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PRODUCT & ENGINEERING MANUAL

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:

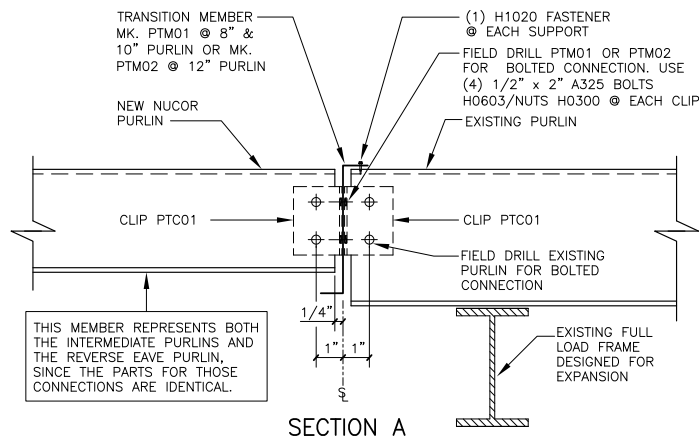
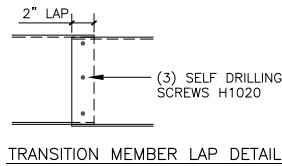
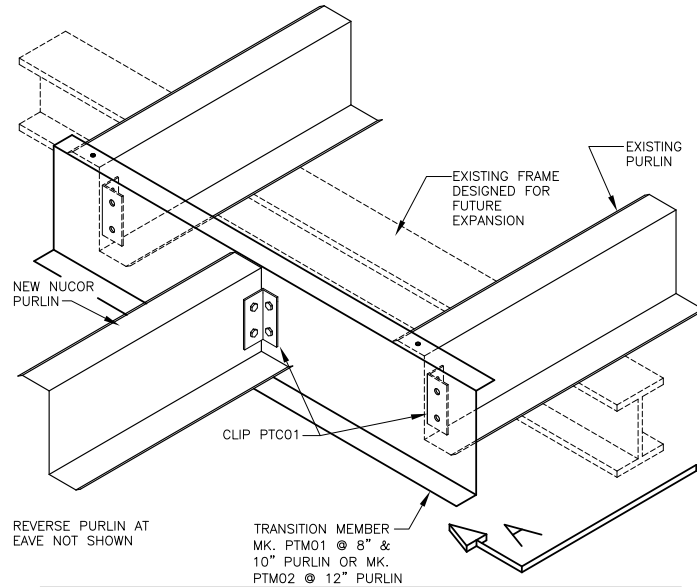
In the case where a Nucor building is tying into an existing building, it is possible that the Nucor building will impose additional loads onto the existing structure. The Project Engineer of Record (not the metal building supplier) must investigate the existing building to insure it remains structurally 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.



PRODUCT & ENGINEERING MANUAL

SECONDARY FRAMING

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



PURLIN CONNECTION @ EXISTING BUILDING

EXISTING PURLIN W/ EXISTING FRAME
 REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

BJ0030

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

DETAIL NAME IF APPLICABLE

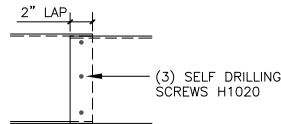
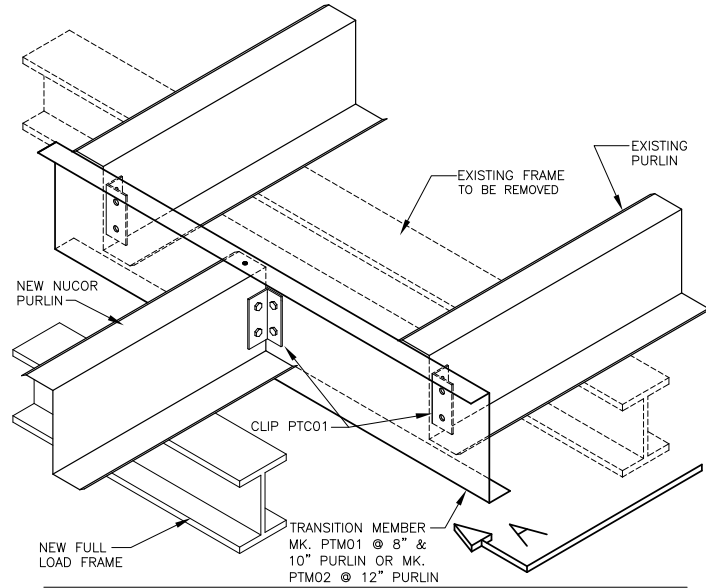
BJ0030.DWG

4.7.3

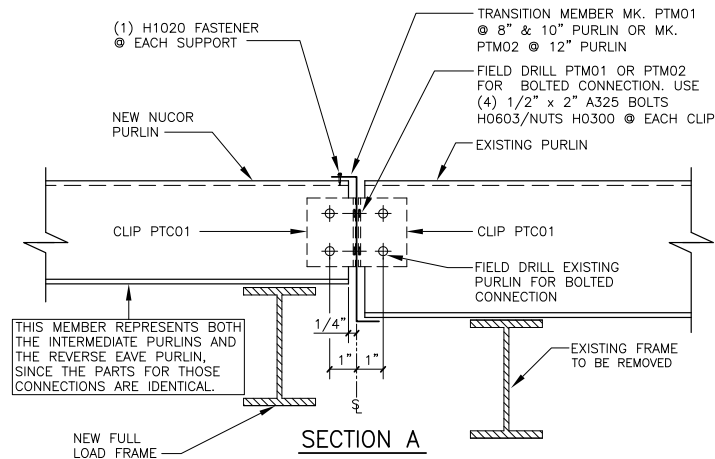


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BJ0040 – PURLIN CONNECTION TO EXISTING NON-NUCOR BUILDING (W/ NEW FRAME)



TRANSITION MEMBER LAP DETAIL



PURLIN CONNECTION @ EXISTING BUILDING

EXISTING PURLIN W/ NEW FRAME
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

BJ0040

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

DETAIL NAME IF APPLICABLE

BJ0040.DWG

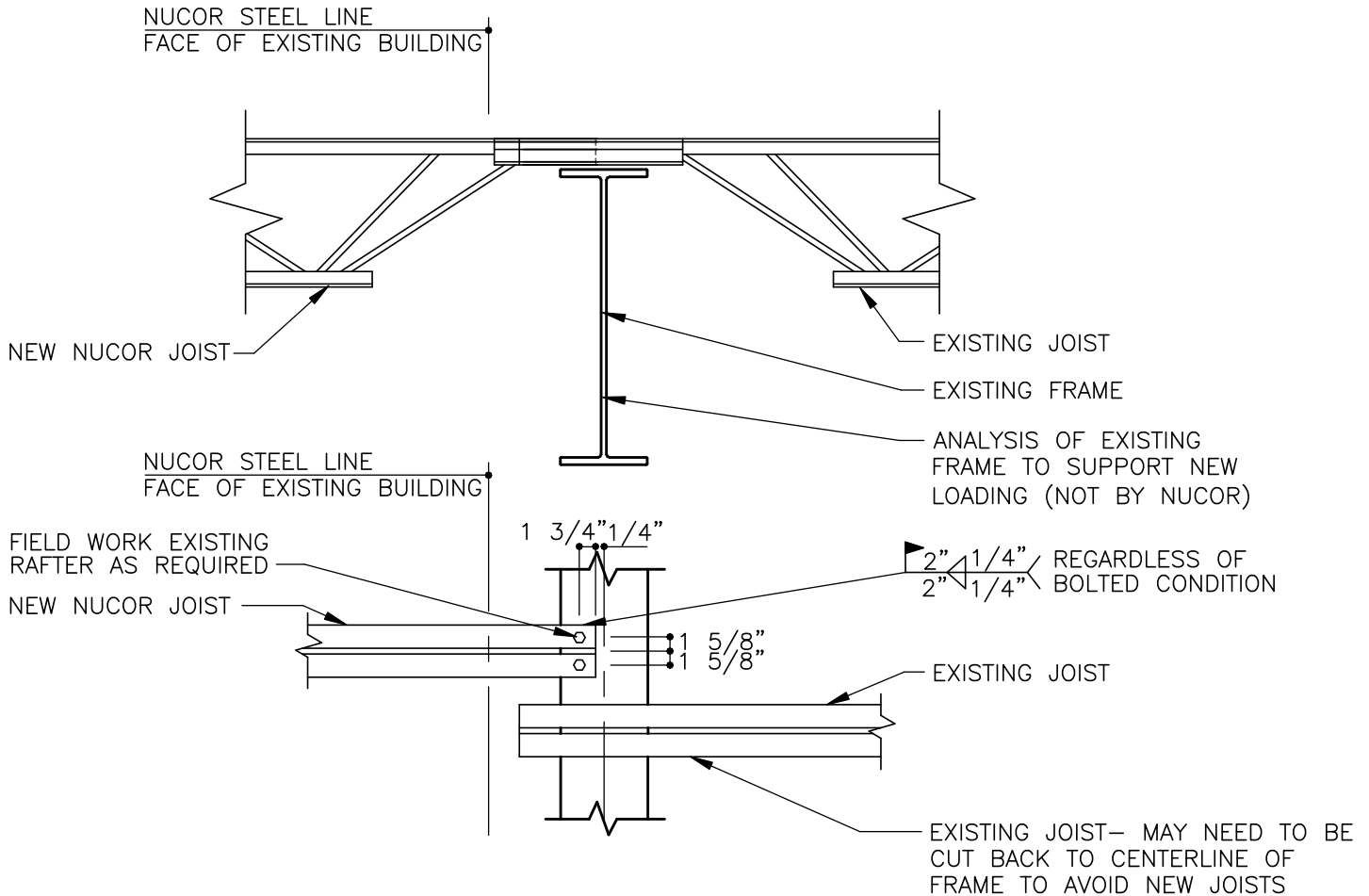
4.7.4



PRODUCT & ENGINEERING MANUAL

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.



