



# PRODUCT & ENGINEERING MANUAL

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## GENERAL NOTES

The future expansion details in this section are shown assuming the future expansion will be a Nucor Buildings Systems structure.

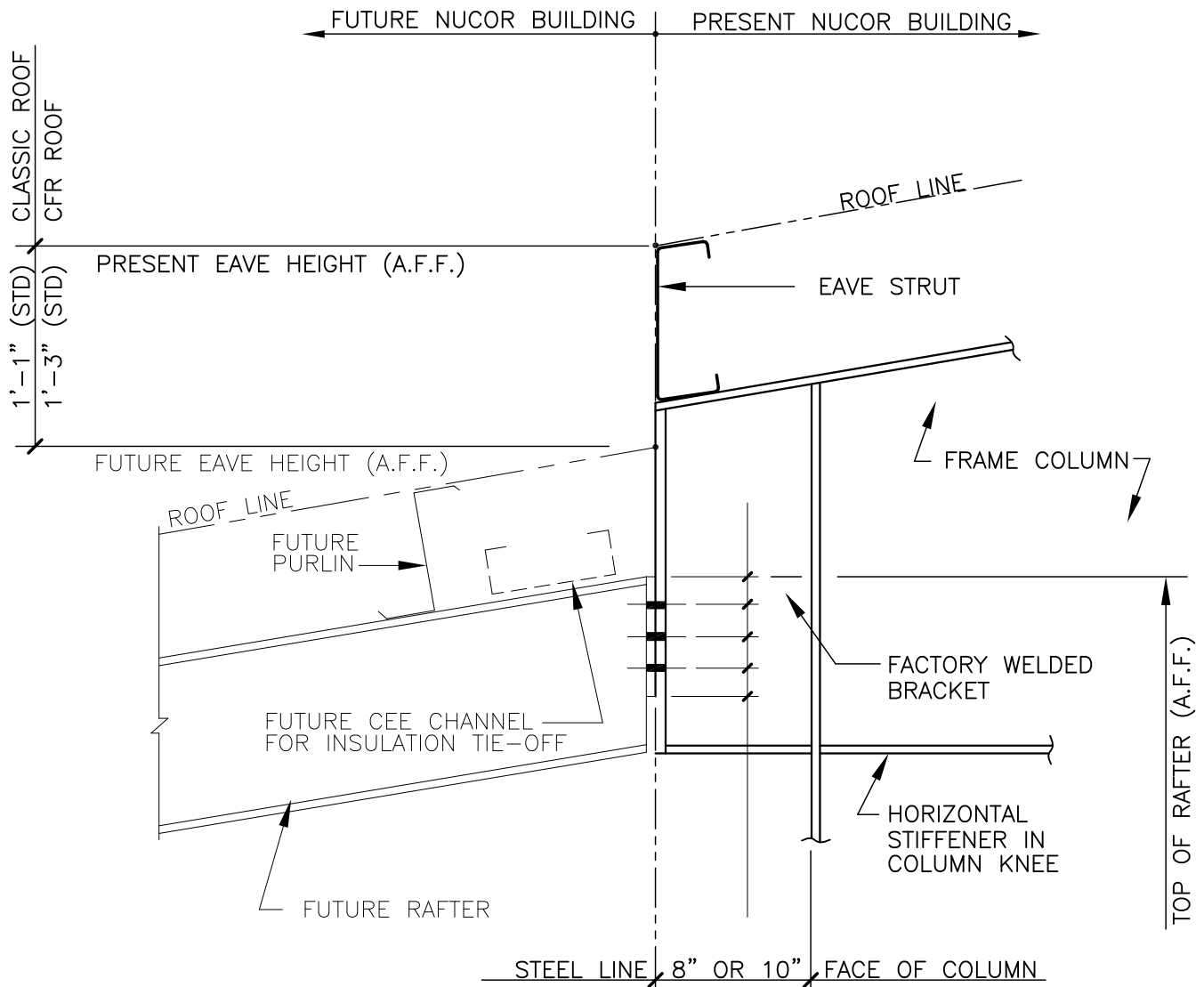
1. NBS will design the new structure for the future expansion based on the future expansion information given by the customer on the "Future Expansion Supplemental Form". It is imperative that Nucor receives all applicable information regarding the future expansion so that Nucor understands and provides material for the correct conditions. Nucor Building Systems will not be responsible for the design of the new structure if the future expansion information changes after the new structure is already fabricated and/or erected.
2. The new building can be prepped for the primary structural connections of the future expansion, including but not limited to the high eave parapet support, mezzanine connections, and crane steel. The new building can be designed for future mezzanine and crane loads as specified in the order documents.
3. If the new building has a Post and Beam endwall condition, the future expansion from this endwall can only be accomplished by placing a new frame directly adjacent (within 2'-8") of the Post and Beam frame.



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## ROOF STRUCTURAL DETAILS

### AR0010 – LOW EAVE, BYPASS GIRTS



## LOW-EAVE FUTURE EXPANSION

BYPASS GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AR0010

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

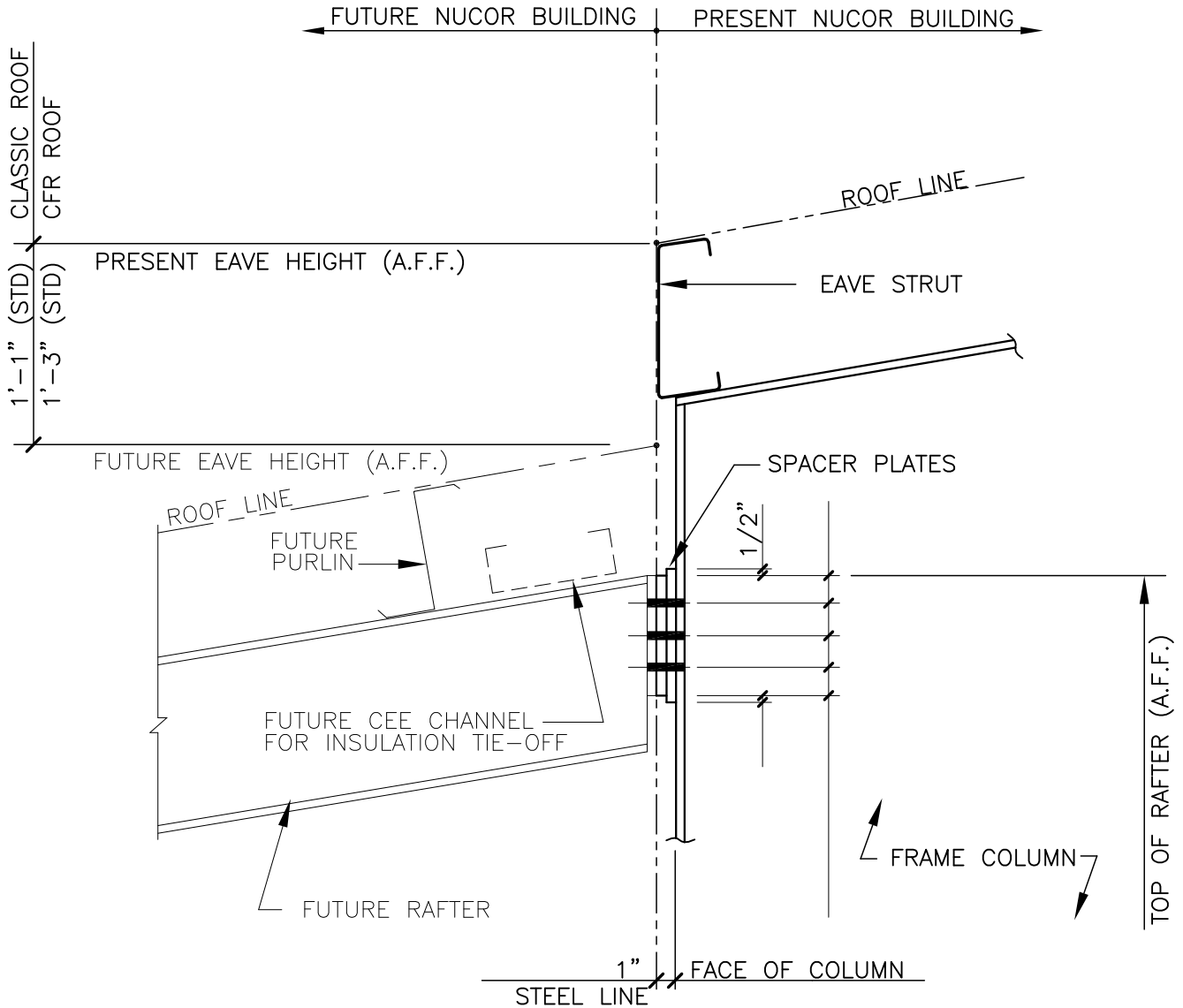
DETAIL NAME IF APPLICABLE  
AR0010.DWG

4.8.3



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## AR0020 – LOW EAVE, INSET GIRTS



### LOW-EAVE FUTURE EXPANSION

INSET GIRTS  
 REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0020**

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

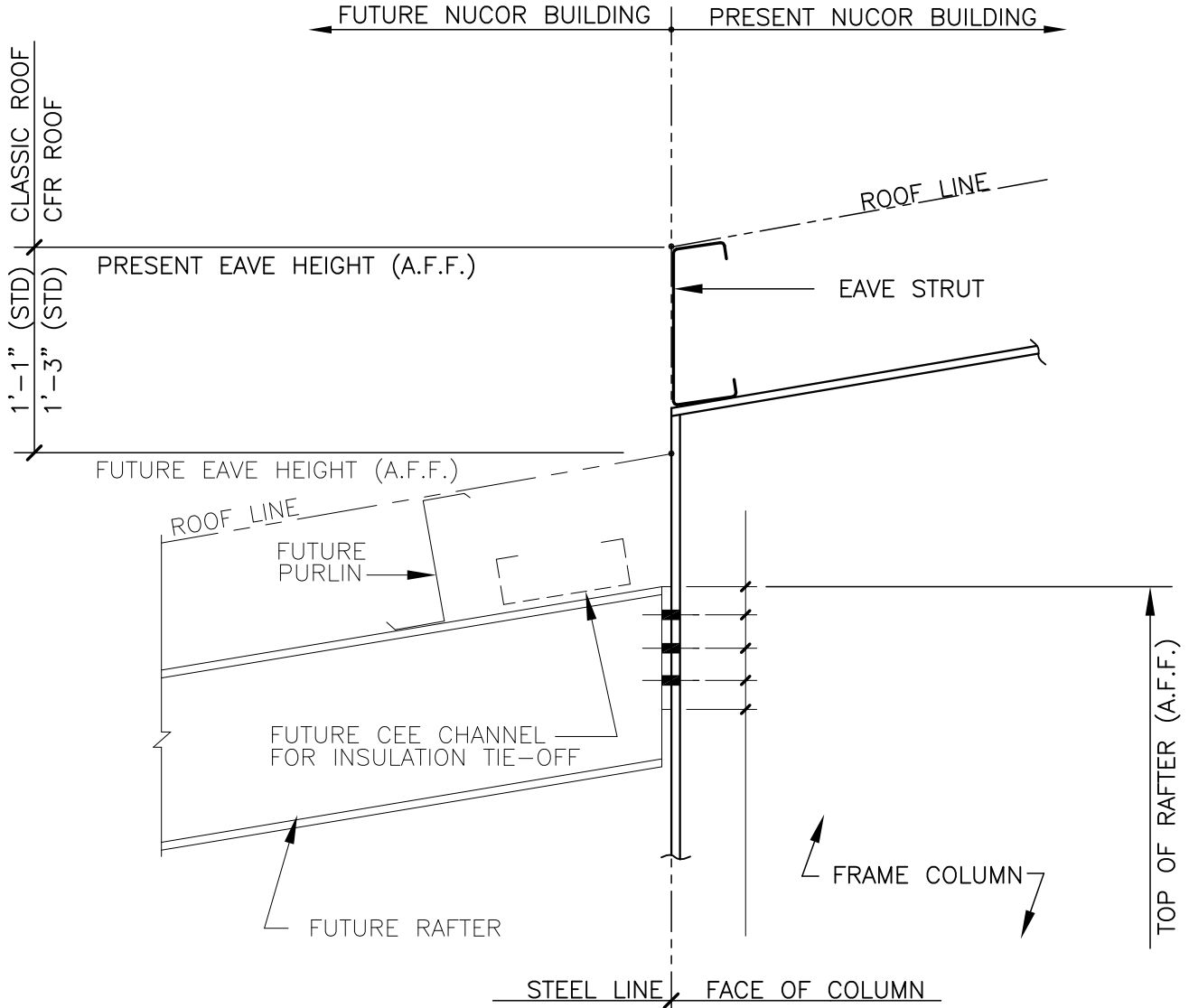
DETAIL NAME IF APPLICABLE  
**AR0020.DWG**

