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GENERAL INFORMATION

1. Re-working, cutting, reaming, shimming and fitting of structural connections may be required to match actual field conditions to make the tie-in structurally and aesthetically adequate.

2. Some roof details shown in this section are pictured with roof purlins. Some of the details may also be used in conjunction with roof joists.

3. Roof to wall tie-in details may require fieldwork to ensure weather tight conditions.

4. Nucor is not responsible for closures, flashing, mastic, fasteners, or any other accessories that may be required to adequately weatherproof existing wall and/or roof panels.

IMPORTANT NOTE:

In the case where a Nucor building is tying into an existing building, it is possible that the Nucor building will impose additional loads onto the existing structure. The Project Engineer of Record (not the metal building supplier) must investigate the existing building to insure it remains structurally adequate for strength and stability considerations with the additional loads. This may also be performed by a design professional retained by the building owner. In a case where the existing building is a Nucor structure, Nucor can provide this investigation via special request from the Builder for an additional charge. Nucor shall not be construed as the Project Engineer of Record on any project, and shall not be held responsible for the effects or the design of existing structures. Water runoff from the existing building may invalidate the Galvalume warranty on the new roof. Also, tie-in flashings are not by Nucor.
SECONDARY FRAMING

BJ0030 – PURLIN CONNECTION TO EXISTING NON-NUCOR BUILDING (W/ EXISTING FRAME)

PURLIN CONNECTION @ EXISTING BUILDING

EXISTING PURLIN W/ EXISTING FRAME
REFERENCE REFER TO NOTE FOR TYPICAL WASHER REQUIREMENTS

BJ0030.DWG
BJ040 – PURLIN CONNECTION TO EXISTING NON-NUCOR BUILDING (W/ NEW FRAME)

The diagram illustrates the connection details for a purlin to an existing non-NUCOR building, involving new and existing purlins, intermediate purlins, and support connections. The specific sections and details are highlighted to ensure proper installation.
BT0010PE – OPTIONAL JOIST CONNECTION TO NON-NUCOR BUILDING (EXISTING FRAME)

NOTE: THE NEW HIGH EAVE OR RIDGE JOIST MUST BE HELD 1’–4 DOWN FROM THE HIGH EAVE STEEL LINE OR THE RIDGE IN ORDER FOR THE CFR SYSTEM TO WORK PROPERLY. THE EXISTING JOIST MAY NEED TO BE FIELD CUT TO ALLOW FOR THIS CONDITION. FIELD WORK OF SOME EXISTING JOISTS MAY BE REQUIRED TO AVOID INTERFERENCE WITH NEW JOISTS.

NUCOR STEEL LINE
FACE OF EXISTING BUILDING

NEW NUCOR JOIST

EXISTING JOIST
EXISTING FRAME

ANALYSIS OF EXISTING FRAME TO SUPPORT NEW LOADING (NOT BY NUCOR)

FIELD WORK EXISTING RAFTER AS REQUIRED
NEW NUCOR JOIST

1 3/4" 1/4"

2" 1/4" REGARDLESS OF BOLTED CONDITION

1 5/8"

EXISTING JOIST – MAY NEED TO BE CUT BACK TO CENTERLINE OF FRAME TO AVOID NEW JOISTS
BT0020PE – OPTIONAL JOIST CONNECTION TO NON-NUCOR BUILDING (NEW FRAME)
BT0030PE – STANDARD JOIST CONNECTION AT EXPANDABLE EN DWALL (FULL LOAD FRAME)

AT ADDITIONS TO NUCOR BLDGS, EXISTING RAFTER IS PREPARED FOR “BOLTED” CONNECTIONS WHERE APPLICABLE.

EXISTING RIGID FRAME RAFTER

NEW JOIST

EXISTING JOIST

NEW BLDG. LENGTH

1'-4"
BJ0090 – EAVE STRUT TO EXISTING @ HIGH SIDE OF BUILDING

(4) 1/2" x 2" A325 BOLTS H0603/NUTS H0300

FIELD DRILL (IF REQUIRED) FOR (2) 1/2" BOLTS

NEW NUCOR EAVE STRUT

EXISTING EAVE STRUT

CLIP PTC06

1/4" 1/4"

2" 2"

