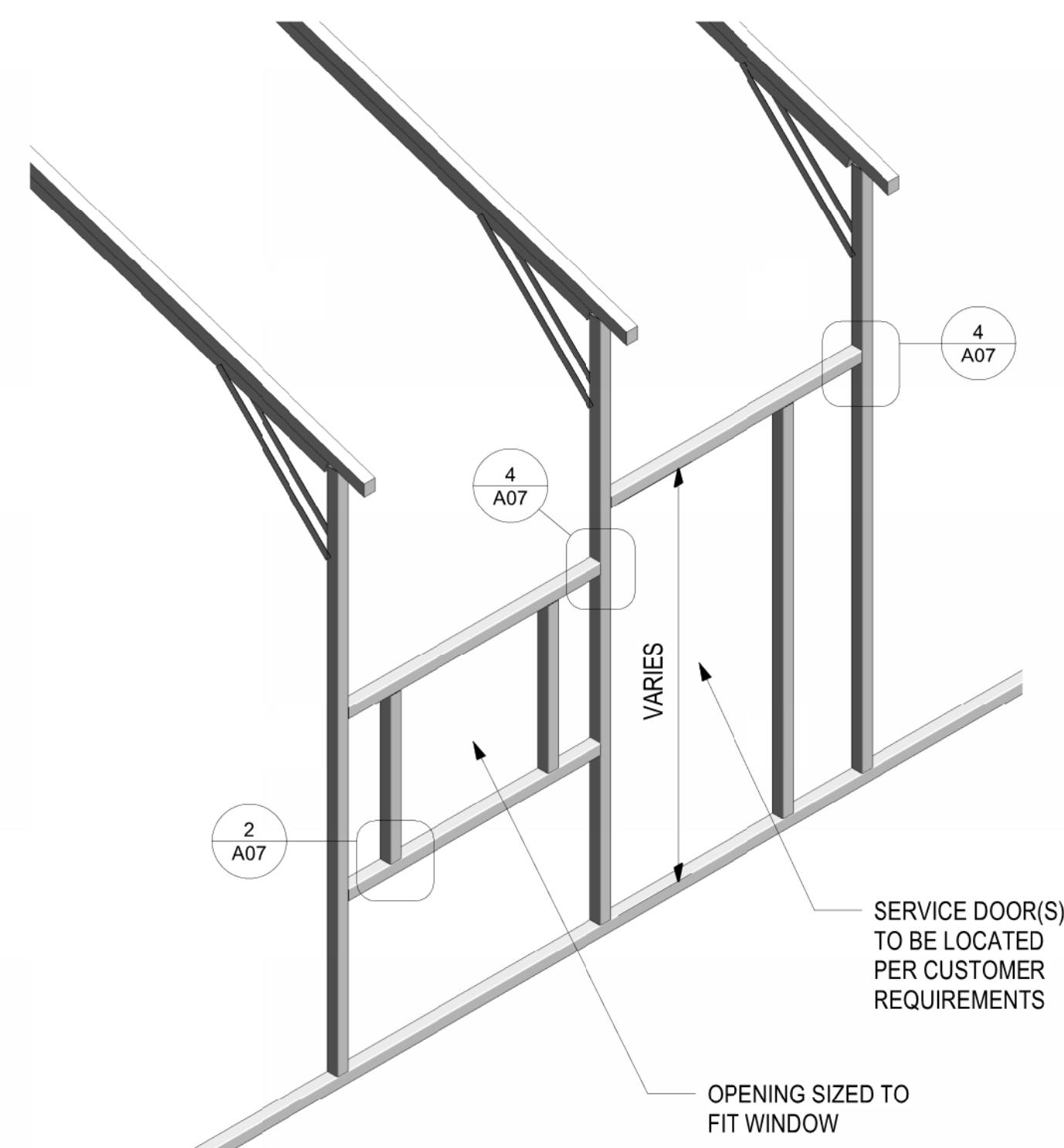
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JOB#	252771
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DWN	GSM
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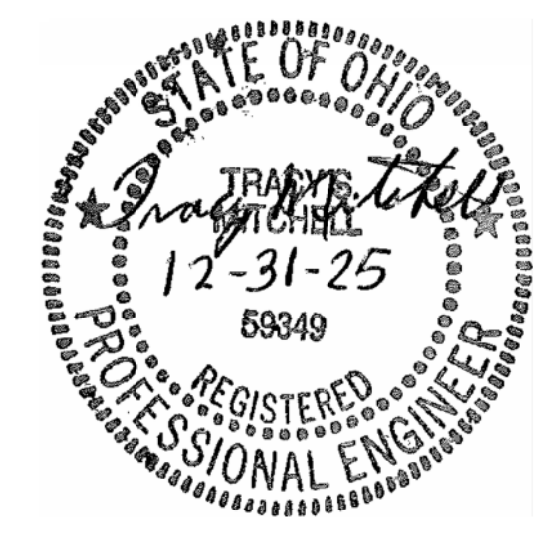
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○ SIDEWALL OVERHEAD DOOR OPENING
NTS



○ SIDEWALL SERVICE DOOR / WINDOW OPENINGS
NTS



ANS STEEL PROTOTYPE BUILDING
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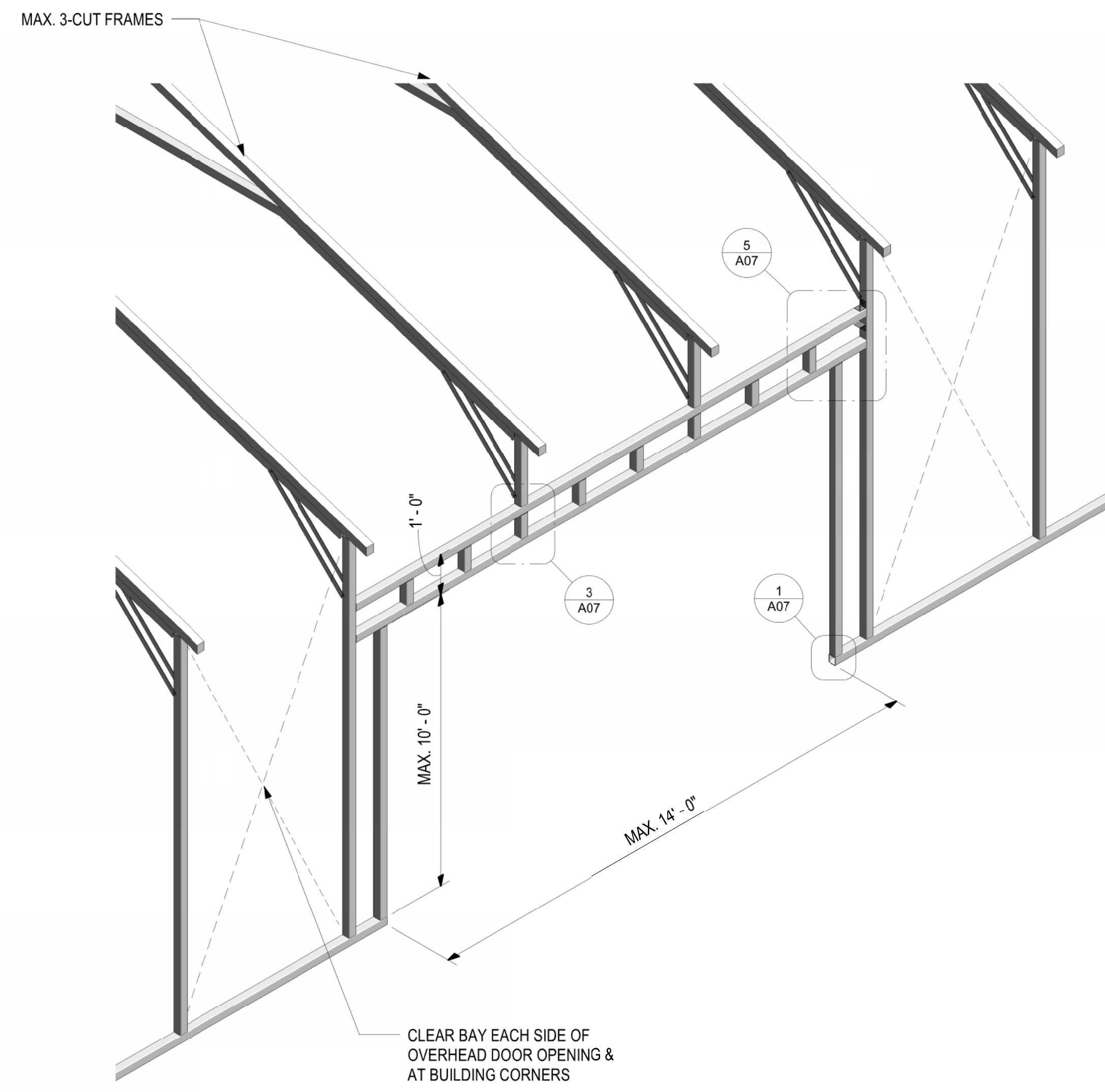
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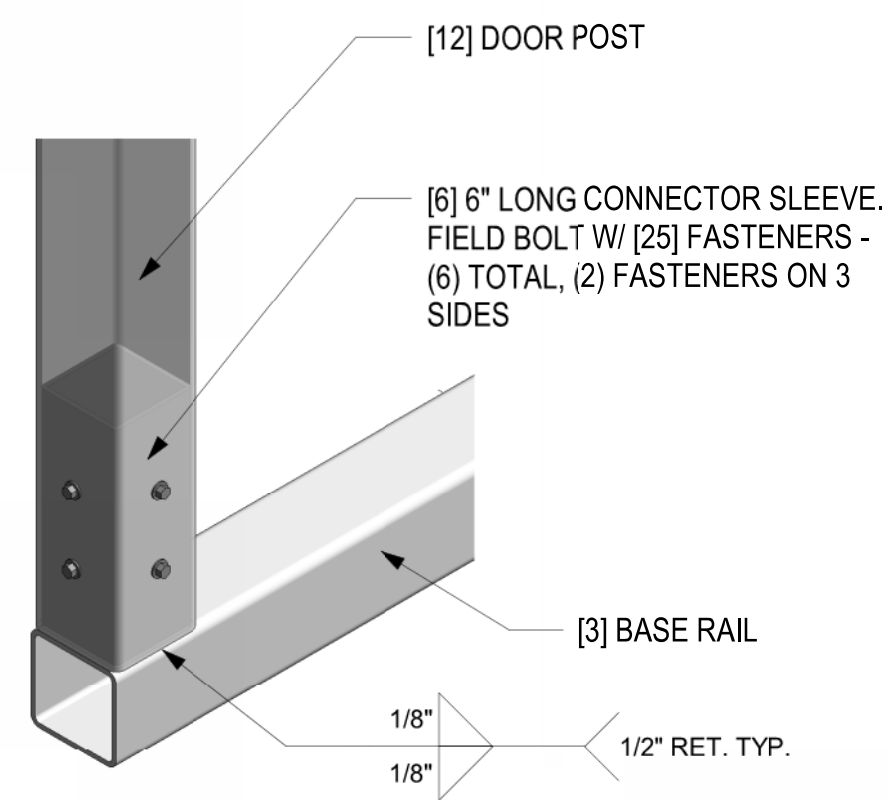


○ SIDEWALL OVERHEAD DOOR OPENINGS W/ TRUSS STYLE HEADER
NTS

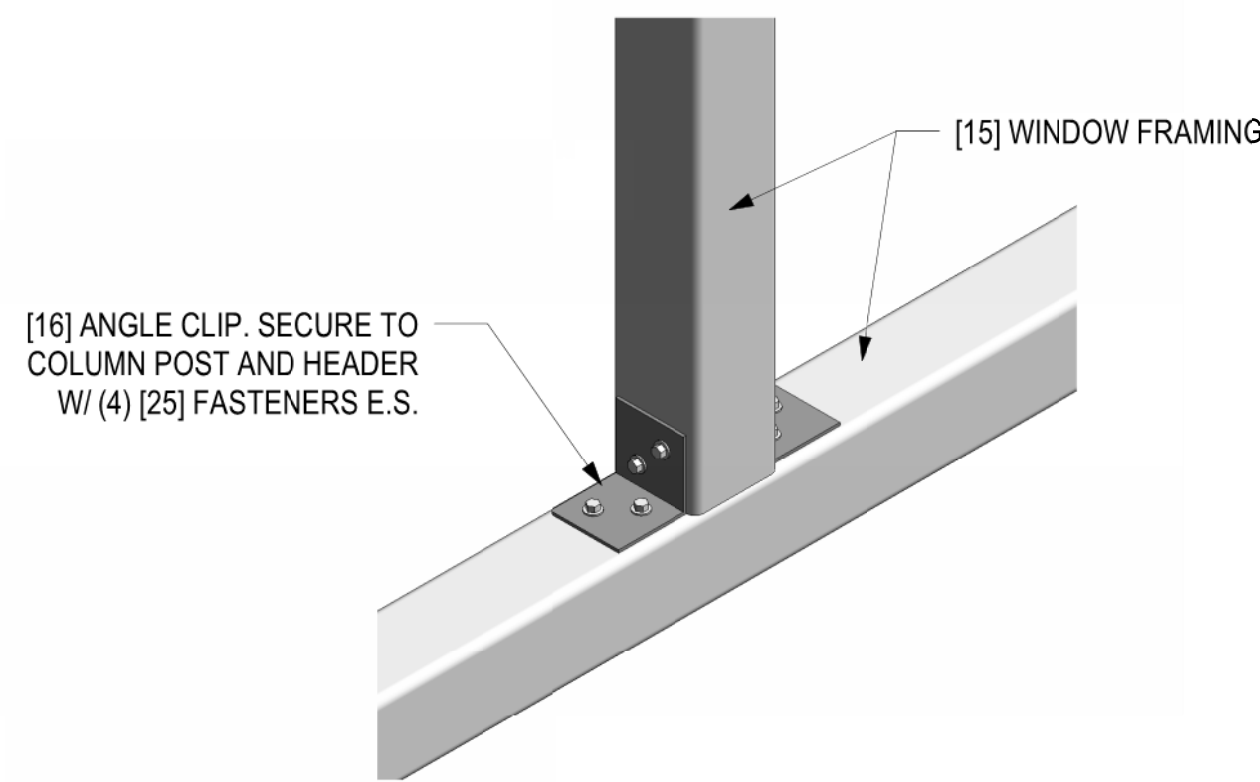
SIDEWALL FRAMING NOTES:

1. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
2. MAX. HEIGHT OF SIDEWALL OVERHEAD DOOR OPENINGS IS 2 FT LESS THAN THE EAVE HEIGHT.
3. OVERHEAD DOOR OPENINGS CANNOT CUT THROUGH MORE THAN (2) FULL FRAMES.
4. MIN. (1) CLEAR BAY MUST BE MAINTAINED BETWEEN ANY (2) OVERHEAD DOOR OPENINGS. A CLEAR BAY IS A SPACE BETWEEN (2) FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
5. MIN. (1) CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
6. SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.

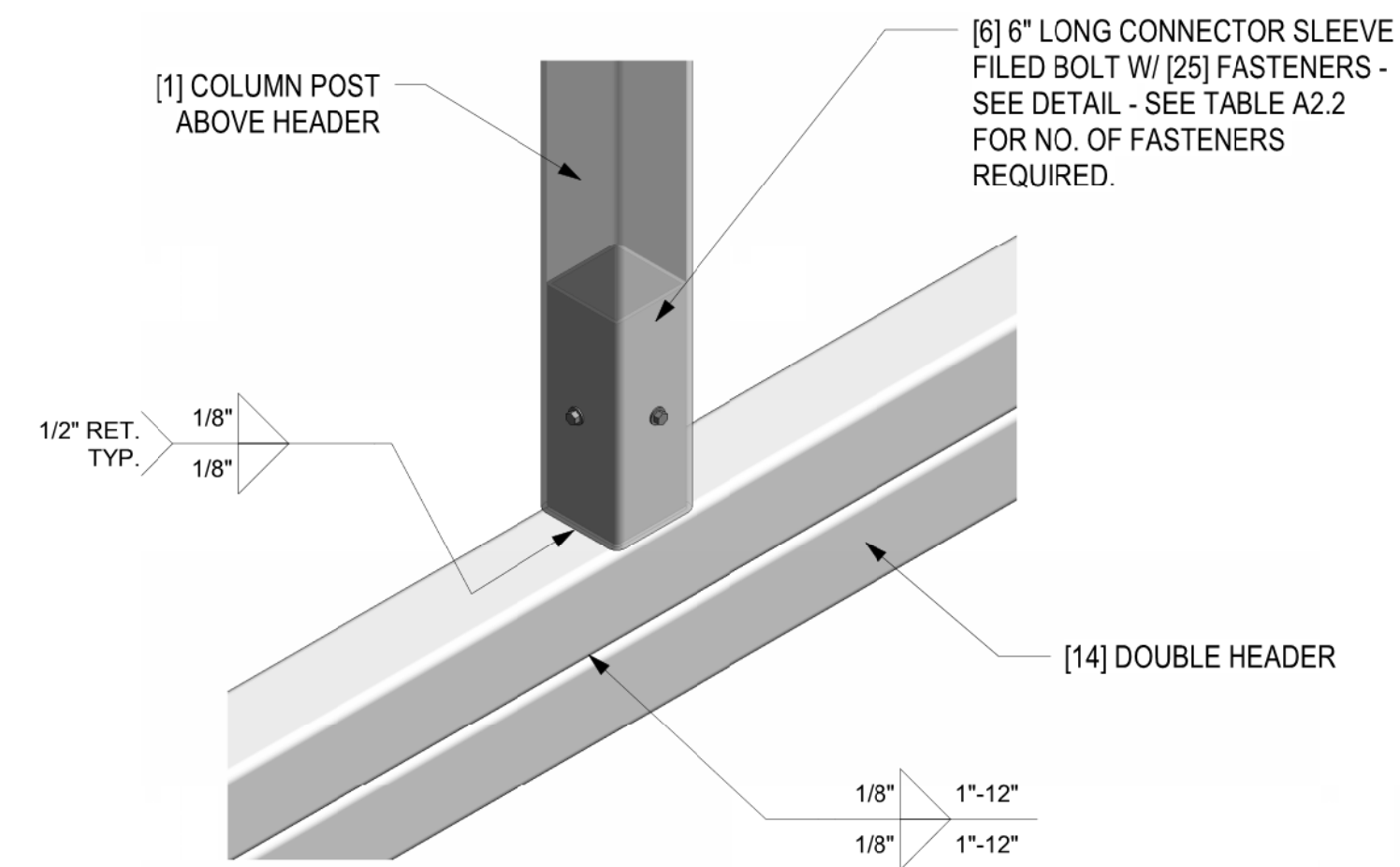
REV.



