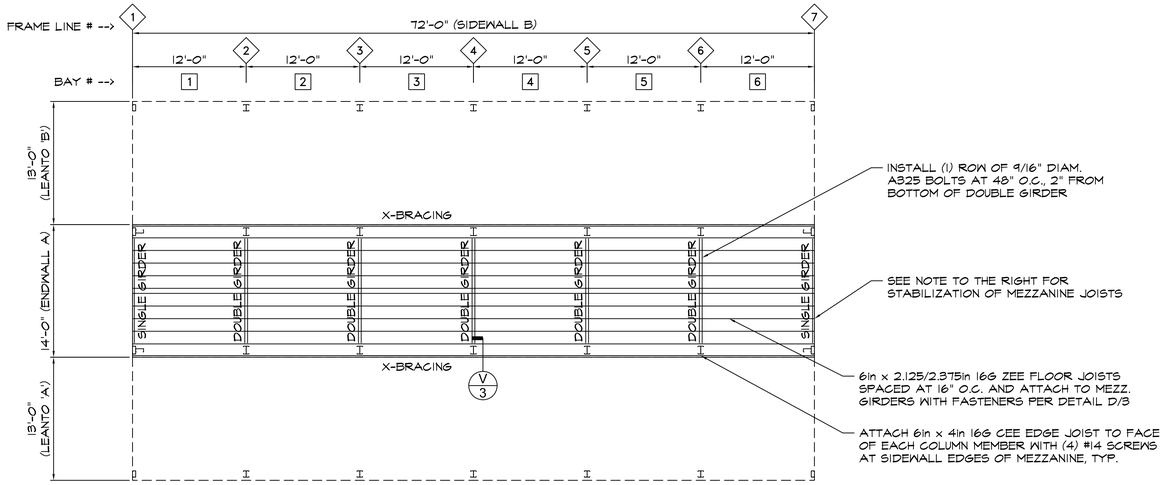
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2/1 MEZZANINE FLOOR FRAMING PLAN

SCALE: 1/8" = 1'-0" MEZZ FLOOR LIVE LOAD: 40 psf

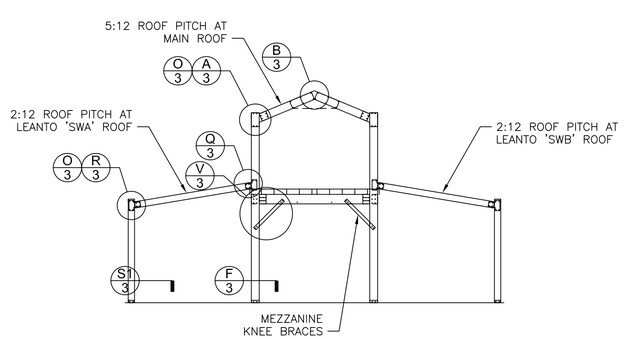
NOTE: STAIR DESIGN, MATERIALS, AND INSTALLATION TO BE PROVIDED BY OTHERS.

DESIGN, MATERIALS, AND INSTALLATION OF ALL GUARDRAILS OR WALLS AT EXPOSED EDGES OF MEZZANINE FLOOR TO BE PROVIDED BY OTHERS.

NOTE: SEE DETAIL T/3 FOR FLOOR FRAMING AROUND FLOOR OPENING FOR STAIRWAY. STAIR TO BE LOCATED BY CUSTOMER.

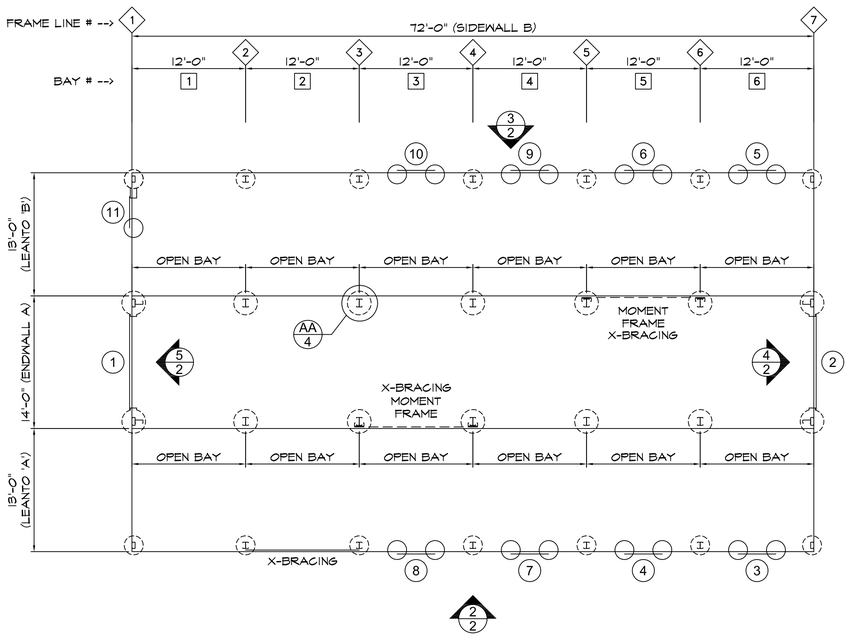
NOTE: INSTALL 3/4in 48/24 MIN. CDX PLYWOOD AT MEZZANINE FLOOR, ATTACH TO STEEL FRAMING WITH #10 MIN. SCREWS AT 6" O.C. AT PANEL EDGES, 12" O.C. IN FIELD. STAGGER ALL PLYNOOD JOINTS PARALLEL TO FLOOR JOISTS. SUPPORT ALL EDGES WITH JOIST MATERIAL OR USE PLYNOOD WITH TONGUE AND GROOVE EDGES.

MEZZANINE JOIST STABILIZATION:
1) NEAR CENTER OF BUILDING AT EACH MEZZANINE GIRDER, ATTACH MIN. 1.5in X 16G STRAP WITH (2) #10 SCREWS TO GIRDER ADJACENT TO ONE FLOOR JOIST, RUN STRAP UP AND OVER TOP OF A MIN. OF TWO JOISTS, THEN BACK DOWN TO GIRDER AT ADJACENT JOIST AND ATTACH STRAP WITH (2) #10 SCREWS TO MEZZANINE GIRDER. INSTALL #10 SCREW THRU STRAP INTO THE TOP OF EACH JOIST CROSSED.
2) INSTALL 4in X 2in (VERTICAL : HORIZ.) 16G ANGLE AT ENDS OF JOISTS (FULL WIDTH OF MEZZANINE) AT EDGES OF MEZZANINE FLOOR (2 PLACES) AND FASTEN TO TOP FLANGE OF FLOOR JOIST ENDS WITH #10 SCREW INTO EACH JOIST.



