BUILDING & PANEL PREPARATION

STEP 1: PLUMB AND SQUARE1: PLUMB AND SQUARE
THE FIRST STEP IN THE SUCCESSFUL INSTALLATION OF WALL PANELS IS TO HAVE THE PRIMARY FRAMING PLUMB AND SQUARE. FOR BEST RESULTS, IT IS RECOMMENDED THAT A TRANSIT BE USED WHEN ERECTING THE STRUCTURAL STEEL. MAKE SURE THAT THE FOUNDATION AND BUILDING STRUCTURE IS SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
SEE FIGURE "A"

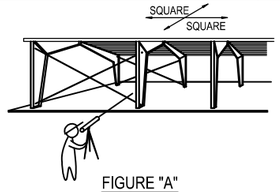


FIGURE "A"

STEP 2: GIRT BLOCKING2: GIRT BLOCKING
BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING THE WALL SHEETING OR INSULATION. CHECK TO BE SURE THAT THE EAVE STRUT AND GIRTS ARE STRAIGHT AND PLUMB. TO ALIGN THE GIRTS, CUT TEMPORARY WOOD BLOCKING TO THE PROPER LENGTH AND INSTALL BETWEEN THE LINES OF GIRTS. THIS BLOCKING CAN BE MOVED FROM BAY TO BAY WHICH WILL REDUCE THE NUMBER OF PIECES REQUIRED. NORMALLY, ONE LINE OF BLOCKING PER BAY WILL BE SUFFICIENT BUT WIDER BAYS MAY REQUIRE MORE. IT IS RECOMMENDED TO BLOCK AT LEAST TWO BAYS AND LEAP FROG THE BLOCKING AS A BAY IS SHEETED. BLOCKING SHOULD NOT BE REMOVED UNTIL THE FULL BAY HAS BEEN SHEETED.
SEE FIGURE "B"

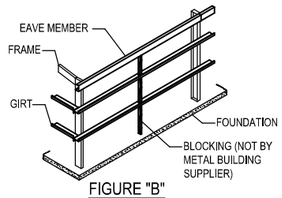


FIGURE "B"

STEP 3: PRE-DRILL PANEL LAP3: PRE-DRILL PANEL LAP
STACK PANELS WITH ENDS FLUSH ON A LEVEL PLACE ON THE GROUND IN PILES NOT EXCEEDING 10 PANELS. THEN PLACE SMALL WOODEN BLOCKS UNDER SIDE-LAPPING EDGE OF STACK OF PANELS TO HOLD THEM AT CORRECT HEIGHT AND POSITION WHILE DRILLING FASTENER HOLES. HOLD PANELS TIGHTLY TOGETHER AT EACH END WITH CLAMPING PLIERS. CAREFULLY MARK POSITIONS FOR SIDE-LAP FASTENERS ON TOP OF HIGH RIB. FASTENERS SHOULD BE LOCATED "ON CENTER" OF HIGH RIB. DRILL HOLES FOR "STITCH" FASTENER (USE #1,-7/32" - 15/64" DRILL-BIT) ON TOP SHEET OF SIDE-LAP. BE SURE PANELS ARE WELL NESTED BEFORE DRILLING.
SEE FIGURE "C"

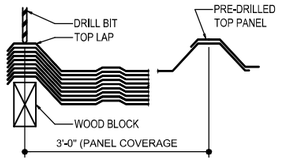


FIGURE "C"