4.8.4



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## AR0030 – LOW EAVE, FLUSH GIRTS



## LOW-EAVE FUTURE EXPANSION

FLUSH GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AR0030

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

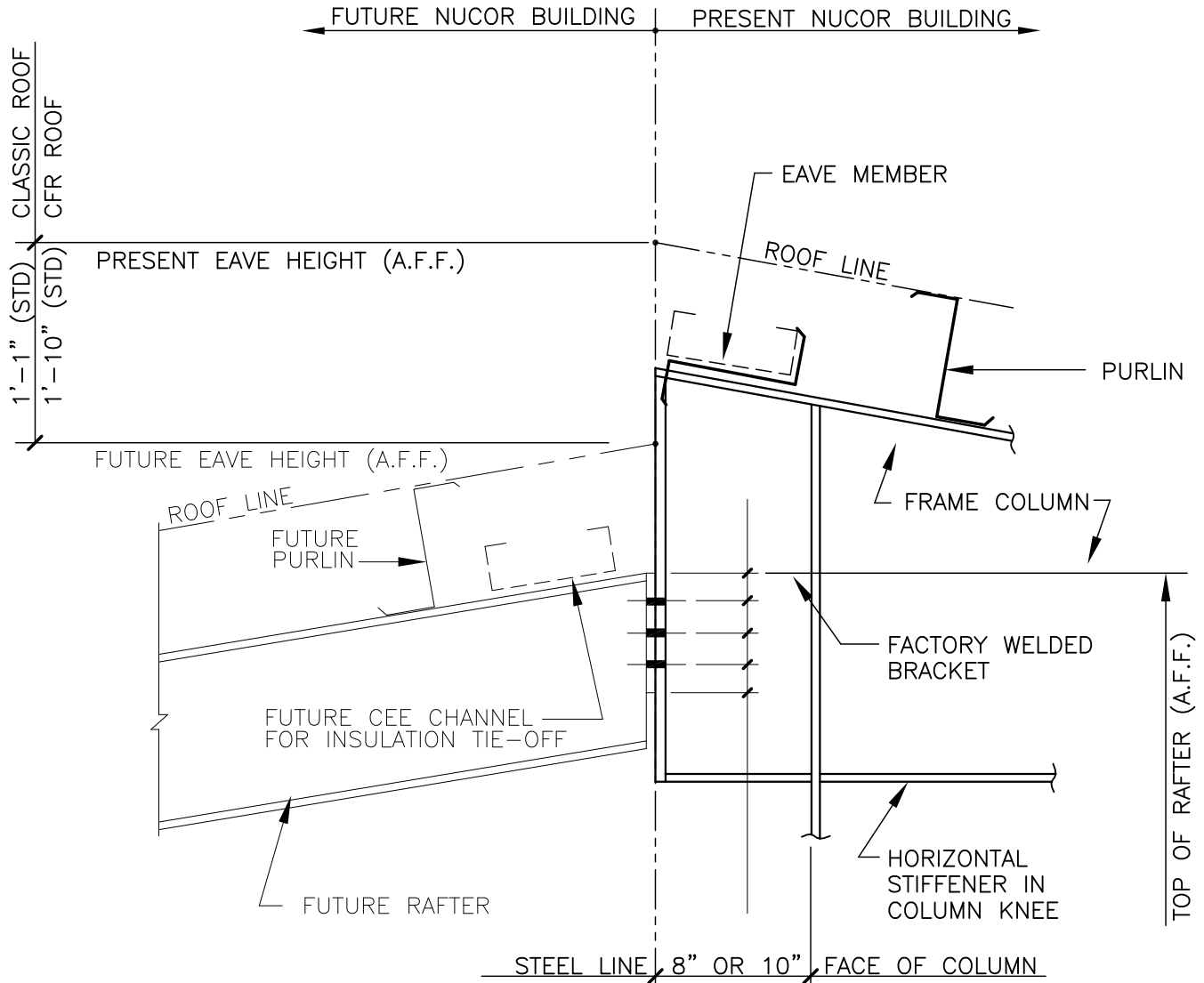
DETAIL NAME IF APPLICABLE  
AR0030.DWG

4.8.5



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## AR0040 – HIGH EAVE, BYPASS GIRTS



### HIGH-EAVE FUTURE EXPANSION

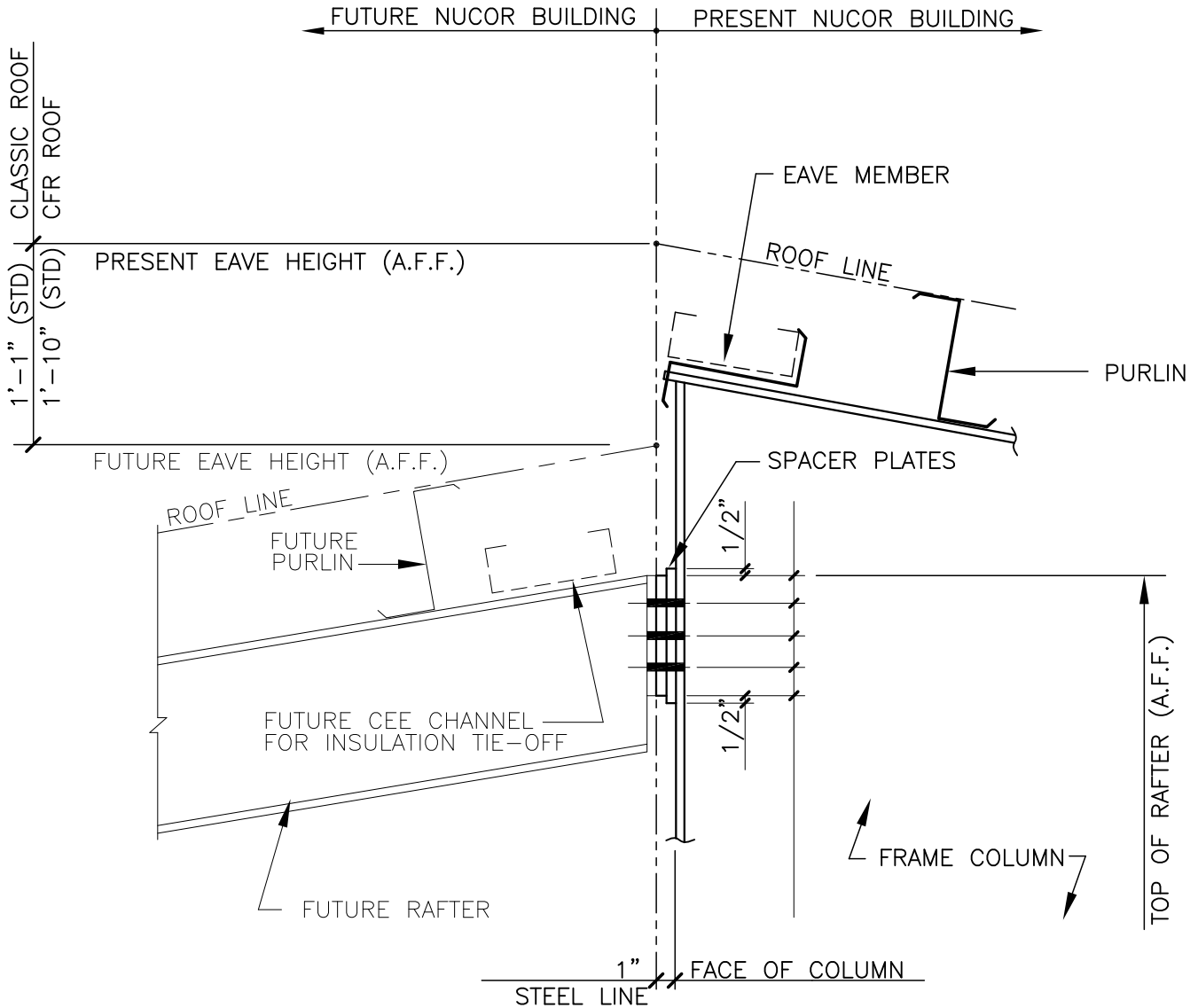
BYPASS GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0040**



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## AR0060 – HIGH EAVE, INSET GIRTS



### HIGH-EAVE FUTURE EXPANSION

INSET GIRTS  
 REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0060**

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

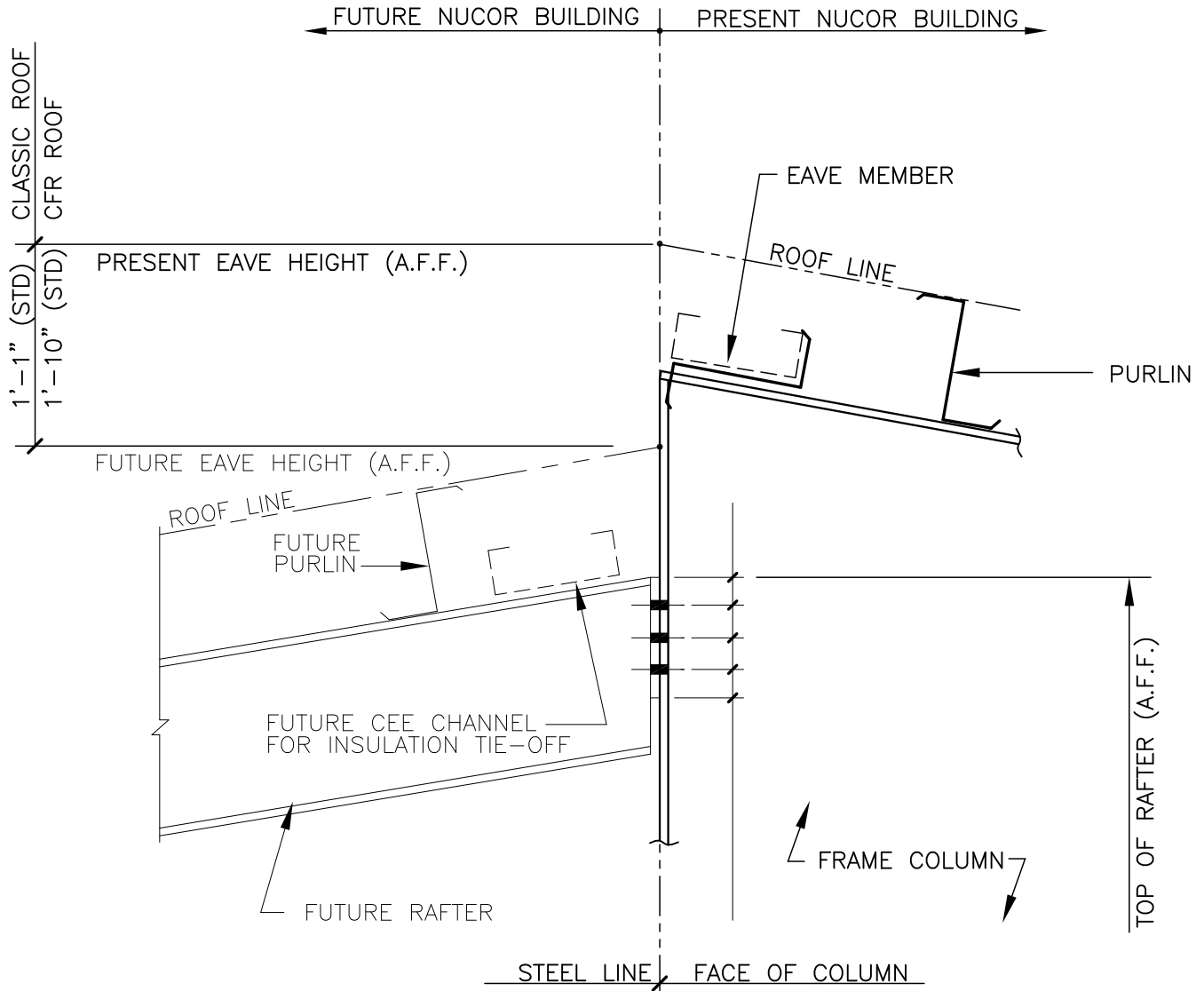
DETAIL NAME IF APPLICABLE  
**AR0060.DWG**

