

VERTICAL RIB ROOF SYSTEM ERECTION AND APPLICATION REQUIREMENTS

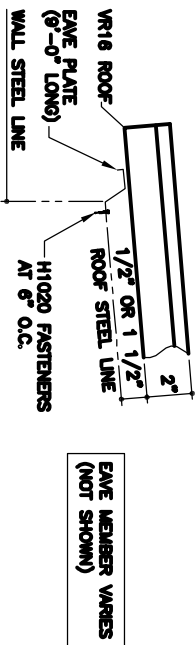
1. GENERAL ERECTION NOTES

- 1.1 UNLOADING AND STORING.
- 1.1.1 CHECK THE QUANTITIES AND CONDITION OF PANEL, BUNDLES AND TRIM CRATES ON ARRIVAL. NOTE ON THE DELIVERY TICKETS ANY SHORTAGES, DAMAGE OR DISCREPANCIES. MBS BUILDING SYSTEMS SHALL NOT BE LIABLE FOR DAMAGE OR SHORTAGES WHICH ARE NOT NOTED ON THE TICKETS.
- 1.1.2 EXTREME CARE SHOULD BE PREVENTED WHEN UNLOADING AND HANDLING THE PANEL, BUNDLES AND ACCESSORY CRATES TO PREVENT DAMAGE. THE WEIGHT OF THE PANEL, BUNDLE IS PRINTED ON THE BUNDLE TAG ON THE END OF EACH BUNDLE. IF THE TAG IS NOT ON THE BUNDLE, YOU MAY CALCULATE THE WEIGHT OF THE BUNDLE WITH THE FORMULA:
- 1.1.3
$$\text{WEIGHT OF PANELS BUNDLE} = \text{LENGTH OF BUNDLE} \times \text{WIDTH OF BUNDLE} \times \text{WEIGHT PER SQUARE FOOT}$$
- 1.1.4 BUNDLES UP TO 10 FEET LONG ENOUGH TO ALLOW FOR FOOTING. BUNDLES OVER 25 FEET IN LENGTH SHALL BE LIFTED WITH A CRANE UTILIZING A SPREADER BAR WITH A 4 INCH MINIMUM WIDTH NYLON STRAPS. STRAPS SHOULD BE 15 TO 20 FEET APART. TO AVOID DAMAGE TO THE PANELS, STEEL CABLES, CHAINS, OR CHOKERS SHALL NOT BE USED.
- 1.1.5 THE VERTICAL, RIB PANELS AND ACCESSORIES SHALL BE STORED ON HIGH GROUND, SLOPED TO DRAIN, AND PROTECTED FROM WIND. PANELS SHOULD BE STORED IN A VENTILATED AREA. PANELS SHOULD BE ALLOWED TO DRY FOR 48 HOURS BEFORE INSTALLATION. THE RECOMMENDED PROCEDURES TO ALLOW CONSISTENT AIR FLOW THROUGH THE BUNDLES. THE RECOMMENDED PROCEDURES ARE OUTLINED IN THE VERTICAL, RIB ERECTION MANUAL. MBS WILL NOT BE FIELD RESPONSIBLE FOR DAMAGE OR DISCOLORATION OF PANELS CAUSED BY IMPROPER STORAGE.
- 1.3 ERECTION SEQUENCE.
- 1.2.1 THE VERTICAL, RIB ROOF SYSTEM IS DESIGNED TO BE ERECTED FROM EITHER END OF THE BUILDING. IN RARE CASES, DUE TO THE BUILDING LAYOUT, IT MAY BE REQUIRED TO START ERECTION FROM A SPECIFIC END. IN THOSE CASES, THIS WILL BE NOTED AS SUCH ON THE ROOF SHEETING PLANS.
- 1.2.2 FULL SUPPORTS ARE PROVIDED FOR START PANELS TO BE FIELD CUT TO THE PROPER WIDTH. THIS MAY CAUSE THE RIBS TO BE CUT OR ALIGNMENT ACROSS THE ROOF. THIS IS NORMAL PRACTICE FOR THE VERTICAL, RIB ROOF SYSTEM AND DOES NOT AFFECT THE PERFORMANCE OF THE ROOF SYSTEM. PLEASE CHECK THE ROOF SHEETING PLAN AND DETAILS FOR DIMENSIONS OF START PANELS PRIOR TO ERECTING THE ROOF.
- 1.2.3 FOR BUNDLES WITH ROOF ACCESSORIES, IT IS REQUESTED IN ORDER TO ALIGN THE TRANSPARENT PANELS WITH THE ROOF ACCESSORIES, THE TRANSPARENT PANELS BE FIELD CUT TO THE PROPER WIDTH. BOTH SIDES OF THE ROOF FROM THE SAME END OF THE BUILDING - UTILIZING THE SAME WIDTH START PANEL. PANEL RUNS WITH TRANSLUCENT PANELS HAVE BEEN PLACED AS SPECIFIED IN THE OTHER DOCUMENTS.
- 1.3 COORDINATION WITH OTHER TRADES.