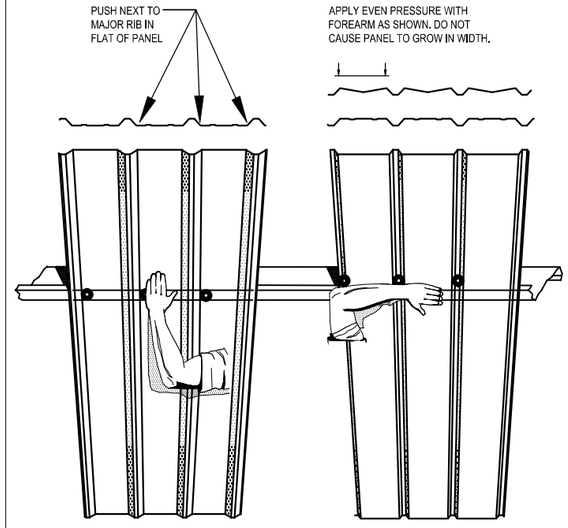
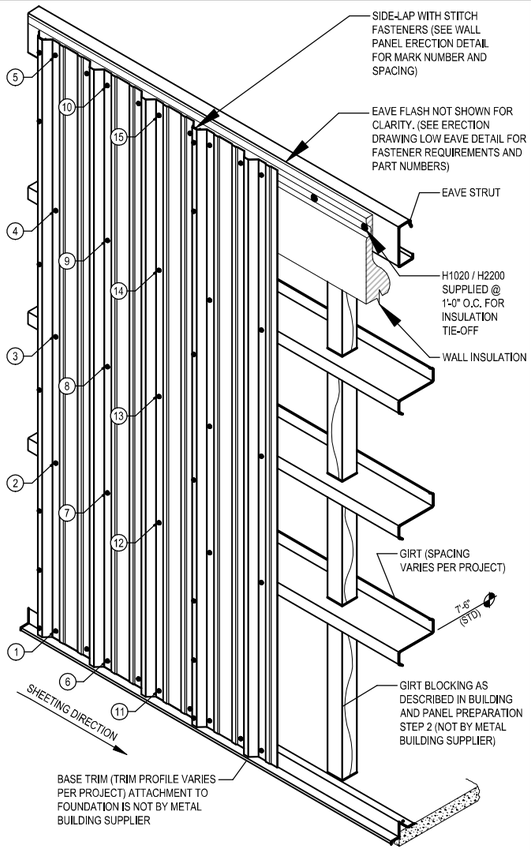


FIGURE "E"



STANDARD FASTENER SCHEDULE

H1000 SELF-TAPPING SCREW (GOOF SCREW) 17–14 x 1 1/4" WITH WASHER LONG LIFE FASTENER 3/8" HEAD	H1042 SELF-DRILLING SCREW 12–14 x 7/8" TCP3 W/O WASHER 5/16" HEAD	H1070 SELF-DRILLING SCREW 12–24 x 1 1/2" TCP5 W/O WASHER 5/16" HEAD 1/2" THK MAX DRILLING CAPACITY
H1020 SELF-DRILLING SCREW 1/4–14 x 1 1/4" TCP3 W/O WASHER 5/16" HEAD 3/16" THK MAX DRILLING CAPACITY	H1045 SELF-DRILLING SCREW 12–14 x 2" TCP3 W/O WASHER 5/16" HEAD	H1100 1/8" x 3/16" STAINLESS STEEL BLIND POP RIVET
H1030 SELF-DRILLING SCREW 12–14 x 1 1/4" TCP2 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1047 SELF-DRILLING SCREW 12–14 x 2" TCP3 FLAT TOP WITH WASHER 5/16"ø HEAD	H1110 3/8"ø STAINLESS GROMMET FASTENER
H1035 SELF-DRILLING SCREW 12–14 x 1 1/2" TCP2 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1050 SELF-DRILLING SCREW 1/4–14 x 7/8" TCP1 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1220 SELF-DRILLING SCREW 12–14 x 1" TCP3 W/O WASHER PHILLIPS HEAD
H1040 SELF-DRILLING SCREW 12–14 x 1 1/4" TCP2 W/O WASHER 5/16"ø HEAD	H1060 SELF-DRILLING SCREW 1/4–14 x 7/8" TCP1 W/O WASHER 5/16" HEAD	PRE-DRILL DIAMETERS 3/16"ø FOR: H1020, H1070 5/32"ø FOR: H1030, H1035, H1040, H1041, H1042, H1045, H1047, H1220 1/8"ø FOR: H1050, H1060, H1061
H1041 SELF-DRILLING SCREW 12–14 x 1 1/4" TCP2 FLAT TOP WITH WASHER 5/16" HEAD	H1061 SELF-DRILLING SCREW 1/4–14 x 7/8" TCP1 FLAT TOP WITH WASHER 5/16"ø HEAD	