LAST REVISION
DATE: 07/08/02
BY: EGB CHK: RJF

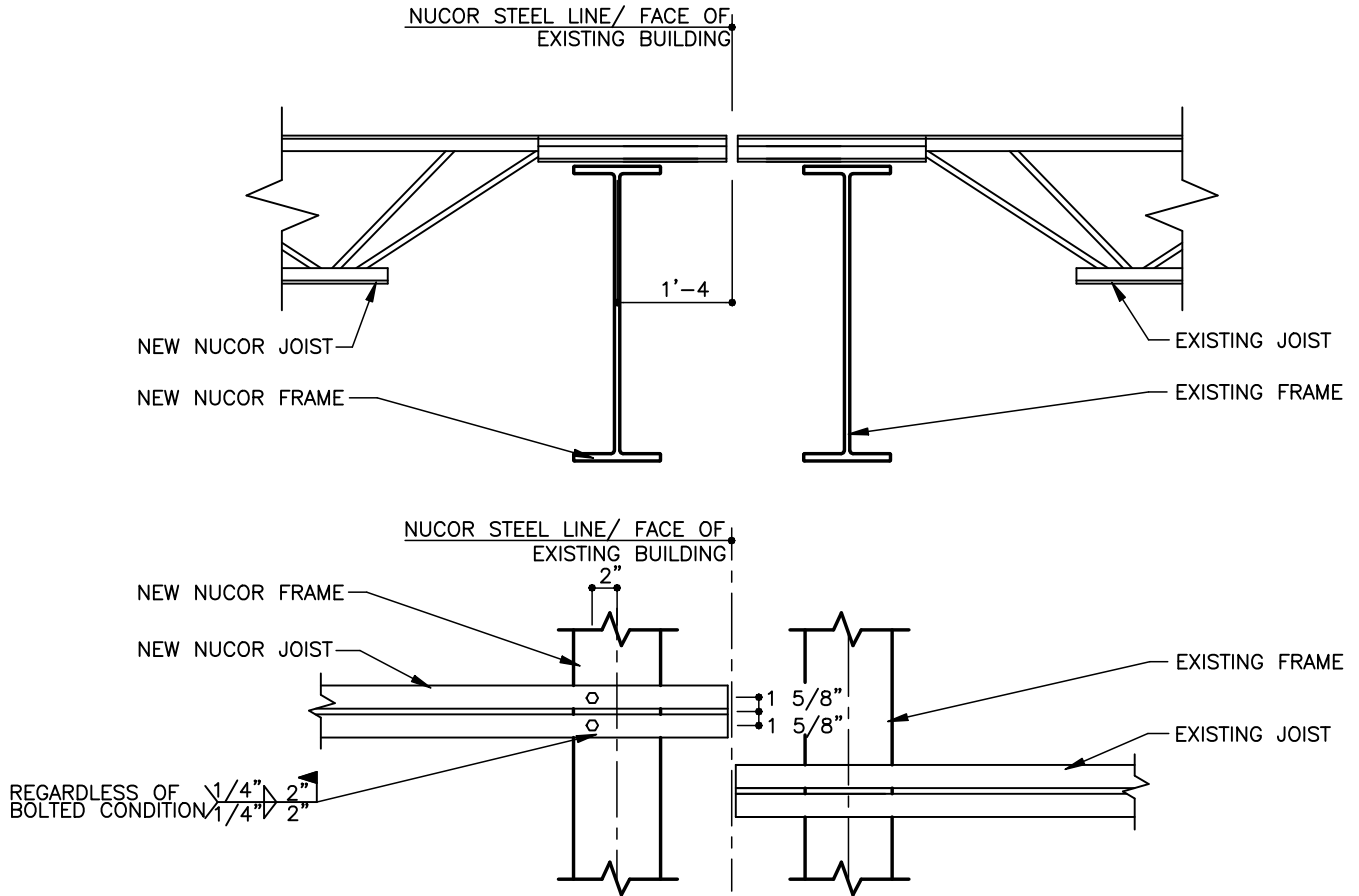
DETAIL NAME IF APPLICABLE
BT0010PE.DWG

4.7.5



PRODUCT & ENGINEERING MANUAL

BT0020PE – OPTIONAL JOIST CONNECTION TO NON-NUCOR BUILDING (NEW FRAME)



LAST REVISION
 DATE: 02/09/01
 BY: CDM CHK: RJF

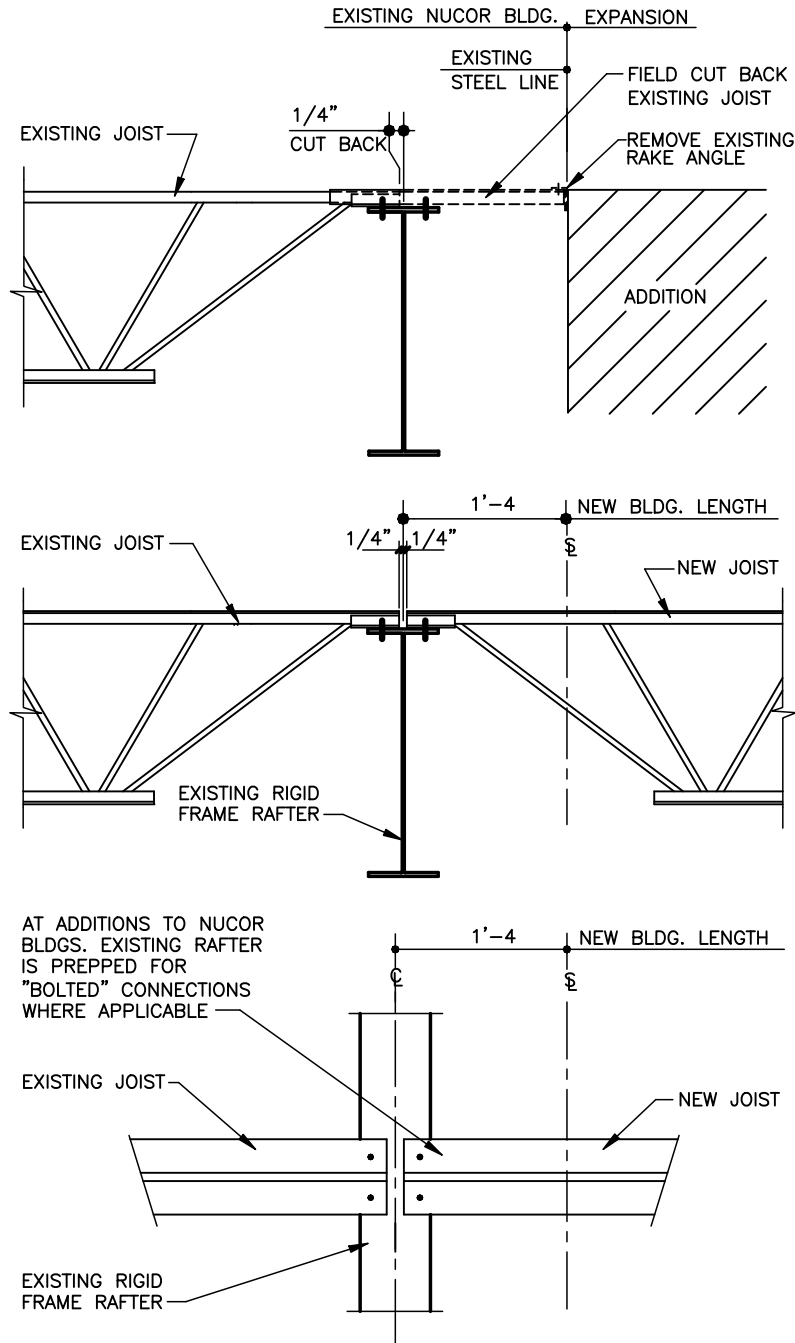
DETAIL NAME IF APPLICABLE
BT0020PE.DWG

4.7.6



PRODUCT & ENGINEERING MANUAL

BT0030PE – STANDARD JOIST CONNECTION AT EXPANDABLE ENDWALL (FULL LOAD FRAME)