EAVE STRUT CONN AT EXISTING BUILDING

NUCOR EXISTING EAVE STRUT @ HIGH SIDE OF BUILDING
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

BJ0090
BJ0100 – CEE CHANNEL TO EXISTING @ HIGH SIDE OF BUILDING

(4) 1/2” x 2” A325 BOLTS H0603/NUTS H0300

FIELD DRILL (IF REQUIRED) FOR (2) 1/2” BOLTS

NEW NUCOR CEE CHANNEL

EXISTING CEE CHANNEL

CLIP PTC06

1/4” 1/4”

2” 2”
BT0040PE – STANDARD BASE CONDITION AT MASONRY/CONCRETE (NON-NUCOR BUILDING TIE-IN)

(3/32" x 1/2" TAPE MASTIC IS PROVIDED FOR WALL PANEL SIDELAPS AT THIS CONDITION DUE TO THE POTENTIAL OF SNOW PILING UP AGAINST THE PANELS. THE MASTIC SHOULD BE INSTALLED FROM THE BOTTOM OF THE WALL PANEL ELEVATION TO 10'-0" ABOVE THE LOWER BUILDING ROOF LINE.)

1-1/4" STEEL LINE

NUCOR "CLASSIC WALL"™
NUCOR "ACCENT PANEL"™
OR NUCOR "RC"™

BASE ANGLE FLASHING – 18 GA.
(POLAR WHITE OR BURNISHED SLATE ONLY)

POWDER – ACTUATED PIN, CONCRETE NAIL, OR EQUIVILENT AT 3'-6" O.C.
(NOT BY NUCOR)

MASONRY OR CONCRETE

WALL DELETION HEIGHT AS SPECIFIED ON THE ORDER DOCUMENTS

EXISTING BUILDING OR STRUCTURE (NOT BY NUCOR)

FLASH NOT BY NUCOR
BT0050PE – OPTIONAL BASE CONDITION AT MASONRY/CONCRETE (NON-NUCOR BUILDING TIE-IN)

(3/32" X 1/2" TAPE MASTIC IS PROVIDED FOR WALL PANEL SIDELAPS AT THIS CONDITION DUE TO THE POTENTIAL OF SNOW PILING UP AGAINST THE PANELS. THE MASTIC SHOULD BE INSTALLED FROM THE BOTTOM OF THE WALL PANEL ELEVATION TO 10’-0 ABOVE THE LOWER BUILDING ROOF LINE.)

NUCOR "CLASSIC WALL™
NUCOR "ACCENT PANEL™
or NUCOR "RCTM"

WALL DELETION HEIGHT AS SPECIFIED ON THE ORDER DOCUMENTS

EXISTING BUILDING OR STRUCTURE (NOT BY NUCOR)

1/8"

MASONRY OR CONCRETE

FLASH NOT BY NUCOR

1-1/4"

STEEL LINE

BASE FLASHING – 26 GA. (COLOR TO MATCH WALL PANEL)

BASE ANGLE (SHORT LEG VERTICAL)

POWDER – ACTUATED PIN, CONCRETE NAIL, OR EQUIVALENT AT 3'-0" O.C. (NOT BY NUCOR)
(3/32" x 1/2" TAPE MASTIC IS PROVIDED FOR WALL PANEL SIDELAPS AT THIS CONDITION DUE TO THE POTENTIAL OF SNOW PILING UP AGAINST THE PANELS. THE MASTIC SHOULD BE INSTALLED FROM THE BOTTOM OF THE WALL PANEL ELEVATION TO 10'-0 ABOVE THE LOWER BUILDING ROOF LINE.)
ROOF SHEETING: NUCOR CLASSIC ROOF™

BT0070PE – NUCOR CLASSIC ROOF™ PANEL TO EXISTING ROOF PANEL AT RIDGE

- CONTINUOUS 3/4” TAPE MASTIC (TYPICAL)
- NUCOR "CLASSIC ROOF™"
- RIDGE LINE
- 1’-4"
- 5 1/4”
- DIE-FORMED RIDGE CAP
- ATTACHMENT TO EXISTING (NOT BY NUCOR)
- EXISTING ROOF PANEL
- RIDGE PURLIN
- EXISTING PURLIN
- NEW NUCOR BUILDING
- EXISTING BUILDING
BT0080PE – NUCOR CLASSIC ROOF™ PANEL TO EXISTING ROOF PANEL AT RAKE