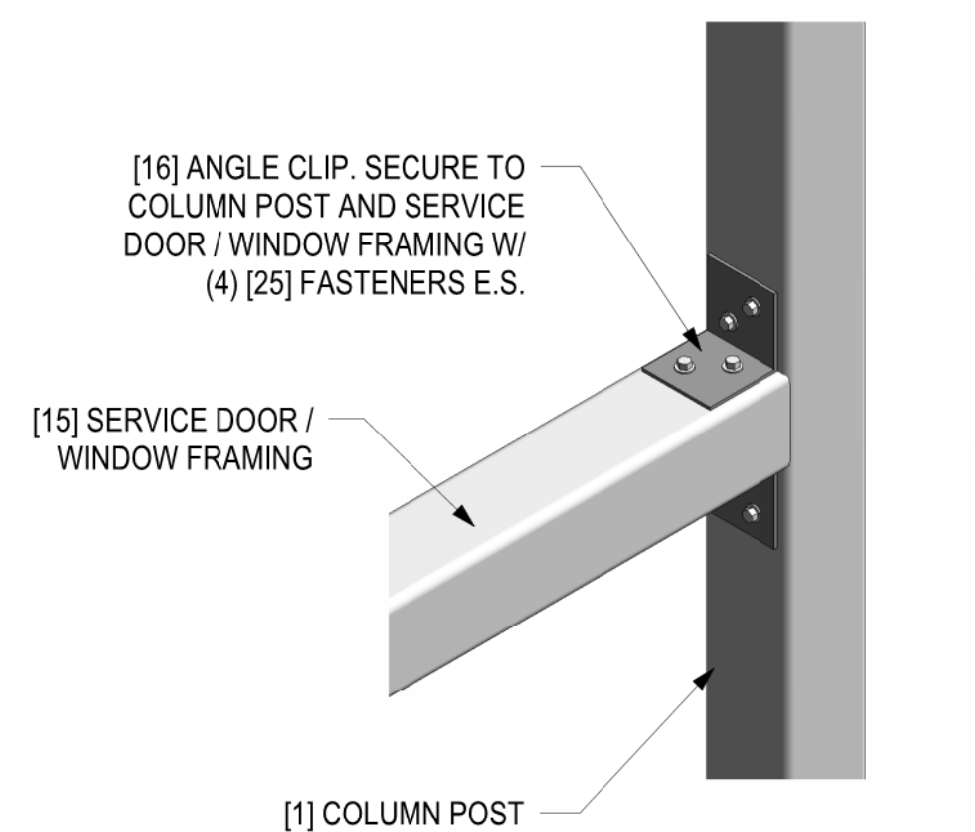
1 DOOR POST BOT. CONN. DETAIL
NTS



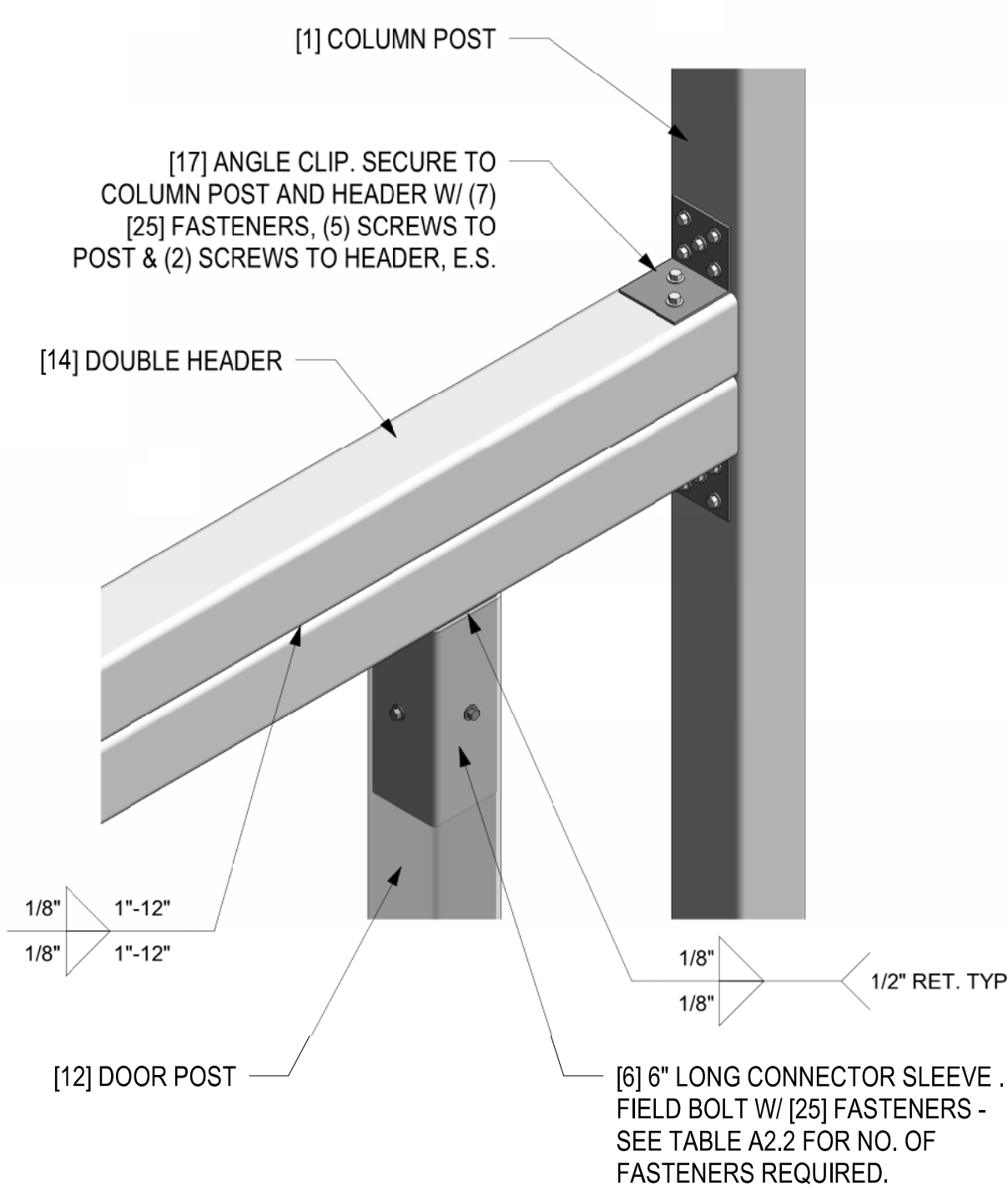
2 TYP. WINDOW FRAMING CONN. DETAIL
NTS



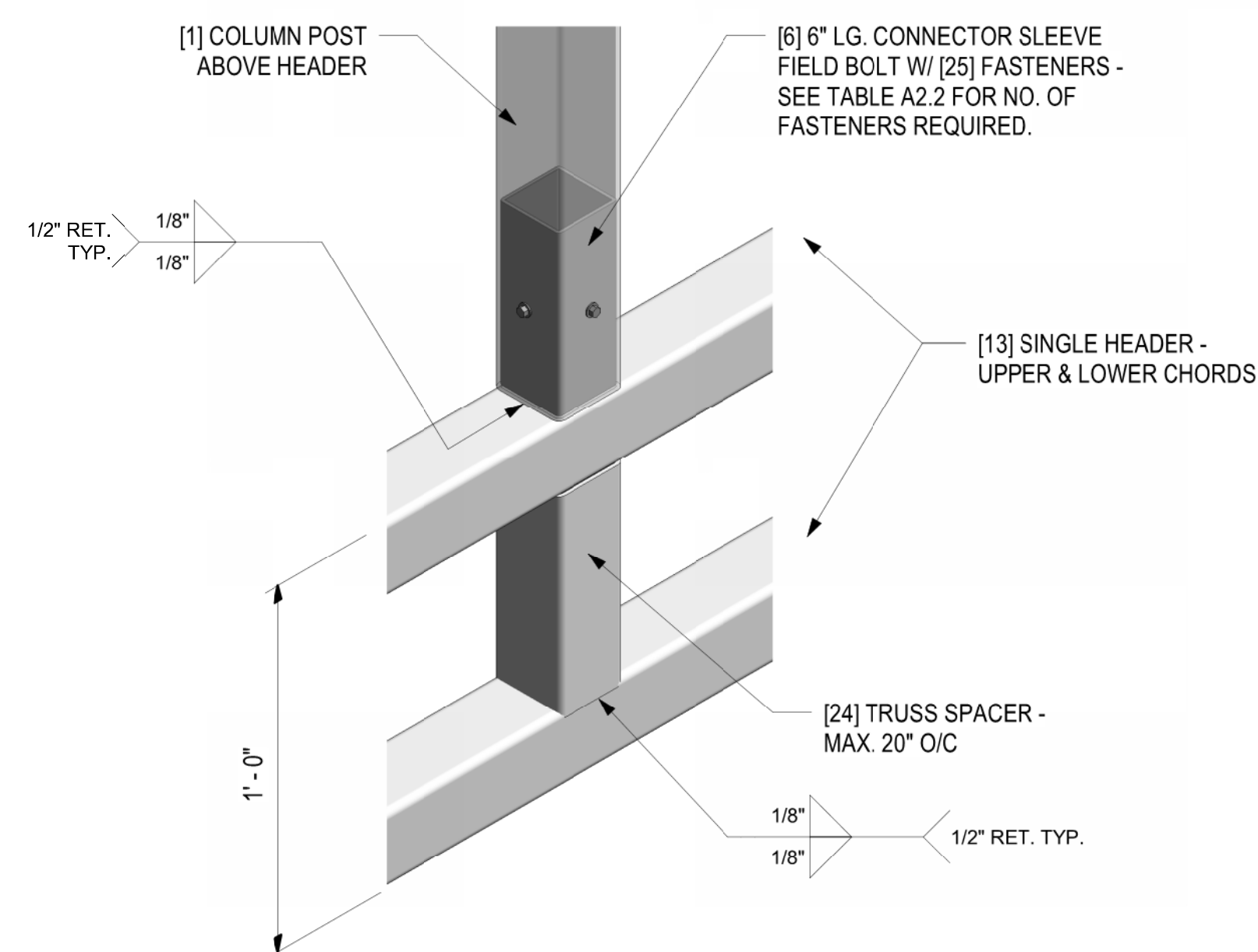
3 COLUMN POST ABOVE DOUBLE DOOR HEADER CONN. DETAIL
NTS



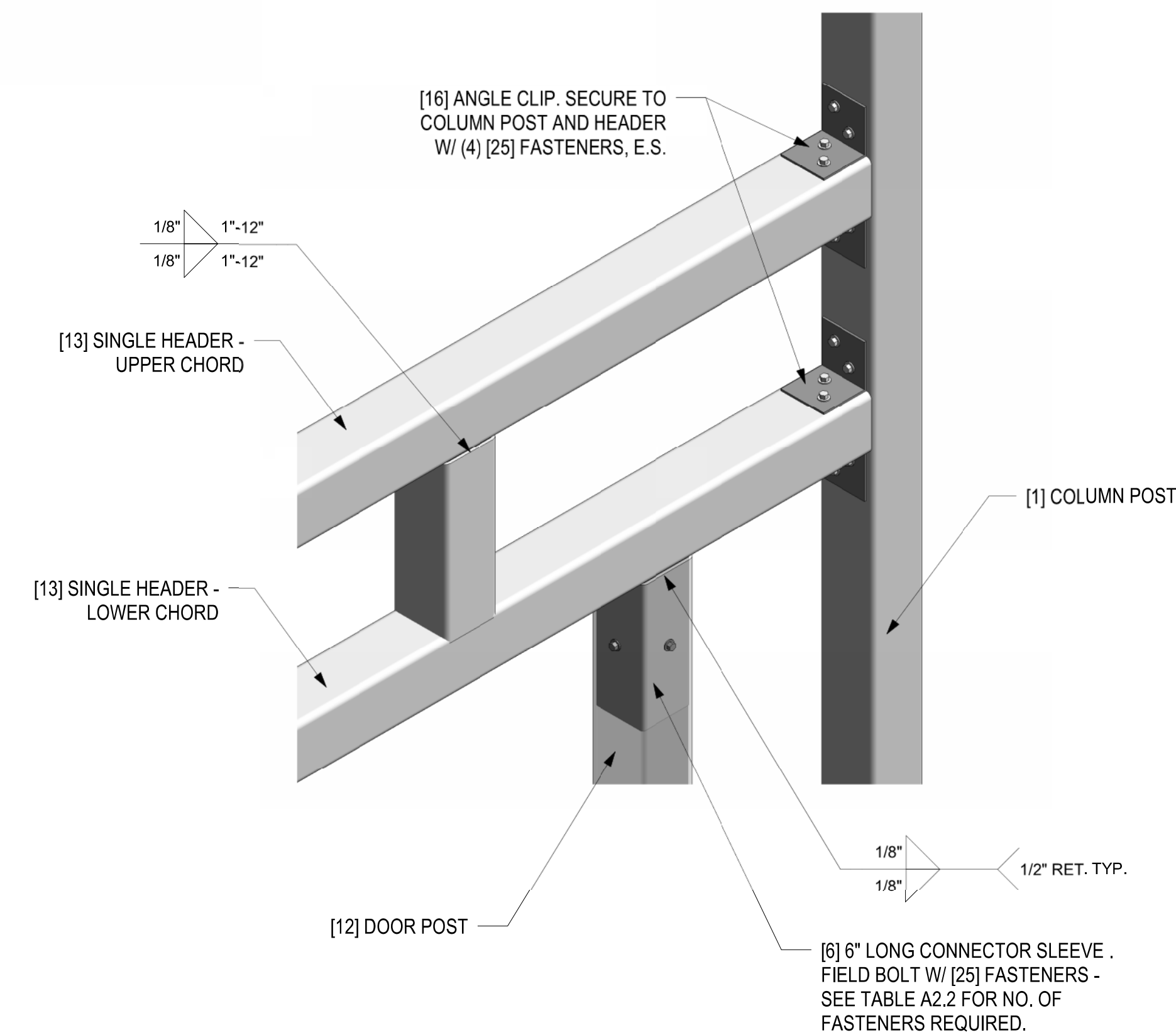
4 TYP. SERVICE DOOR / WINDOW FRAMING CONN. DETAIL
NTS