3/1 TYP. FRAME CROSS-SECTION

SCALE: 1/8" = 1'-0" FRAMES 2-6



NOTE: USE ½" X 3" DEWALT 'SCREW-BOLT+' ANCHOR IN 3½" DEEP HOLES AT ANCHOR LOCATIONS PER BASE DETAILS F/3 AND S1/3, INSTALLED PER ICC REPORT ESR-3889, SECTION 4.3.

NOTE: SEE "TYP. FRAME CROSS-SECTION" DETAIL ON SHEET 1 FOR SPECIFIC FRAME DETAIL INFORMATION.

1/1 FOUNDATION PLAN

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

DEFLECTION LIMITS

PORTAL FRAME (HORZ):	L/60 (STD)
PORTAL FRAME (VERT):	L/180 (STD)
PURLINS:	L/150 (STD)
GIRTS:	L/90 (STD)
EW WIND COLUMNS:	L/120 (STD)
WALL PANEL:	L/60 (STD)

IMPORTANT: IN ADDITION TO THESE ENGINEERING PLANS (WHICH ALWAYS TAKE PRECEDENCE), YOU SHOULD HAVE THE FOLLOWING FROM ACT BUILDING SYSTEMS:
- CONSTRUCTION PACKAGE
- INSTALLATION MANUALS
- CONSTRUCTION VIDEOS

PLEASE CONTACT YOUR SALES REP IF YOU HAVE NOT RECEIVED THESE PRIOR TO STARTING CONSTRUCTION.

PROJECT DESIGN CRITERIA

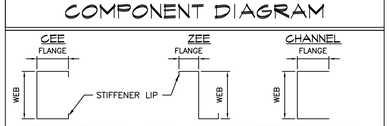
GOVERNING CODE: IBC 2021
RISK CATEGORY: II
ROOF DEAD LOAD: 3 psf
ROOF COLLATERAL LOAD: 3 psf
GROUND SNOW LOAD: 52 psf Ct = 1.0
ROOF SNOW LOAD: 40 psf
ROOF LIVE LOAD: 20 psf (REDUCIBLE)
WIND ENCLOSURE: ENCLOSED
WIND SPEED: 115 mph
WIND EXPOSURE: C
Ss: 0.218 Sds: 0.233
S1: 0.059 Sd1: 0.095
SEISMIC DESIGN CATEGORY: B
R transverse: 3.0 R longitudinal: 3.0
SOIL BEARING PRESSURE: 1500 psf

WIND DESIGN OF LATERAL FORCE-RESISTING SYSTEMS IS BASED ON THE DIRECTIONAL DESIGN PROCEDURE OF ASCE 7-16, CHAPTER 27

SEISMIC DESIGN OF LATERAL FORCE-RESISTING SYSTEMS ARE AS FOLLOWS:
-- TRANSVERSE: ORDINARY STEEL MOMENT FRAME (SEISMIC DESIGN IS BASED ON ASCE 07-16, SECTIONS 12.1 - 12.13)
-- LONGITUDINAL: ORDINARY STEEL BRACED FRAME. (SEISMIC DESIGN IS PERFORMED USING THE SIMPLIFIED DESIGN PROCEDURE (ASCE 07-16, SECTION 12.14).

DESIGN BASE SHEAR: IS SHOWN ON CALCULATION SHEET M2.

COMPONENT DIAGRAM



TYP. = TYPICAL U.N.O. = UNLESS NOTED OTHERWISE

WALL OPENING SCHEDULE

DOOR	WIDTH	HEIGHT	OPENING TYPE	HEADER GIRT	OPENING JAMBS
1 - 2	10'-0"	8'-0"	ROLL UP DOOR	SINGLE	CHN4X 3X16
3 - 10	4'-0"	7'-2"	PERSONNEL DOOR	SINGLE	CHN4X 3X16
11	3'-4"	7'-2"	PERSONNEL DOOR	DOUBLE	CHN4X 3X16
12	6'-4"	6'-10"	PERSONNEL DOOR	SEE NOTE #4	CHN4X 3X16
13	5'-0"	4'-0"	WINDOW	SINGLE	CHN4X 3X16
14-19	3'-0"	4'-0"	WINDOW	SEE NOTE #4	CHN4X 3X16
20-21	4'-0"	3'-0"	WINDOW	SINGLE	CHN4X 3X16

NOTES:
1) JAMB MEMBERS SHOWN AS "CHN" ARE CHANNEL MEMBERS (WITHOUT STIFFENER LIPS). FIRST NUMBER IS WEB DEPTH IN INCHES, SECOND NUMBER IS FLANGE WIDTH IN INCHES, AND THIRD NUMBER IS MATERIAL THICKNESS (GAUGE).
2) SEE DETAILS J/3 AND K/3 FOR OPENING FRAMING INFORMATION.
3) SIZE OF HEADER GIRT MEMBER TO BE SAME AS SIDEWALL OR ENDWALL GIRT, AS APPROPRIATE, PER ELEVATIONS. AT WINDOWS, INSTALL HEADER GIRT SPECIFIED ABOVE AND BELOW WINDOWS, U.N.O.
4) AT OPENINGS NOTED, INSTEAD OF ATTACHING DOOR JAMBS TO HEADER GIRT PER DETAIL L1/3 ATTACH DOOR JAMBS TO UNDERSIDE OF KNEE BRACE PER DETAIL L2/3, MEZZANINE EDGE JOIST OR ENDWALL RAFTER PER DETAIL L3/3.
5) ALL OPENINGS AND ACCESSORIES SHALL BE CAPABLE OF SUPPORTING ALL WIND PRESSURES PERPENDICULAR TO THE SURFACE (GENERATED BY WINDS AT THE SPEED AND EXPOSURE INDICATED ABOVE) BY SPANNING BETWEEN THE JAMBS.