4.8.7



# PRODUCT & ENGINEERING MANUAL

## AR0070 – HIGH EAVE, FLUSH GIRTS



## HIGH-EAVE FUTURE EXPANSION

FLUSH GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AR0070

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

DETAIL NAME IF APPLICABLE  
AR0070.DWG

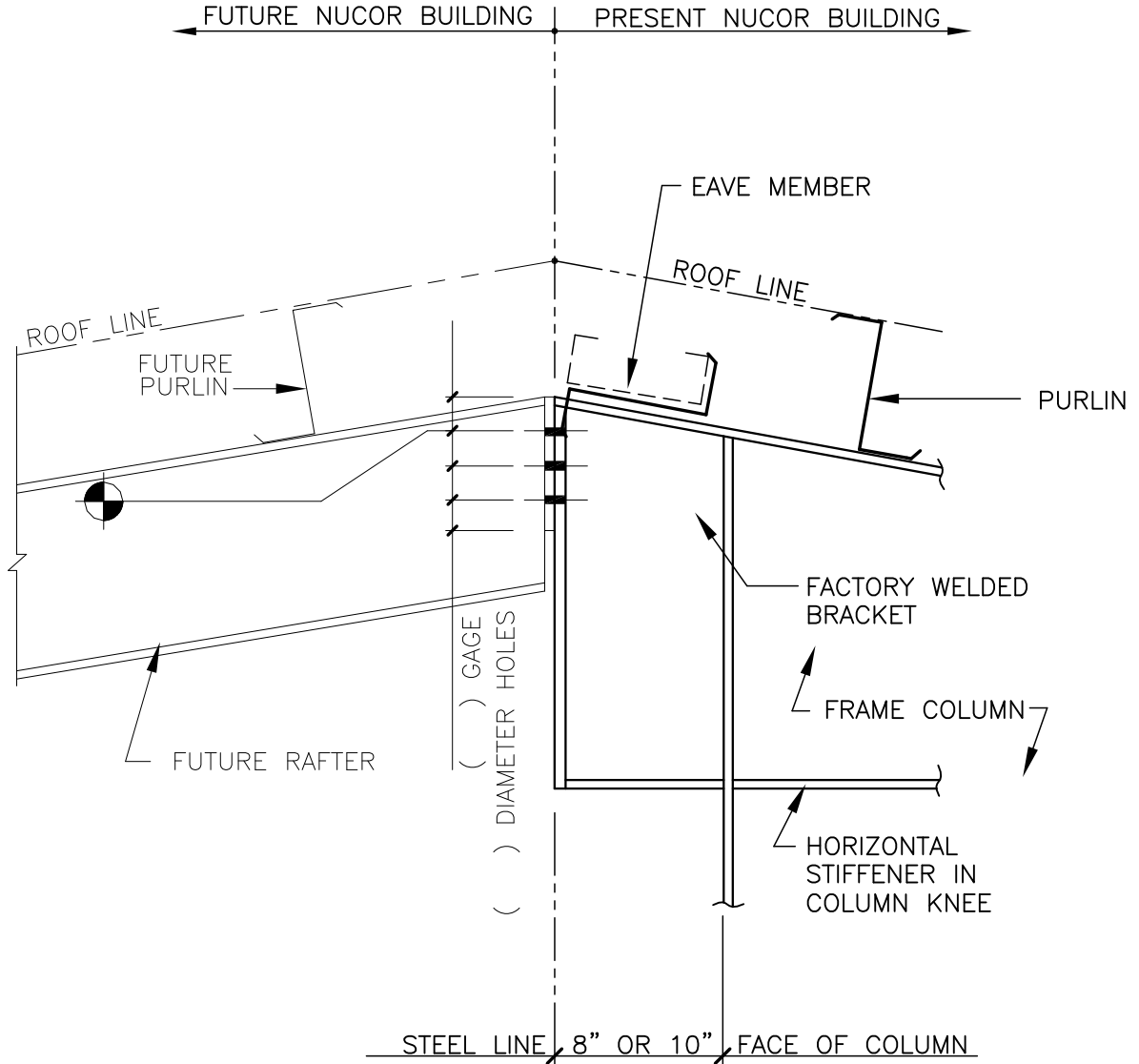
4.8.8





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## AR0080 – RIDGE, BYPASS GIRTS



### FUTURE EXPANSION AT RIDGE

BYPASS GIRTS

BOLTS FOR FUTURE RAFTER WILL BE SUPPLIED AT TIME OF EXPANSION.

**AR0080**

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

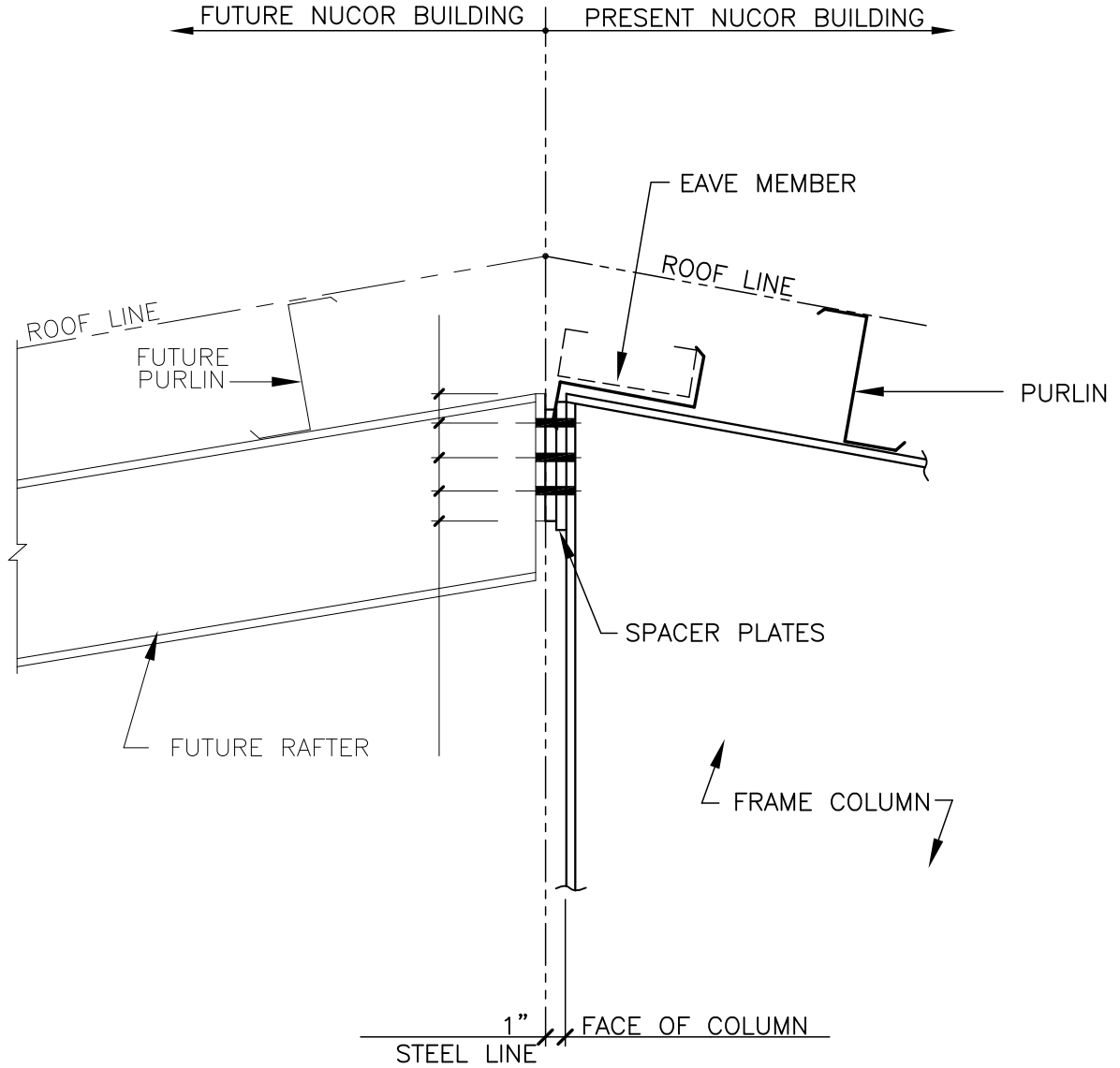
DETAIL NAME IF APPLICABLE  
**AR0080.DWG**

4.8.9



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## AR0090 – RIDGE, INSET GIRTS



### FUTURE EXPANSION AT RIDGE

INSET GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0090**

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

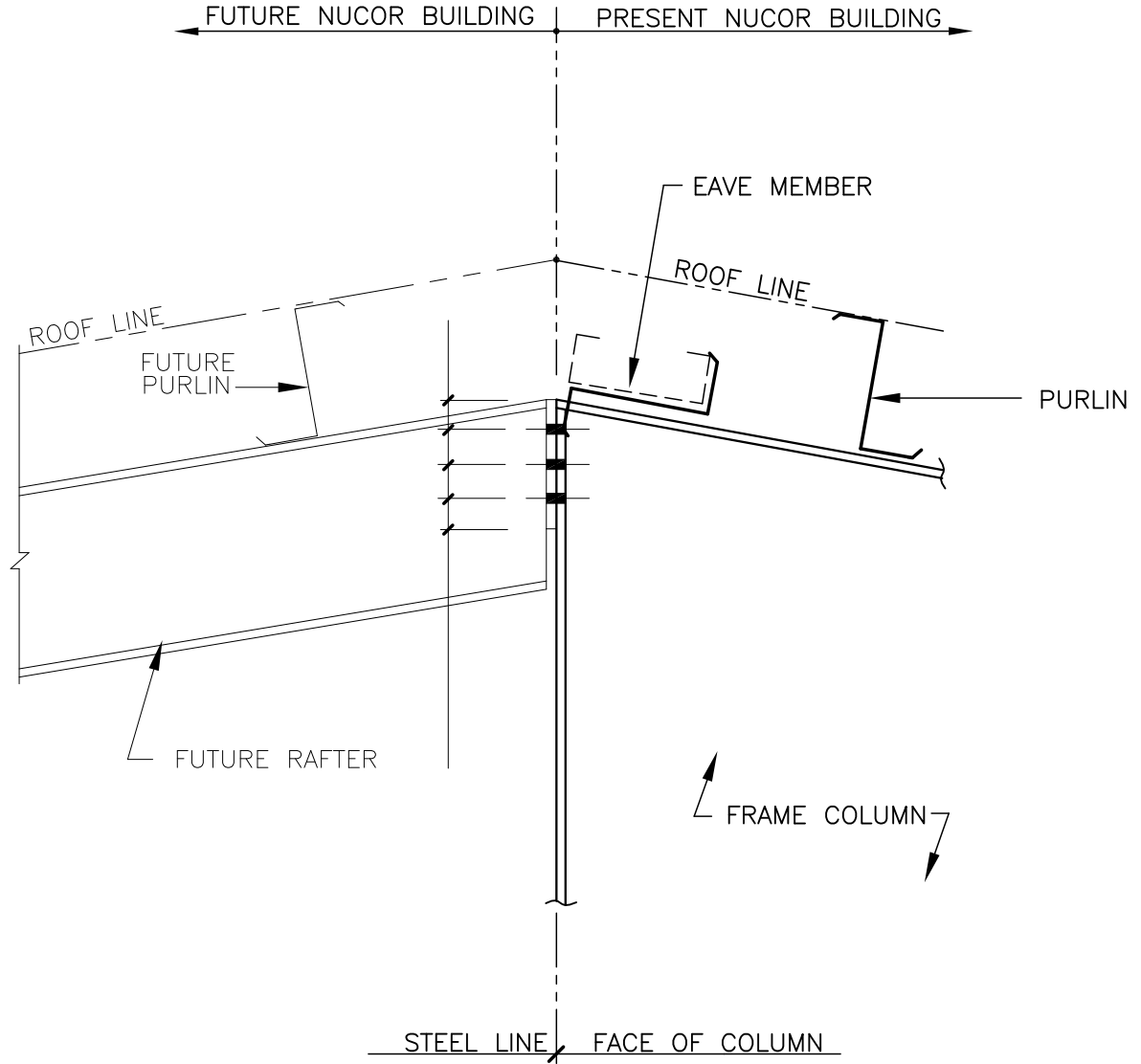
DETAIL NAME IF APPLICABLE  
**AR0090.DWG**