LAST REVISION
 DATE: 02/09/01
 BY: CDM CHK: RJF

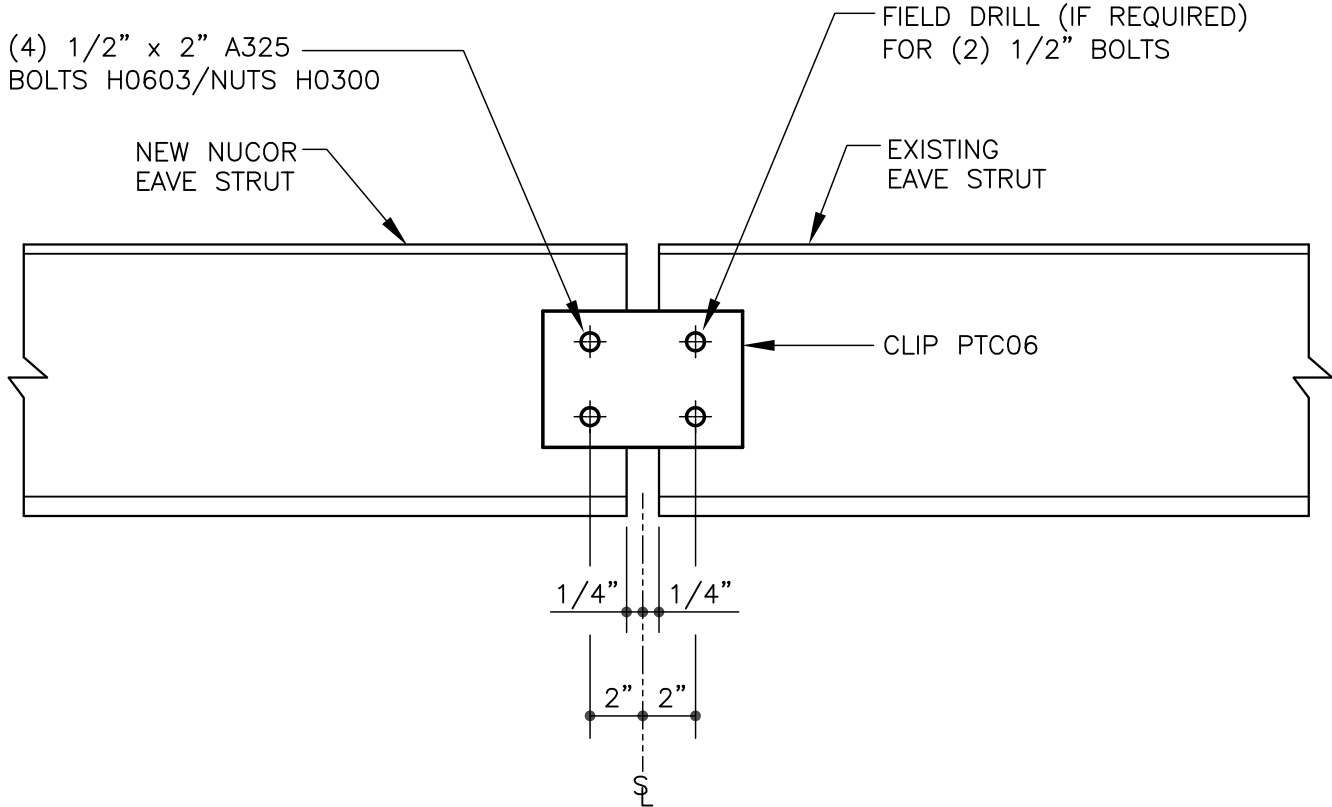
DETAIL NAME IF APPLICABLE
BT0030PE.DWG

4.7.7



PRODUCT & ENGINEERING MANUAL

BJ0090 – EAVE STRUT TO EXISTING @ HIGH SIDE OF BUILDING



EAVE STRUT CONN AT EXISTING BUILDING

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

BJ0090

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

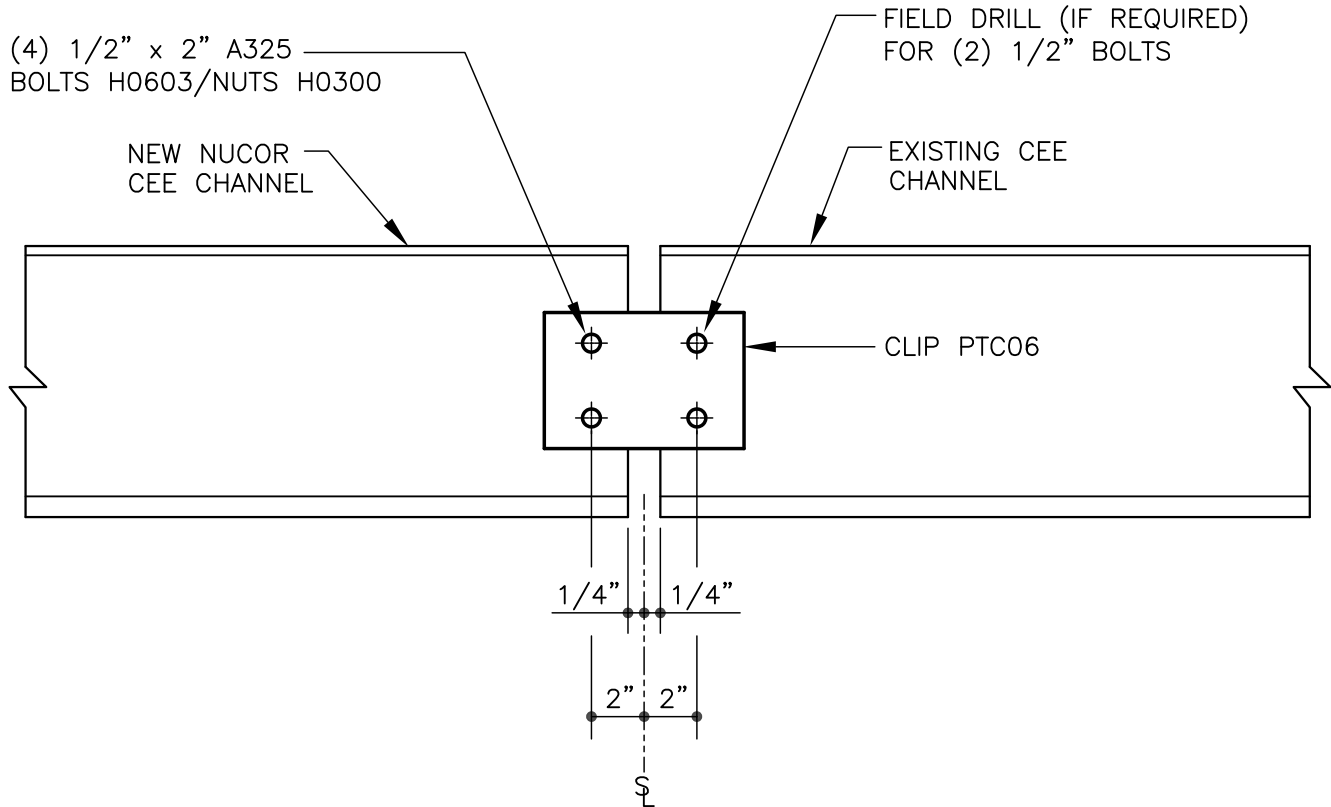
DETAIL NAME IF APPLICABLE
BJ0090.DWG

4.7.8



PRODUCT & ENGINEERING MANUAL

BJ0100 – CEE CHANNEL TO EXISTING @ HIGH SIDE OF BUILDING



CEE CHANNEL CONN AT EXISTING BUILDING

NUCOR EXISTING CEE CHANNEL @ HIGH SIDE OF BUILDING
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

BJ0100