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FAX 503 589-1728

ACTBUILDING SYSTEMS®

DISTRIBUTOR:
JOB NAME: Metal Building Outlet Corp.
JOB ADDRESS: Jonathan and Tiffany Perez
2850 Mt. Herman Rd
Monument, CO 80132

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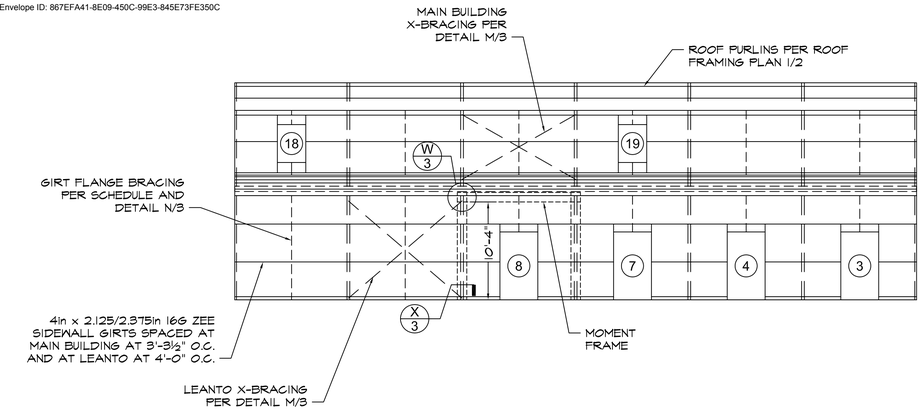
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DATE 2/25/2025

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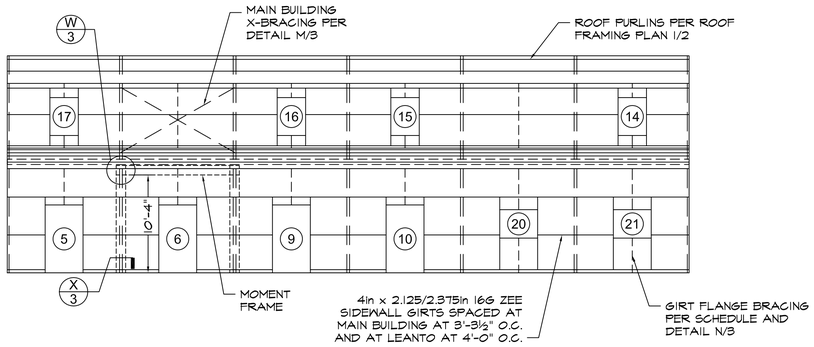
SHEET 1 OF 4

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2 / 2 SIDEWALL 'A' EXTERIOR ELEVATION

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



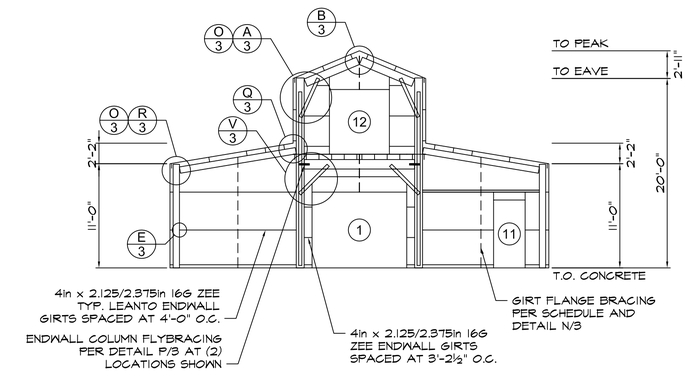
3 / 2 SIDEWALL 'B' EXTERIOR ELEVATION

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

GIRT FLANGE BRACING SCHEDULE

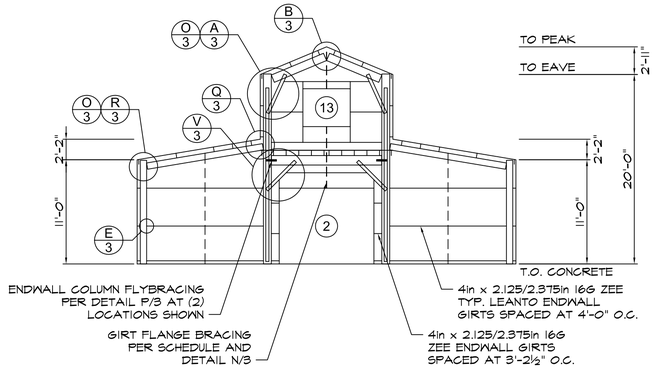
	BAY #1	BAY #2	BAY #3	BAY #4	BAY #5	BAY #6
Sidewall 'A'	M/S	M/S	M/S	M/S	M/S	M/S
Sidewall 'B'	M/S	M/S	M/S	M/S	M/S	M/S
Endwall 'A'	M/S	---	---	---	---	---
Endwall 'B'	M/S	---	---	---	---	---
Leanto 'A' Sidewall	M/S	M/S	M/S	M/S	M/S	M/S
Leanto 'A' Endwall 'A'	M/S	---	---	---	---	---
Leanto 'A' Endwall 'B'	M/S	---	---	---	---	---
Leanto 'B' Sidewall	M/S	M/S	M/S	M/S	M/S	M/S
Leanto 'B' Endwall 'A'	M/S	---	---	---	---	---
Leanto 'B' Endwall 'B'	M/S	---	---	---	---	---