4.8.10



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## AR0100 – RIDGE, FLUSH GIRTS



## FUTURE EXPANSION AT RIDGE

FLUSH GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0100**

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

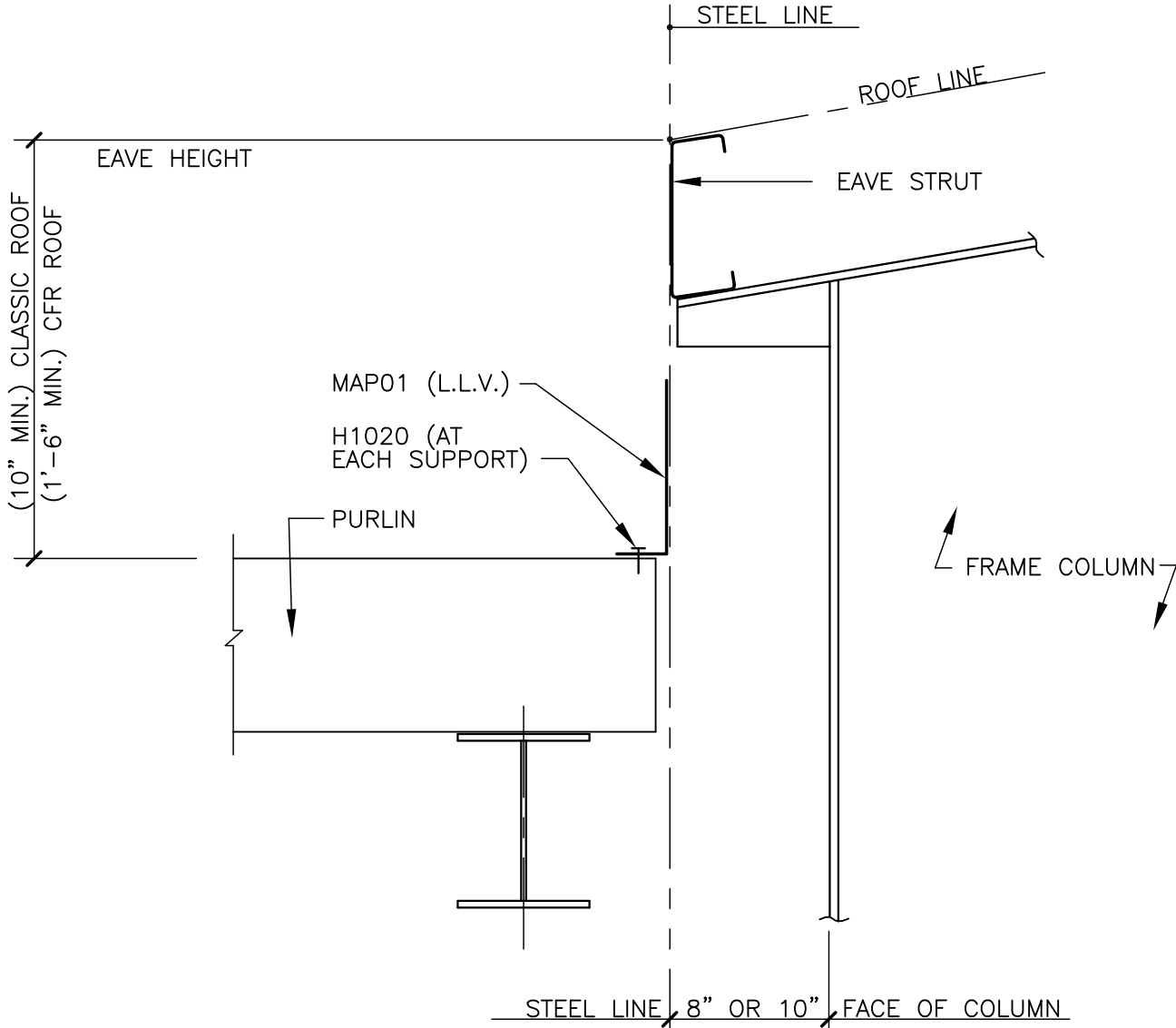
DETAIL NAME IF APPLICABLE  
**AR0100.DWG**

**4.8.11**



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## AR0110 – LOW EAVE WITH GABLE BELOW, BYPASS GIRTS



## LOW-EAVE WITH GABLE BLDG. BELOW

BYPASS GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AR0110

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

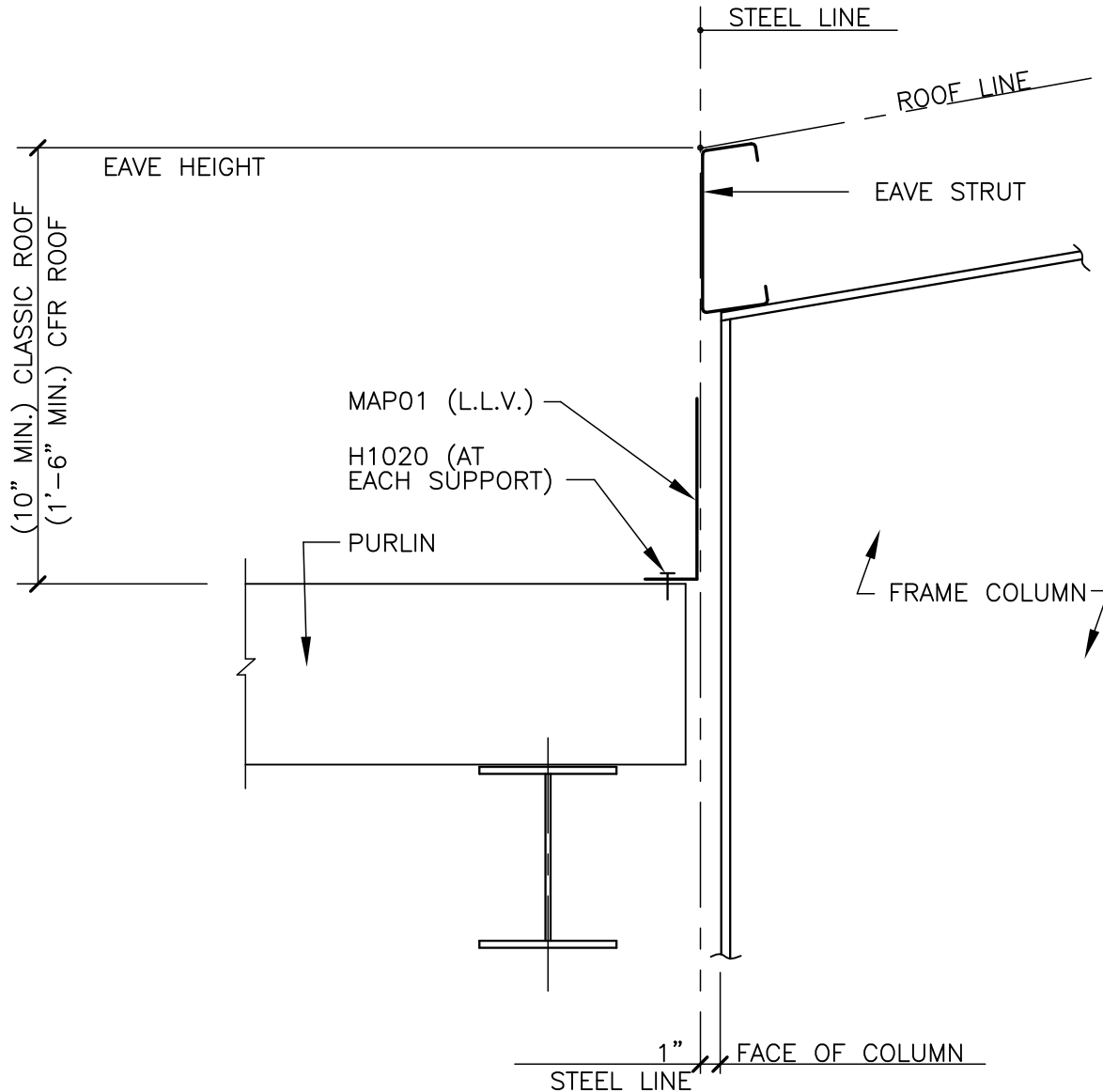
DETAIL NAME IF APPLICABLE  
AR0110.DWG

4.8.12



# PRODUCT & ENGINEERING MANUAL

## AR0120 – LOW EAVE WITH GABLE BELOW, INSET GIRTS



### LOW-EAVE WITH GABLE BLDG. BELOW

INSET GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0120**

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

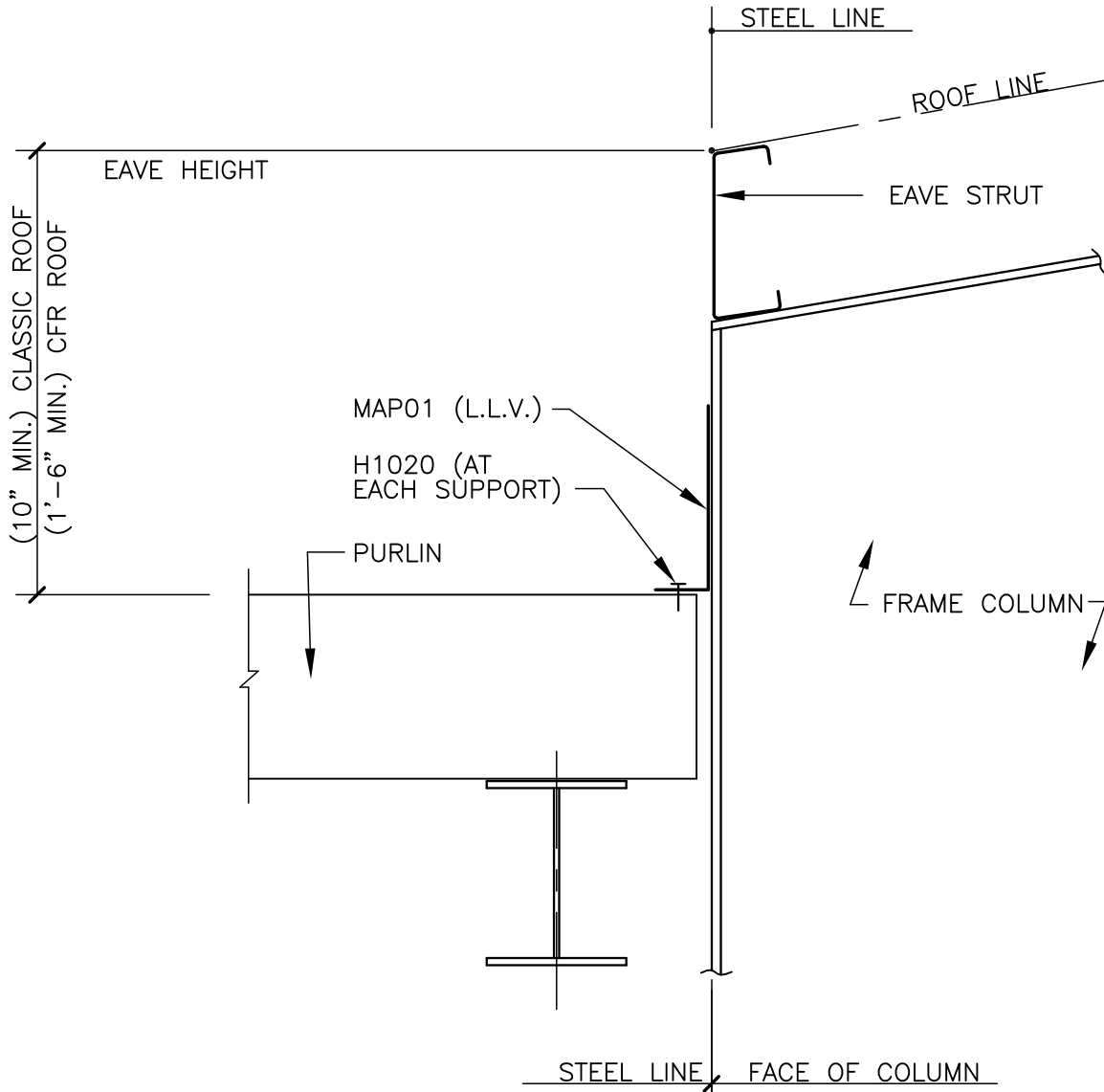
DETAIL NAME IF APPLICABLE  
**AR0120.DWG**