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

DETAIL NAME IF APPLICABLE
BJ0100.DWG

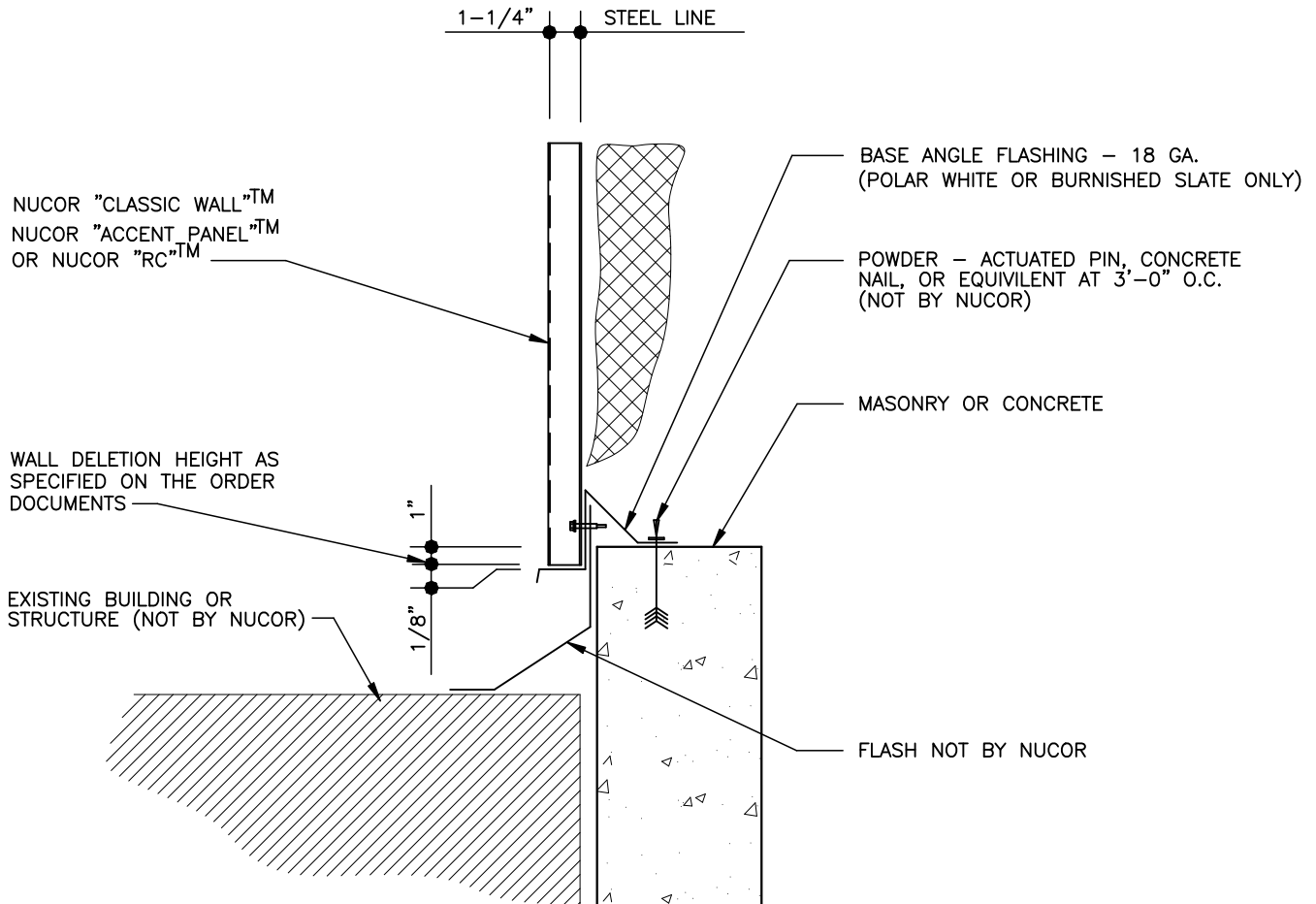
4.7.9



PRODUCT & ENGINEERING MANUAL

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.)



LAST REVISION
DATE: 02/09/01
BY: CDM CHK: RJF

DETAIL NAME IF APPLICABLE
BT0040PE.DWG

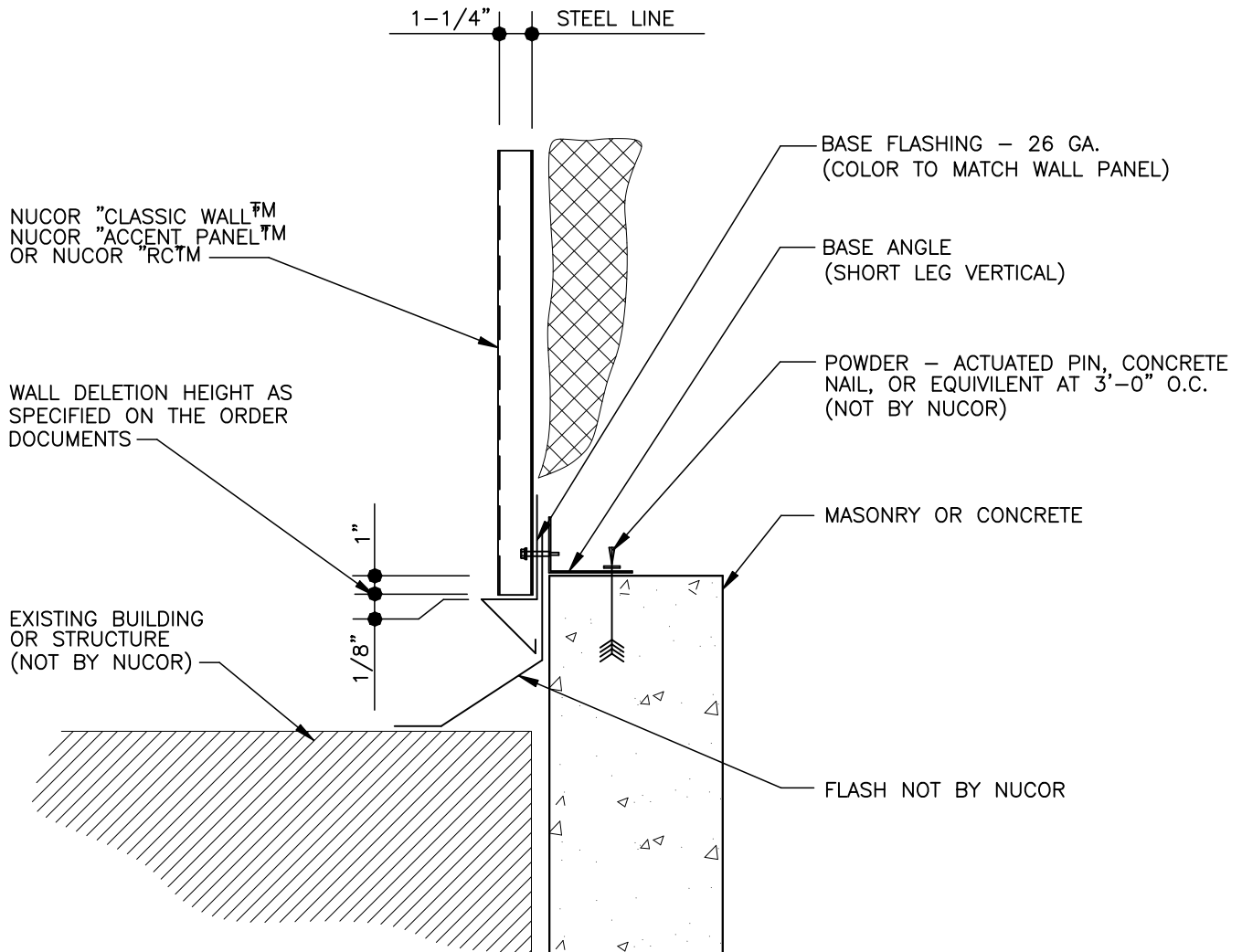
4.7.10



PRODUCT & ENGINEERING MANUAL

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.)



LAST REVISION
DATE: 02/09/01
BY: CDM CHK: RJF

DETAIL NAME IF APPLICABLE
BT0050PE.DWG

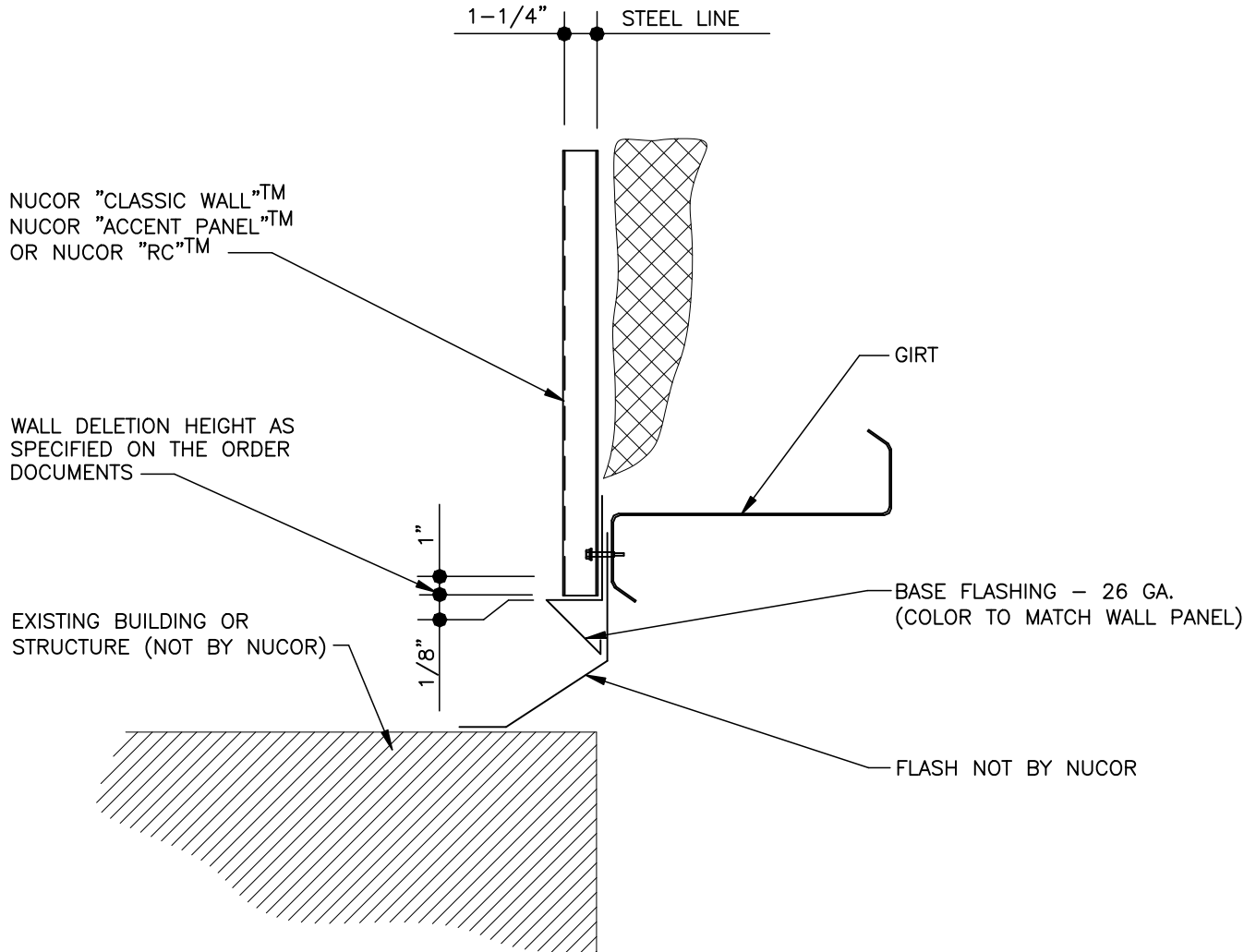
4.7.11



PRODUCT & ENGINEERING MANUAL

BT0060PE – STANDARD BASE CONDITION AT METAL WALL (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.)