--- = NONE REQUIRED M/S = MIDSPAN



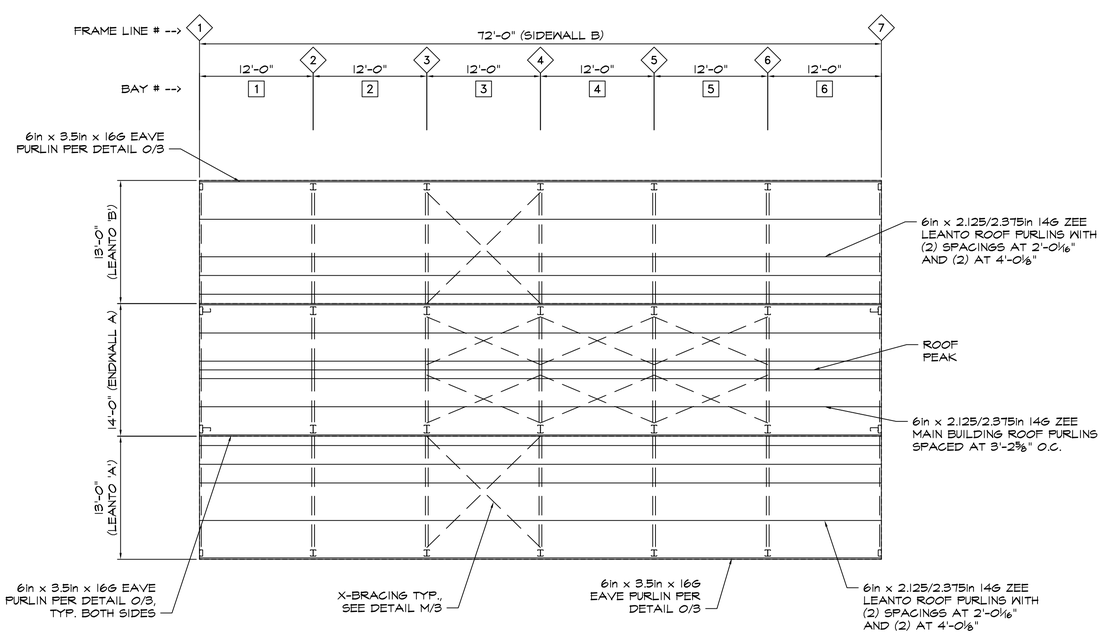
5 / 2 ENDWALL 'A' INTERIOR ELEVATION

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



4 / 2 ENDWALL 'B' INTERIOR ELEVATION

SCALE: 1/8" = 1'-0" FRAME #7



1 / 2 ROOF FRAMING PLAN

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

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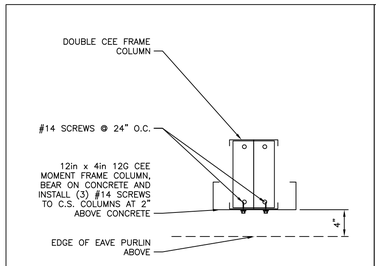
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DATE 2/25/2025

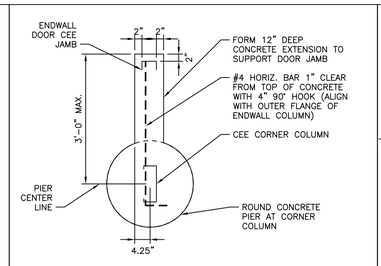
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SHEET 2 OF 4

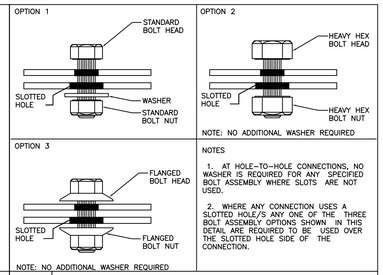
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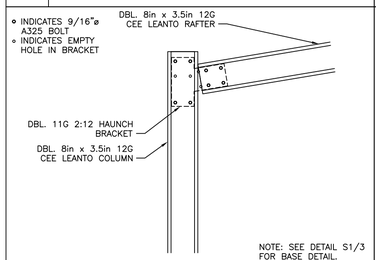
X BASE OF MOMENT FRAME COLUMN



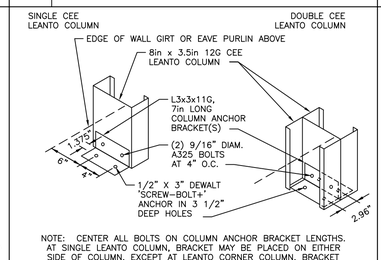
Y CORNER PIER EXTENSION DETAIL



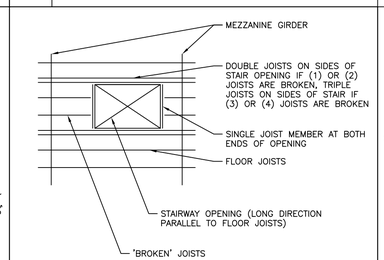
Z BOLT OPTIONS



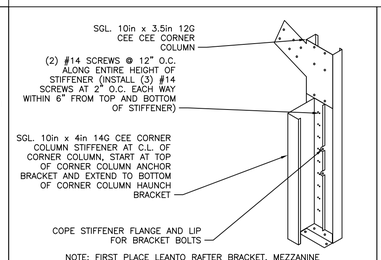
R LEANTO HAUNCH CONNECTION
LEANTO SWA, LEANTO SWB



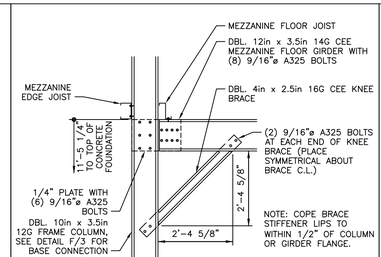
S1 LEANTO COLUMN BASE DETAIL
LEANTO SWA, LEANTO SWB