4.8.13



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## AR0130 – LOW EAVE WITH GABLE BELOW, FLUSH GIRTS



## LOW-EAVE WITH GABLE BLDG. BELOW

FLUSH GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AR0130

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

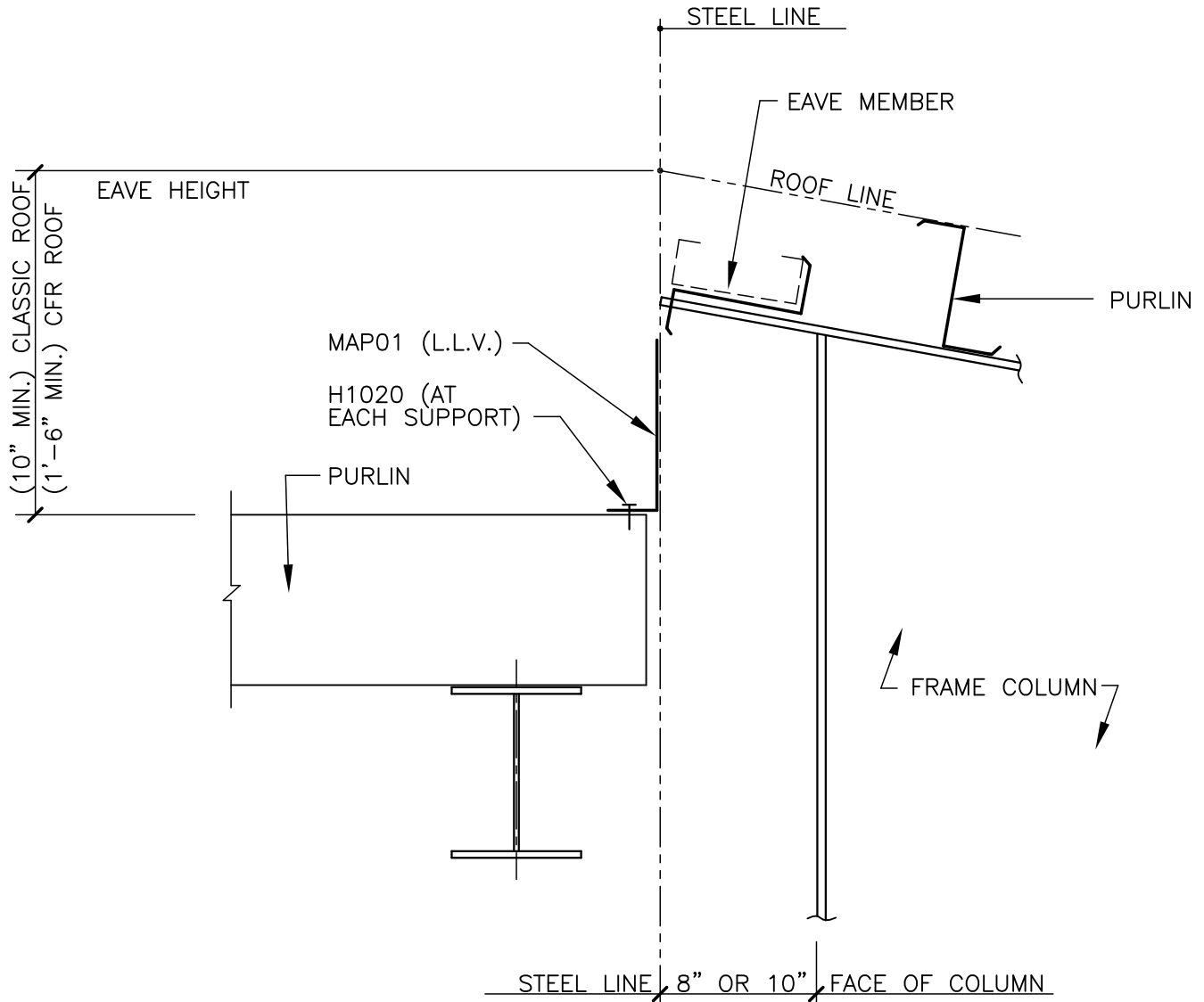
DETAIL NAME IF APPLICABLE  
AR0130.DWG

4.8.14



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## AR0140 – HIGH EAVE WITH GABLE BELOW, BYPASS GIRTS



## HIGH-EAVE WITH GABLE BLDG. BELOW

BYPASS GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0140**

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

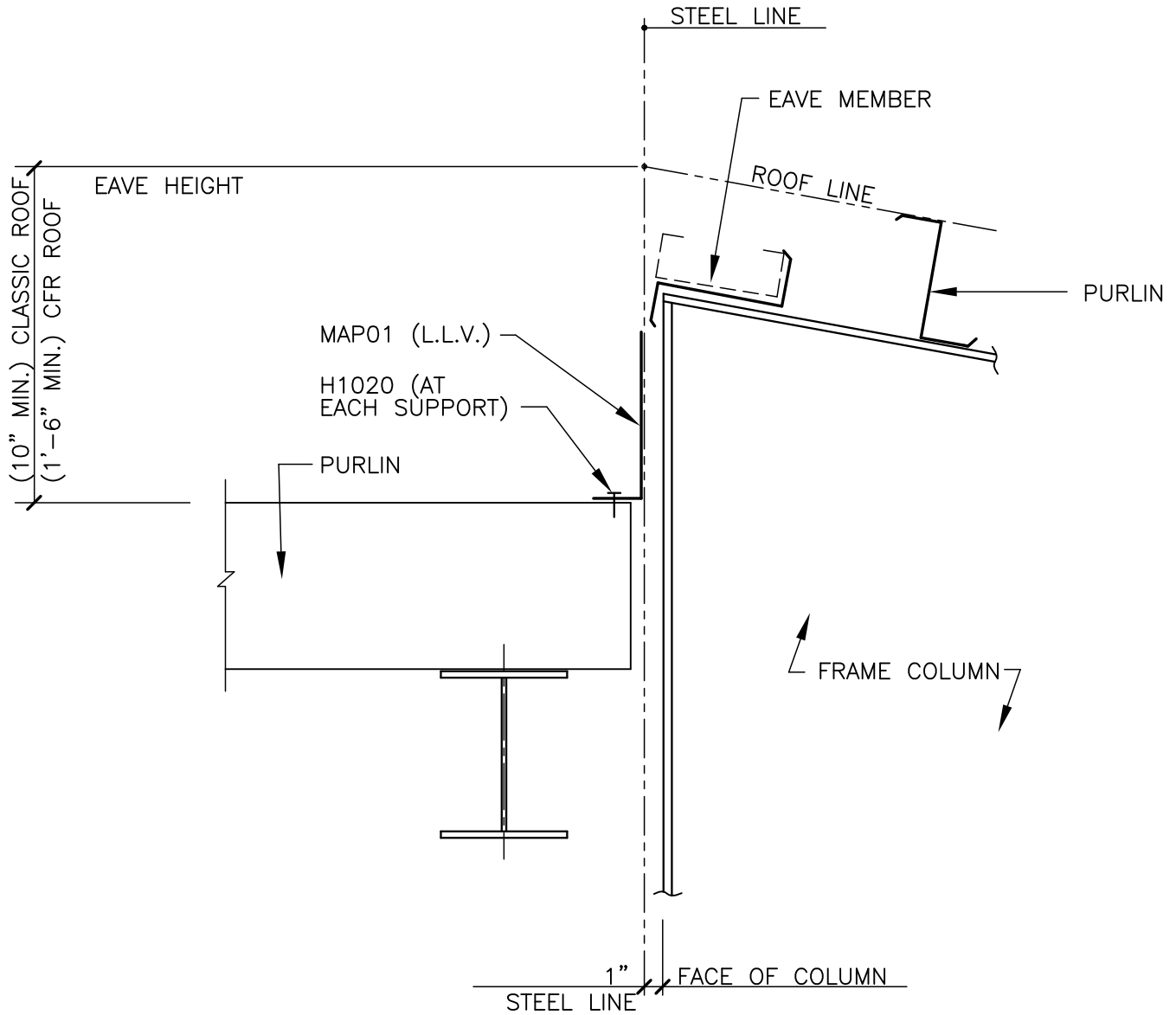
DETAIL NAME IF APPLICABLE  
**AR0140.DWG**

**4.8.15**



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## AR0150 – HIGH EAVE WITH GABLE BELOW, INSET GIRTS



### HIGH-EAVE WITH GABLE BLDG. BELOW

INSET GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0150**

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

DETAIL NAME IF APPLICABLE  
**AR0150.DWG**

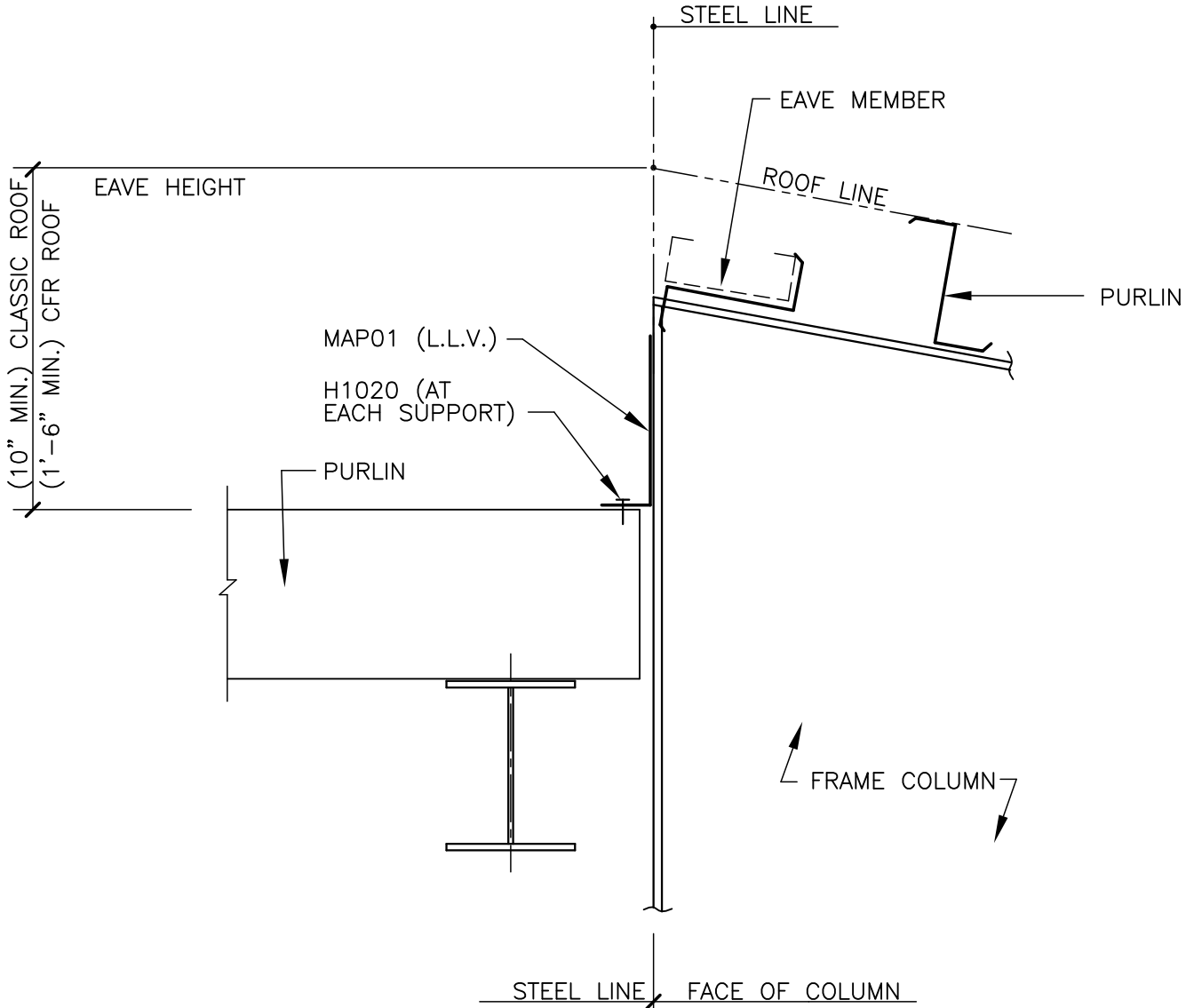
4.8.16





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## AR0160 – HIGH EAVE WITH GABLE BELOW, FLUSH GIRTS