- 1.3.1 SUPPORTS FOR THE VERTICAL, RIB ROOF SYSTEM SHALL BE PROVIDED AND ARE REQUIRED AS SHOWN IN THE SECTIONS AND AS NOTED IN THESE SPECIFICATIONS. ALL NECESSARY CLEARANCE DIMENSIONS FOR PROPER CLEARANCES RELATIVE TO THE ROOF PANELS HAVE BEEN SHOWN. THE ERECTION OF THE ROOF SYSTEM SHALL BE COORDINATED WITH THE OTHER TRADES AND REQUIREMENTS WITH OTHER TRADES ASSOCIATED WITH THE BUILDING ROOF SYSTEM.
- 1.4 ERECTION CARE.
- 1.4.1 THE ERECTOR MUST BE SITUATED IN THE ERECTION OF METAL BUILDING SYSTEMS AND IS RESPONSIBLE FOR COMPLIING WITH ALL APPLICABLE LOCAL, FEDERAL, AND STATE CONSTRUCTION AND SAFETY REGULATIONS INCLUDING OSHA REGULATIONS AS WELL AS ANY APPLICABLE REQUIREMENTS OF LOCAL, NATIONAL, OR INTERNATIONAL UNION RULES OR PRACTICES. THE ERECTOR REMAINS SOLELY RESPONSIBLE FOR THE SAFETY AND ABILITY/KNOWLEDGE OF ALL TECHNIQUES AND METHODS UTILIZED. IT IS THE ERECTOR OF THE METAL BUILDING SYSTEMS RESPONSIBILITY TO PROVIDE THE PROPER ROOFING SYSTEMS AND TO PROVIDE ALL SAFETY DEVICES SUCH AS SCAFFOLDS, RUNWAYS, NETS, ETC. WHICH MAY BE REQUIRED TO SAFELY ERECT THE METAL BUILDING SYSTEM AND/OR VERTICAL, RIB ROOF SYSTEM.
- 1.4.2 THE ERECTOR OF THE VERTICAL, RIB ROOF SYSTEM SHALL EXERCISE GREAT CARE AND ATTENTION TO THE DETAILS AS SHOWN ON THESE DRAWINGS AND IN THE VERTICAL, RIB ERECTION MANUAL TO ENSURE A SECURE AND PROPER FIT OF ALL COMPONENTS. MBS BUILDING SYSTEMS SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE OR CONDUCTING THE ERECTION OF THE VERTICAL, RIB ROOF SYSTEM WITH OTHER TRADES.
- 1.4.3 DUE CONSIDERATION MUST BE GIVEN BY THE ERECTOR TO THE EFFECTS OF THERMAL EXPANSION AND CONTRACTION WHEN ERECTING THE ROOF. IF AN EXISTING STRUCTURE TO BE BUILT UPON IS TYPICALLY NOT INCLUDED AS PART OF THE MATERIAL PROVIDED BY MBS BUILDING SYSTEMS. REFER TO THE SECTIONS AND DETAILS FOR SPECIFIC MATERIALS PROVIDED BY MBS.
- 1.5 FIELD CUTTING OF PANELS.
- 1.5.1 WHEN FIELD CUTTING OR MITERING VERTICAL, RIB ROOF PANELS, NON-ABRASIVE CUTTING TOOLS SUCH AS HILTIERS, OR TIN-SNIPS SHALL BE USED. ABRASIVE CUTTING TOOLS SUCH AS MECHANICAL GRINDERS, SAWS, SHEARS, OR SOCCORS CAN DAMAGE THE GALVALUME FINISH AND CREATE EXCESS METAL SHAVINGS THAT CAN CORRODE THE PANELS. THE USE OF NON-APPROVED CUTTING DEVICES MAY VOID YOUR FACTORY WARRANTY.
1. DESIGN AND PERFORMANCE CRITERIA
- 2.1.1 THE VERTICAL, RIB ROOF SYSTEM CONSISTS OF 24 GAUGE PANELS WITH A NORMAL COVERAGE OF TYPE USED. A PANEL SEAM THAT IS BETWEEN 2 1/2" AND 3 1/2" HIGH DEPENDS ON CLIP TYPE AND SPACING.
- 2.2.1 REFER TO THE DETAILS AND SECTIONS FOR SHEETING PANEL CLIP TYPE.
- 2.2.2 PANEL CLIP SPACING USES A CLIP TO ATTACH THE PANELS TO THE ROOF SECONDARY MEMBERS. PANEL CLIP SPACING REQUIREMENTS ARE AS FOLLOWS:
- FOR VERTICAL, RIB ROOF ON A MBS BUILDING, CLIPS ARE REQUIRED AT EVERY PURLIN AND/OR ROOF JOIST.