LAST REVISION
DATE: 02/09/01
BY: CDM CHK: RJF

DETAIL NAME IF APPLICABLE
BT0060PE.DWG

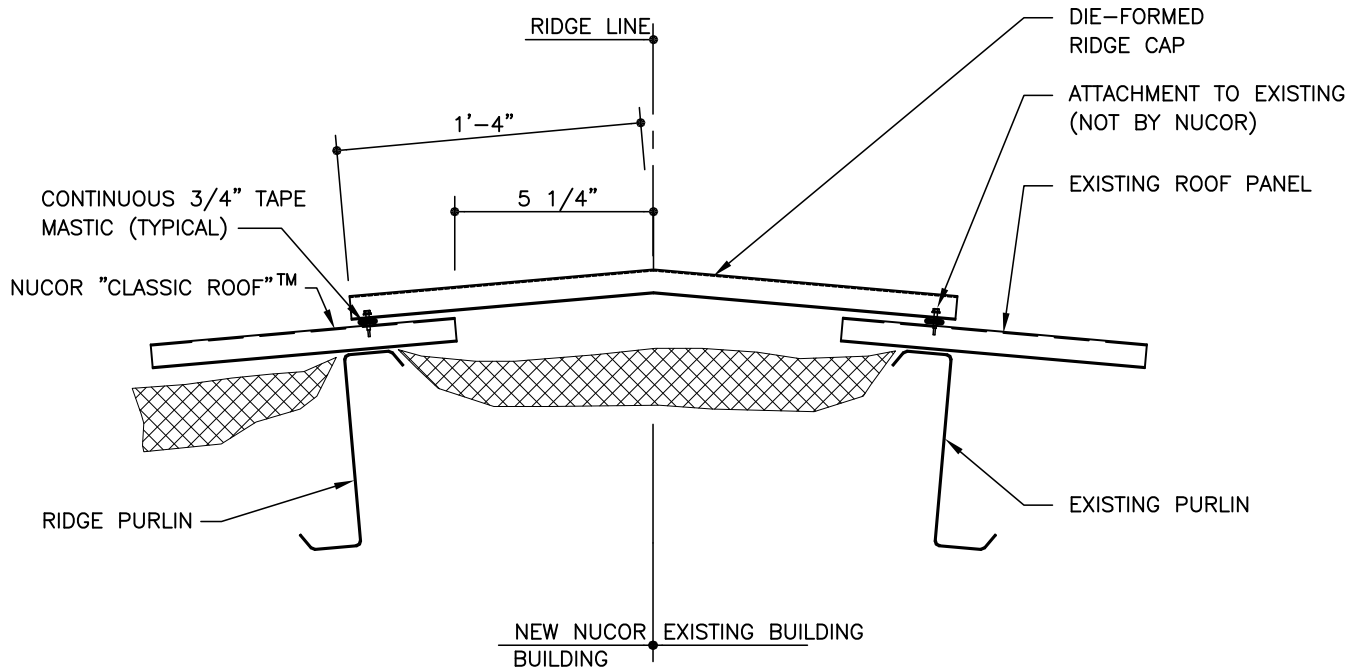
4.7.12



PRODUCT & ENGINEERING MANUAL

ROOF SHEETING: NUCOR CLASSIC ROOF™

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



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

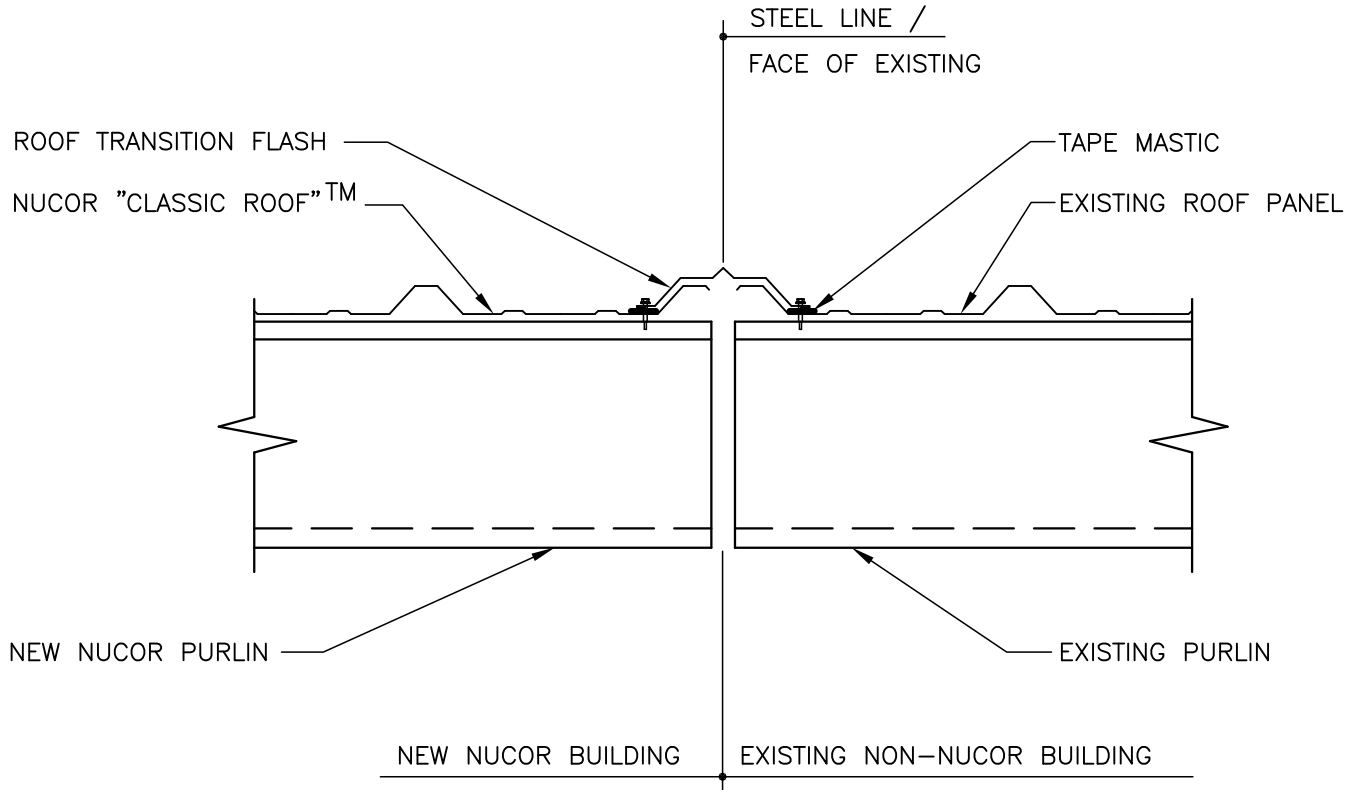
DETAIL NAME IF APPLICABLE
BT0070PE.DWG

4.7.13



PRODUCT & ENGINEERING MANUAL

BT0080PE – NUCOR CLASSIC ROOF™ PANEL TO EXISTING ROOF PANEL AT RAKE