## HIGH-EAVE WITH GABLE BLDG. BELOW

FLUSH GIRTS  
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

**AR0160**

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

DETAIL NAME IF APPLICABLE  
**AR0160.DWG**

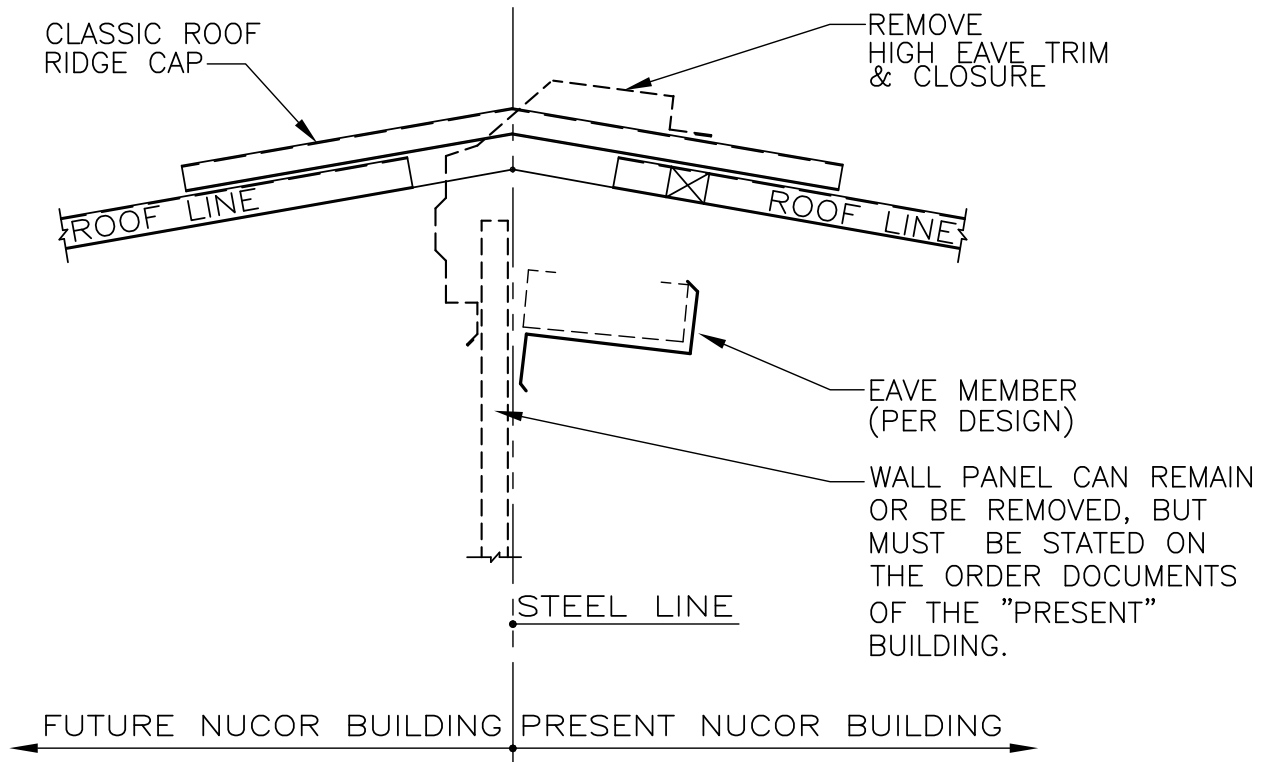
4.8.17



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## CLASSIC ROOF TRIM DETAILS

### FE0010PE – HIGH EAVE FUTURE EXPANSION—RIDGE



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: KMC

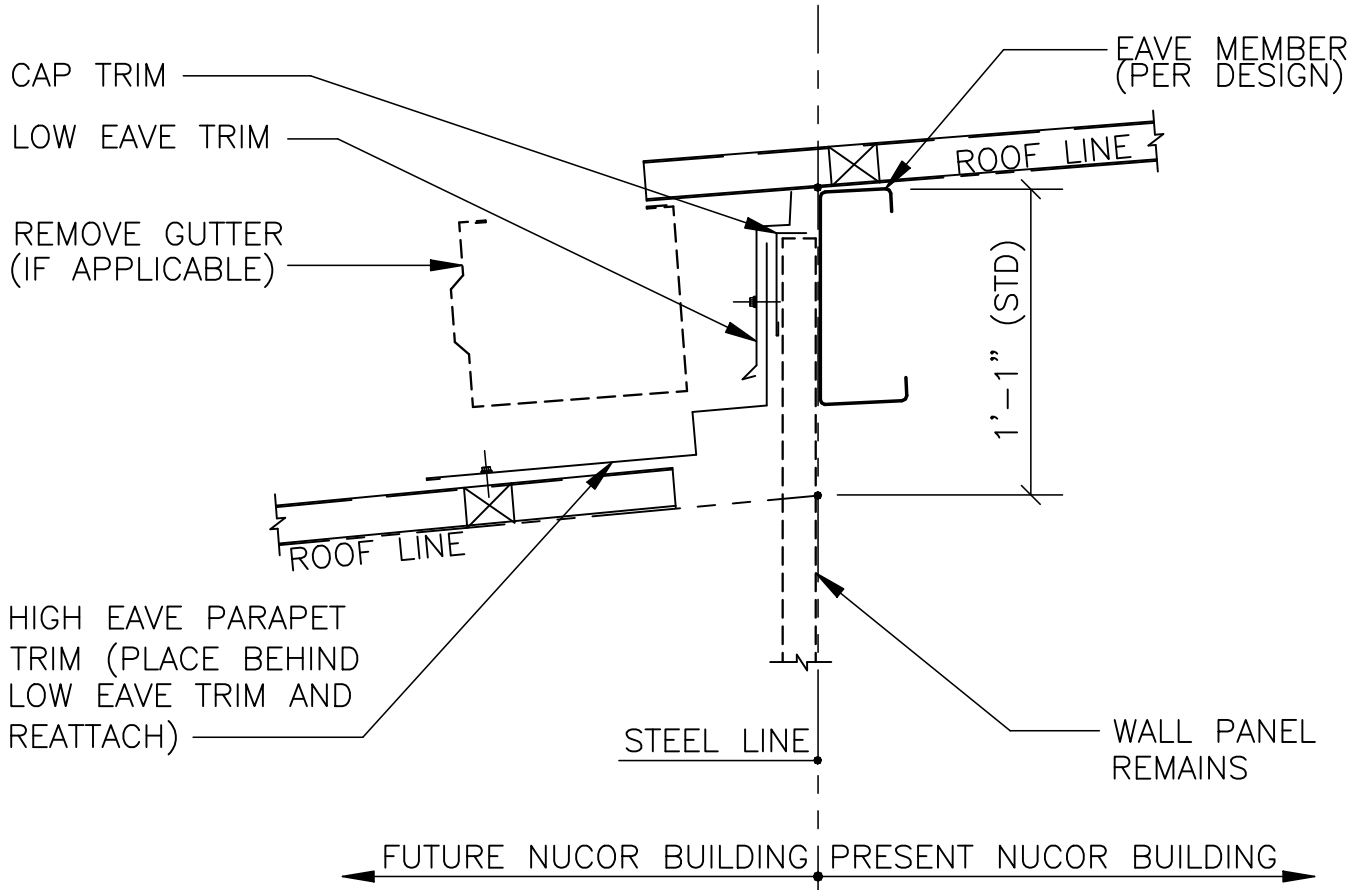
DETAIL NAME IF APPLICABLE  
**FE0010PE.DWG**

**4.8.18**



# PRODUCT & ENGINEERING MANUAL

## FE0020PE – LOW EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMAINS)



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

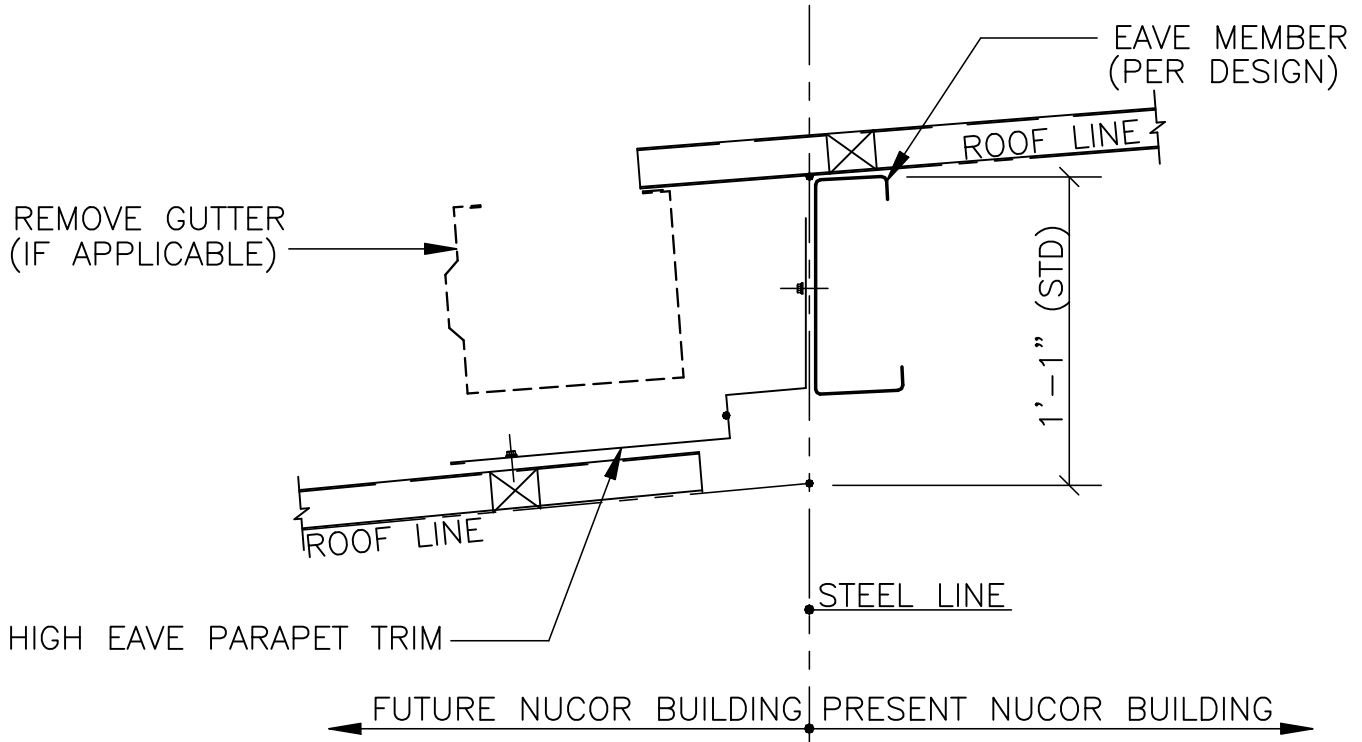
DETAIL NAME IF APPLICABLE  
**FE0020PE.DWG**