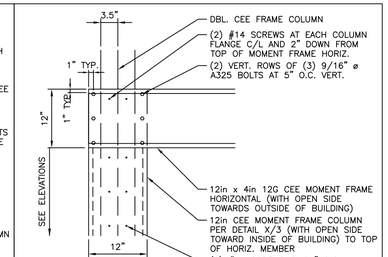
T MEZZ. FLOOR FRAMING AT STAIR OPENING



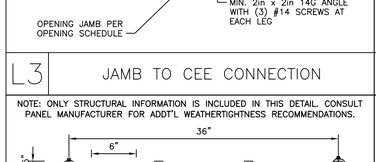
U CORNER COLUMN STIFFENER



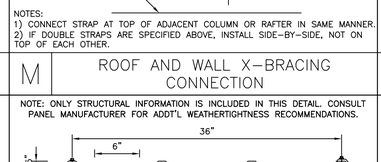
V MEZZANINE GIRDER CONNECTION



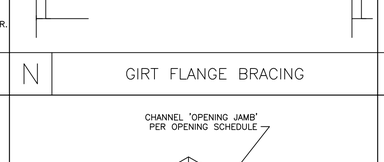
W TOP OF MOMENT FRAME COLUMN



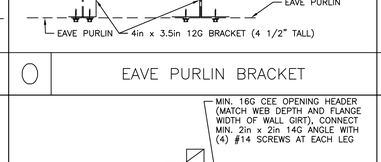
L3 JAMB TO CEE CONNECTION



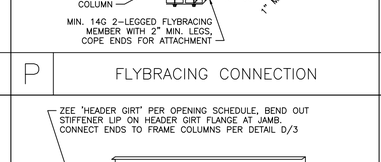
M ROOF AND WALL X-BRACING CONNECTION



N GIRT FLANGE BRACING



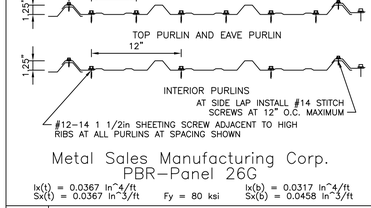
O EAVE PURLIN BRACKET



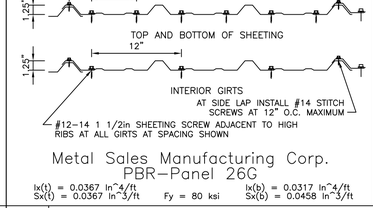
P FLYBRACING CONNECTION



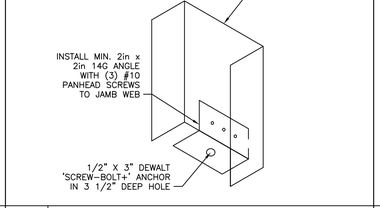
Q LEANTO RAFTER CONNECTION
LEANTO SWA, LEANTO SWB



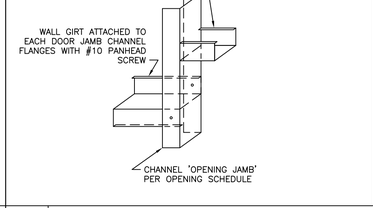
H ROOF SHEETING



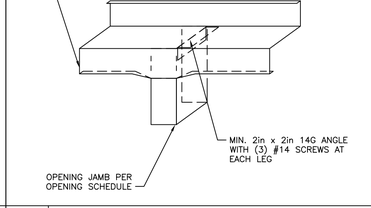
I WALL SHEETING



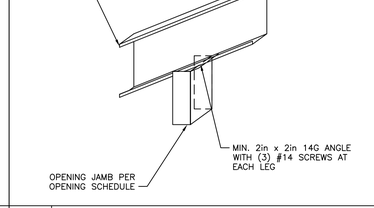
J OPENING JAMB BASE CONNECTION



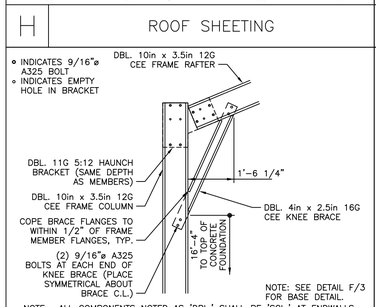
K OPENING JAMB GIRT CONNECTION



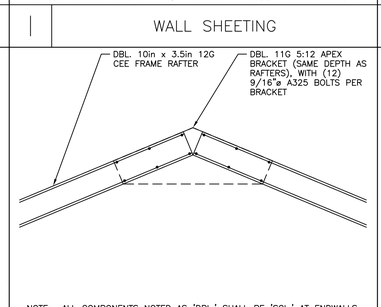
L1 JAMB TO HEADER GIRT CONNECTION



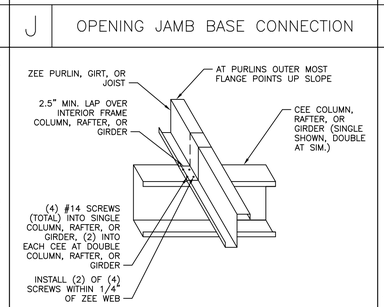
L2 JAMB TO BRACE CONNECTION



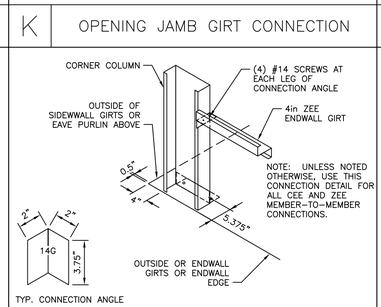
A HAUNCH CONNECTION



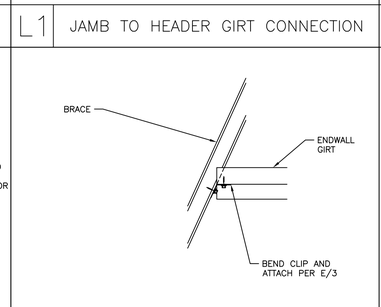
B APEX CONNECTION



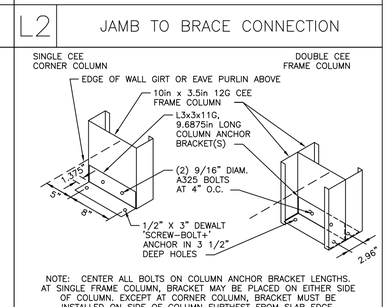
D ZEE PURLIN/GIRT CONNECTION



E ENDWALL GIRT AT CORNER COLUMN



E2 END GIRT TO BRACE



F FRAME COLUMN BASE DETAIL

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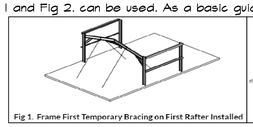
SHEET 3 OF 4

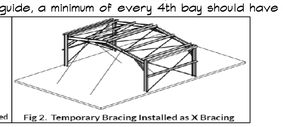
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Generic Temporary Bracing Information
The installation of temporary bracing is critical to avoid building collapse or damaging structural movement during construction. This collapse can occur with no notice and as such the installation of appropriate temporary bracing is critical to avoid damage, injury, and possible death. Determination, procurement, and correct installation of temporary bracing is the responsibility of the builder / primary contractor / installer.