- Steel Line / Face of Existing
- Roof Transition Flash
- NUCOR "CLASSIC ROOF"™
- Tape Mastic
- Existing Roof Panel
- New NUCOR Purlin
- Existing Purlin
- New NUCOR Building
- Existing Non-NUCOR Building
BT0090PE – NUCOR CLASSIC ROOF™ PANEL TO EXISTING ROOF PANEL AT ROOF STEP

- PANEL CLOSURE AND MASTIC
- EXISTING ROOF PANEL
- STEP FLASH
- PANEL CLOSURE W/3/4" TAPE MASTIC TOP & BOTTOM
- NUCOR "CLASSIC ROOF™"
- EXISTING EAVE STRUT
- 5” END OF PANEL
- HIGH SIDE PURLIN
- STEEL LINE FACE OF EXISTING 1’-4” PURLIN WEB

LAST REVISION
DATE: 02/16/15
BY: AK CHK: EGB

DETAIL NAME IF APPLICABLE
BT0090PE.DWG

4.7.15
(3/32" x 1/2" TAPE MASTIC IS PROVIDED FOR WALL PANEL SIDELAPS AT THIS CONDITION DUE TO THE POTENTIAL OF SNOW PILING UP AGAINST THE PANELS. THE MASTIC SHOULD BE INSTALLED FROM THE BOTTOM OF THE WALL PANEL ELEVATION TO 10’-0 ABOVE THE LOWER BUILDING ROOF LINE.)

**Diagram Description:**
- **Existing Wall Panel**
- **Rake Angle**
- **Rake Parapet Flash**
- **Tape Mastic**
- **NUCOR "CLASSIC ROOF™"**
- **Steel Line / Face of Existing**
- **Purlin**
- **New Building Length**

**Panel Closure and Mastic Not By NUCOR at Non-NUCOR Tie-Ins**
BT0110PE – NUCOR CLASSIC ROOF™ PANEL RAKE PARAPET TO MASONRY OR CONCRETE

NEW BUILDING LENGTH

COUNTER-FLASH IN REGLET
NOT BY NUCOR

ATTACHMENT NOT BY NUCOR

RAKE PARAPET
FLASH

TAPE MASTIC

NUCOR "CLASSIC ROOF™"

EXISTING MASONRY OR CONCRETE WALL

FACE OF MASONRY OR CONCRETE WALL

PURLIN
(3/32" X 1/2" TAPE MASTIC IS PROVIDED FOR WALL PANEL SIDELAP AT THIS CONDITION DUE TO THE POTENTIAL OF SNOW PILING UP AGAINST THE PANELS. THE MASTIC SHOULD BE INSTALLED FROM THE BOTTOM OF THE WALL PANEL ELEVATION TO 10'-0 ABOVE THE LOWER BUILDING ROOF LINE.)
BT0130PE – NUCOR CLASSIC ROOF™ PANEL RAKE PARAPET TO MASONRY OR CONCRETE

- Existing masonry or concrete wall
- Counter-flash in reglet not by Nucor
- Attachment not by Nucor
- High eave flashing
- Panel closure w/3/4" tape mastic top & bottom
- Nucor "Classic Roof™"
- High side purlin
- Insulation blocking / fastener not by Nucor
- Face of existing masonry or concrete wall
- 5" end of panel
- 1'-4" purlin web
- New building width
ROOF SHEETING: NUCOR CFR™ ROOF

BT0140PE – NUCOR CFR™ ROOF PANEL TO EXISTING BUILDING AT RIDGE

1. Refer to “Section 11.6” of the Product and Engineering Manual for all standard CFR Expansion Joint Details.

NOTE
FASTENERS TO EXISTING NON–NUCOR BUILDINGS ARE NOT PROVIDED.
1. Refer to “Section 11.7” of the Product and Engineering Manual for all standard VR16-II Expansion Joint Details.
BT0150PE – STANDARD DIMENSIONS FOR ROOF TIE-IN TO EXISTING BUILDINGS

MINIMUM ROOF TIE-IN DIMENSIONS

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>CLASSIC</th>
<th>CFR</th>
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<tr>
<td>A</td>
<td>1'-1&quot;</td>
<td>1'-3&quot;</td>
</tr>
<tr>
<td>B</td>
<td>1'-1&quot;</td>
<td>1'-10&quot;</td>
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<tr>
<td>C</td>
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