**4.8.19**



# PRODUCT & ENGINEERING MANUAL

## FE0030PE – LOW EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMOVED)



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

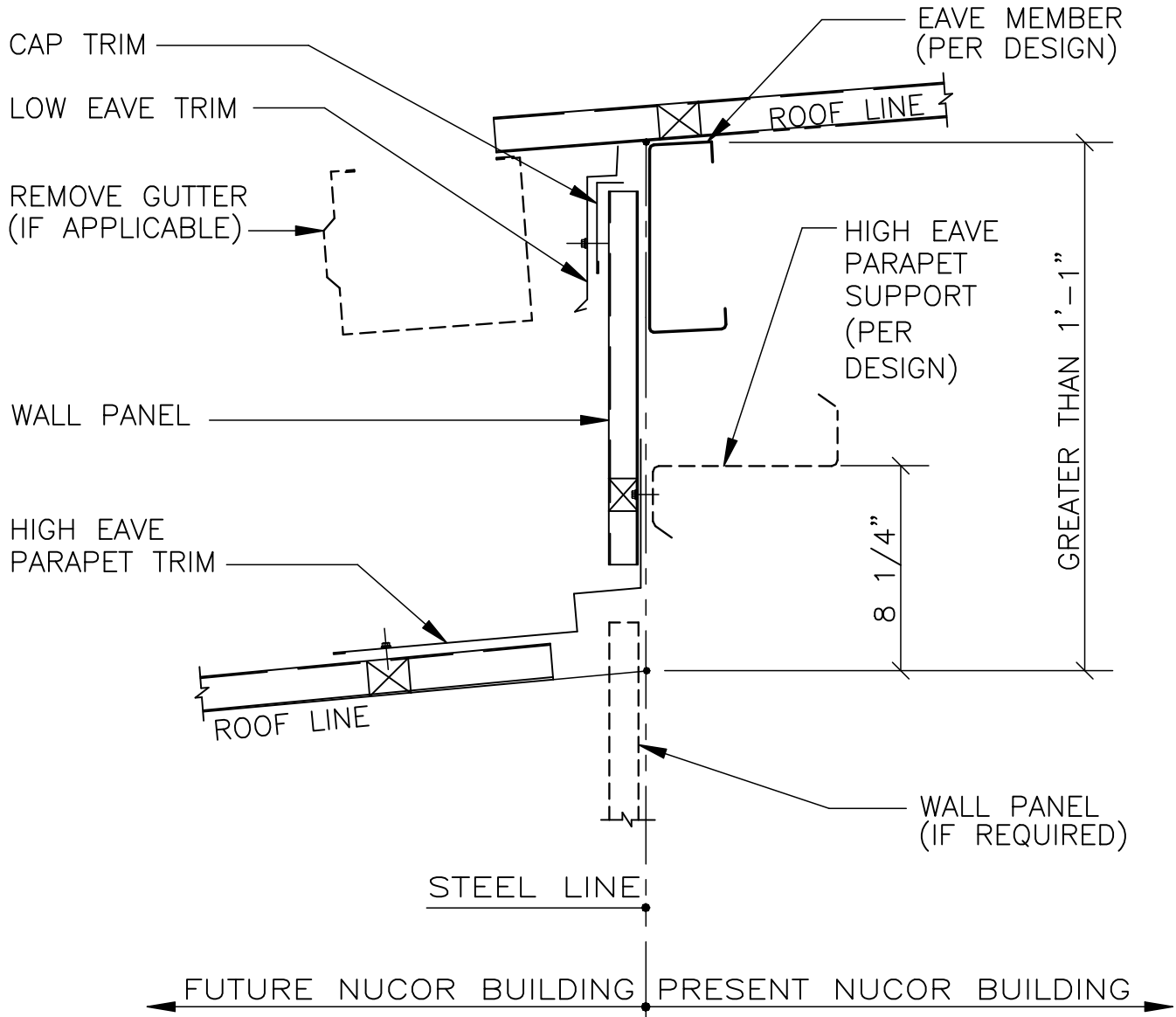
DETAIL NAME IF APPLICABLE  
**FE0030PE.DWG**

**4.8.20**



# PRODUCT & ENGINEERING MANUAL

## FE0040PE – LOW EAVE FUTURE EXPANSION (BELOW EAVE)



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

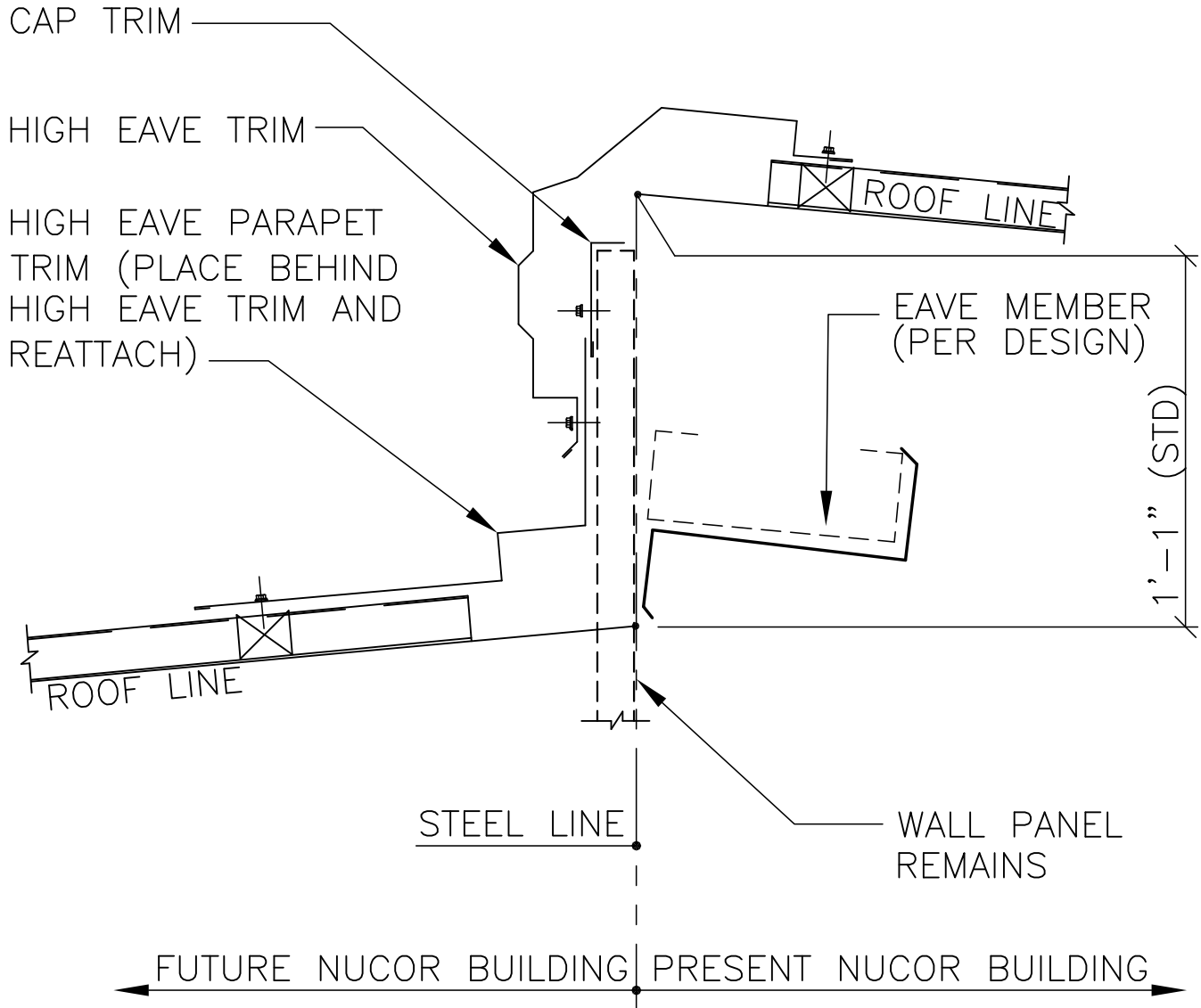
DETAIL NAME IF APPLICABLE  
**FE0040PE.DWG**

**4.8.21**



# PRODUCT & ENGINEERING MANUAL

## FE0050PE – HIGH EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMAINS)



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: KMC

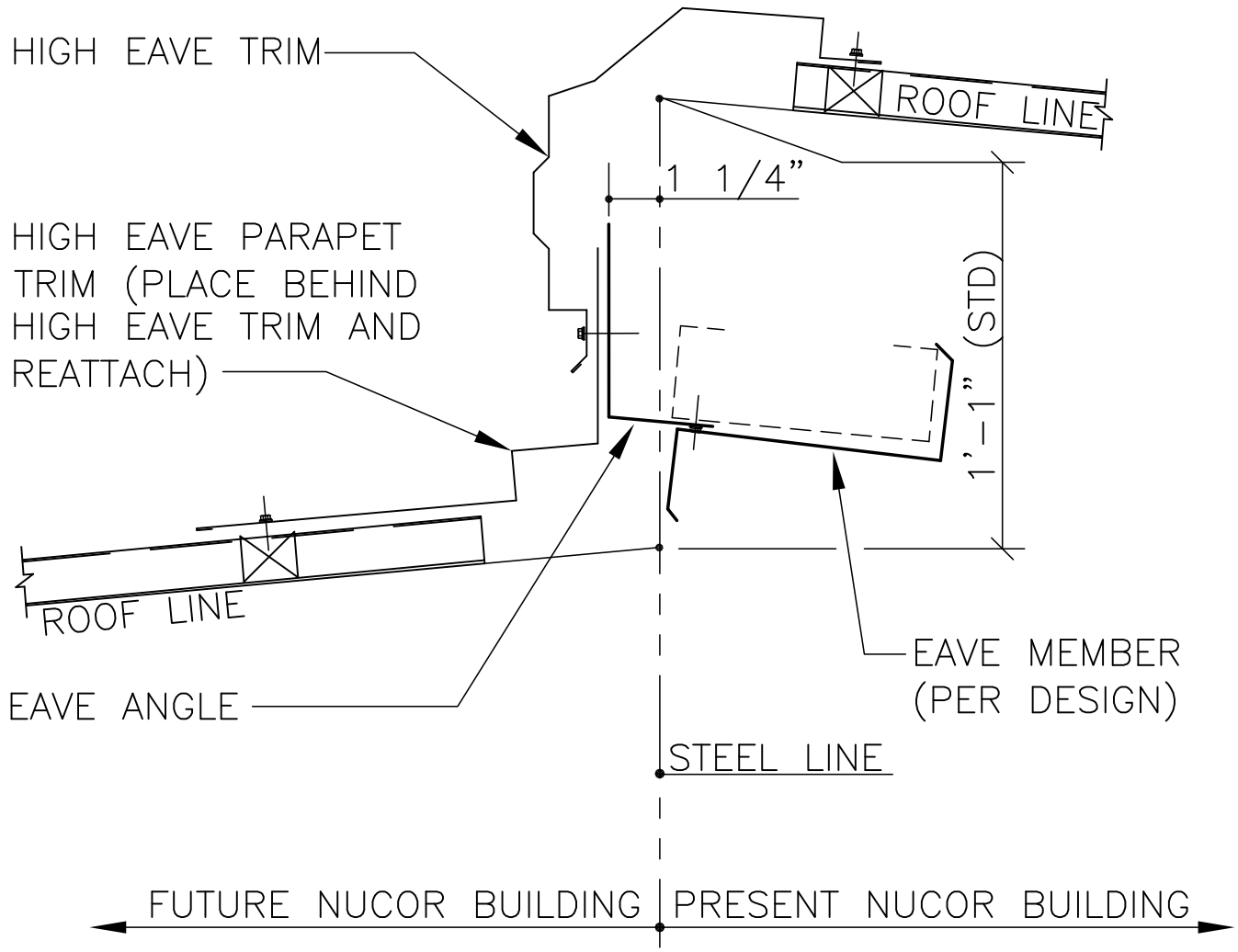
DETAIL NAME IF APPLICABLE  
**FE0050PE.DWG**