Bracing Materials
The constructor / installer is to supply suitably sized materials for temporary bracing. These materials are generally capable of tension, but in some circumstances will need to be capable of tension and compression. Load rated ratchet strapping of an appropriate size can be used to temporarily 'x-brace' bays in both directions, until the final bracing systems are fullyinstalled. This is especially critical for buildings where X Bracing is not required in the final structure due to the use of moment frames or diaphragm bracing.

Temporary Bracing Location
The location of Temporary bracing will depend on the installation method used. Installation should be completed in accordance with the Construction Package, Engineering Plans, and Instruction Manuals. If the Frame First Method (most common) is used, then the use of tension only bracing and creating temporarily braced bays as per Fig 1 and Fig 2. can be used. As a basic guide, a minimum of every 4th bay should have temporary bracing installed as per Fig 2.


Fig 1. Frame First Temporary Bracing on First Rafter Installed


Fig 2. Temporary Bracing Installed as X Bracing

If the Tilt Up Method is used (where walls are constructed on the ground And then tilted into place), then the tops of columns are braced with a tension and compression brace in the same direction Fig 3. Then rafters and purlins can be installed with temporary bracing holding rafters in place (similar to Fig 1) until final bracing of diaphragm sheeting is installed

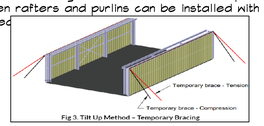


Fig 3. Tilt Up Method - Temporary Bracing

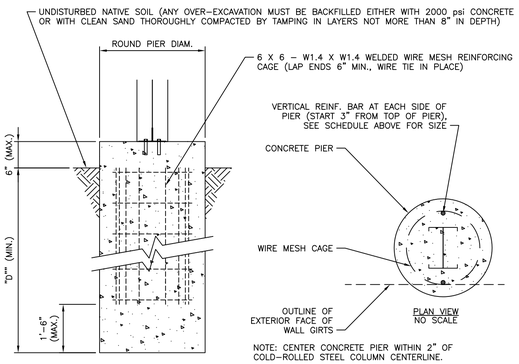
Typically, braces should be positioned diagonally across the structure from the top to the bottom, intersecting near the midpoint to provide stability, optimally at a 45-degree angle but no less than a 20-degree angle. The connection strength of temporary bracing is a critical consideration and these connections must be capable of resisting the potentially substantial temporary bracing loads –whether this connection point be to the building, the foundations or to the ground. Dependent upon building size this may include heavy angles and post installed concrete anchors. The temporary bracing methods used must be capable of fully stabilising the structure during the construction process.

Additional Temporary Bracing
The temporary bracing described is a minimum requirement for a standard-sized building in average conditions. Additional consideration should be given to larger building spans and/or challenging site conditions. There may also be an increased risk in relation to partially completed buildings and exposed sites. It is recommended that extra temporary bracing is utilized if moderate wind speeds are expected on site. Additional support elements, such as steel cables may need to be introduced that can be attached to the building's framework and anchored to the ground or other stable structures to provide extra stability. The frame should remain rigid throughout and such responsibility lies with the constructor. Buildings should not be left in a partially completed state longer than necessary.
[Empty Paragraph]
The temporary bracing should not be removed until all purlins, girts and permanent cross bracing, diaphragm bracing or moment frames where used are installed. The temporary bracing is to remain in place where possible, until the roof and wall cladding is fully installed. If you need any further information regarding the installation of temporary bracing or are at all unsure of the necessary requirements for this specific building, there are guides available through various industry bodies:
https://www.aisc.org/ https://www.metal-buildings-institute.org/

Support is also available at support@actbuildingsystems.com.

THE ABOVE INFORMATION REGARDING TEMPORARY BRACING DOES NOT FORM PART OF THE ENGINEERING CERTIFICATION FOR THIS DESIGN AND IS PROVIDED AS A GUIDE TO AID INSTALLATION ONLY.

LOCATION	DIAM.	"D"	VERT. REINFORCING
MAIN BUILDING SIDEWALLS/CORNERS	30"	5'-2"	(1)-#4
LEANTO SIDEWALLS	24"	3'-6"	---
DOOR JAMBS	24"	3'-2"	---



AA	ROUND CONC. PIER FOUNDATION	SCALE: NO SCALE

STRUCTURAL GENERAL NOTES

1. DRAWING USAGE:
ENGINEERING SEAL IS VALID FOR THE CONSTRUCTION OF A SINGLE BUILDING AT THE JOB ADDRESS SHOWN IN DRAWING TITLEBLOCK. ANY OTHER USE OF THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION FROM METAL SALES MANUFACTURING CORP. (MSM) AND ALLIANCE ENGINEERING OF OREGON, INC IS PROHIBITED.

2. DRAWING SEAL REQUIREMENTS:
THESE DRAWINGS SHALL BE SIGNED AND SEALED BY THE PROFESSIONAL ENGINEER FROM THE FIRM SHOWN IN THE TITLEBLOCK, IN ACCORDANCE WITH THE REQUIREMENTS OF THE JOBSITE JURISDICTION (WET, DIGITAL OR IMPRINT.). IF THIS DRAWING SET HAS BEEN RECEIVED WITHOUT THE SEAL AND SIGNATURE THEY SHALL BE CONSIDERED INVALID AND NOT FOR PERMITTING OR CONSTRUCTION. THE PROFESSIONAL ENGINEER ACCEPTS NO LIABILITY OR RESPONSIBILITY FOR DRAWINGS MODIFIED WITHOUT THE SEAL AND SIGNATURE.