5 COLUMN POST ABOVE DOUBLE DOOR HEADER CONN. DETAILS
NTS



7 COLUMN POST ABOVE TRUSS DOOR HEADER CONN. DETAIL
NTS



6 COLUMN POST ABOVE TRUSS DOOR HEADER CONN. DETAILS
NTS



ANS STEEL PROTOTYPE BUILDING
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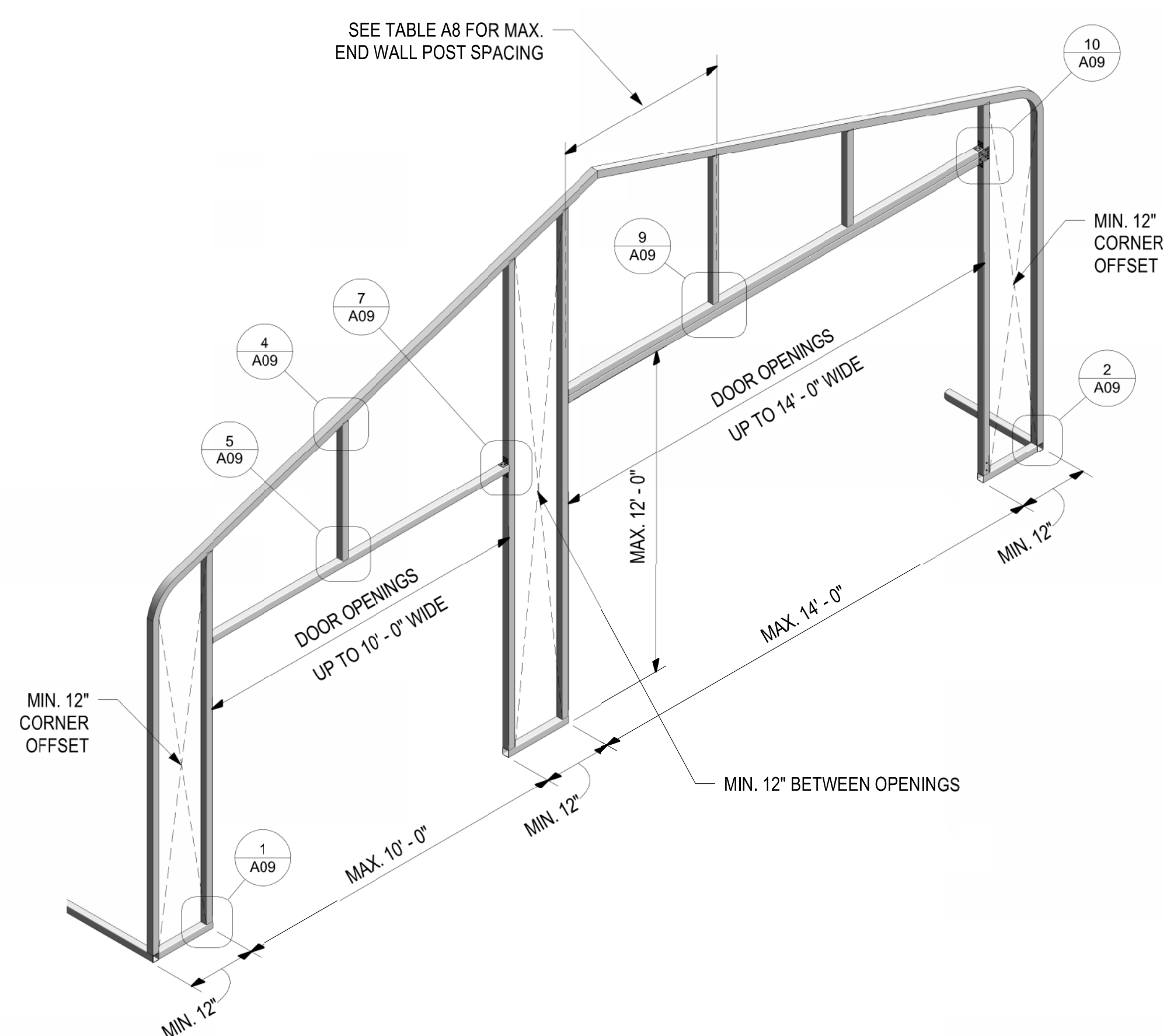
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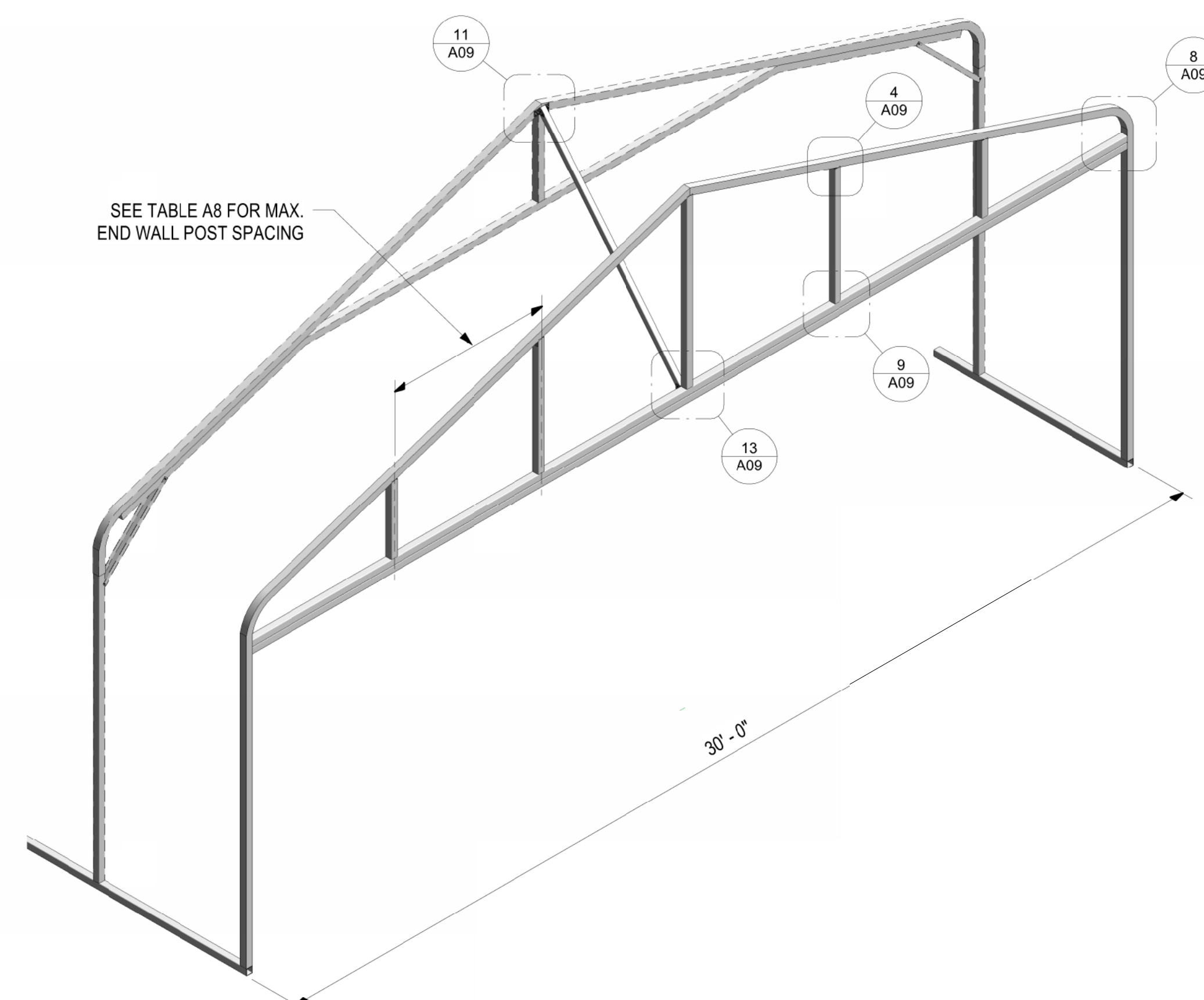
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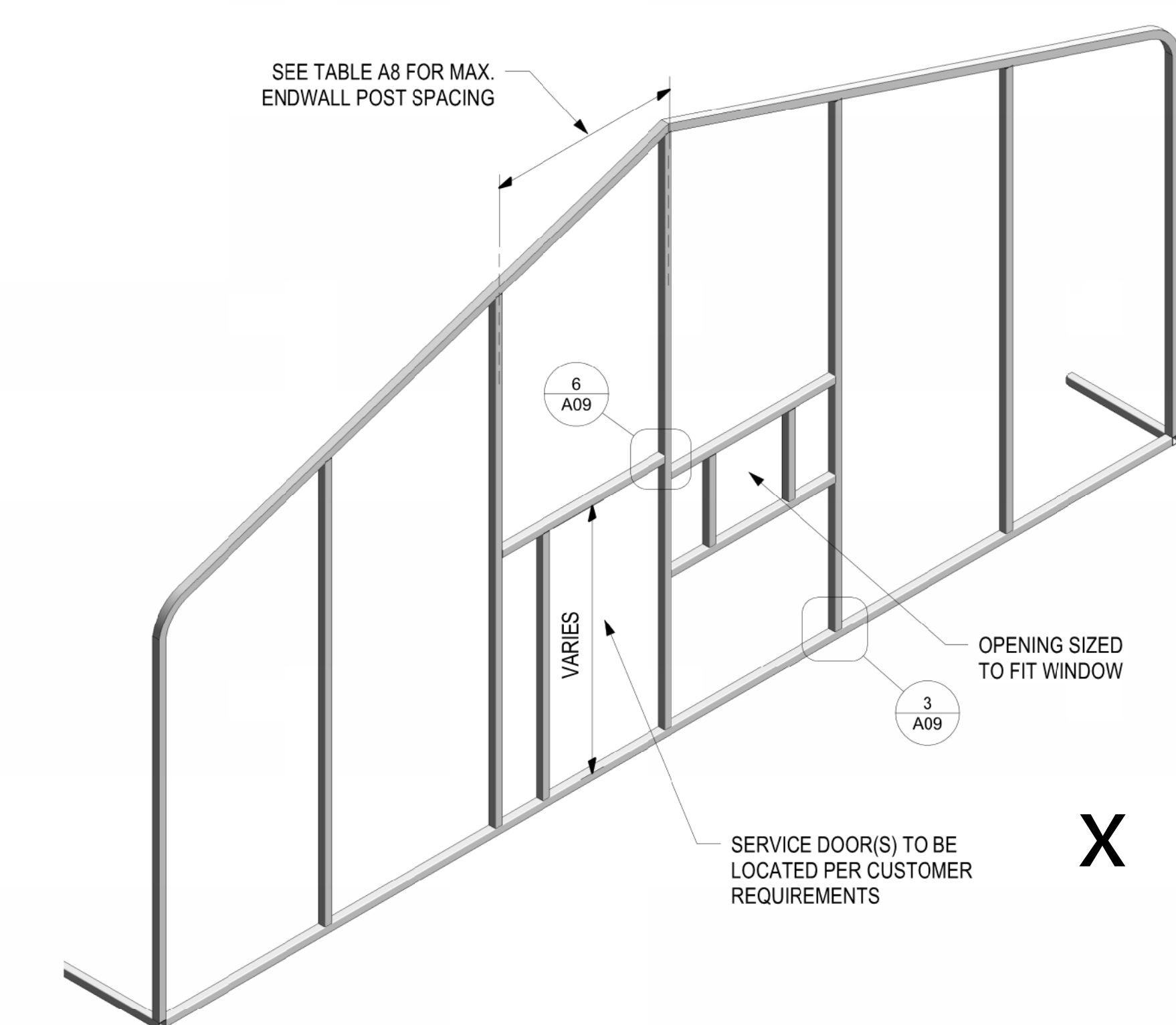
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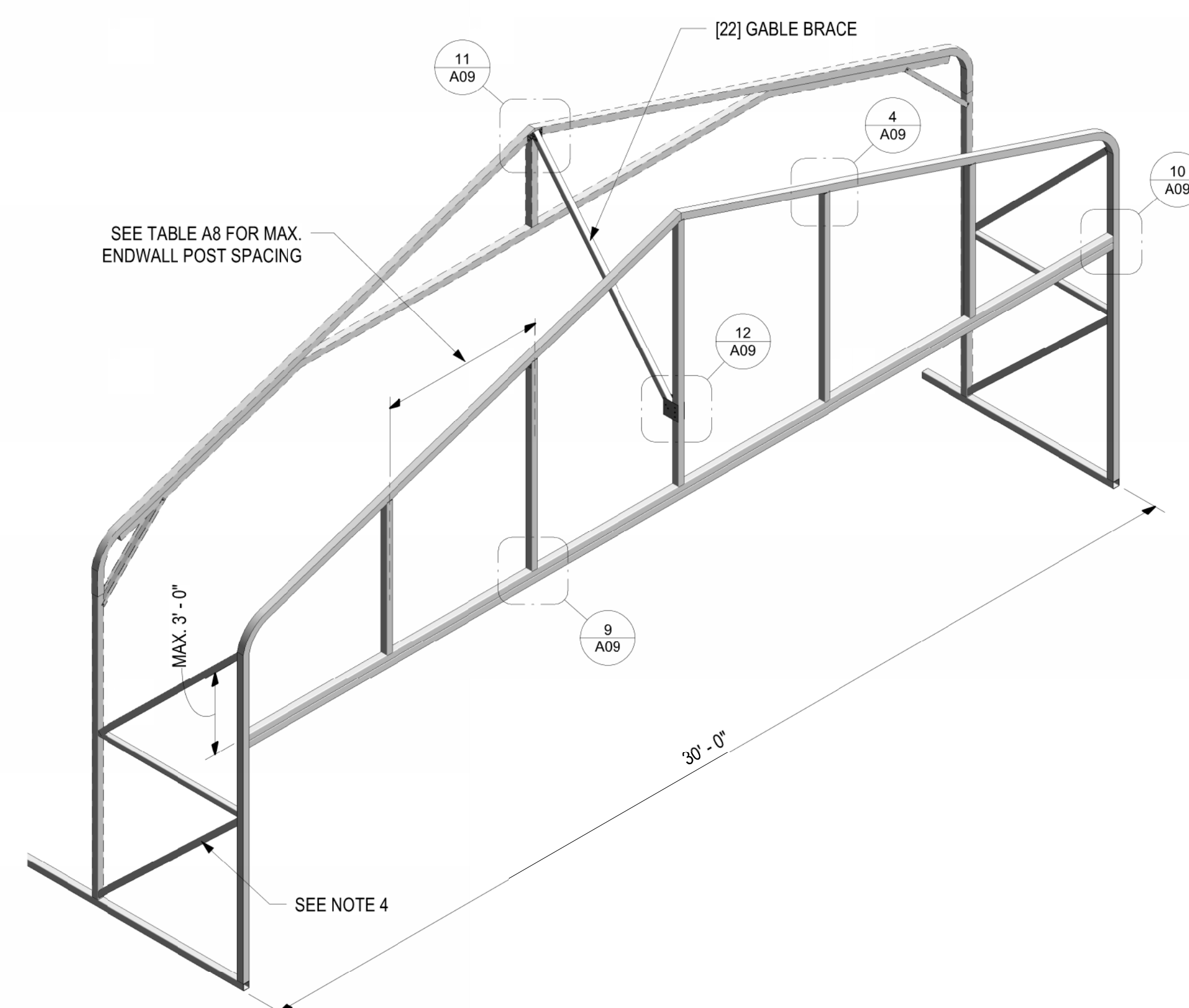
○ ENDWALL OVERHEAD DOOR OPENINGS
NTS



○ ENDWALL GABLES
NTS



○ ENDWALL SERVICE DOOR AND WINDOW OPENINGS
NTS



○ PARTIAL ENDWALL FRAMING
NTS



**ANS STEEL PROTOTYPE BUILDING
30' WIDE MAXIMUM
STATE OF OHIO**

REV	PERMIT
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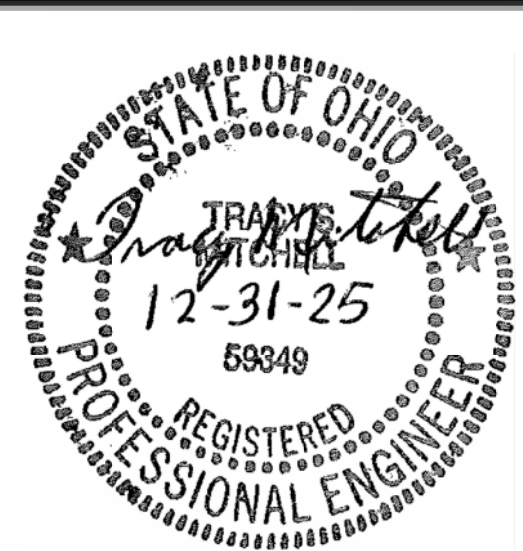
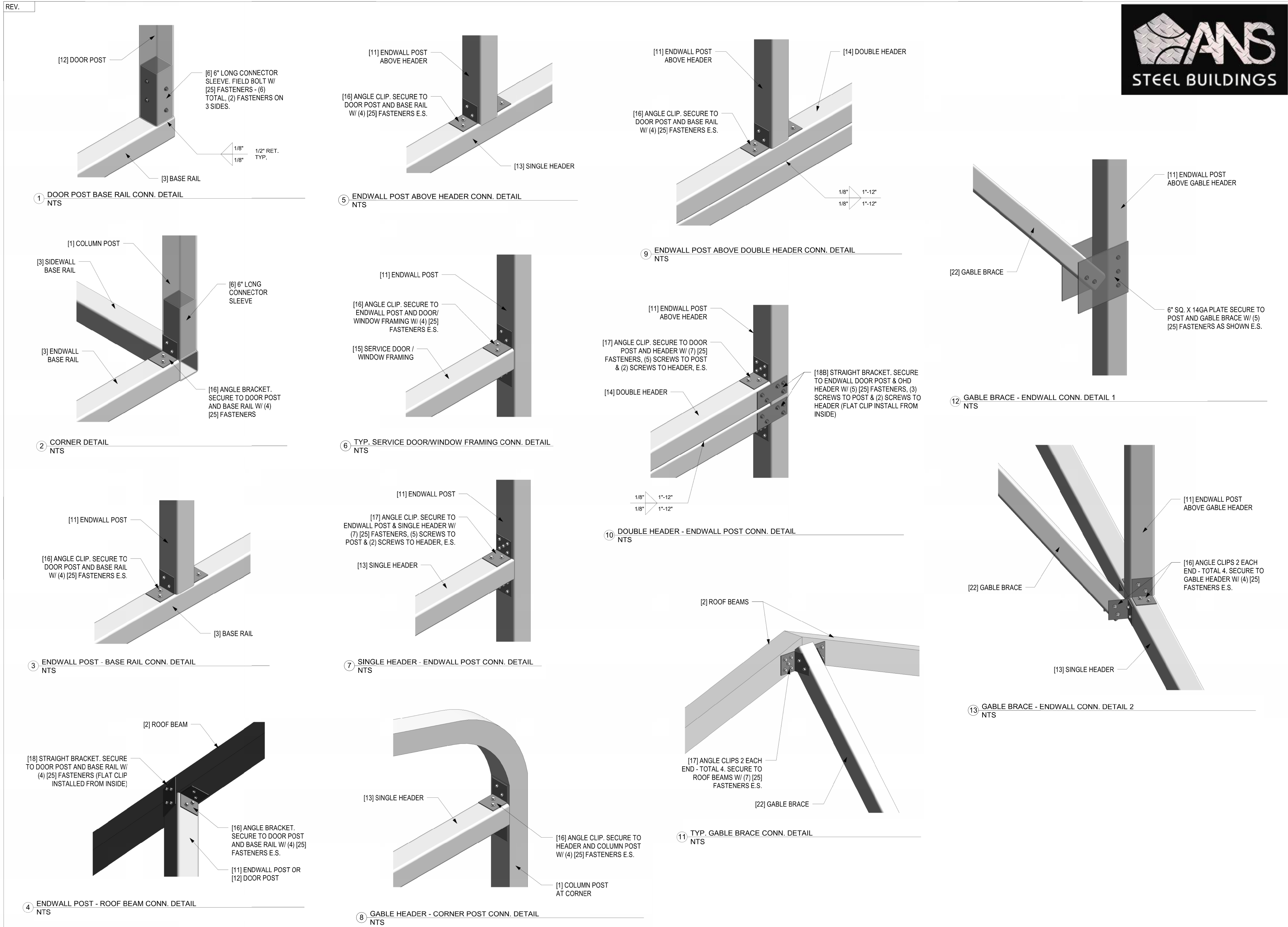
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ENDWALL FRAMING NOTES:

- ENDWALL FRAMING NOTES:**
1. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
 2. MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
 3. SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
 4. DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES. SEE SHEET A10 FOR DIAGONAL BRACE CONNECTION DETAILS.

TABLE A8 - ENDWALL POST SPACING SCHEDULE

WIND SPEED (MPH)	EAVE HEIGHT		
	UP TO 7'	8' TO 9'	10' TO 12'
100	5'	5'	5'



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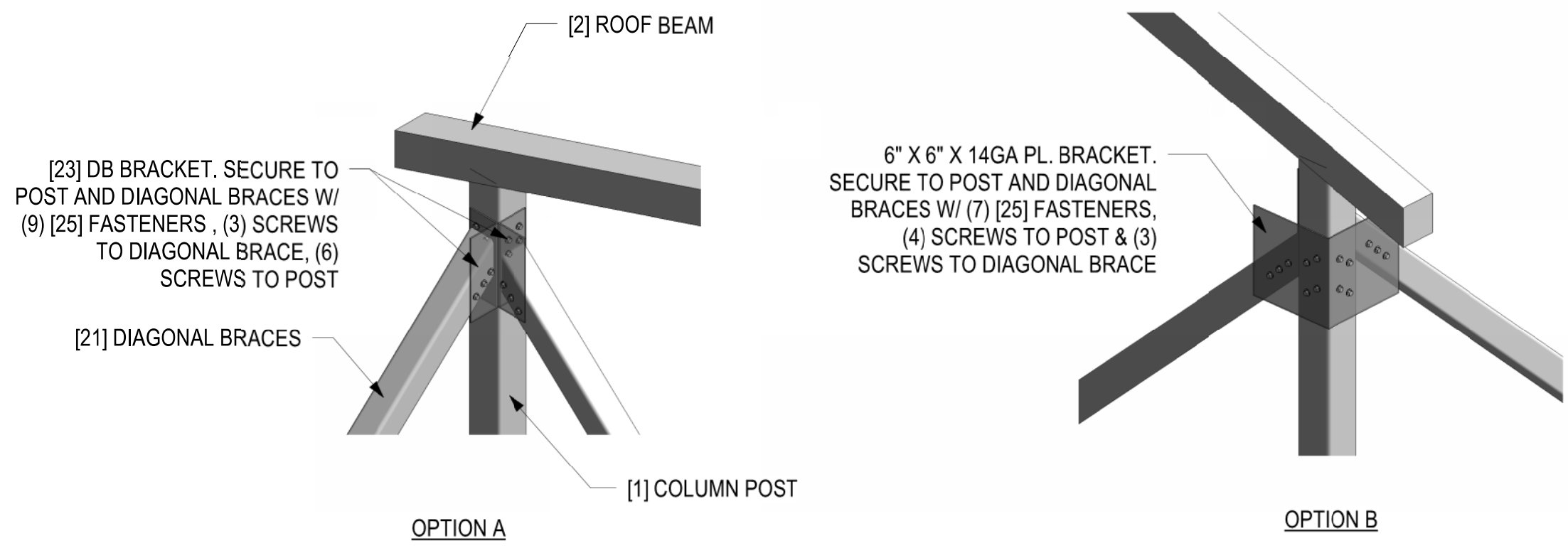
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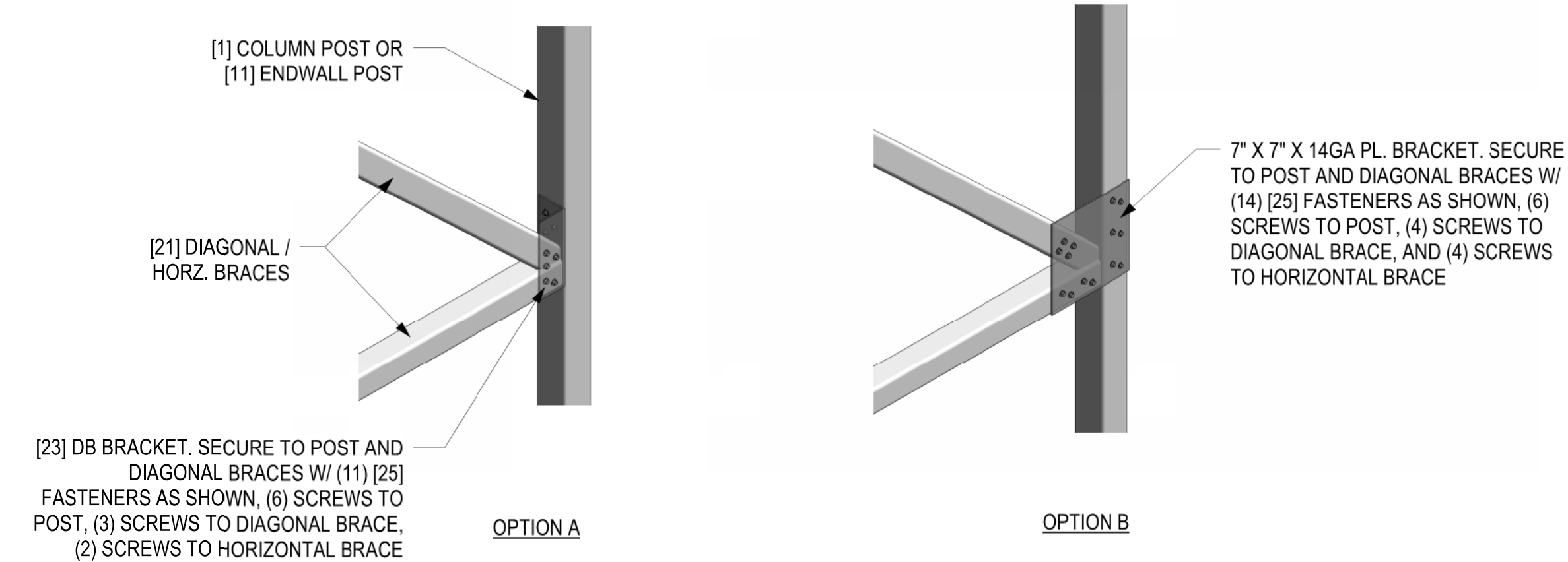
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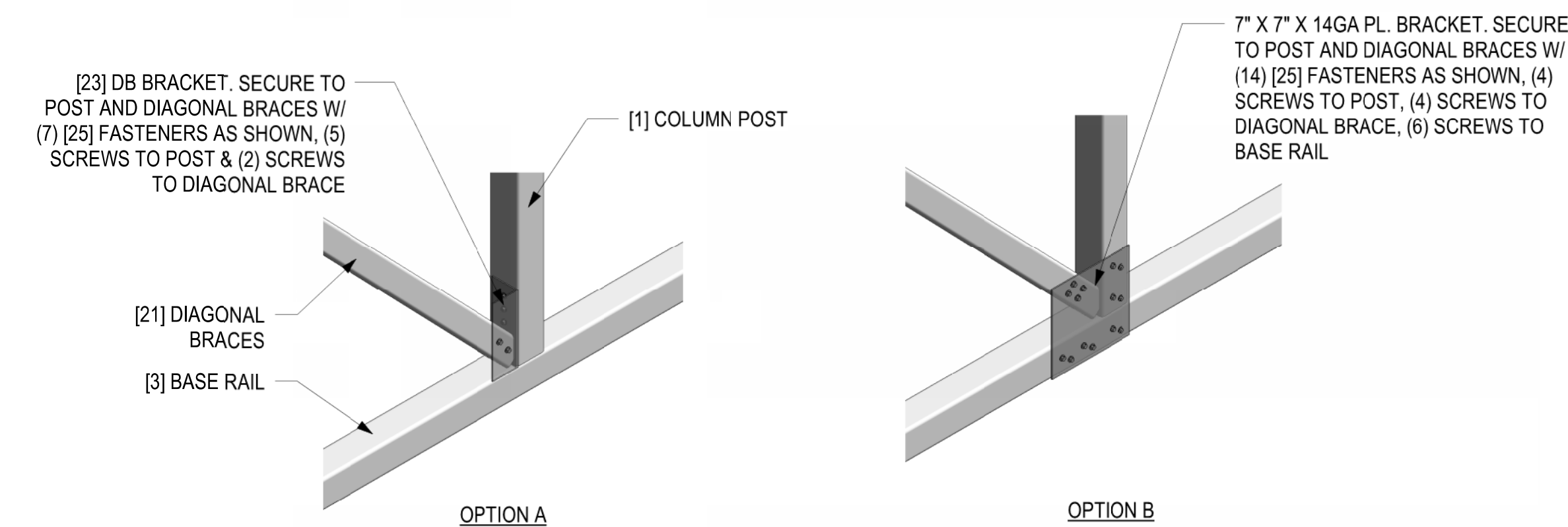
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1 DIAGONAL BRACE TOP CORNER CONN. DETAIL*
NTS