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

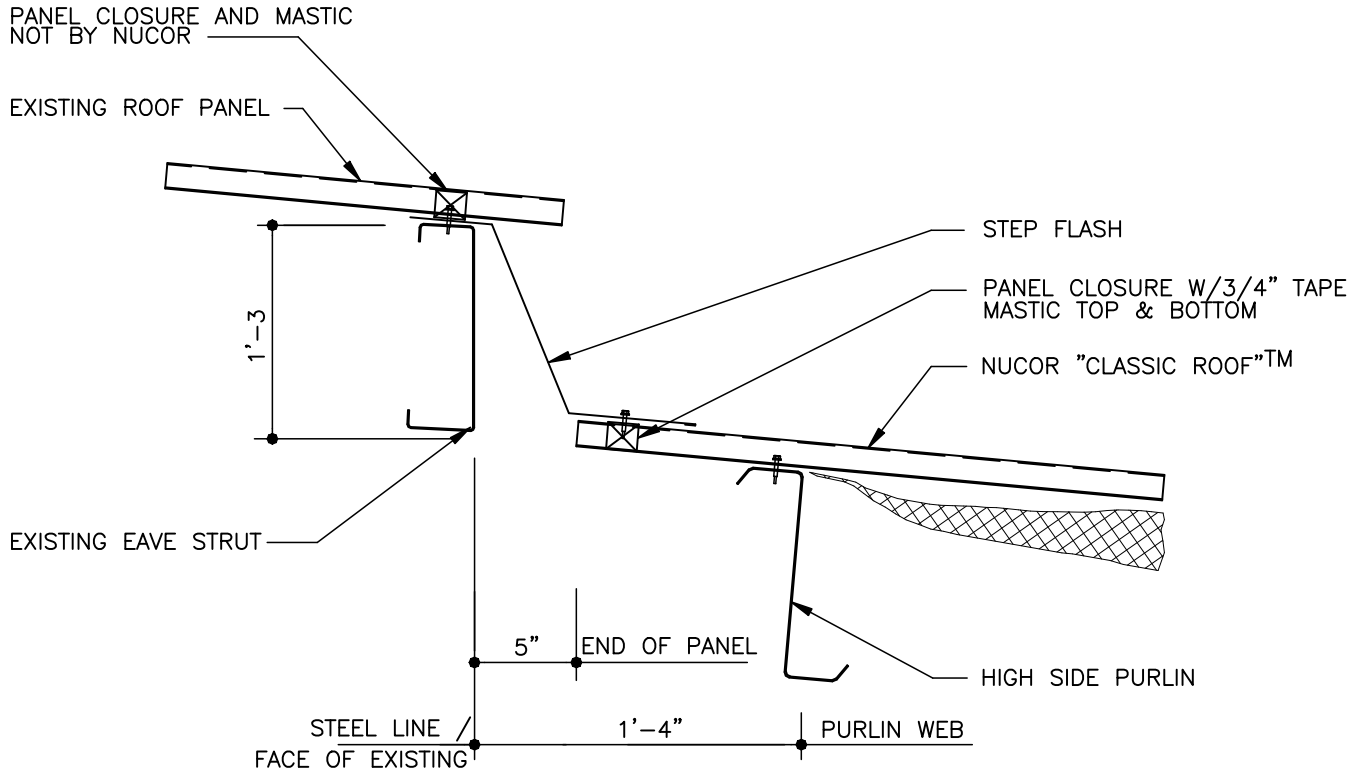
DETAIL NAME IF APPLICABLE
BT0080PE.DWG

4.7.14



PRODUCT & ENGINEERING MANUAL

BT0090PE – NUCOR CLASSIC ROOF™ PANEL TO EXISTING ROOF PANEL AT ROOF STEP



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

DETAIL NAME IF APPLICABLE
BT0090PE.DWG

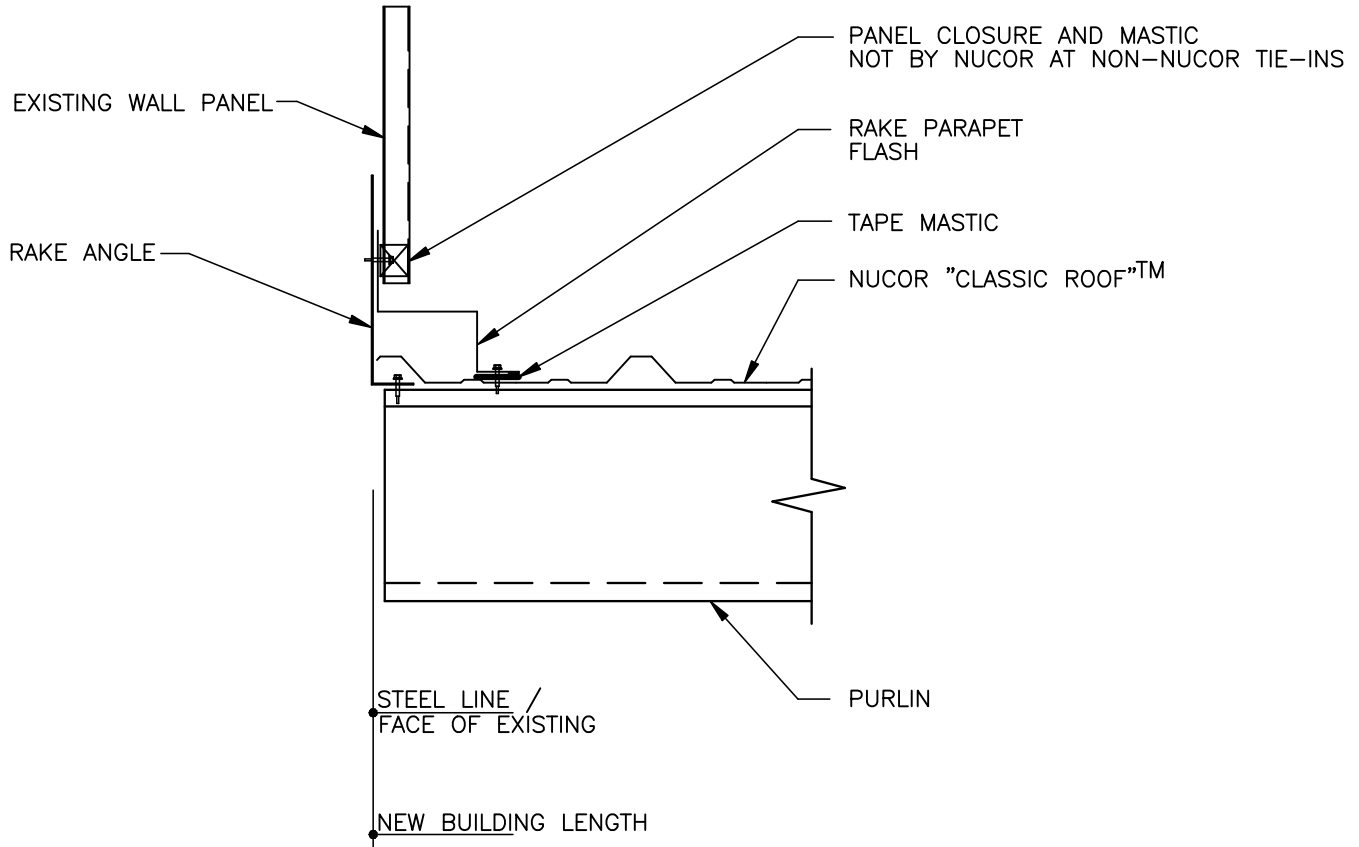
4.7.15



PRODUCT & ENGINEERING MANUAL

BT0100PE – NUCOR CLASSIC ROOF™ PANEL RAKE PARAPET TO EXISTING BUILDING

(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.)