3. CONTRACTOR RESPONSIBILITIES:
CONTRACTOR SHALL VERIFY AND CONFIRM ALL EXISTING CONDITIONS AND DIMENSIONS. ALLIANCE ENGINEERING OF OREGON, INC (ENGINEER) SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS PRIOR TO START OF WORK.
CONTRACTOR MUST SUBMIT IN WRITING ANY REQUEST FOR MODIFICATION TO THE PLANS AND/OR SPECIFICATIONS AND NO STRUCTURAL CHANGES FROM THE APPROVED PLANS SHALL BE MADE IN THE FIELD UNLESS, PRIOR TO MAKING CHANGES, WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. SHOP DRAWINGS SUBMITTED TO THE ENGINEER FOR REVIEW DO NOT CONSTITUTE "IN WRITING" UNLESS IT IS NOTED THAT SPECIFIC CHANGES ARE BEING REQUESTED. IF CHANGES ARE MADE WITHOUT WRITTEN APPROVAL, SUCH CHANGES SHALL BE THE LEGAL AND FINANCIAL RESPONSIBILITY OF THE CONTRACTOR OR SUB-CONTRACTORS INVOLVED AND IT SHALL BE THEIR FULL RESPONSIBILITY TO REPLACE OR REPAIR THE CONDITION AS DIRECTED BY THE ENGINEER.
CONTRACTOR SHALL PROVIDE ALL TEMPORARY BRACING, SHORING, GUYING, OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING ERECTION. THESE TEMPORARY PROVISIONS SHALL REMAIN IN PLACE UNTIL SUFFICIENT PERMANENT MEMBERS ARE ERECTED TO INSURE THE SAFETY OF PARTIALLY ERECTED STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR MEETING ALL LAWS REGULATING THE ERECTION OF STEEL BUILDINGS.
THESE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. BUILDING IS NOT CONSIDERED COMPLETE UNTIL THE INSTALLATION OF ALL COMPONENTS AND DETAILS SHOWN HEREIN ARE INSTALLED ACCORDING TO THE DRAWINGS.

4. ENGINEERING:
THIS METAL BUILDING SHOWN ON THESE PLANS HAS BEEN REVIEWED BY ALLIANCE ENGINEERING OF OREGON, INC FOR CONFORMITY ONLY TO THE STRUCTURAL DESIGN PORTIONS OF THE GOVERNING CODE, ONLY ENGINEERED TO THE CODE AND NO KNOWLEDGE OF ADDITIONAL ITEMS ADDED..... THE BUILDING OWNER IS RESPONSIBLE TO SEEK PROFESSIONAL ADVICE OR ADDITIONAL LICENSED PROFESSIONALS IN ADDRESSING ANY OTHER CODE REQUIREMENTS (INCLUDING, BUT NOT LIMITED TO, FIRE AND LIFE SAFETY, ENVIRONMENTAL, ACCESSIBILITY, HVAC, PLUMBING, OR ELECTRICAL) THAT MAY APPLY TO THIS PROJECT. AS THESE ADDITIONAL REQUIREMENTS FALL OUTSIDE THE STRUCTURAL DESIGN, ALLIANCE ENGINEERING OF OREGON, INC SHALL NOT ACT AS THE ENGINEER OR ARCHITECT OF RECORD OR THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR THE ENTIRETY OF THE PROJECT.
DRAWINGS SCALES INDICATED ON DRAWINGS ARE APPROXIMATE AND INTENDED TO BE USED FOR REFERENCE ONLY. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES.
THESE DOCUMENTS ARE STAMPED ONLY AS TO THE COMPONENTS FURNISHED BY MSM. IT IS THE RESPONSIBILITY OF THE PURCHASER TO COORDINATE DRAWINGS PROVIDED BY ALLIANCE ENGINEERING OF OREGON, INC WITH OTHER PLANS AND/OR OTHER COMPONENTS THAT ARE PART OF THE OVERALL PROJECT. IN CASES OF DISCREPANCIES, DRAWINGS PROVIDED BY ALLIANCE ENGINEERING OF OREGON, INC SHALL GOVERN. THE UNDERSIGNED ENGINEER WILL NOT SUPERVISE THE FABRICATION OR ERECTION OF THIS STRUCTURE

5. INSPECTIONS:
ALL PROJECT INSPECTIONS AND TESTING REQUESTED BY BUILDING DEPARTMENT SHALL BE AT OWNER'S EXPENSE. THE INSPECTION AND/OR TESTING AGENCIES SHALL BE ACCREDITED AND APPROVED BY THE BUILDING DEPARTMENT. ALLIANCE ENGINEERING OF OREGON, INC SHALL NOT BE ONSITE NOR INVOLVED IN THE PROJECT INSPECTIONS, OTHER THAN BEING FURNISHED THE INSPECTION / TESTING REPORTS WHEN IT WILL IMPACT THE CURRENT BUILDING DESIGN.

6. SOIL REQUIREMENTS:
ALLOWABLE SOIL BEARING VALUE INDICATED ON DRAWING SHEET 1 OCCURS AT 12" BELOW FINISH GRADE, OR EXISTING NATURAL GRADE, OR AT FROST DEPTH SPECIFIED BY BUILDING DEPARTMENT, WHICHEVER IS THE LOWEST ELEVATION. FOUNDATION DESIGN SHOWN ASSUMES BOTTOM OF FOOTING BEARS ON NATIVE SOILS.
FOUNDATION DESIGN SHOWN DOES NOT ACCOUNT FOR EXPANSIVE SOIL CONDITIONS OR FOR CONCRETE THAT WILL BE EXPOSED TO SULFATE CONTAINING SOLUTIONS OR CHLORIDES. OWNER SHALL CONTACT ENGINEER PRIOR TO CONSTRUCTION IF ANY OF THESE CONDITIONS EXIST.

7. CONCRETE REQUIREMENTS:
ALL CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 2500 psi. HIGHER STRENGTH CONCRETE MAY BE USED, AT OWNER'S DISCRETION, FOR FINISH AND DURABILITY PURPOSES. CEMENT SHALL COMPLY WITH ASTM C150, TYPE 2, AND SHALL CONTAIN NO FLYASH.
ALL CONCRETE PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", WHICH IS HEREBY MADE A PART OF THESE DOCUMENTS.
CONCRETE REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 FOR #4 BARS AND LARGER, GRADE 40 FOR #3 BARS. WELDED WIRE MESH SHALL CONFORM TO ASTM A185 (Fy MIN. OF 70 ksi). ALL FOOTING REINFORCING BARS TO BE CONTINUOUS AROUND CORNERS. LAP SPLICE FOOTING REINFORCING MIDWAY BETWEEN COLUMNS. ALL LAP SPLICES TO BE 48 BAR DIAMETERS MIN., U.N.O.
CONCRETE GRADE BEAMS, THICKENED SLAB EDGES, PIERS, AND SPREAD FOOTINGS SHALL BE POURED ONTO UNDISTURBED, NATIVE SOIL WHICH IS FREE FROM ANY MATERIAL THAT WILL ADVERSELY AFFECT THE MIN. ALLOWABLE SOIL BEARING PRESSURE SPECIFIED ON SHEET 1.
CONCRETE ANCHOR INSTALLATION SHALL BE DONE IN ACCORDANCE WITH ICC REPORT ESR-3889, SECTION 4.3.