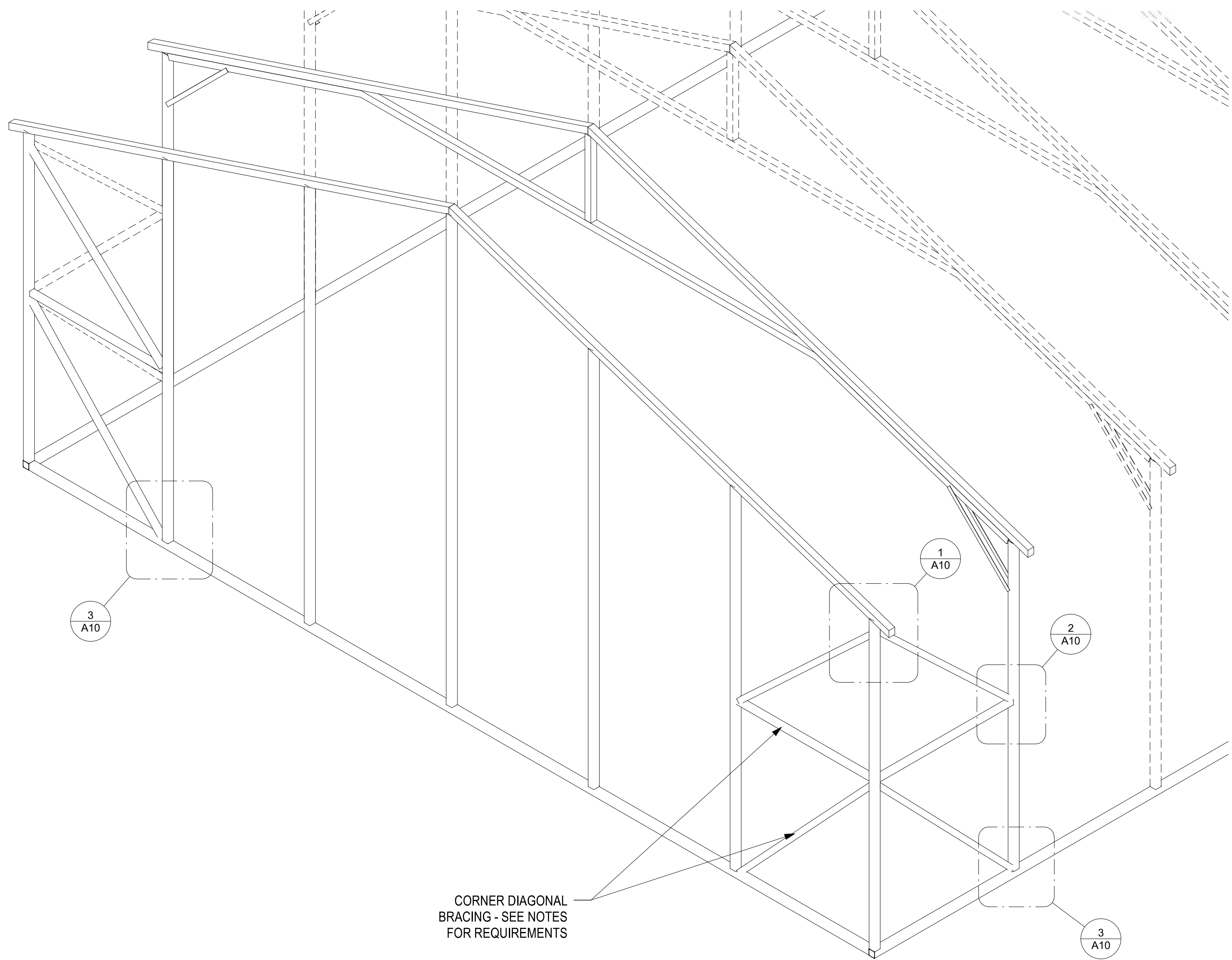


2 DIAGONAL BRACE - POST CONN. DETAIL*
NTS



3 DIAGONAL BRACE BOT. CORNER CONN. DETAIL*
NTS

* INSIDE VIEW SHOWN FOR CLARITY.

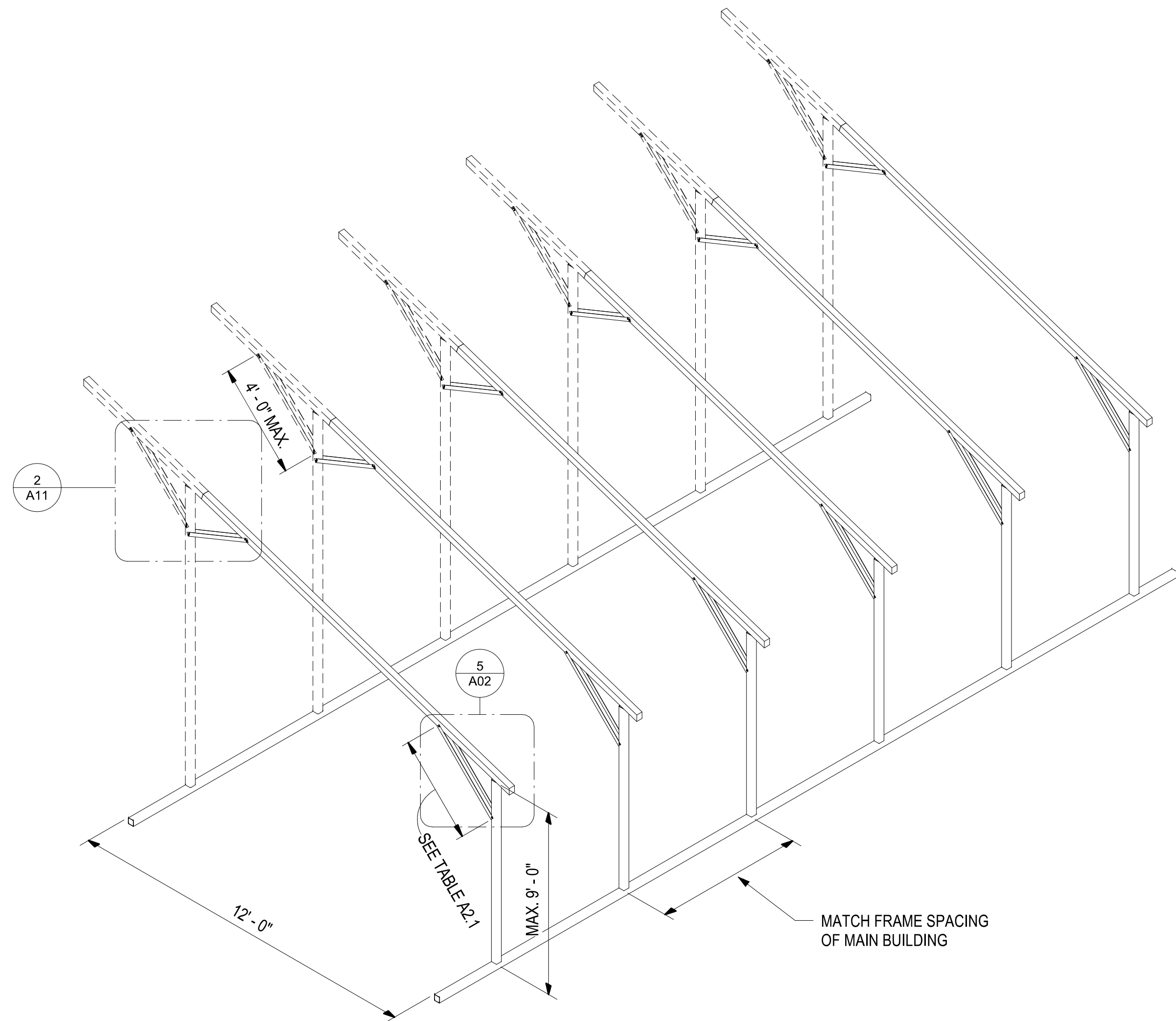


DIAGONAL BRACING AT CORNERS
NTS

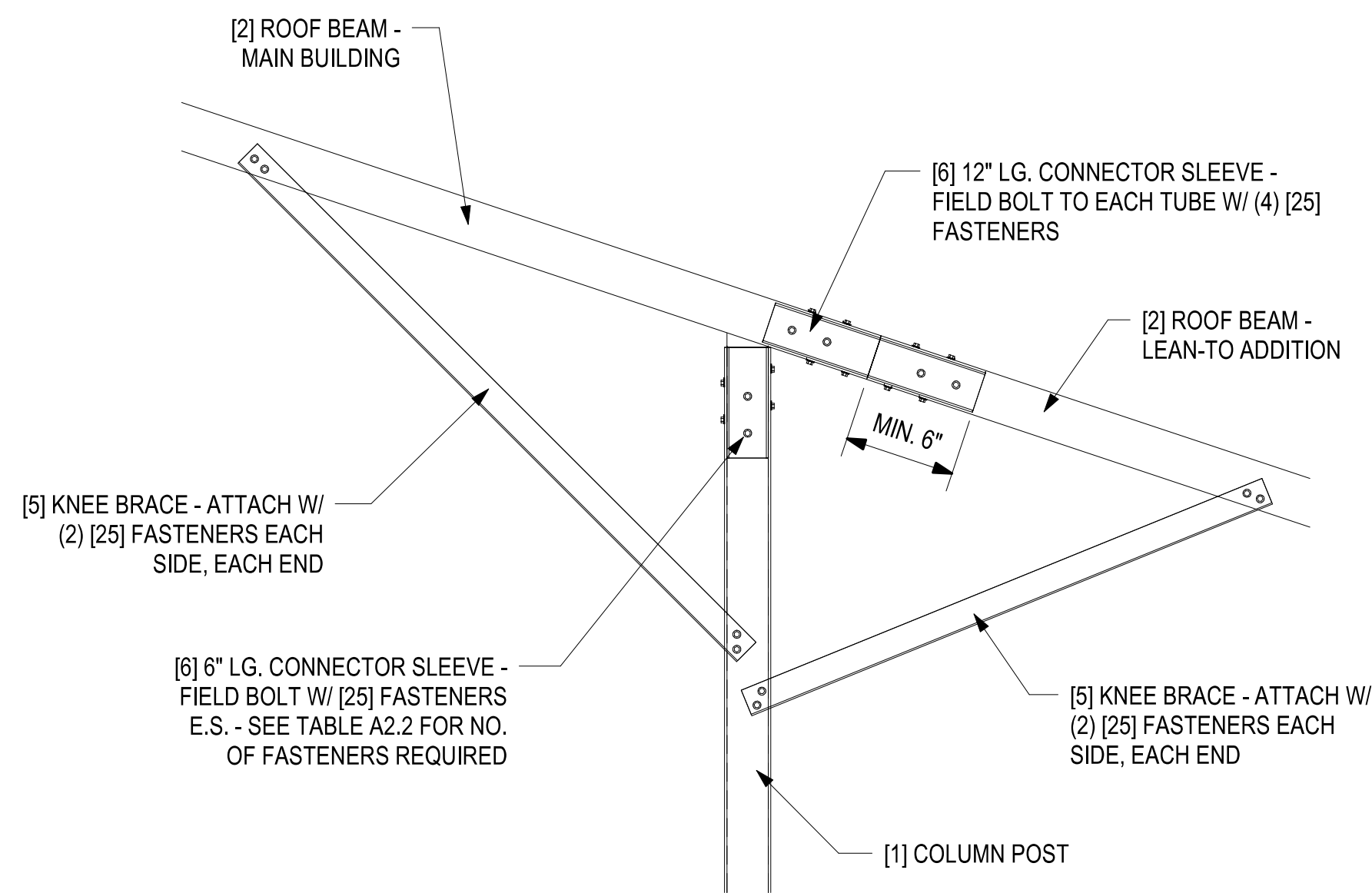
CORNER BRACING NOTES:

- DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
 - FOR 3 SIDED ENCLOSED BUILDINGS 140 MPH OR GREATER WIND SPEED
 - THE BUILDING MUST BE DESIGNED W/ OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
- SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
- ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.

REV.



1 OPTIONAL LEAN-TO ADDITION
NTS



2 LEAN-TO ATTACHMENT DETAIL
1 1/2" = 1'-0"



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TABLE A11 - LEAN-TO FRAME SPACING CHART		
GROUND SNOW (PSF)	ENCLOSED BUILDING	OPEN BUILDING
	WIND SPEED (MPH)	WIND SPEED (MPH)
30	100	100
40	60	48
	48	36

- LEAN-TO ADDITION NOTES:
- LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
 - ROOF SLOPE, PURLIN, AND GIRT OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
 - IF THE LEAN-TO ADDITION IS "OPEN" (BOTH ENDWALLS OR SIDEWALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE A11.

REV.

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATION SHOWN ON SHEETS F01 THRU F03 CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE F1.2.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 5-1/2" FOR 14GA MATERIAL AND 5-3/4" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTIONS.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

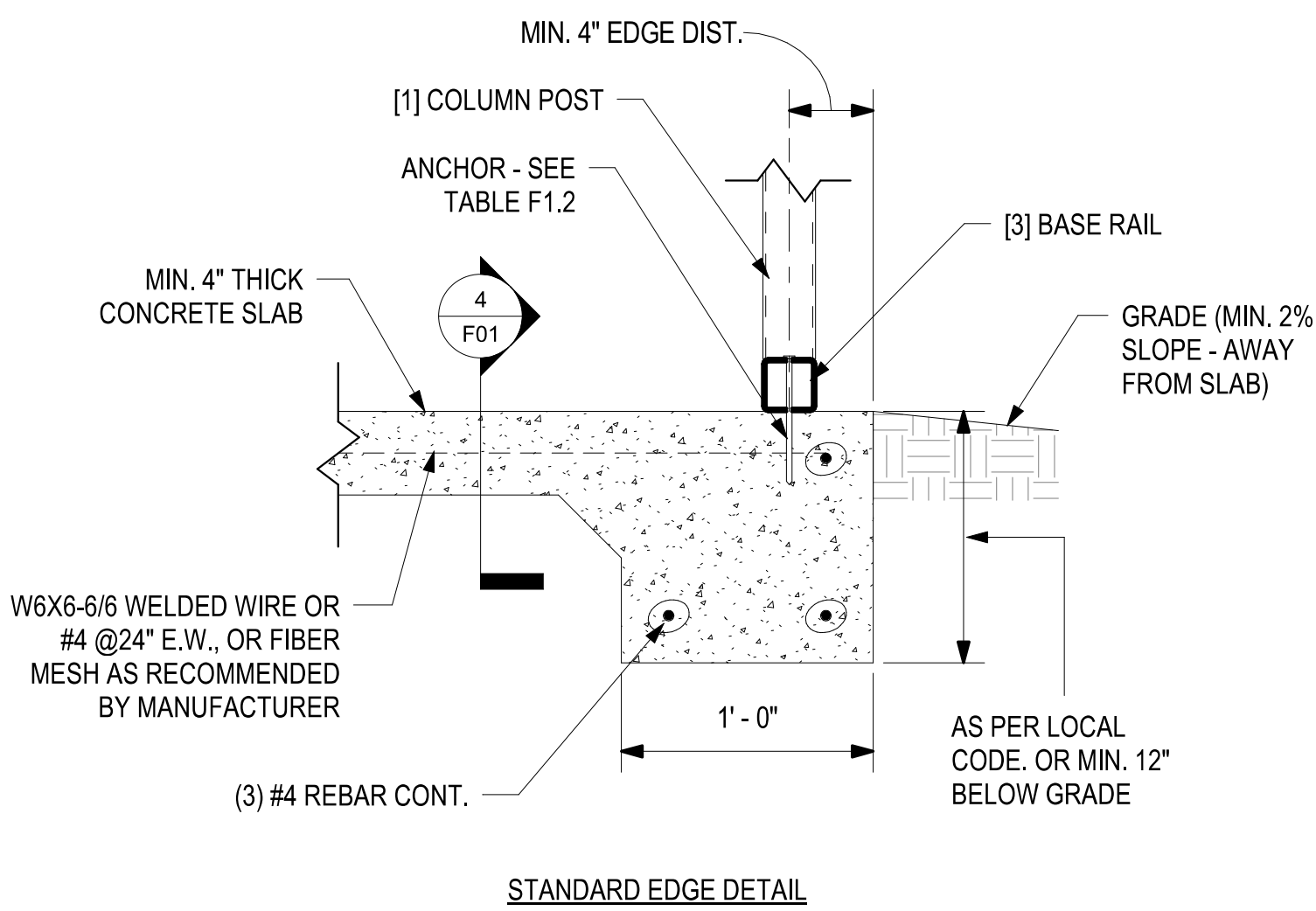
TABLE F1.1 - NOTCH WIDTH			
HORIZONTAL/OPEN		VERTICAL	
14GA	12GA	14GA.	12GA.
2-3/4"	2-7/8"	1-3/4"	1-7/8"

NOTE: DEPTH IS TO BE 1 1/2"