ROOF SHEETING ERECTOR NOTES

STANDARD FASTENER SCHEDULE

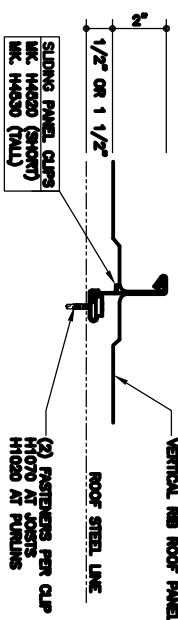
VERTICAL RIB EAVE PLATE DETAIL



EAVE PLATE PART NUMBERS WITH SCULPTURED RAKE TRIM			
AT SHORT CLIPS		AT TALL CLIPS	
PART #	EAVE TRIM DETAIL	PART #	EAVE TRIM DETAIL
EPB03	SAMPLE EAVE OR EAVE GUTTER	EPB03	SAMPLE EAVE OR EAVE GUTTER
EPD01	LOW EAVE EXTENSION	EPD01	LOW EAVE EXTENSION
EPD	SCULPTURED EAVE	EPD	SCULPTURED EAVE

EAVE PLATE PART NUMBERS WITH SIMPLE EAVE & SIMPLE RAKE			
AT SHORT CLIPS		AT TALL CLIPS	
PART #	ROOF SLOPE	PART #	ROOF SLOPE
EP003	< OR = 4:12	EP003	< OR = 4:12
EP001	> 4:12, < OR = 11:12	EP001	> 4:12, < OR = 11:12
EP002	12:12	EP002	12:12

ROOF PANEL CLIP ATTACHMENT DETAIL



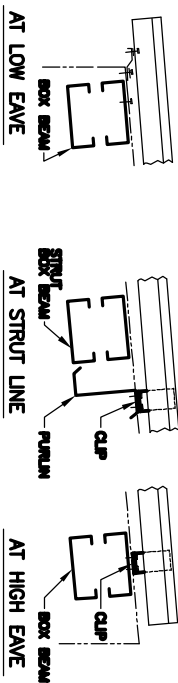
STANDARD PANEL CLIP ATTACHMENT

WITH SLIDING LIPS, CARE MUST BE TAKEN TO NOT OVER-DRIVE THE CLIP SCREWS. OVER-DRIVING CAN STRIP THE THREADS AND/OR CAUSE THE CLIP TO NOT SLIDE PROPERLY. USE SCREW GUN WITH TORQUE CONTROL, SET TO FUNCTION PROPERLY FOR THE COMBINATION OF FASTENER SIZE, HOLE SIZE, AND MATERIAL THICKNESS.

SPECIAL CONDITION AT A COLD-FORMED BOX BEAM

IF THIS PROJECT HAS A CORNER ATTACHED BOX BEAM:

- 1) AT THE LOW END, DO NOT ATTACH ROOF CLIPS TO THE BOX BEAM.
- 2) AT A STRUT LINE (ADJACENT TO A PURLIN), DO NOT ATTACH BEAM. (NOTE THE STRUT LINE COULD BE AT THE HIGH END.)
- 3) AT THE HIGH END, THAT IS NOT ADJACENT TO A PURLIN, DO ATTACH ROOF CLIPS TO THE BOX BEAM.



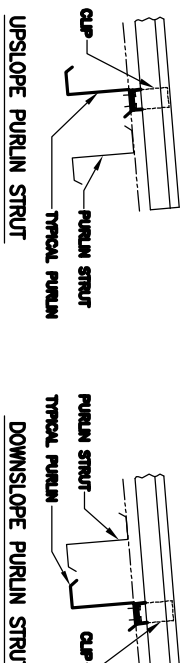
SPECIAL CONDITION AT A STRONG-BACK EAVE BEAM

IF THIS PROJECT HAS AN EAVE BEAM WITH (2) PURLINS, AS SHOWN, DO NOT ATTACH ROOF CLIPS TO THE "SECOND" PURLIN.



SPECIAL CONDITION AT A PURLIN STRUT

IF THIS PROJECT HAS PURLIN STRUTS, DO NOT ATTACH ROOF CLIPS TO THE PURLIN STRUTS



ISSUE	DWN	CHK	ENO	P.E.	DATE
APPROVAL	BW/EV	JR	JZ		11/28/08
REVISED APPROVAL	TJF		JZ		01/29/09
PERMITS FOR APPROVAL	JH		JZ		03/17/09
REVISED APPROVALS	NJS				04/08/09

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