8. STRUCTURAL STEEL REQUIREMENTS:
ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 (Fy MIN. OF 36000 psi), U.N.O. ALL BOLTS SHALL CONFORM TO ASTM A325, U.N.O. BOLT HOLE DIAMETERS SHALL BE 1/16" LARGER THAN NOMINAL BOLT DIAMETER. ALL INSTALLATION SHALL BE IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE".
NO WELDING IS REQUIRED ON THIS JOB.

9. LIGHT GAUGE STRUCTURAL STEEL REQUIREMENTS:
ALL LIGHT GAUGE STEEL FRAMING MATERIAL AND ERECTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN IRON AND STEEL INSTITUTE (AISI) "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
ALL LIGHT GAUGE STEEL MATERIAL SHALL CONFORM TO ASTM A653 HAVING A MINIMUM YIELD STRENGTH OF 55000 psi. THE GRADE AND ASTM SPECIFICATION NUMBER SHALL BE INDICATED BY PAINTING, DECAL, TAGGING, OR OTHER SUITABLE MEANS, ON EACH LIFT OR BUNDLE OF FABRICATED ELEMENTS.
UNLESS NOTED OTHERWISE, CEE, ZEE, AND CHANNEL MEMBERS' WEB AND FLANGE DIMENSIONS (IN INCHES) SHALL BE AS NOTED IN DETAILS IN THE FOLLOWING FORMAT: [WEB DEPTH]in x [FLANGE WIDTH]in [GAUGE]G. FOR ZEES WITH UNEQUAL FLANGES, THE WIDTHS FOR BOTH FLANGES WILL BE LISTED, SEPARATED BY A " / ". MIN. FLANGE STIFFENER LIPS SHALL BE 0.885" FOR 12G CEES, 0.800" FOR 14G CEES, 0.773" FOR 16G CEES, 0.900" FOR 12G ZEES, 0.900" FOR 14G ZEES, AND 0.900" FOR 16G ZEES. ALL BEND RADIUSES SHALL BE .1875". FOR ANGLES, THE FIRST TWO NUMBERS ARE THE LEG DIMENSIONS.
DECIMAL THICKNESS OF THE DELIVERED LIGHT GAUGE STEEL MATERIAL, ACCORDING TO NOMINAL GAUGES, SHALL MEET OR EXCEED 95% THE FOLLOWING DESIGN VALUES

GAUGE NO.	DECIMAL THICKNESS, IN.	GAUGE NO.	DECIMAL THICKNESS, IN.	GAUGE NO.	DECIMAL THICKNESS, IN.
10	0.135	14	0.070	18	0.048
12	0.105	16	0.059	20	0.036

EXCEPT AS SHOWN ON DRAWINGS, CEE COLUMN AND RAFTER MEMBERS SHALL NOT BE DRILLED OR NOTCHED WITHOUT PRIOR APPROVAL OF THE ENGINEER. DOOR JAMB, ROOF PURLIN, AND WALL GIRT ENDS MAY HAVE FLANGES COPED 3" MAX. IF CONNECTION IS MADE TO PERPENDICULAR MEMBER PER DETAIL E/3. ROUND HOLES MAY BE DRILLED THROUGH ANY GIRT OR PURLIN MEMBER WITHIN THE MIDDLE THIRD OF THE DEPTH OF THAT MEMBER AND NOT WITHIN 24" OF MEMBER END (FIELD-DRILLED BOLT HOLES INDICATED AT ENDS OF KNEE OR APEX BRACE WEBS AND SHOP-PUNCHED HOLES IN BRACE FLANGES EXCEPTED).
ALL BOLTS USED TO CONNECT LIGHT GAUGE MATERIAL SHALL CONFORM TO ASTM A325. BOLTS TO BE SNUG TIGHT PER THE RCSC AND AISC SPECIFICATIONS, UNLESS SPECIFICALLY NOTED OTHEREWISE. BOLTS SHALL BE SPACED NO LESS THAN 3 BOLT DIAMETERS BETWEEN CENTERS. DISTANCE FROM BOLT CENTER TO THE END OR EDGE OF ANY LIGHT GAUGE MEMBER SHALL BE A MIN. OF 1.5 BOLT DIAMETERS. ALL SCREWS USED TO CONNECT LIGHT GAUGE MATERIAL SHALL BE SELF-DRILLING SCREWS AND SHALL HAVE A MIN. TENSILE BREAKING STRENGTH OF 100,000 psi. SCREWS SHALL BE SPACED NO LESS THAN 1" O.C. AND EDGE OR END DISTANCE SHALL NOT BE LESS THAN 1". UNLESS NOTED OTHERWISE, ALL REFERENCES TO 'SCREWS' CONNECTING MATERIAL THICKER THAN 20 ga. SHALL BE MIN. #14 SCREWS AND SHALL HAVE MIN. 14 THREADS PER INCH.
SCREW ROOT DIAMETERS SHALL NOT BE LESS THAN: #14 SCREW: .200" #12 SCREW: .177" #10 SCREW: .153"

10. STEEL ROOF AND WALL PANELS (CLADDING):
LIGHT GAUGE STEEL ROOF AND WALL PANELS SHALL CONFORM TO ASTM A653 AND THE STEEL DECK INSTITUTE SPECIFICATIONS AND HAVE A MIN. YIELD STRENGTH OF 80000 psi.
DECIMAL THICKNESSES, ACCORDING TO NOMINAL GAUGES, SHALL MEET OR EXCEED THE FOLLOWING:

GAUGE NO.	DECIMAL THICKNESS, IN.	GAUGE NO.	DECIMAL THICKNESS, IN.	GAUGE NO.	DECIMAL THICKNESS, IN.
22	0.0179	26	0.0179	29	0.0134
24	0.0179	28	0.0149	30	0.0120

SEE DETAILS H/3 AND I/3 FOR ROOF AND WALL PANEL FASTENER TYPES AND SPACINGS.

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