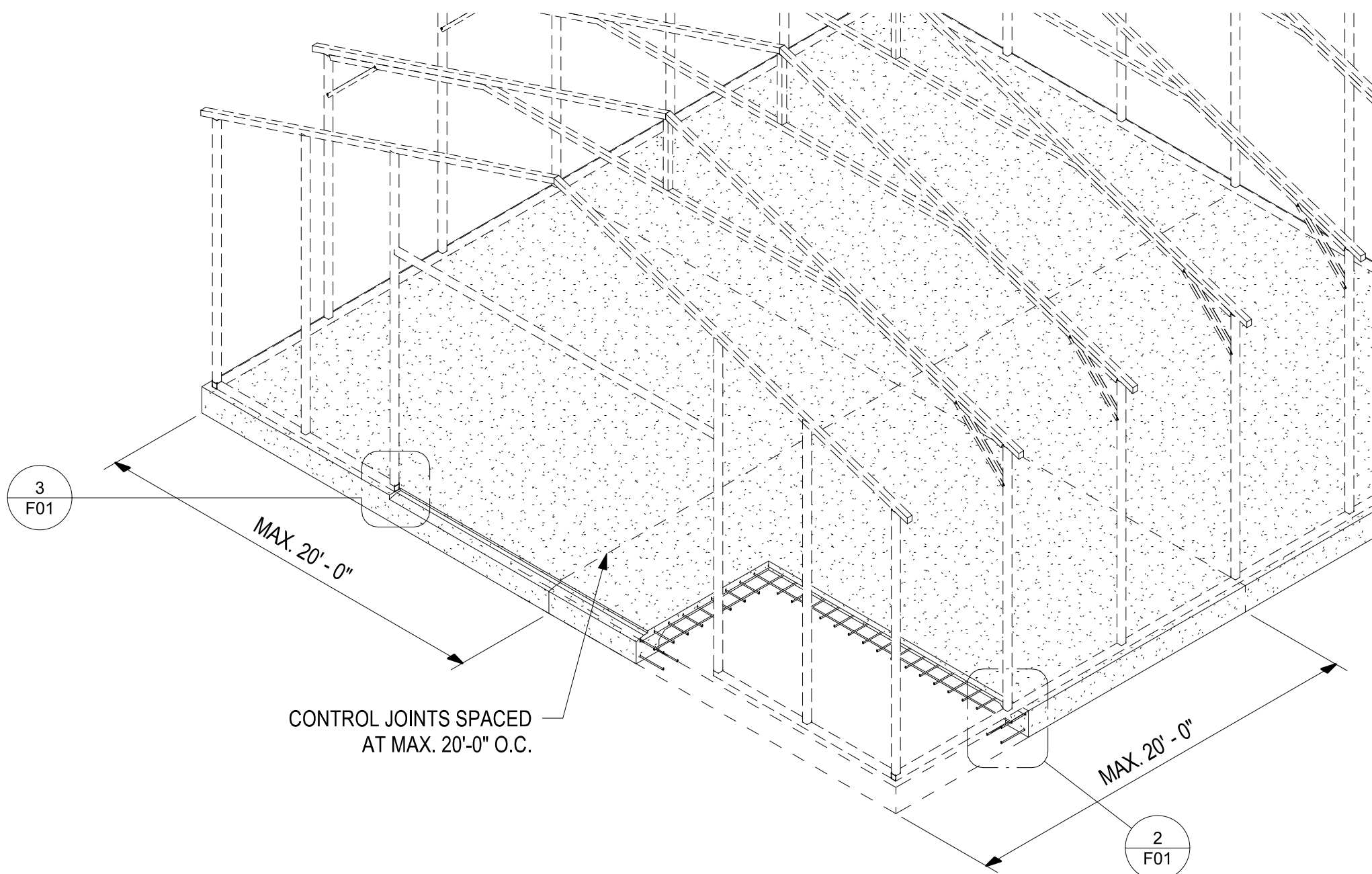
TABLE F1.2 - ANCHOR SCHEDULE		
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	100	(1) 1/2"Ø X 7"
OPEN	100	(1) 1/2"Ø X 7"

NOTES:

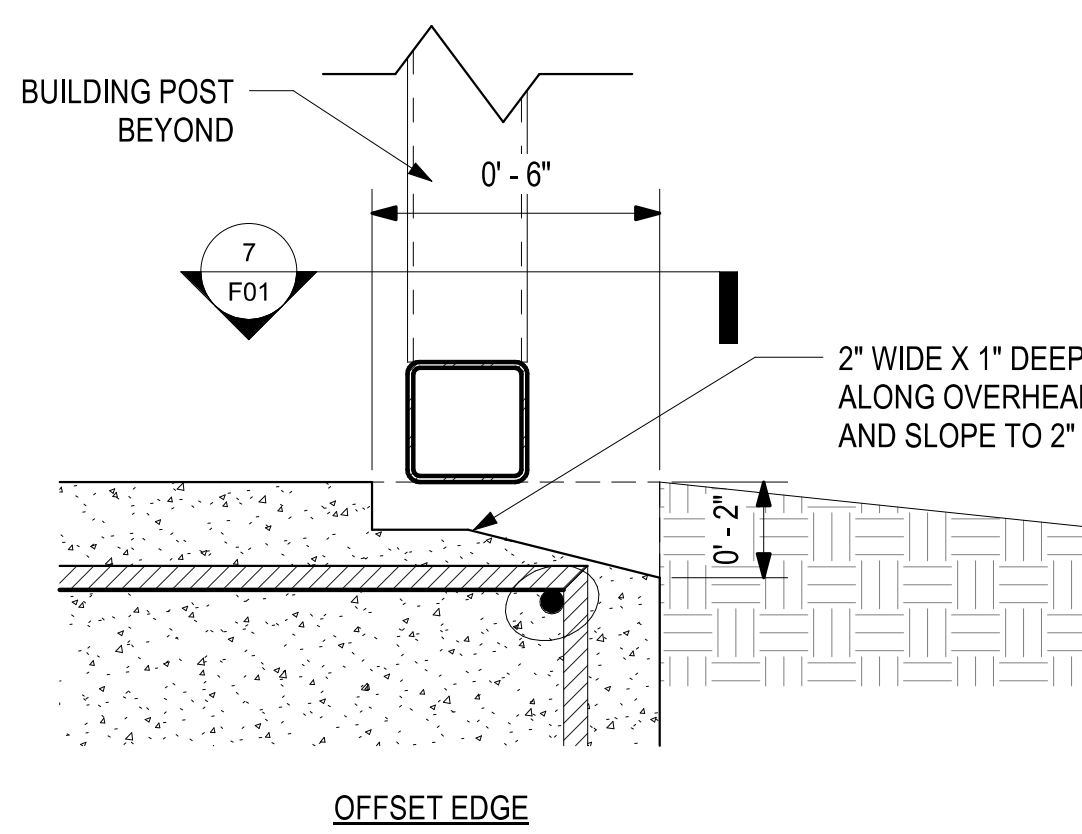
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 2-7/8".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



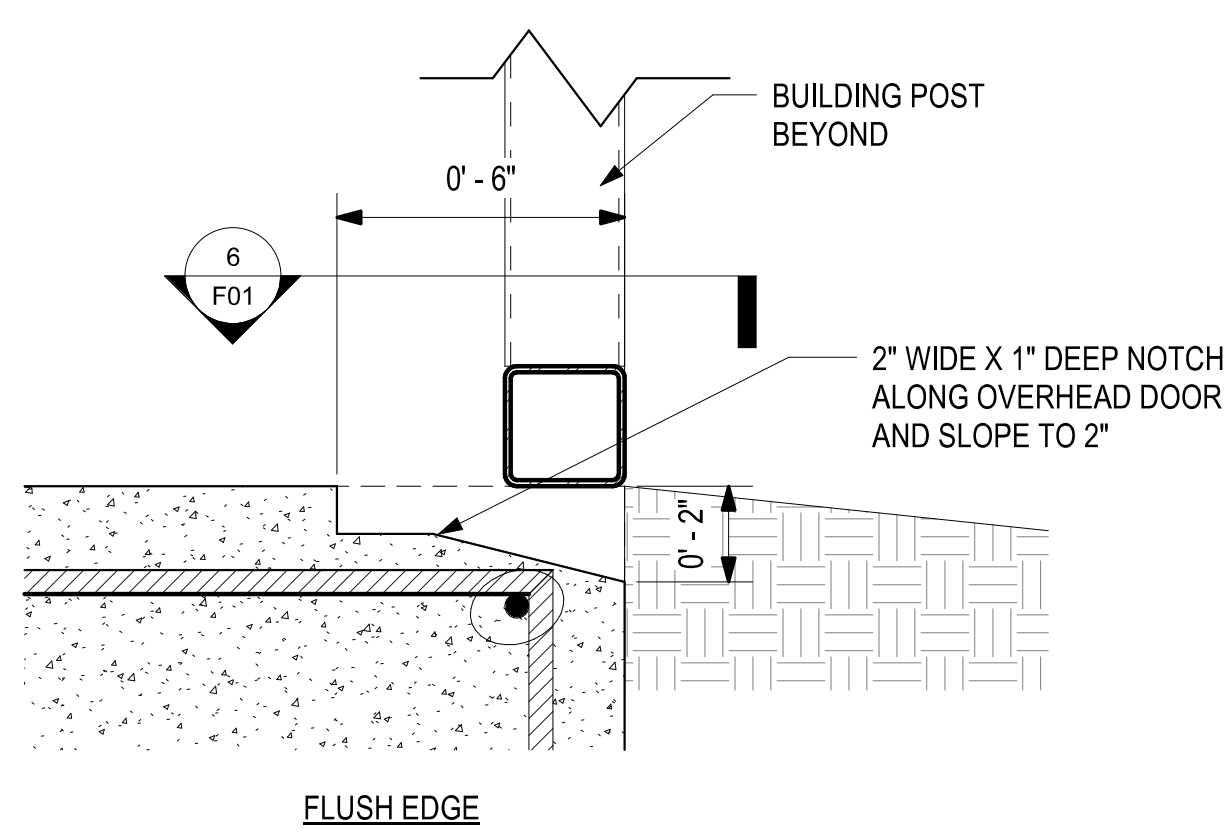
1 CONCRETE SLAB FOUNDATION NTS



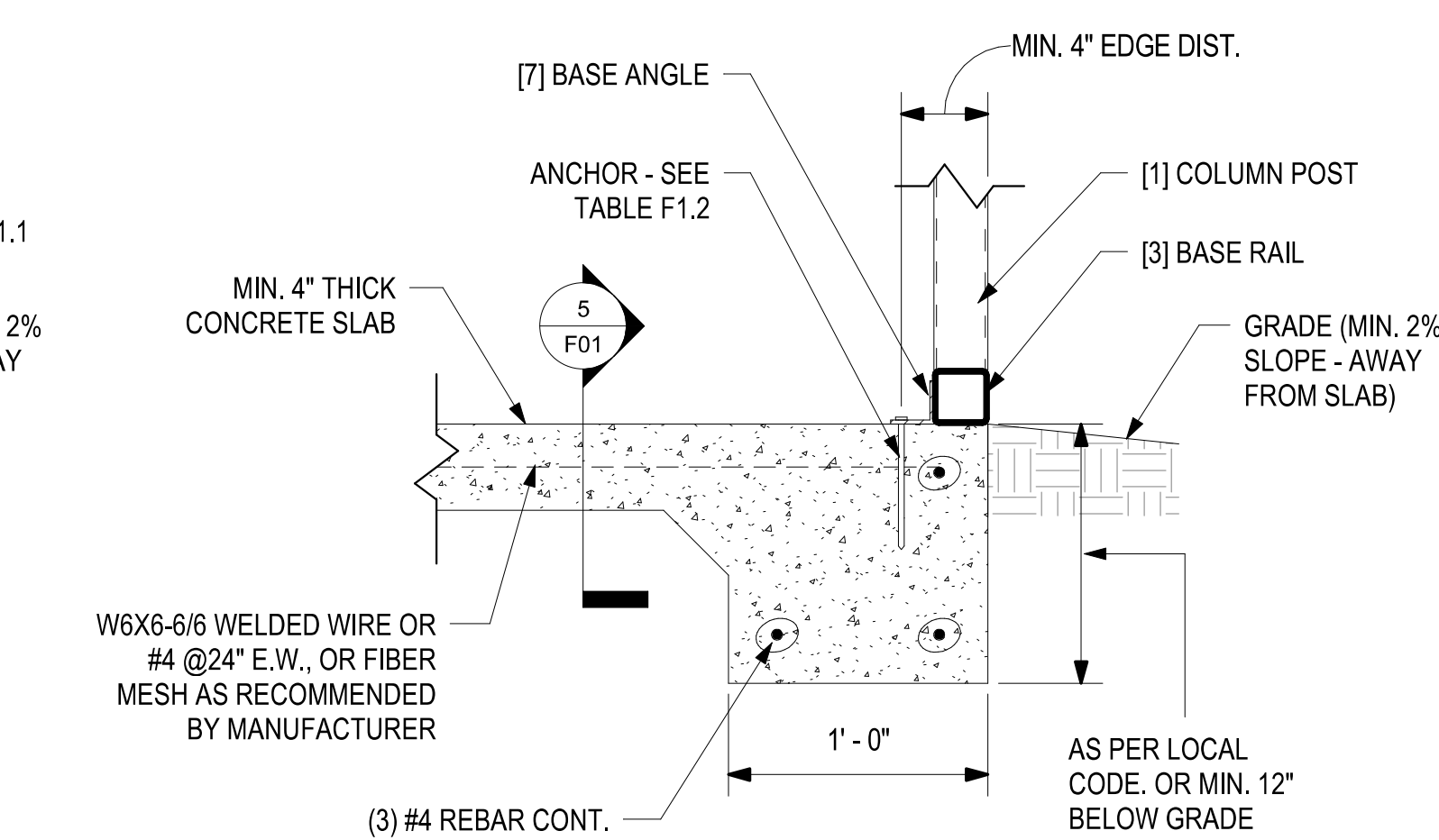
2 EDGE DETAIL OPTIONS
1 1/2" = 1'-0"



3 OVERHEAD DOOR NOTCH DETAIL OPTIONS
3" = 1'-0"

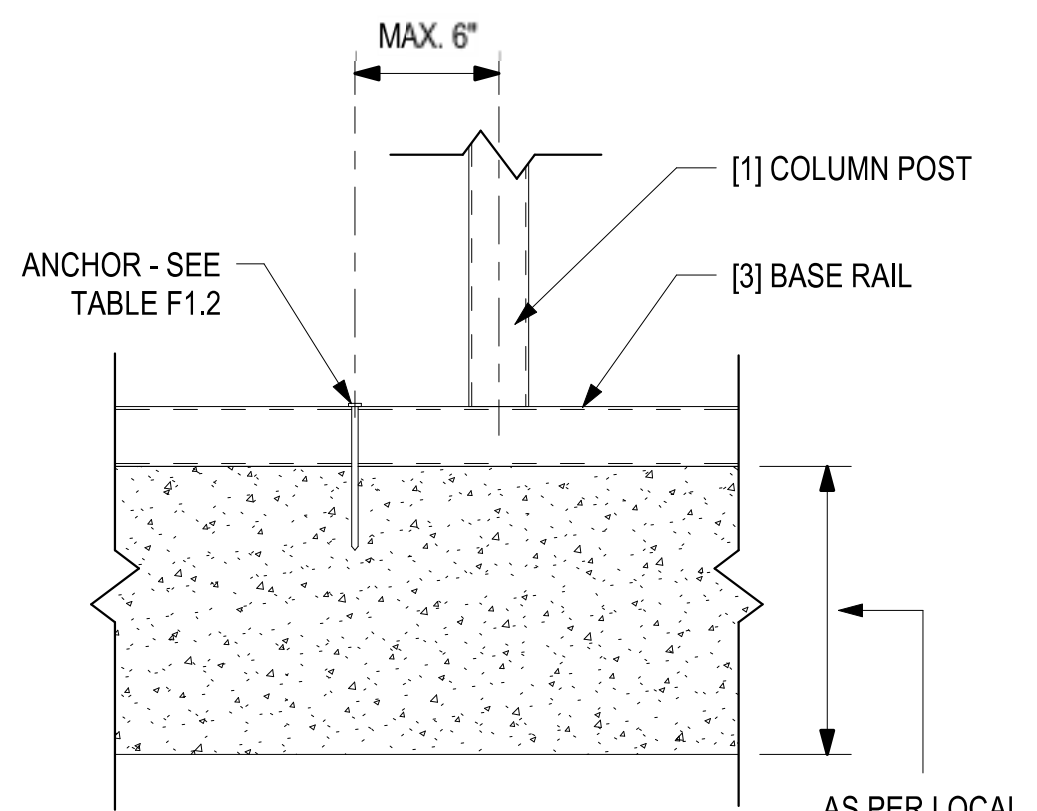


4 FLUSH EDGE DETAIL

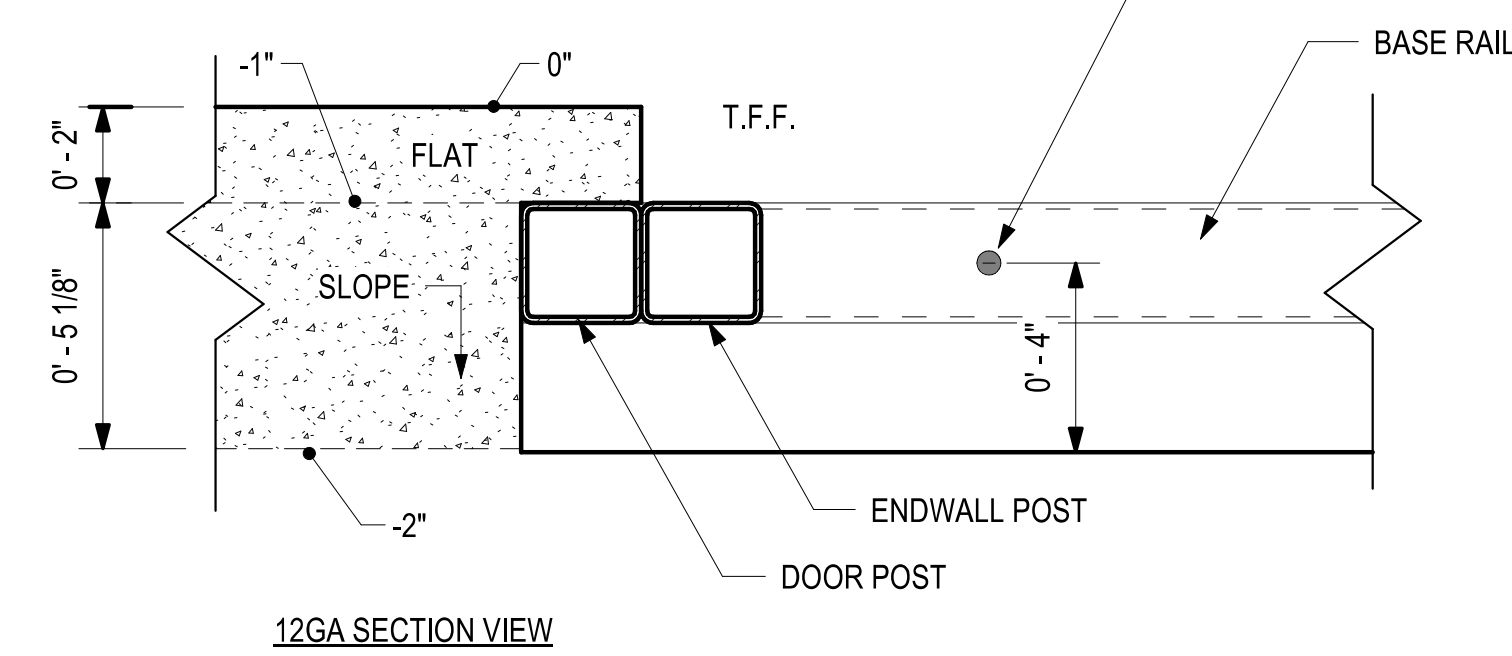
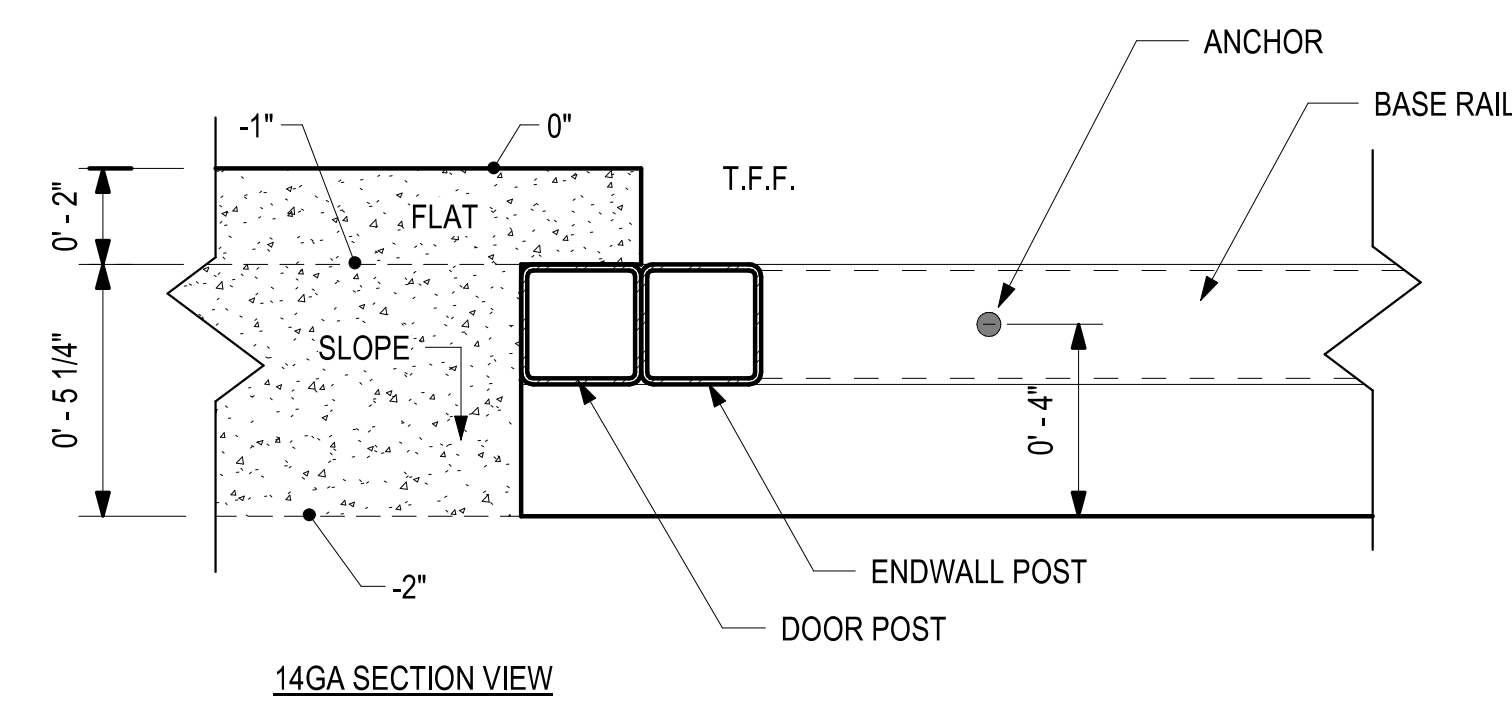