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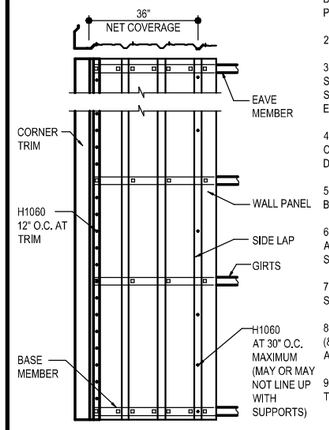
• H1060 STITCH FASTENER
▫ H1040 STRUCTURAL FASTENER



WALL PANEL ERECTION

ERECTOR NOTE: 1/2" SIDELAP MASTIC (H3010) IS REQUIRED IN SNOWDRIFT CONDITIONS. REFER TO THE ELEVATIONS FOR LOCATION REQUIREMENTS.

1. BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING PANEL ERECTION. MAINTAIN WOOD BLOCKING (NOT BY METAL BUILDING SUPPLIER) UNTIL PANEL TO STRUCTURAL FASTENERS ARE INSTALLED.
2. ALIGN AND PLUMB FIRST WALL PANEL.
3. TO PREVENT "OIL-CANNING", ALL PANEL FASTENERS SHOULD START FROM BASE MEMBER AND THEN BE SECURED TO EACH STRUCTURAL GIRT TOWARD THE EAVE.
4. FOUNDATION MUST BE SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
5. ERECTION CREW IS TO CLEAN ALL WALL PANELS BEFORE LEAVING JOB SITE.
6. ERECTOR IS TO ERECT PANELS SO THAT SIDELAPS ARE AWAY FROM THE MAIN TRAFFIC AREA'S LINE OF SIGHT.
7. STORE PANELS PROPERLY TO PREVENT MOISTURE. SEE ERECTION MANUAL.
8. AT FLUSH GIRT CONDITIONS, PRE-DRILL COLUMNS (& STUBS IF REQ'D) FOR EASE OF PANEL ATTACHMENT AT THESE AREAS.
9. INSTALL BASE PANEL CLOSURES (IF JOB REQUIRES THEM). SEE BASE TRIM DETAILS.

FIELD CUTTING PANELS

WHEN FIELD CUTTING OR MITERING WALL PANELS, NON-ABRASIVE CUTTING TOOLS SUCH AS NIBBLERS OR TIN-SNIPS SHALL BE USED. ABRASIVE CUTTING TOOLS SUCH AS MECHANICAL GRINDERS OR POWER SAWS CAN DAMAGE THE MATERIAL FINISH AND CREATE EXCESS METAL SHAVINGS THAT CAN CORRODE THE PANELS. THE USE OF NON-APPROVED CUTTING DEVICES MAY VOID THE FACTORY WARRANTY.

ANY METAL SHAVINGS THAT ARE CREATED NEED TO BE CLEANED FROM THE PANEL TO PREVENT SCRATCHING AND/OR CORROSION. THE MANUFACTURER WILL NOT ACCEPT CLAIMS FOR DAMAGE/DETERIORATION DUE TO USE OF UNAPPROVED TOOLS.

FASTENER INSTALLATION

RECOMMENDED TOOL TYPES: SEE ALSO FASTENER SCHEDULETOOL TYPES: SEE ALSO FASTENER SCHEDULE
4 AMP OR HIGHER RATED TOOLS (DO NOT USE IMPACTING TOOLS)
2000 - 2500 RPM SCREW GUN WITH TORQUE ADJUSTABLE CLUTCH
MANUAL OR ELECTRIC RIVET TOOL

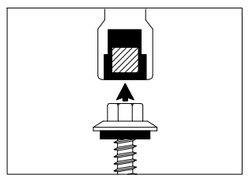
DO NOT USE IMPACTING TOOLSNOT USE IMPACTING TOOLS
TO ASSURE PROPER VOLTAGE TO THE TOOL, EXTENSION CORDS SHOULD BE CHECKED FOR PROPER WIRE SIZE/CHORD LENGTH.
16 GAGE WIRE, MAXIMUM CHORD LENGTH = 100'
14 GAGE WIRE, MAXIMUM CHORD LENGTH = 200'
12 GAGE WIRE, MAXIMUM CHORD LENGTH = 300'

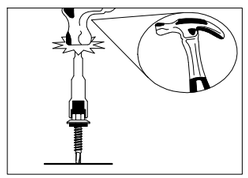
DRIVING TIPS TIPS:
SET THE NUT DRIVER AS DESCRIBED BELOW PRIOR TO INSTALLING FASTENERS TO PREVENT FASTENER WOBBLE...