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

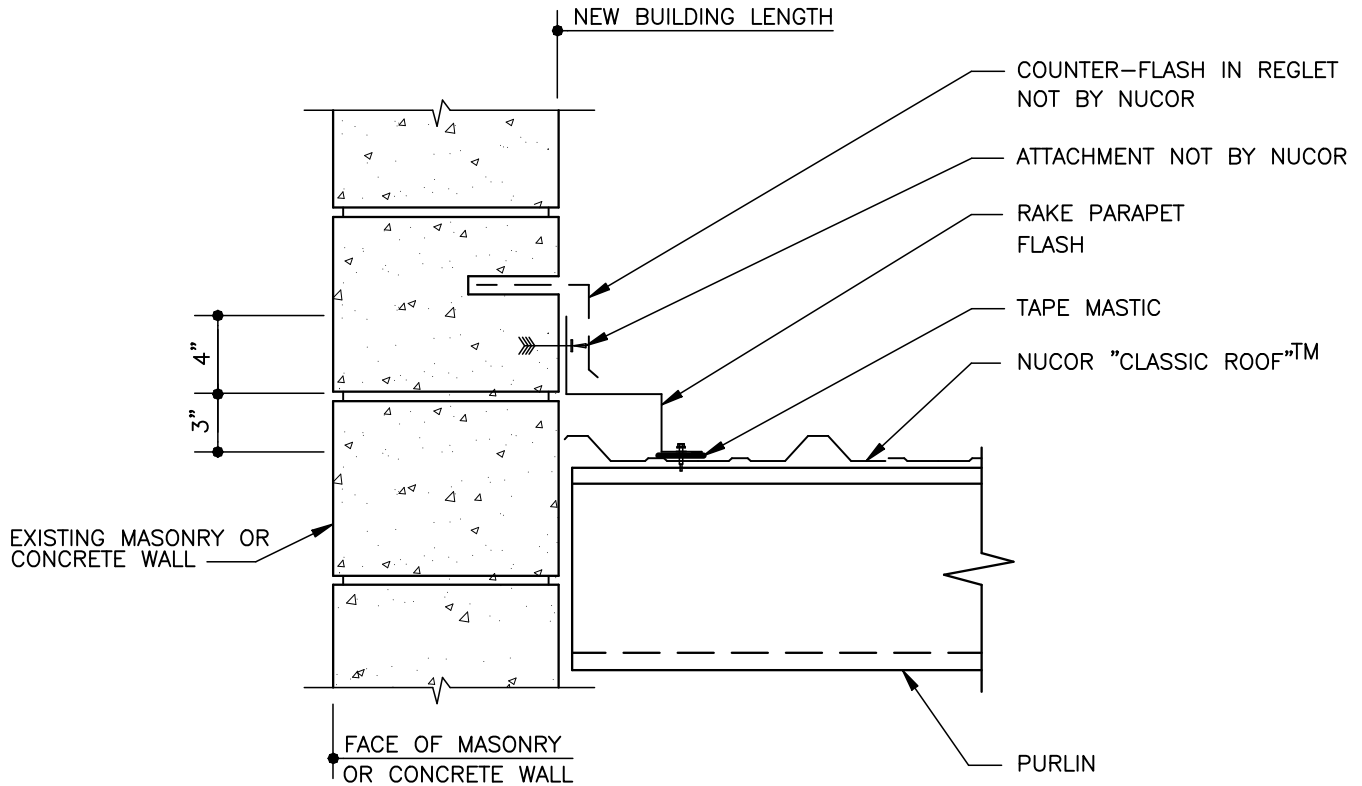
DETAIL NAME IF APPLICABLE
BT0100PE.DWG

4.7.16



PRODUCT & ENGINEERING MANUAL

BT0110PE – NUCOR CLASSIC ROOF™ PANEL RAKE PARAPET TO MASONRY OR CONCRETE



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

DETAIL NAME IF APPLICABLE
BT0110PE.DWG

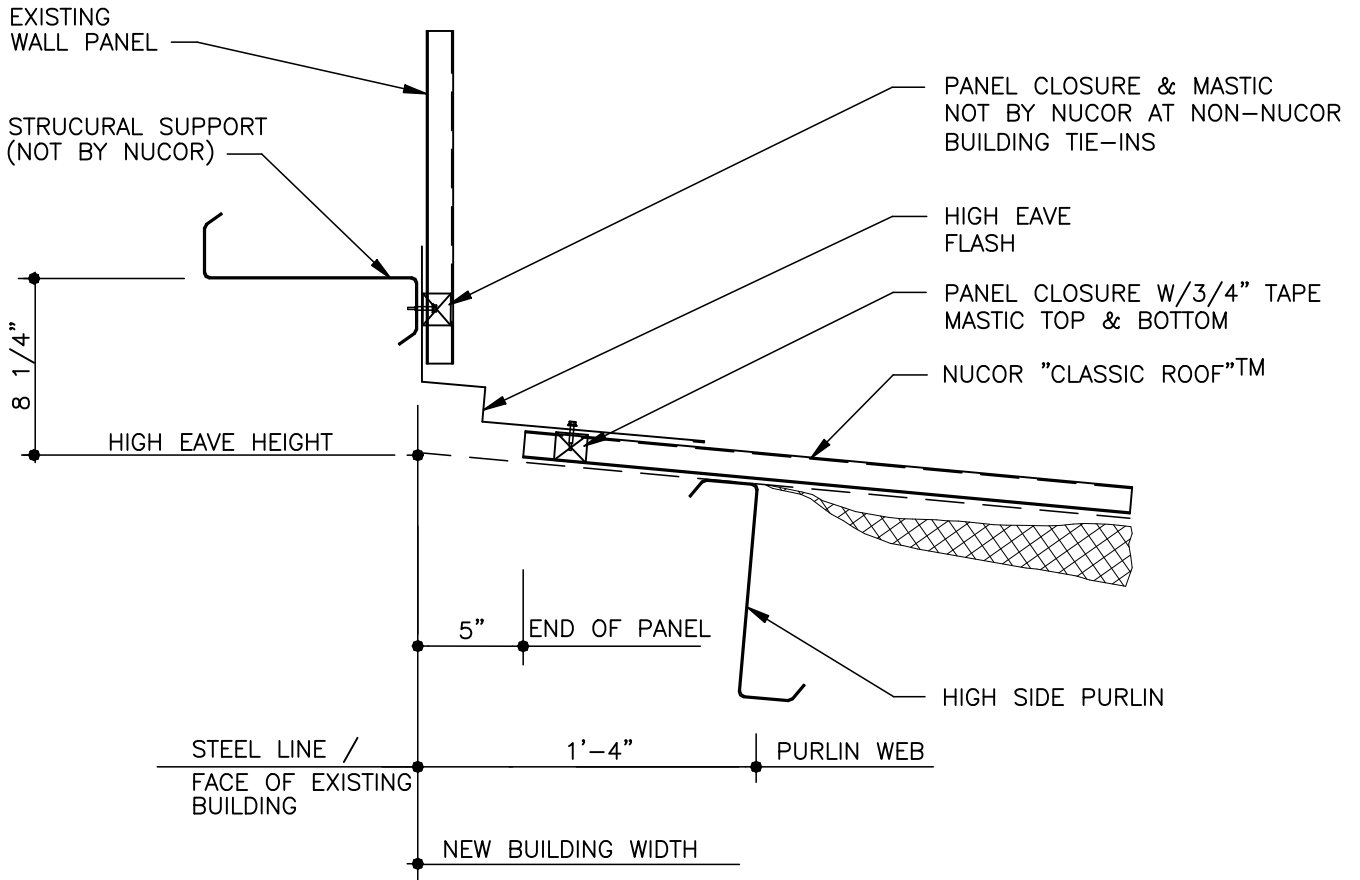
4.7.17



PRODUCT & ENGINEERING MANUAL

BT0120PE – NUCOR CLASSIC ROOF™ PANEL HIGH EAVE PARAPET TO EXISTING BUILDING

(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.)