5 EDGE FLUSH DETAIL - SECTION VIEW
1 1/2" = 1'-0"

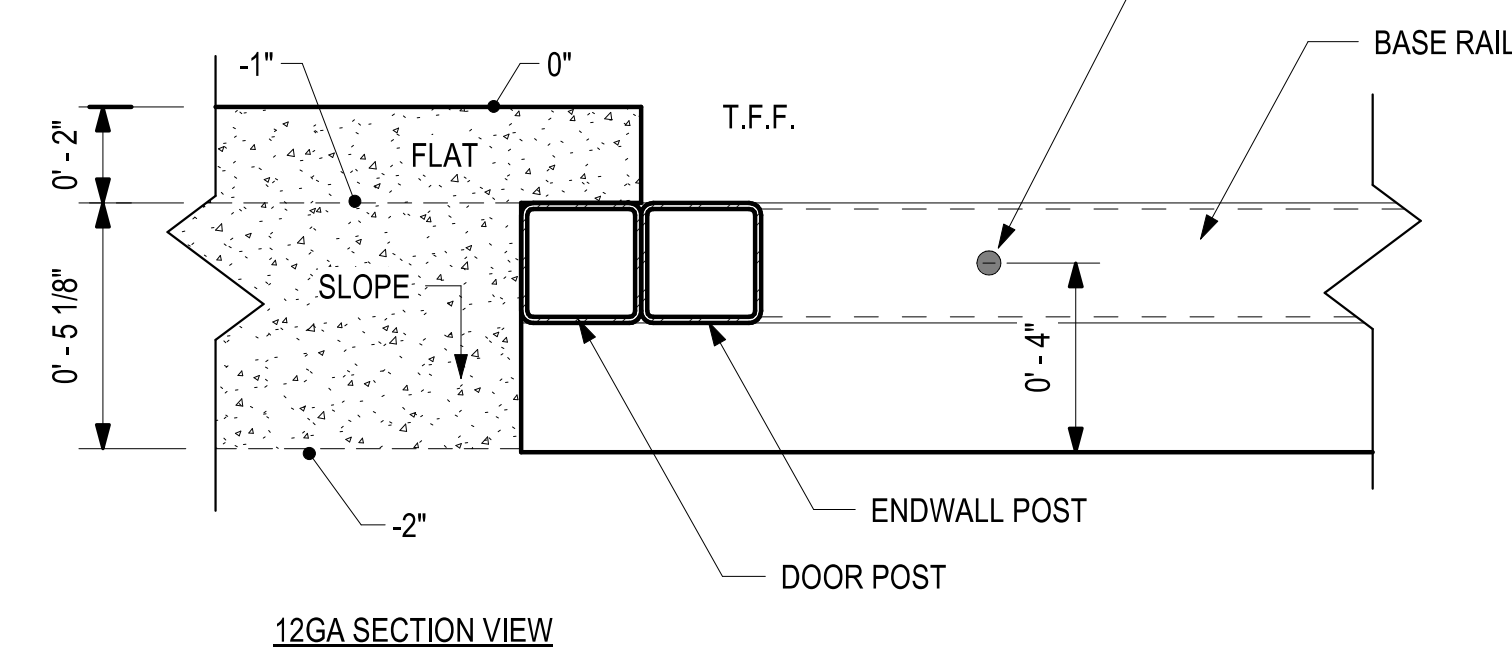
4 EDGE OFFSET DETAIL - SECTION VIEW
1 1/2" = 1'-0"



6 OVERHEAD DOOR NOTCH DETAIL SECTION VIEW - FLUSH EDGE
3" = 1'-0"



7 OVERHEAD DOOR NOTCH DETAIL SECTION VIEW - OFFSET EDGE
3" = 1'-0"



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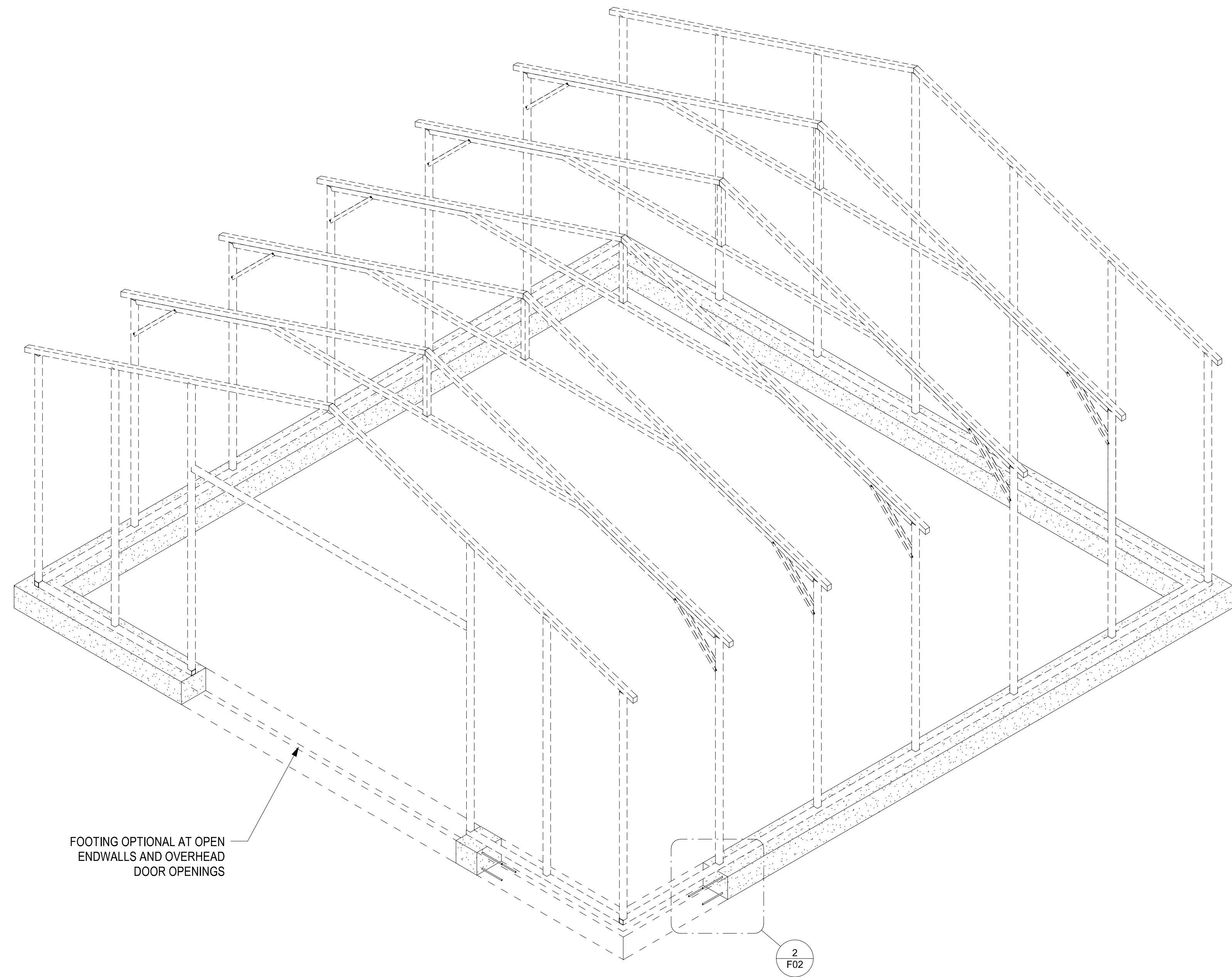
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1 CONCRETE STRIP FOUNDATION
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CONCRETE STRIP FOUNDATION NOTES:

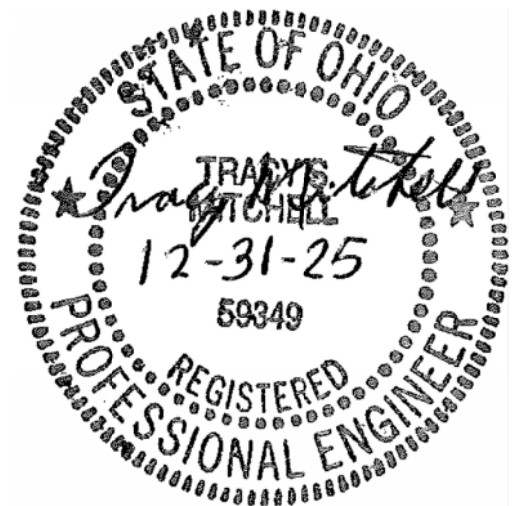
- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS F01 THRU F03 CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE F2.1.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS
- BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.

TABLE F2.1- ANCHOR SCHEDULE		
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	100	(1) 1/2"Ø X 7"
OPEN	100	(1) 1/2"Ø X 7"

NOTES:

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 2-7/8".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

TABLE F2.2 - CONCRETE STRIP SCHEDULE	
WIND SPEED (MPH)	MIN. SIZE REQUIRED
100	15"W X 12"D



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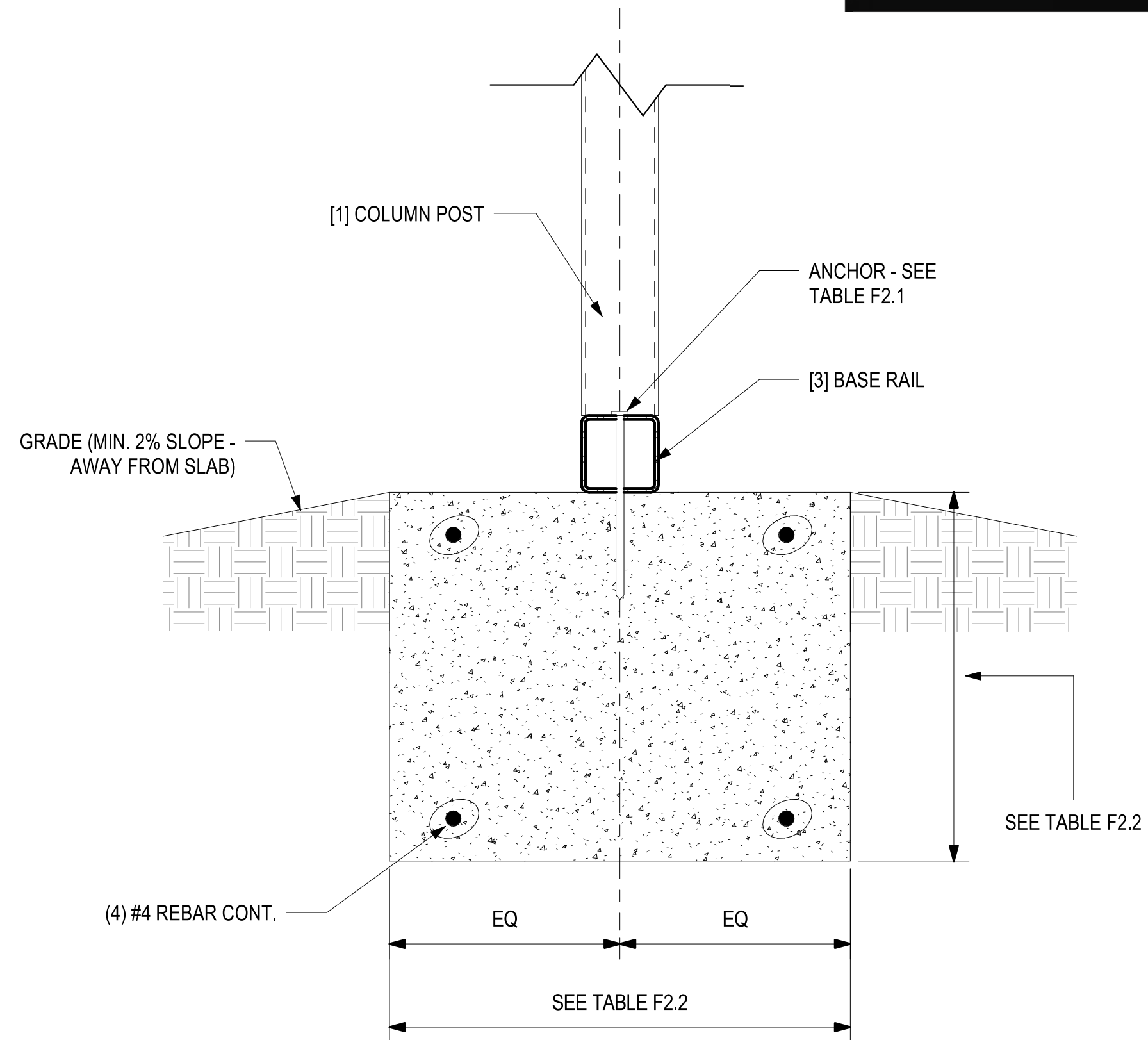
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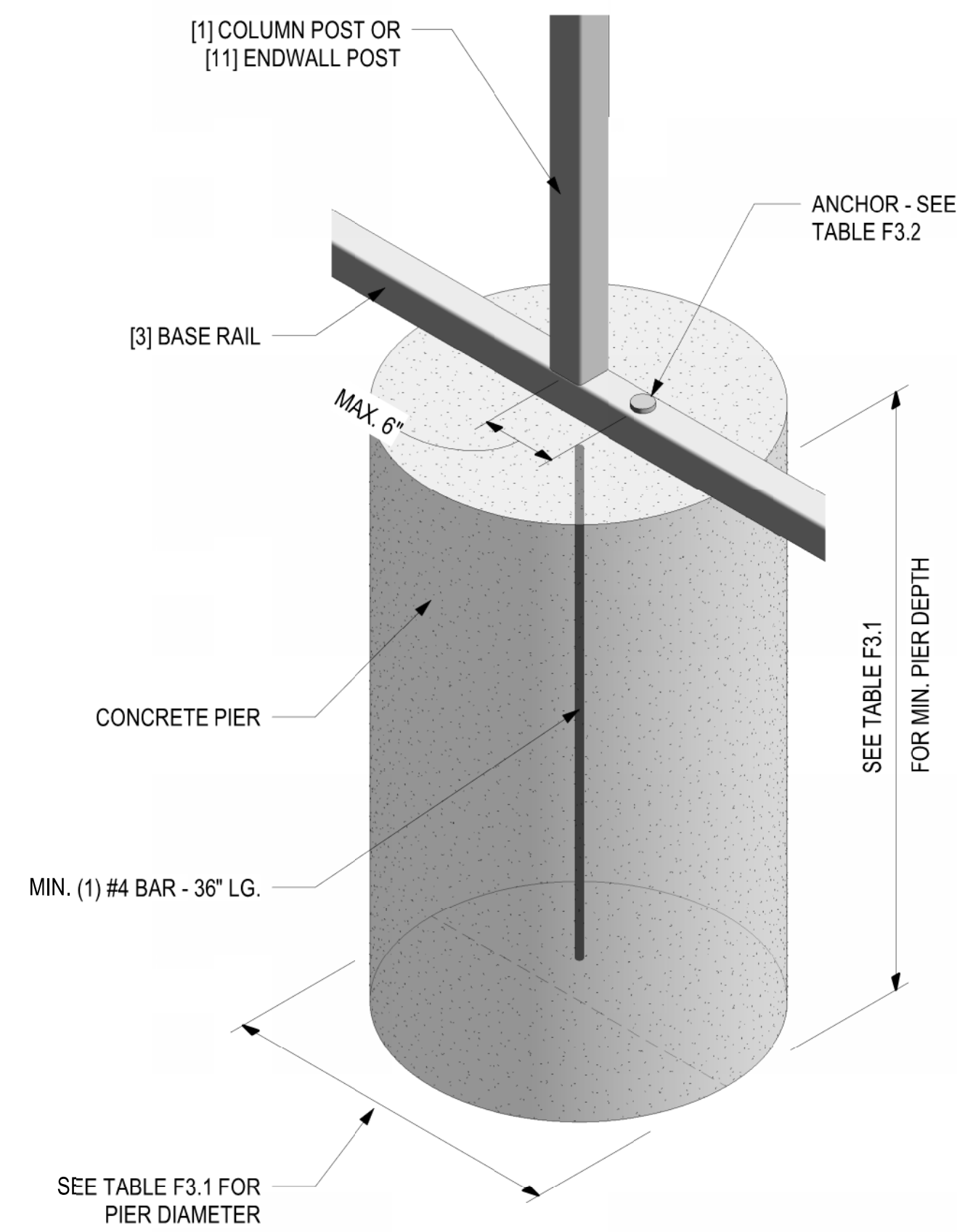
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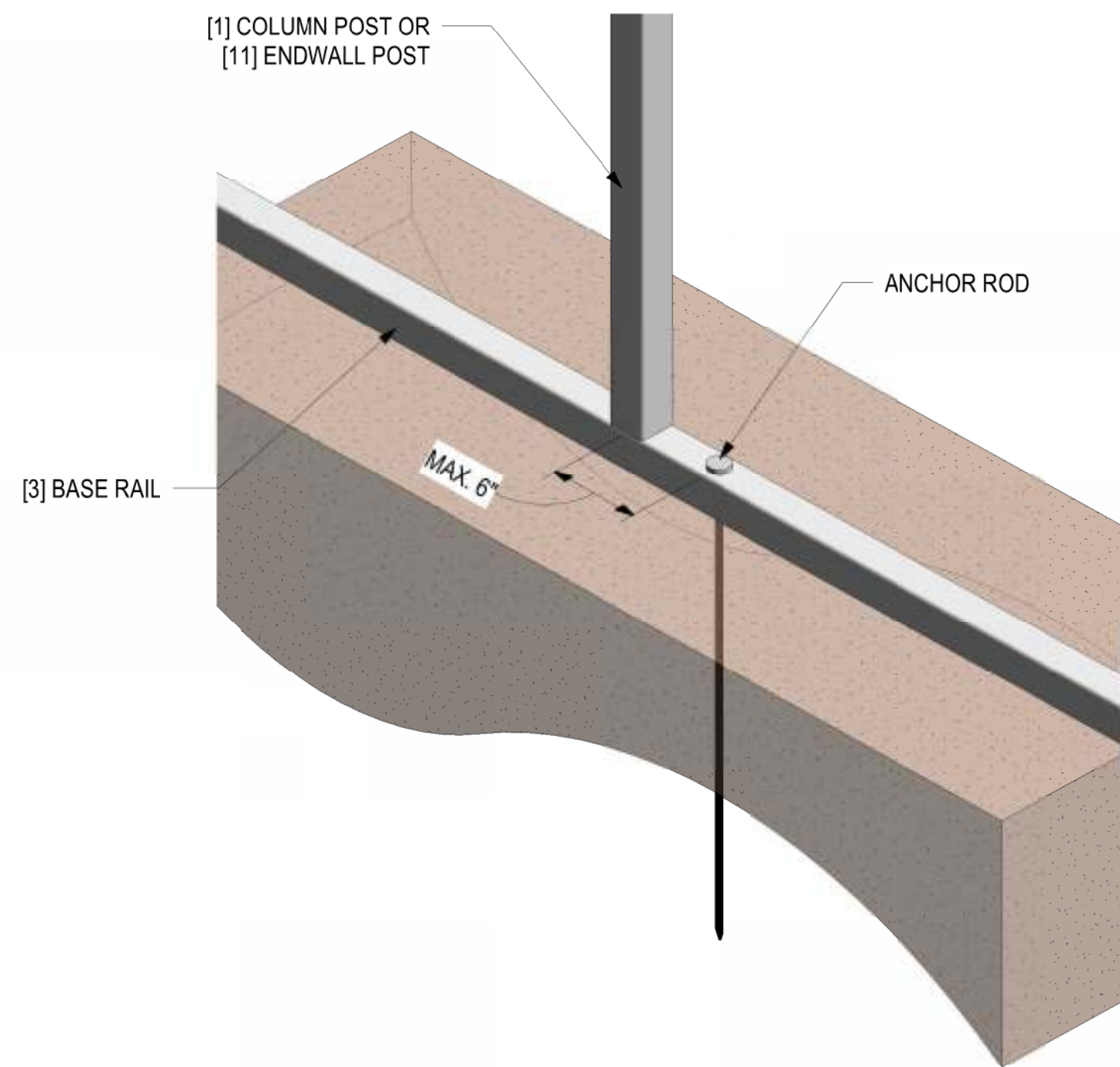