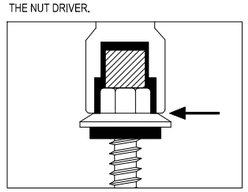
COMPRESS THE INSULATION AT FASTENER LOCATION WITH ONE HAND WHILE DRIVING THE FASTENER WITH THE OTHER. THIS WILL HELP KEEP THE PANEL FLAT AND PREVENT THE FASTENER FROM "WALKING". DRIVE FASTENERS PERPENDICULAR TO PANEL SURFACE.

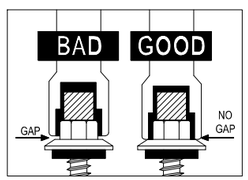
EXCESSIVE PRESSURE CAN CAUSE DRILL POINT FAILURE. LET THE FASTENER DO THE WORK.

DO NOT OVER TIGHTEN FASTENERS AS THIS WILL LEAD TO PANEL DIMPLING AND DISTORTION.


1. PUT THE TOP OF THE FASTENER INTO THE NUT DRIVER. NOTE: FOR PAINTED FASTENERS, PLACE A SINGLE OR DOUBLED LAYER OF PLASTIC BETWEEN THE FASTENER HEAD AND THE NUT DRIVER.


2. PLACE THE POINT OF THE FASTENER ONTO A HARD SURFACE AND FIRMLY HIT THE TOP OF THE NUT DRIVER 2-3 TIMES.


3. THE BASE OF THE NUT DRIVER SHOULD NOW BE CONTACTING THE TOP OF THE HEAD OF THE FASTENER WITH NO GAPS.



4. BAD SET VS. GOOD SET.

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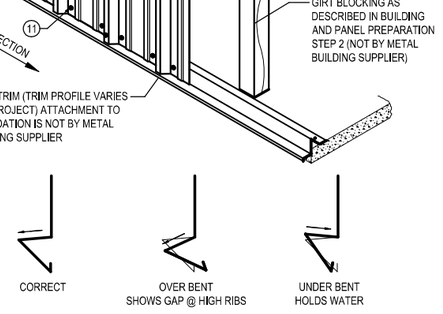
PANEL INSTALLATION & FASTENER SEQUENCE

STEP 1: INSTALL FIRST PANEL1: INSTALL FIRST PANEL
INSTALL THE FIRST WALL PANEL AT THE BUILDING CORNER AND ALIGN THE PANEL RIB WITH THE STEEL LINE AS SHOWN IN THE CORNER DETAILS USING THE START/FINISH DIMENSION SHOWN ON THE PLAN. IT IS EXTREMELY IMPORTANT THAT THE FIRST WALL PANEL IS INSTALLED PLUMB AND SQUARE. USE A LEVEL OR A TRANSIT TO AID IN THIS PROCESS.

PLACE A 1/8" SHIM ON THE BASE TRIM UNDER THE PANEL TO HOLD THE PANEL OFF THE BASE TRIM. ENSURE THAT THE WEIGHT OF THE PANEL DOES NOT FORCE BASE TRIM TO EXCESSIVELY BEND DOWN. BASE TRIM SHOULD HAVE A SLIGHT SLOPE TO ALLOW WATER TO RUN OUT AND NOT SIT ON BASE TRIM.
SEE FIGURE "D" - TO RIGHT

WHEN INSTALLING THE PANEL, APPLY PRESSURE EVENLY TO AVOID DISTORTING THE PANEL AND CAUSING OIL CANNING.
SEE FIGURE "E" - ABOVE

RECOMMENDED PANEL FASTENING SEQUENCE IS SHOWN TO THE RIGHT. THIS PATTERN AIDS IN PLUMBING AS WELL AS MAINTAINING PANEL COVERAGE / MODULARITY. SOME APPLICATIONS MAY REQUIRE MODIFIED SEQUENCE AND WILL BE BEST DETERMINED IN THE FIELD. DO NOT ATTACH PANEL AT BASE AND TOP AND WORK TOWARD THE MIDDLE OF THE