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

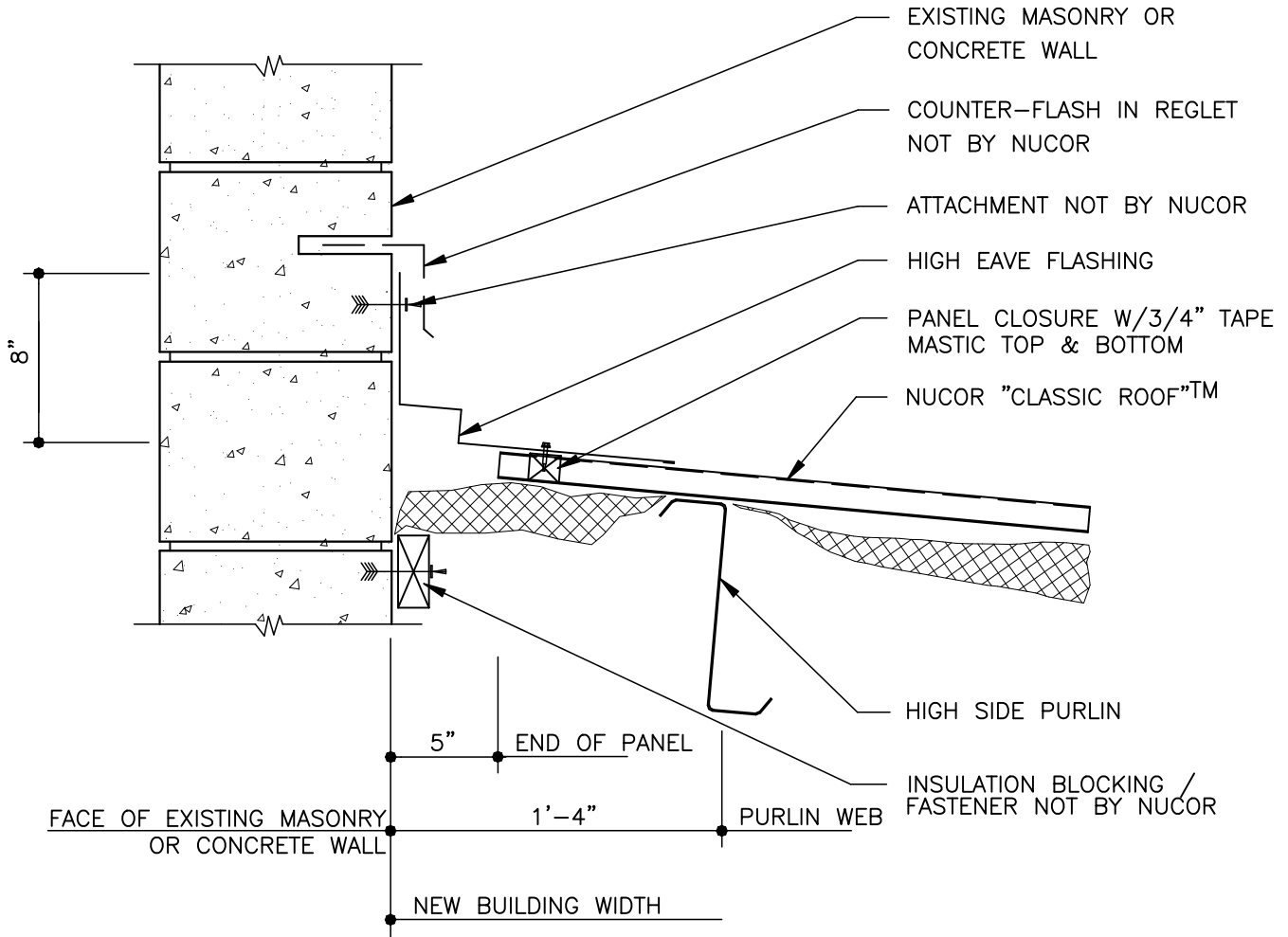
DETAIL NAME IF APPLICABLE
BT0120PE.DWG

4.7.18



PRODUCT & ENGINEERING MANUAL

BT0130PE – NUCOR CLASSIC ROOF™ PANEL RAKE PARAPET TO MASONRY OR CONCRETE



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

DETAIL NAME IF APPLICABLE
BT0130PE.DWG

4.7.19

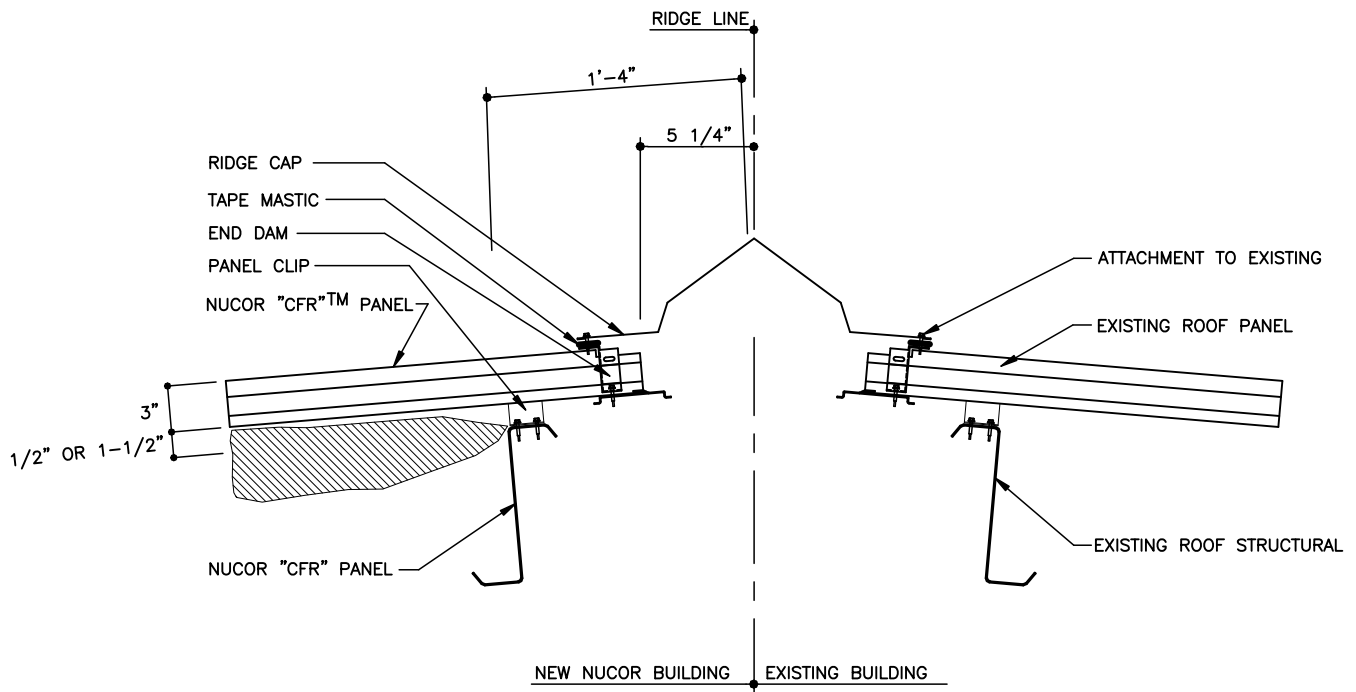


PRODUCT & ENGINEERING MANUAL

ROOF SHEETING: NUCOR CFR™ ROOF

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

NOTE
FASTENERS TO EXISTING NON-NUCOR
BUILDINGS ARE NOT PROVIDED.



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

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

DETAIL NAME IF APPLICABLE
BT0140PE.DWG

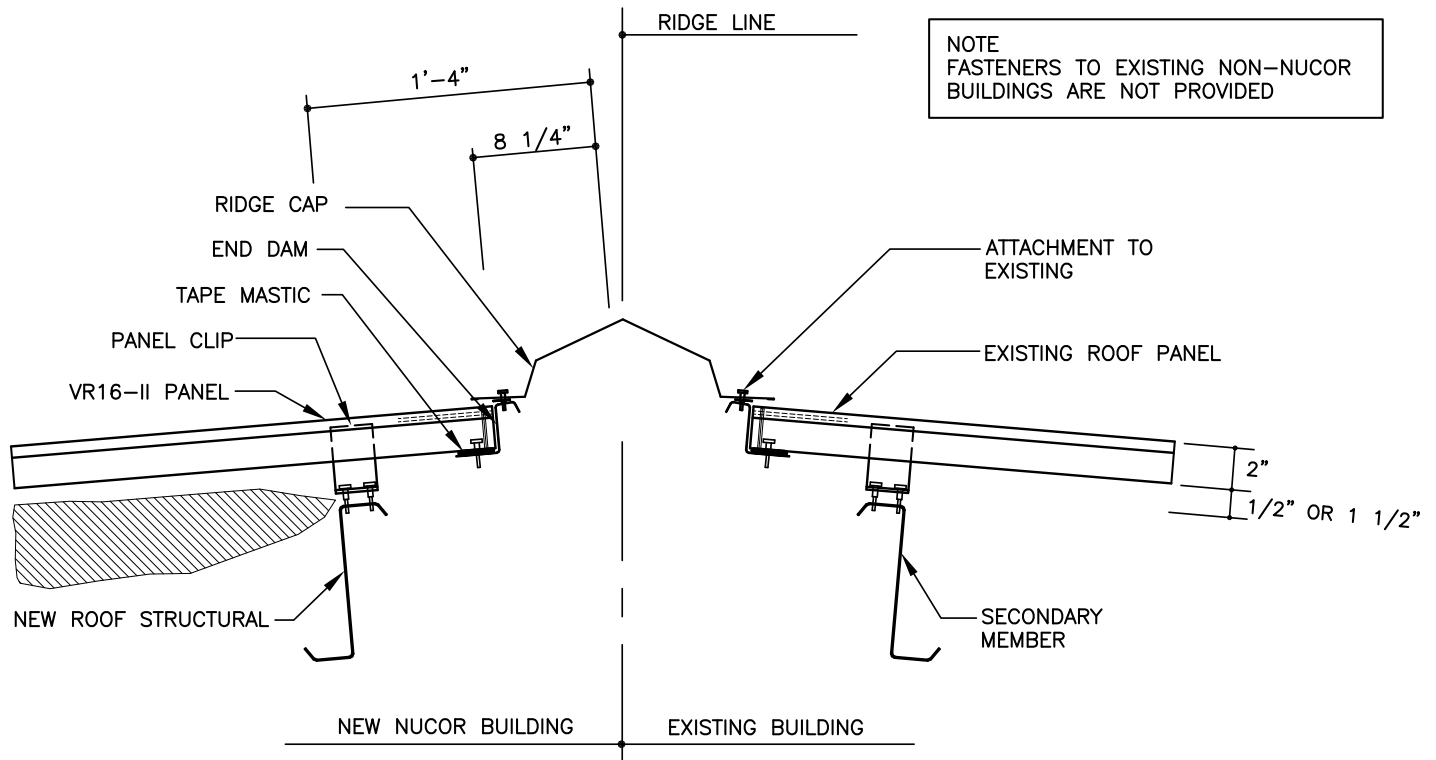
4.7.20



PRODUCT & ENGINEERING MANUAL

ROOF SHEETING: NUCOR VR16-II™ ROOF

BT0145PE – NUCOR VR16-II™ ROOF PANEL TO EXISTING BUILDING AT RIDGE



1. Refer to "Section 11.7" of the Product and Engineering Manual for all standard VR16-II Expansion Joint Details.

LAST REVISION
DATE: 10/20/09
BY: DPS_CHK: KMC

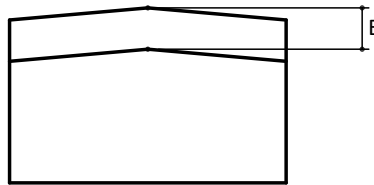
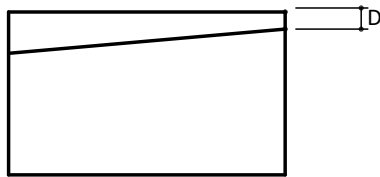
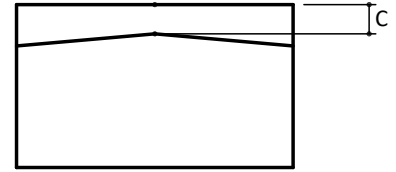
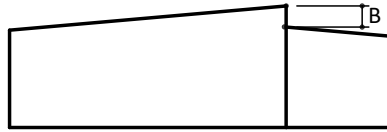
DETAIL NAME IF APPLICABLE
BT0145PE.DWG

4.7.21



PRODUCT & ENGINEERING MANUAL

BT0150PE – STANDARD DIMENSIONS FOR ROOF TIE-IN TO EXISTING BUILDINGS



MINIMUM ROOF TIE-IN DIMENSIONS		
CONDITION	CLASSIC	CFR
A	1'-1"	1'-3"
B	1'-1"	1'-10"
C	10"	1'-6"
D	10"	10"
E	1'-1"	2'-3"

LAST REVISION
 DATE: 10/17/11
 BY: RT CHK: EGB

DETAIL NAME IF APPLICABLE
BT0150PE.DWG

4.7.22