2 CONCRETE STRIP FOUNDATION DETAIL
3" = 1'-0"

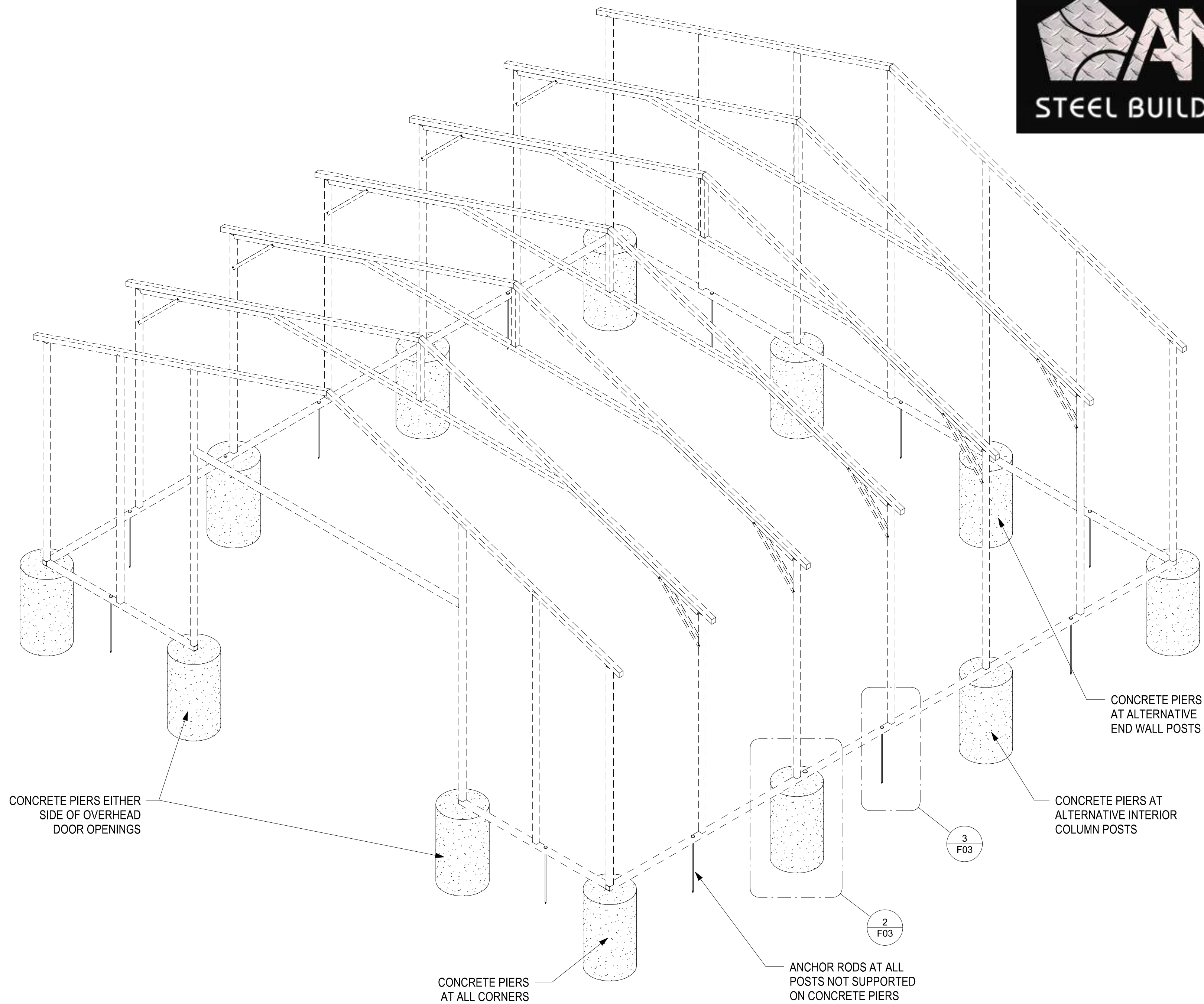
REV.



② CONCRETE PIER DETAIL
1 1/2" = 1'-0"



③ ANCHOR ROD INTO SOIL DETAIL
1 1/2" = 1'-0"



① CONCRETE PIER FOUNDATION
1 1/2" = 1'-0"

TABLE F3.1 - CONCRETE PIER SCHEDULE	
WIND SPEED (MPH)	MIN. SIZE REQUIRED
100	24"ø X 42"

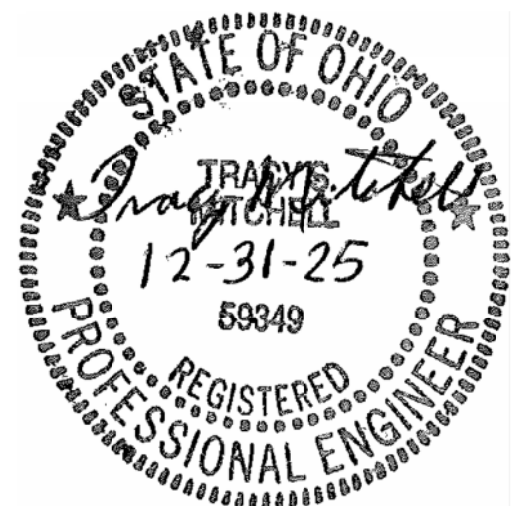
TABLE F3.2 - ANCHOR SCHEDULE		
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	100	(1) 1/2"ø X 7"
OPEN	100	(1) 1/2"ø X 7"

NOTES:

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 2-7/8".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

CONCRETE PIER FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE PIER FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS F01 THRU F03 CAN BE USED.
- CONCRETE PIERS SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS AND ON ALTERNATIVE INTERIOR COLUMN POSTS AND ENDWALL POSTS.
- TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH ENDWALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST WITH A PIER.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST WITH A PIER SHALL BE AS SHOWN IN TABLE F3.2.
- TWO ANCHORS AND A PIER ARE REQUIRED AT DIAGONAL BRACING LOCATIONS WHEN REQUIRED.
- ALL POSTS NOT SUPPORTED ON CONCRETE PIERS SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. THREADED ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- PIERS SHALL BE FORMED BY DIGGING A HOLE OF THE SAME SIZE AS THE PIER ON LEVEL GRADE AND FILLING IT WITH CONCRETE. THREADED ROD ANCHORS SHOULD BE DROPPED INTO THE PIERS PRIOR TO POURING THE CONCRETE.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.



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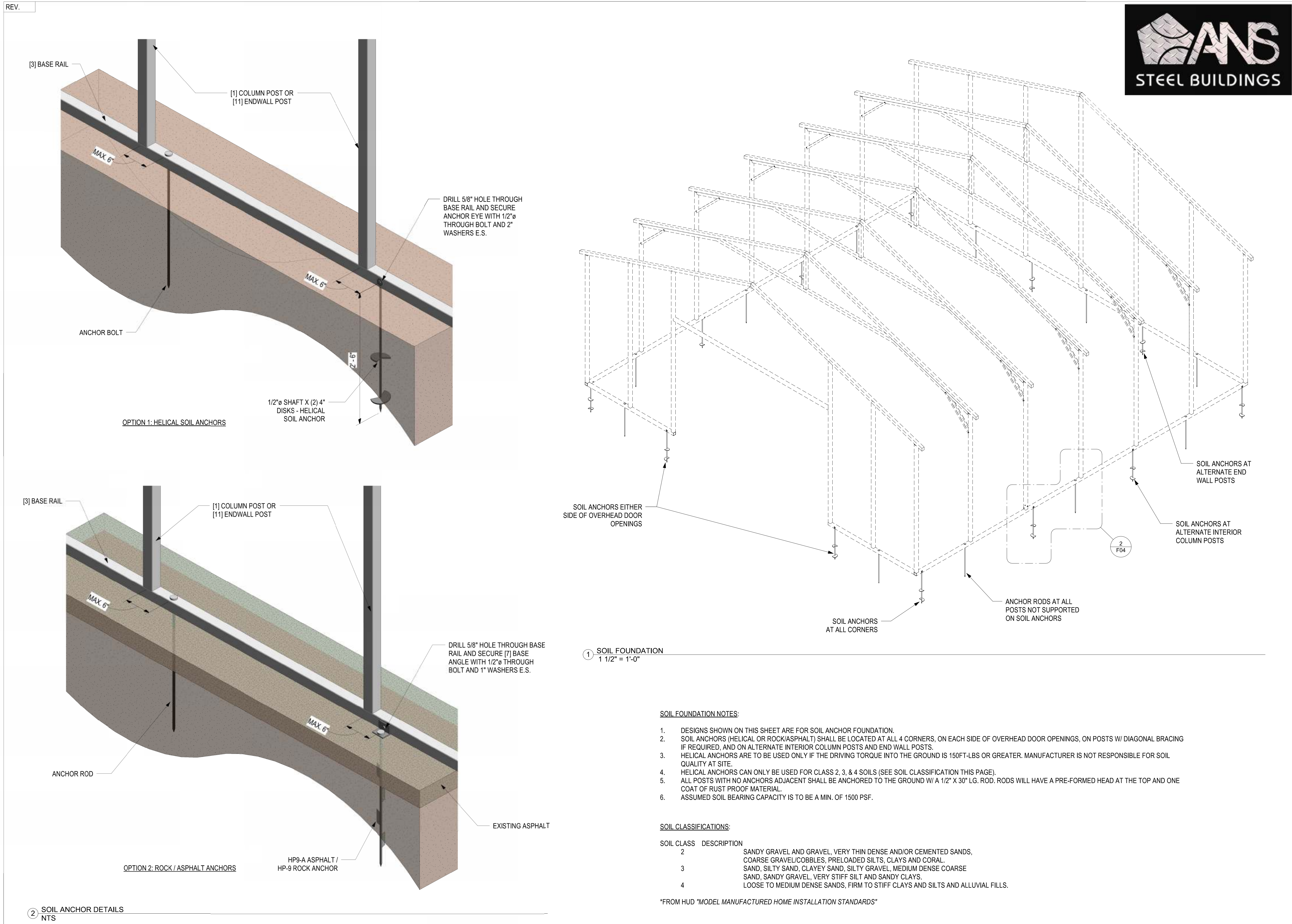
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CONCRETE DESIGN NOTE:
(FULL CONCRETE NOTE CAN BE PROVIDED AS REQUESTED.)

- 1) SCOPE
ALL CONCRETE DESIGNS ARE THE INTERPRETATION OF MSS ENGINEERING, LLC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DESIGNS MEET ALL APPLICABLE BUILDING CODES AND REGULATIONS. THE CONTRACTOR SHALL NOTIFY MSS ENGINEERING OF "SITE SPECIFIC" CODE REGULATIONS PRIOR TO ANY WORK BEING PERFORMED. ALL CONCRETE WORK SHALL CONFORM TO SPECIFICATIONS SET FORTH BY THE AMERICAN CONCRETE INSTITUTE (ACI).
- 2) CONCRETE MATERIALS & MIXTURE REQUIREMENTS
CONCRETE SHALL BE OF AIR ENTRAINED PORTLAND CEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI IN 28 DAYS AND 3" TO 4" SLUMP. (UNLESS NOTED OTHERWISE)
A. CEMENTITIOUS MATERIALS:
CEMENT SHALL BE PORTLAND CEMENT CONFORMING TO ASTM C-150, TYPE I. ALL CEMENTITIOUS MATERIAL AND THE COMBINATION OF THESE MATERIALS SHALL BE INCLUDED IN CALCULATING THE W/CM OF THE CONCRETE MIXTURE.
B. AGGREGATES
THE AGGREGATE SHALL BE CRUSHED LIMESTONE OR A MSS ENG. APPROVED EQUIVALENT AND BE FREE OF CHEMICALS, COATINGS, OR OTHER MATERIALS WHICH AFFECT THE BONDING OF THE CEMENT PASTE. NORMAL-WEIGHT AGGREGATE SHALL CONFORM TO ASTM C33 WITH A MAXIMUM SIZE OF 1 1/4". LIGHT-WEIGHT AGGREGATE SHALL CONFORM TO ASTM C330
C. WATER
WATER SHALL BE CLEAN, POTABLE, AND FREE FROM ACIDS, ALKALIS, OR ORGANIC MATERIAL. MIXING WATER SHALL CONFORM TO ASTM C1602.
D. ADMIXTURES
AIR-ENTRAINMENT: ASTM C260
WATER REDUCTION AND SETTING TIME MODIFICATION: ASTM C494
PRODUCING FLOWING CONCRETE: ASTM C1017
INHIBITING CHLORIDE-INDUCED CORROSION: ASTM C1582
E. STEEL FIBER REINFORCEMENT
STEEL FIBER REINFORCEMENT USED FOR SHEAR RESISTANCE SHALL BE DEFORMED, CONFORM TO ASTM A820, AND HAVE A LENGTH-TO-DIAMETER RATIO OF AT LEAST 50 AND NOT EXCEEDING 100.
F. CONCRETE MIXTURE REQUIREMENTS (UNLESS NOTED OTHERWISE)
- MINIMUM COMPRESSIVE STRENGTH (F/c): 2500 PSI
- TEST AGE FOR COMPRESSIVE STRENGTH: 28 DAYS
- MAXIMUM WATER /CEMENT RATIO (W/CM): 0.45
- MAXIMUM SIZE OF COURSE AGGREGATE LESS THAN LEAST OF (I), (II), (III):
(I) ONE-FIFTH THE NARROWEST DIMENSION BETWEEN SIDES OF FORMS
(II) ONE-THIRD THE DEPTH OF SLABS
(III) THREE-FOURTHS THE MINIMUM SPECIFIED CLEAR SPACING BETWEEN INDIVIDUAL REINFORCING BARS OR WIRES, BUNDLES OF BARS, PRESTRESSED REINFORCEMENT, INDIVIDUAL TENDONS, BUNDLED TENDONS, OR DUCTS
- 3) CONCRETE PRODUCTION & CONSTRUCTION
A. CONCRETE PLACEMENT & CONSOLIDATION:
- DEBRIS AND ICE SHALL BE REMOVED FROM SPACES TO BE OCCUPIED BY CONCRETE BEFORE PLACEMENT.
- STANDING WATER SHALL BE REMOVED FROM PLACE OF DEPOSIT BEFORE CONCRETE IS PLACED.
- MASONRY FILLER UNITS THAT WILL BE IN CONTACT WITH CONCRETE SHALL BE PREWETTED PRIOR TO PLACING CONCRETE.
- EQUIPMENT USED TO CONVEY CONCRETE FROM THE MIXER TO THE LOCATION OF FINAL PLACEMENT SHALL HAVE CAPABILITIES TO ACHIEVE THE PLACEMENT REQUIREMENTS.
- CONCRETE SHALL NOT BE PUMPED THROUGH PIPE MADE OF ALUMINUM OR ALUMINUM ALLOYS.
- CONCRETE SHALL BE PLACED IN ACCORDANCE WITH THE FOLLOWING:
· AT A RATE TO PROVIDE AN ADEQUATE SUPPLY OF CONCRETE AT THE LOCATION OF PLACEMENT.
· AT A RATE SO CONCRETE AT ALL TIMES HAS SUFFICIENT WORKABILITY SUCH THAT IT CAN BE CONSOLIDATED BY THE INTENDED METHODS.
· WITHOUT SEGREGATION OR LOSS OF MATERIALS.
· WITHOUT INTERRUPTIONS SUFFICIENT TO PERMIT LOSS OF WORKABILITY BETWEEN SUCCESSIVE PLACEMENTS THAT WOULD RESULT IN COLD JOINTS.
- DEPOSITED AS NEAR TO ITS FINAL LOCATION AS PRACTICABLE TO AVOID SEGREGATION DUE TO REHANDLING OR FLOWING.
- CONCRETE THAT HAS BEEN CONTAMINATED OR HAS LOST ITS INITIAL WORKABILITY TO THE EXTENT THAT IT CAN NO LONGER BE CONSOLIDATED BY THE INTENDED METHODS SHALL NOT BE USED.
- RETEMPERING CONCRETE IN ACCORDANCE WITH THE LIMITS OF ASTM C94 SHALL BE PERMITTED.
- AFTER STARTING, CONCRETING SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL THE COMPLETION OF A PANEL OR SECTION, AS DEFINED BY ITS BOUNDARIES OR PREDETERMINED JOINTS.
- CONCRETE SHALL BE CONSOLIDATED BY SUITABLE MEANS DURING PLACEMENT AND SHALL BE WORKED AROUND REINFORCEMENT AND EMBEDMENTS AND INTO CORNERS OF FORMS.
- TOP SURFACES OF VERTICALLY FORMED LIFTS SHALL BE GENERALLY LEVEL.