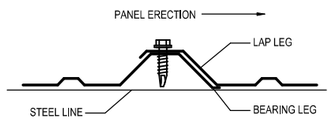
NOTE: BASE TRIM PROFILES ARE MANUFACTURED WITH A 5°D SLOPE TO PROMOTE WATER SHED. ENSURE SLOPE IS PRESENT TO PREVENT HOLDING WATER. DO NOT ALLOW WEIGHT OF PANEL TO OVER BEND TRIM CREATING LARGER GAP AT RIB OF PANEL.

FIGURE "D"

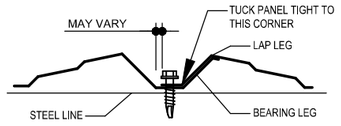
PANEL ORIENTATION AND ALIGNMENT

NOTE THE ORIENTATION OF THE PROFILE AND BEARING LEG FOR THE LEADING EDGE OF THE PANEL. PANELS SHOULD BE INSTALLED AS SHOWN BELOW TO HELP MAINTAIN PANEL MODULARITY / COVERAGE FOR THE LENGTH OF THE WALL.

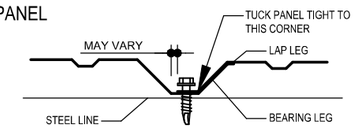
R-PANEL



A-PANEL



REVERSE R-PANEL



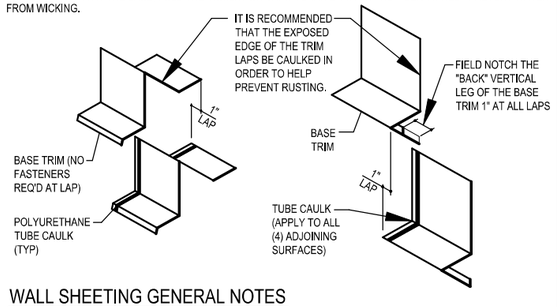
BASE TRIM LAP SEALANT

AT BASE TRIM LAPS, APPLY A BEAD OF POLYURETHANE TUBE CAULK (H3152) TO ALL ADJOINING SURFACES AND LAP 1". SEE BASE TRIM DETAIL FOR THE SPECIFIC TRIM FOR YOUR PROJECT.

IF JOB HAS OPTIONAL FOAM PANEL CLOSURES ORDERED AT BASE, ATTACH TO INSIDE OF WALL PANEL AT BASE AND FASTEN THROUGH PANEL AND CLOSURE, INTO BASE TRIM. FASTENING PATTERN WILL VARY PER WALL PANEL TYPE. REFER TO THE WALL PANEL ERECTION DETAIL FOR MORE FASTENING INFO.

USE SUPPLIED BASE CORNER PIECES OR FIELD MITER BASE TRIM AT CORNERS.

INSULATION HINT: AT THE BASE, FOLD THE INSULATION VAPOR BARRIER OVER THE FIBER TO HELP PREVENT WATER FROM WICKING.



WALL SHEETING GENERAL NOTES

TRIM 696

DESCRIPTION	DRWN	CHK	ENG	DATE
Anchor Bolts for Construction	MBS	CDC	RHW	01/25/2023
Building Department Review	MBS	CDC	RHW	01/26/2023

AMERICAN BUILDINGS a NUCOR brand
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PROJECT NAME: WILCO HAY STORAGE - EUGENE
EUGENE, OR 97402
CUSTOMER NAME: WALEN CONSTRUCTION, LLC
TUALATIN, OR 97062
JOB NUMBER: N23G00114A
SHEET TITLE: DETAILS

Reviewed for Code Compliance - 08/18/2023 3:34:20 PM
Permit Number - 23-01679-01
Eugene

REGISTERED PROFESSIONAL ENGINEER
97085PE
OREGON
MAR. 9 2021
WING HONG LO
EXPIRATION DATE: 12-31-2024

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SHEET 8

D8 of 10

03/10/23

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