- B. CURING CONCRETE:
- CONCRETE, OTHER THAN HIGH-EARLY-STRENGTH, SHALL BE MAINTAINED AT A TEMPERATURE OF AT LEAST 50°F AND IN A MOIST CONDITION FOR AT LEAST THE FIRST 7 DAYS AFTER PLACEMENT, EXCEPT IF ACCELERATED CURING IS USED.
- HIGH-EARLY-STRENGTH CONCRETE SHALL BE MAINTAINED AT A TEMPERATURE OF AT LEAST 50°F AND IN A MOIST CONDITION FOR AT LEAST THE FIRST 3 DAYS AFTER PLACEMENT, EXCEPT IF ACCELERATED CURING IS USED.
- ACCELERATED CURING TO ACCELERATE STRENGTH GAIN AND REDUCE TIME OF CURING IS PERMITTED USING HIGH-PRESSURE STEAM, STEAM AT ATMOSPHERIC PRESSURE, HEAT AND MOISTURE. IF ACCELERATED CURING IS USED, THE FOLLOWING SHALL APPLY:
· COMPRESSIVE STRENGTH AT THE LOAD STAGE CONSIDERED SHALL BE AT LEAST THE STRENGTH REQUIRED AT THAT LOAD STAGE.
· ACCELERATED CURING SHALL NOT IMPAIR THE DURABILITY OF THE CONCRETE.
· PROCEDURES FOR PROTECTING AND CURING CONCRETE SHALL BE CONSIDERED ADEQUATE IF (I) OR (II) ARE SATISFIED:
(I) AVERAGE STRENGTH OF FIELD-CURED CYLINDERS AT TEST AGE DESIGNATED FOR DETERMINATION OF F/c IS EQUAL TO OR AT LEAST 85 PERCENT OF THAT OF COMPANION STANDARD-CURED CYLINDERS.
(II) AVERAGE STRENGTH OF FIELD-CURED CYLINDERS AT TEST AGE EXCEEDS F/c BY MORE THAN 500 PSI.
C. CONCRETING IN COLD WEATHER:
- ADEQUATE EQUIPMENT SHALL BE PROVIDED FOR HEATING CONCRETE MATERIALS AND PROTECTING CONCRETE DURING FREEZING OR NEAR-FREEZING WEATHER.
- FROZEN MATERIALS OR MATERIALS CONTAINING ICE SHALL NOT BE USED.
- FORMS, FILLERS, AND GROUND WITH WHICH CONCRETE IS TO COME IN CONTACT SHALL BE FREE FROM FROST AND ICE.
- CONCRETE MATERIALS AND PRODUCTION METHODS SHALL BE SELECTED SO THAT THE CONCRETE TEMPERATURE AT DELIVERY COMPLIES WITH THE SPECIFIED TEMPERATURE LIMITS.
D. CONCRETING IN HOT WEATHER:
- CONCRETE MATERIALS AND PRODUCTION METHODS SHALL BE SELECTED SO THAT THE CONCRETE TEMPERATURE AT DELIVERY COMPLIES WITH THE SPECIFIED TEMPERATURE LIMITS.
- HANDLING, PLACING, PROTECTION, AND CURING PROCEDURES SHALL LIMIT CONCRETE TEMPERATURES OR WATER EVAPORATION THAT COULD REDUCE STRENGTH, SERVICEABILITY, AND DURABILITY OF THE MEMBER OR STRUCTURE.
E. CONSTRUCTION, CONTRACTION, & ISOLATION JOINTS:
- JOINT LOCATIONS OR JOINT DETAILS NOT SHOWN OR THAT DIFFER FROM THOSE INDICATED IN CONSTRUCTION DOCUMENTS SHALL BE SUBMITTED FOR REVIEW BY THE LICENSED DESIGN PROFESSIONAL.
- EXCEPT FOR PRESTRESSED CONCRETE, CONSTRUCTION JOINTS IN FLOOR AND ROOF SYSTEMS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF SPANS OF SLABS, BEAMS, AND GIRDERS.
- CONSTRUCTION JOINTS IN GIRDERS SHALL BE OFFSET A DISTANCE OF AT LEAST TWO TIMES THE WIDTH OF INTERSECTING BEAMS, MEASURED FROM THE FACE OF THE INTERSECTING BEAM.
- CONSTRUCTION JOINTS SHALL BE CLEANED AND LAITANCE REMOVED BEFORE NEW CONCRETE IS PLACED.
- SURFACE OF CONCRETE CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED.
- IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE PREWETTED AND STANDING WATER REMOVED.
- 4) REINFORCEMENT MATERIALS & CONSTRUCTION REQUIREMENTS
ALL REINFORCING STEEL SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 GRADE 60, UNLESS INDICATED OTHERWISE ON THE DRAWING. ALL REINFORCING STEEL SHALL BE DEFORMED REINFORCEMENT. WELDED WIRE FABRIC SHALL BE ELECTRICALLY WELDED COLD-DRAWN WIRE OF GAUGE AND MESH SIZE SHOWN ON THE DRAWING, AND SHALL CONFORM TO ASTM A185, DEFORMED TYPE.
A. GENERAL:
- MILL TEST REPORTS FOR REINFORCEMENT SHALL BE SUBMITTED.
- NONPRESTRESSED REINFORCEMENT WITH RUST, MILL SCALE, OR A COMBINATION OF BOTH SHALL BE CONSIDERED SATISFACTORY, PROVIDED A HAND-WIRE-BRUSHED REPRESENTATIVE TEST SPECIMEN OF THE REINFORCEMENT COMPLIES WITH THE APPLI CABLE ASTM SPECIFICATION FOR THE MINIMUM DIMENSIONS (INCLUDING HEIGHT OF DEFORMATIONS) AND WEIGHT PER UNIT LENGTH.
- PRESTRESSING REINFORCEMENT SHALL BE FREE OF MILL SCALE, PITTING, AND EXCESSIVE RUST. A LIGHT COATING OF RUST SHALL BE PERMITTED.
- AT THE TIME CONCRETE IS PLACED, REINFORCEMENT TO BE BONDED SHALL BE CLEAN OF ICE, MUD, OIL, OR OTHER DELETERIOUS COATINGS THAT DECREASE BOND.
- 5) ANCHORING TO CONCRETE
POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. POST-INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)
- 6) FORMWORK
A. DESIGN OF FORMWORK:
- DESIGN OF FORMWORK SHALL CONSIDER (I) THROUGH (V):
(I) METHOD OF CONCRETE PLACEMENT.
(II) RATE OF CONCRETE PLACEMENT.
(III) CONSTRUCTION LOADS, INCLUDING VERTICAL, HORIZONTAL, AND IMPACT.
(IV) AVOIDANCE OF DAMAGE TO PREVIOUSLY CONSTRUCTED MEMBERS.
(V) FOR POST-TENSIONED MEMBERS, ALLOWANCE FOR MOVEMENT OF THE MEMBER DURING APPLICATION OF THE PRESTRESSING FORCE WITHOUT DAMAGE TO THE MEMBER.
- FORMWORK FABRICATION AND INSTALLATION SHALL RESULT IN A FINAL STRUCTURE THAT CONFORMS TO SHAPES, LINES, AND DIMENSIONS OF THE MEMBERS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS.
- FORMWORK SHALL BE SUFFICIENTLY TIGHT TO INHIBIT LEAKAGE OF PASTE OR MORTAR.
- FORMWORK SHALL BE BRACED OR TIED TOGETHER TO MAINTAIN POSITION AND SHAPE.

- B. REMOVAL OF FORMWORK:
- BEFORE STARTING CONSTRUCTION, THE CONTRACTOR SHALL DEVELOP A PROCEDURE AND SCHEDULE FOR REMOVAL OF FORMWORK AND INSTALLATION OF RESHORES, AND SHALL CALCULATE THE LOADS TRANSFERRED TO THE STRUCTURE DURING THIS PROCESS.
- STRUCTURAL ANALYSIS AND CONCRETE STRENGTH REQUIREMENTS USED IN PLANNING AND IMPLEMENTING THE FORMWORK REMOVAL AND RESHORE INSTALLATION SHALL BE FURNISHED BY THE CONTRACTOR TO THE LICENSED DESIGN PROFESSIONAL AND TO THE BUILDING OFFICIAL, WHEN REQUESTED.
- NO CONSTRUCTION LOADS SHALL BE PLACED ON, NOR ANY FORMWORK REMOVED FROM, ANY PART OF THE STRUCTURE UNDER CONSTRUCTION EXCEPT WHEN THAT PORTION OF THE STRUCTURE IN COMBINATION WITH REMAINING FORMWORK HAS SUFFICIENT STRENGTH TO SUPPORT SAFELY ITS WEIGHT AND LOADS PLACED THEREON AND WITHOUT IMPAIRING SERVICEABILITY.
- SUFFICIENT STRENGTH SHALL BE DEMONSTRATED BY STRUCTURAL ANALYSIS CONSIDERING ANTICIPATED LOADS, STRENGTH OF FORMWORK, AND AN ESTIMATE OF IN-PLACE CONCRETE STRENGTH.
- THE ESTIMATE OF IN-PLACE CONCRETE STRENGTH SHALL BE BASED ON TESTS OF FIELD-CURED CYLINDERS OR ON OTHER PROCEDURES TO EVALUATE CONCRETE STRENGTH APPROVED BY THE LICENSED DESIGN PROFESSIONAL AND, WHEN REQUESTED, APPROVED BY THE BUILDING OFFICIAL.
- FORMWORK SHALL BE REMOVED IN SUCH A MANNER NOT TO IMPAIR SAFETY AND SERVICEABILITY OF THE STRUCTURE.
- CONCRETE EXPOSED BY FORMWORK REMOVAL SHALL HAVE SUFFICIENT STRENGTH NOT TO BE DAMAGED BY THE REMOVAL.
- FORMWORK SUPPORTS FOR POST-TENSIONED MEMBERS SHALL NOT BE REMOVED UNTIL SUFFICIENT POST-TENSIONING HAS BEEN APPLIED TO ENABLE POST-TENSIONED MEMBERS TO SUPPORT THEIR DEAD LOAD AND ANTICIPATED CONSTRUCTION LOADS.
- NO CONSTRUCTION LOADS EXCEEDING THE COMBINATION OF SUPERIMPOSED DEAD LOAD PLUS LIVE LOAD INCLUDING REDUCTION SHALL BE PLACED ON ANY UNSHORED PORTION OF THE STRUCTURE UNDER CONSTRUCTION, UNLESS ANALYSIS INDICATES ADEQUATE STRENGTH TO SUPPORT SUCH ADDITIONAL LOADS AND WITHOUT IMPAIRING SERVICEABILITY.
- 7) CONCRETE EVALUATION & ACCEPTANCE
A. GENERAL:
- A STRENGTH TEST SHALL BE THE AVERAGE OF THE STRENGTHS OF AT LEAST TWO 6 X 12 IN. CYLINDERS OR AT LEAST THREE 4 X 8 IN. CYLINDERS MADE FROM THE SAME SAMPLE OF CONCRETE AND TESTED AT 28 DAYS OR AT TEST AGE DESIGNATED FOR F'c.
- THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL COMPLY WITH ASTM C1077.
- QUALIFIED FIELD TESTING TECHNICIANS SHALL PERFORM TESTS ON FRESH CONCRETE AT THE JOB SITE, PREPARE SPECIMENS FOR STANDARD CURING, PREPARE SPECIMENS FOR FIELD CURING, IF REQUIRED, AND RECORD THE TEMPERATURE OF THE FRESH CONCRETE WHEN PREPARING SPECIMENS FOR STRENGTH TESTS.
- QUALIFIED LABORATORY TECHNICIANS SHALL PERFORM REQUIRED LABORATORY TESTS.
- ALL REPORTS OF ACCEPTANCE TESTS SHALL BE PROVIDED TO THE LICENSED DESIGN PROFESSIONAL, CONTRACTOR, CONCRETE PRODUCER, AND, IF REQUESTED, TO THE OWNER AND THE CODE OFFICIAL.
- B. FREQUENCY OF TESTING:
- SAMPLES FOR PREPARING STRENGTH TEST SPECIMENS OF EACH CONCRETE MIXTURE PLACED EACH DAY SHALL BE TAKEN IN ACCORDANCE WITH (I) THROUGH (III):
(I) AT LEAST ONCE A DAY.
(II) AT LEAST ONCE FOR EACH 150 YD3 OF CONCRETE.
(III) AT LEAST ONCE FOR EACH 5000 FT2 OF SURFACE AREA FOR SLABS OR WALLS.
- ON A GIVEN PROJECT, IF TOTAL VOLUME OF CONCRETE IS SUCH THAT FREQUENCY OF TESTING WOULD PROVIDE FEWER THAN FIVE STRENGTH TESTS FOR A GIVEN CONCRETE MIXTURE, STRENGTH TEST SPECIMENS SHALL BE MADE FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE BATCHES ARE USED.
- IF THE TOTAL QUANTITY OF A GIVEN CONCRETE MIXTURE IS LESS THAN 50 YD3, STRENGTH TESTS ARE NOT REQUIRED IF EVIDENCE OF SATISFACTORY STRENGTH IS SUBMITTED TO AND APPROVED BY THE CODE OFFICIAL.
- C. ACCEPTANCE CRITERIA FOR STANDARD-CURED SPECIMENS:
- SPECIMENS FOR ACCEPTANCE TESTS SHALL BE IN ACCORDANCE WITH (I) AND (II):
(I) SAMPLING OF CONCRETE FOR STRENGTH TEST SPECIMENS SHALL BE IN ACCORDANCE WITH ASTM C172.
(II) CYLINDERS FOR STRENGTH TESTS SHALL BE MADE AND STANDARD-CURED IN ACCORDANCE WITH ASTM C31 AND TESTED IN ACCORDANCE WITH ASTM C39.
- STRENGTH LEVEL OF A CONCRETE MIXTURE SHALL BE ACCEPTABLE IF (I) AND (II) ARE SATISFIED:
(I) EVERY ARITHMETIC AVERAGE OF ANY THREE CONSECUTIVE STRENGTH TESTS EQUALS OR EXCEEDS F/c.
(II) NO STRENGTH TEST FALLS BELOW F/c BY MORE THAN 500 PSI IF F/c IS 5000 PSI OR LESS, OR BY MORE THAN 0.10F/c IF F/c EXCEEDS 5000 PSI.
- IF EITHER OF THE REQUIREMENTS ARE NOT SATISFIED, STEPS SHALL BE TAKEN TO INCREASE THE AVERAGE OF SUBSEQUENT STRENGTH RESULTS
- REQUIREMENTS FOR INVESTIGATING LOW STRENGTH-TEST RESULTS SHALL APPLY IF THE REQUIREMENTS OF (II) ARE NOT MET



ANS STEEL PROTOTYPE BUILDING
30" WIDE MAXIMUM
STATE OF OHIO

REV PERMIT


DWN	GSM
JOB#	252771
SHT	17/17
DWN	GSM
CKD	TSM

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Ship To			Dealer
Name <u>Keagan Morris</u>	Order # <u>1759161370224640-3</u>		ANS STEEL BUILDINGS
Billing Address _____			DEFIANCE, OH 43512
City _____	State <u>OH</u>	Zip Code <u>43209</u>	419-785-4005
Install Address <u>2682 Bellwood AVE.</u>			anssteelbuildingsllc@gmail.com
City <u>Bexley</u>	State <u>OH</u>	Zip Code <u>43209</u>	
Email <u>keagan.morris@yahoo.com</u>	Phone # <u>616-679-6257</u>	Mobile # _____	

Description	Qty	Unit Price	Price	Totals	
Base Price: 26'x24'	1			Subtotal	
Installation Surface: Concrete	1	-	-	+ Sales Tax 6.75%	
Installation Surface: Dirt	1	-	-		
Roof: Shiny Black	1	-	-	Total Order Amount	
Trim Colors: Shiny Black	1	-	-	- Deposit Amount	
Gable End Siding: Ivory	1	-	-		
Side Wall Siding: Ivory	1	-	-	Remaining Due	
Garage Door Colors (*Colors maybe a a different Hue or Shade): Shiny Black	1	-	-		
Gable Ends Wainscot: Ivory	1	-	-		
Side Walls Wainscot: Ivory	1	-	-		
Roof Style: A-Frame Vertical	1				
Roof Pitch: 4/12	1	-	-		
Roof Overhang: 6"	1	-	-		
Trusses: Triple Wide	1	-	-		
Gauge: 14-Gauge Framing	1	-	-		
Brace: Standard Brace	1	-	-		

Customer Signature	Date	Desired Delivery Date
#1759161370224640-3  Signed by:	9/29/2025	

Dealer or Manufacturer Signature	Date	Delivery Notes


Description	Qty	Unit Price	Price
Engineer Certified: Included 130/30 Certification	1	-	-
Leg Height: 9'	1		
Left Side: Fully Enclosed - Siding: Horizontal	1		
Right Side: Fully Enclosed - Siding: Horizontal	1		
Front End: Fully Enclosed - Siding: Horizontal	1		
Back End: Fully Enclosed - Siding: Horizontal	1		
Walk-in Door (36" x 80") - Hinges Right Hand Door Swing	1		
10x8 Roll Up Door	2		
9x7 Roll Up Door	1		
Anchor Package: Concrete Anchors	1		
Side Garage Door Header Bar	3		
Additional Fees			
Standard Gauge Sheet Metal	1	-	-
Concrete Anchors	18		
Additional Notes			
Notes, Comments, Questions:Thank you for choosing ANS Steel Buildings. If you have any questions, please let me know. {anssteelbuildings.taya@gmail.com : 419-785-4005}			

Things You Should Know

20 Year Warranty on 12 gauge and 1 year warranty on 14 gauge on rust, assuming user care and maintenance • 1 Year workmanship warranty *13' high or taller building requires machinery/extra charges may apply • Any building Longer than 32' L will have a SEEM (restrictions may apply call the office for details).

1. All sales are C.O.D. payment of balance in full due at time of installation. We accept cash, cashiers check and or money orders, also major credit cards with an additional 3% charge. Credit card overpayment refunds will charge 5% fee, returned checks \$35 fee
2. Height is measured from the ground to the sidewall not the peak. The contractor needs 3' of spacing all around the structure in order to adequately build the structure, or extra fees may apply.
3. The customer is responsible for informing the installers of any underground cables, gas lines, or any other utility lines. ANS Steel Buildings, LLC is not responsible for any damages to unmarked or un-located utilities.
4. If there is a price discrepancy over \$20.00, ANS Steel buildings, LLC reserves the right to cancel the order at any time.
5. **To qualify for free installation, the site must be level.** (NO SLOPES) Units installed on unlevelled ground will have spacing between base rail and ground ANS Steel Buildings is NOT responsible for any spacing being filled or groundwork being done. If extra work is needed due to ground being unlevel more than 3" extras charges will incur. It will be up to the contractor to determine additional cost
6. If customer wants insurance on the building, it is customer's sole responsibility to contact customer's insurance company to secure coverage. ANS Steel Buildings, LLC highly recommends that customer secure insurance coverage for the building.
7. It is the sole responsibility of the customer to check for permits or restrictions regarding installation of the product. Some state and local ordinances may require a foundation prior to installation. ANS Steel Buildings, LLC does NOT install foundations and all costs associated with foundation shall be the sole responsibility of the purchaser.
8. It is highly recommended that all ground, gravel or blacktop installation be securely fastened with mobile home anchors. Rebar anchors are designed for temporary use only. ANS Steel Buildings, LLC will not be responsible for any damage to the structure if the customer chooses to use only the rebar anchors provided with the carport and failure to utilize the proper anchoring method will void your warranty. **In some cases, it is not possible to install all of the mobile home anchors due to rocky or other ground conditions. In such cases, ANS Steel Buildings, LLC will reimburse the customer for the mobile home anchors that are not used but the customer will still be responsible for the full price of the building.**
9. ANS Steel Buildings, LLC has a select group of factory-trained installers. The warranty will be void if the unit is installed by anyone other than our approved independent contractors. **Your lot must be level or contractor fees will apply on the lot.** Installer must be able to unload within 20' of the job site, or additional fees will apply. Additionally, it is the customer's sole responsibility for ensuring the installation area is adequately prepared/cleared for installation. Any alterations made to the building after install will void all warranties
10. If you are a tax-exempt purchaser, a copy of your tax exemption certificate must be attached to this original form.
11. The quoted price above does not include any extra task or requests by the customer. Any such additional tasks or requests will require a separate quote and approval by ANS Steel Buildings, LLC. ALL DEPOSITS ARE NONREFUNDABLE. A 40% deposit on special orders is required. No refunds on special orders.
12. Buyer agrees that the balance shall be due and payable at the time of installation. In the event that balances due and owing at the time of installation are not paid in full, the buyer shall be in default under this agreement. ANS Steel Buildings, LLC may elect to repossess the carport/garage and buyer hereby consent to allow ANS Steel Buildings, LLC access to the carport/garage to repossess the carport/garage, or at its sole discretion ANS Steel Buildings, LLC may assess interest at a rate of 18% per annum on any unpaid balance. Buyer agrees that in the event of any default under this agreement, buyer shall be responsible for reasonable collection agency costs, any attorney's fees and cost incurred as a result of default. JURISDICTION, it is expressly agreed that in any dispute, suit, claim, or legal proceeding of any nature arising from the obligations under this agreement, shall be filed in a court of competent jurisdiction in Defiance County, Ohio and be controlled by the law of the State of Ohio.
13. Please be advised that installation times are subject to change due to contractor availability and weather conditions. If the contractor is unable to complete your job due to site complications or inaccurate measurements a \$250 or 5% return fee, whichever is greater, will apply. Any structure not installed and returned after scheduled and confirmed date, will be subject to a 5-35% restocking fee.

This is a contract, By signing this, customer acknowledges and agrees with all of the above terms. This contract is NOT final until review/approval by ANS Steel Buildings, LLC. Customer Service Will Contact You Three To Seven Days Before Delivery & Setup.

Customer Signature  _____
Signed by: 7679327ED6B841A.

Dealers Signature _____

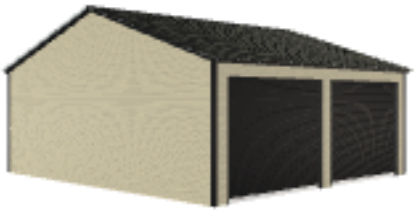
Installed Date _____

Any revisions or modifications MAY result in an additional charge.

ANS Steel Buildings, LLC approval/Authorization: _____

• ☐ CASH ☐ C/C ☐ CHECK # _____

Building Images



Perspective View



Front



Left Side



Right Side



Back

Floor Plan