**4.8.22**



# PRODUCT & ENGINEERING MANUAL

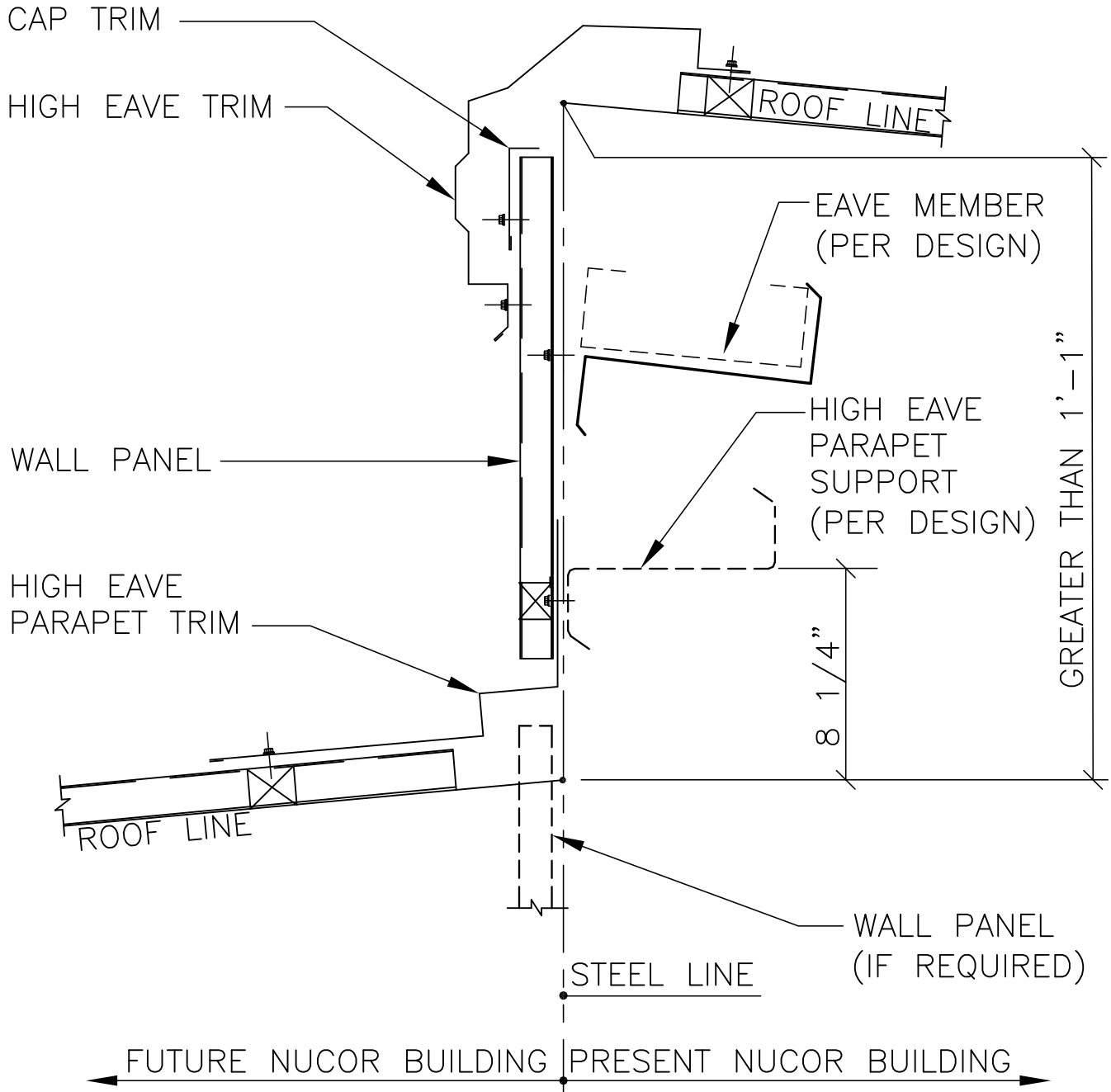
## FE0060PE – HIGH EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMOVED)





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## FE0070PE – HIGH EAVE FUTURE EXPANSION (BELOW EAVE)



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: KMC

DETAIL NAME IF APPLICABLE  
**FE0070PE.DWG**

**4.8.24**

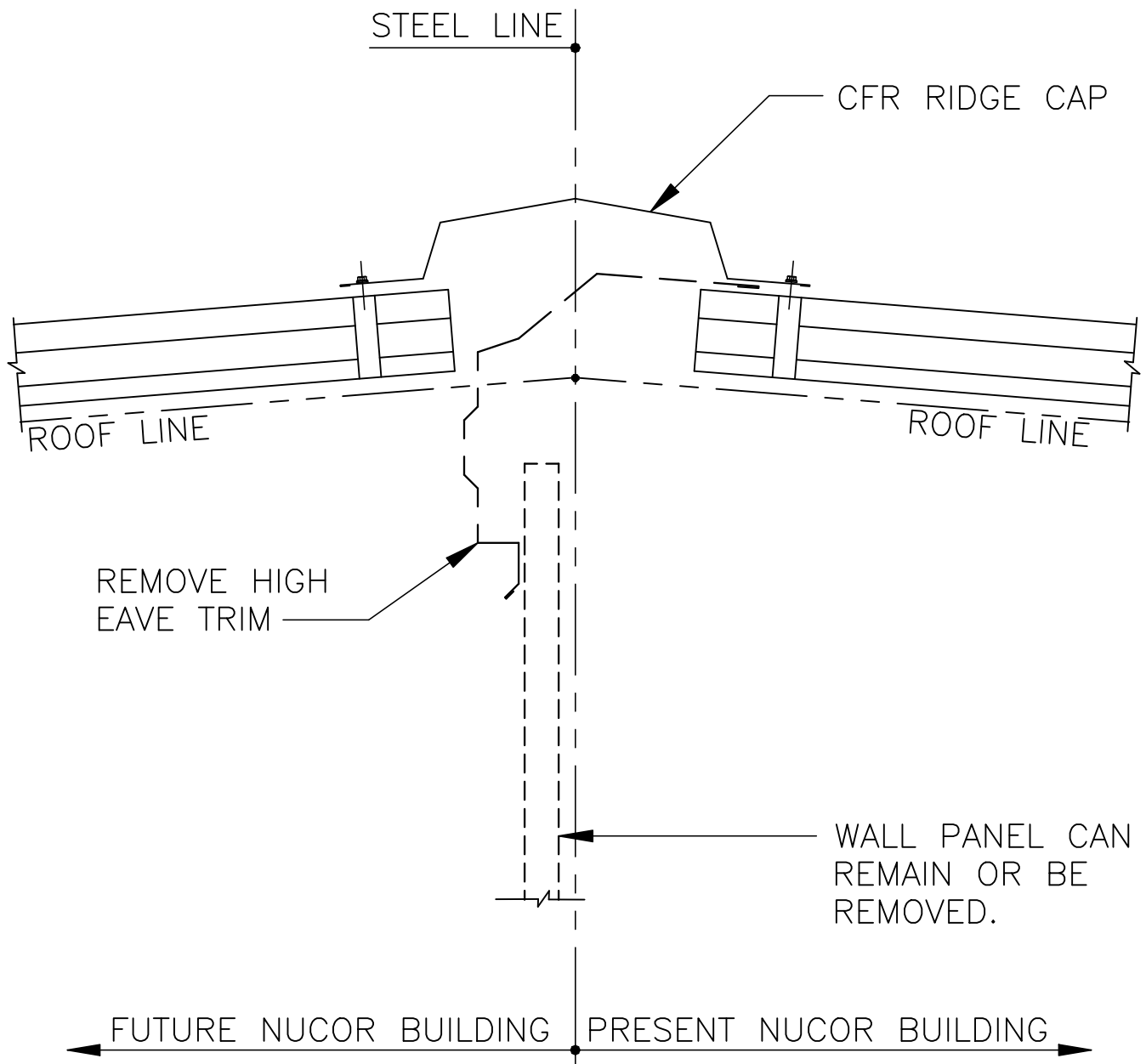




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## CFR ROOF TRIM DETAILS

### FE0080PE – HIGH EAVE FUTURE EXPANSION—RIDGE



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

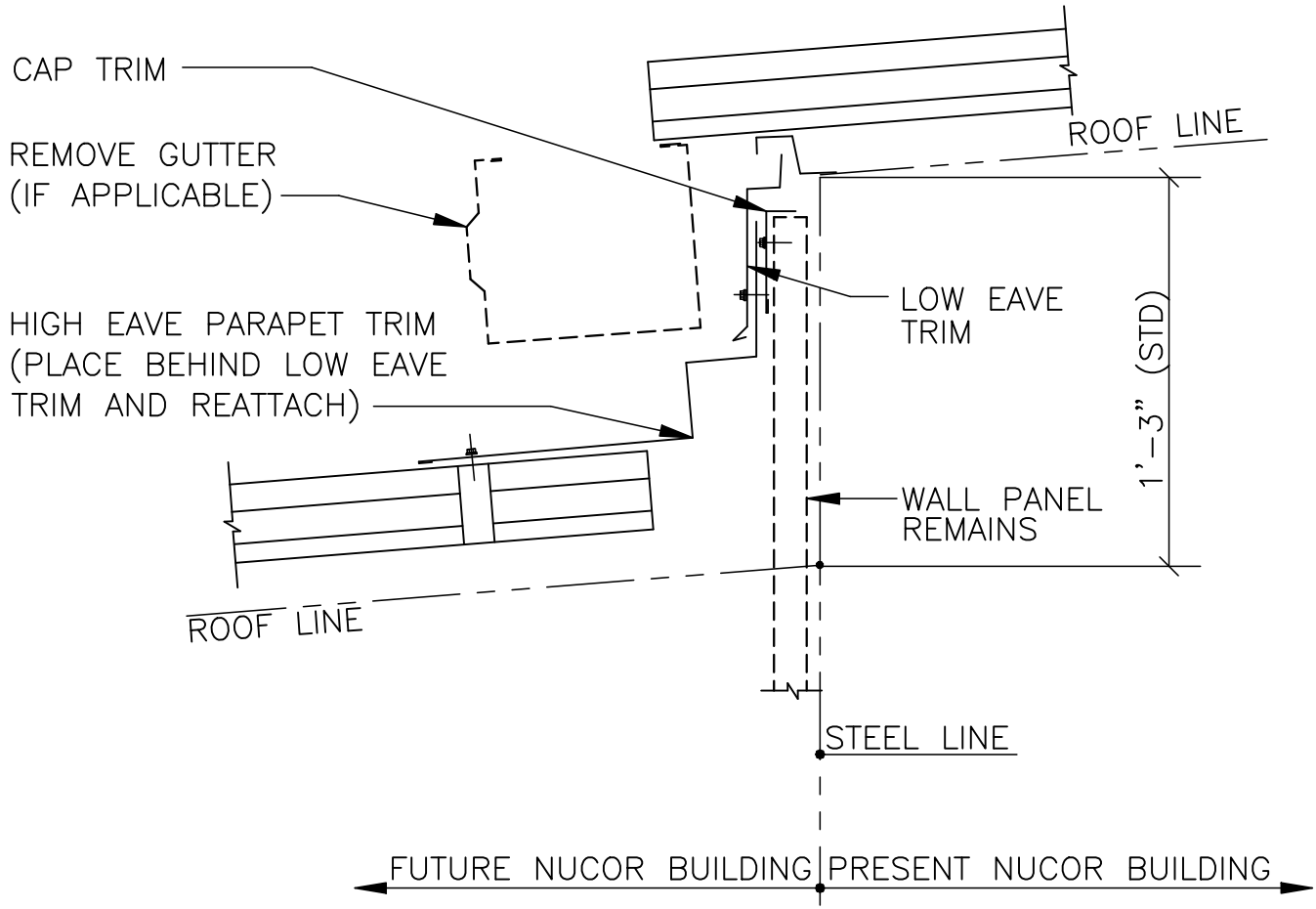
DETAIL NAME IF APPLICABLE  
**FE0080PE.DWG**

**4.8.25**



# PRODUCT & ENGINEERING MANUAL

## FE0090PE – LOW EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMAINS)



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

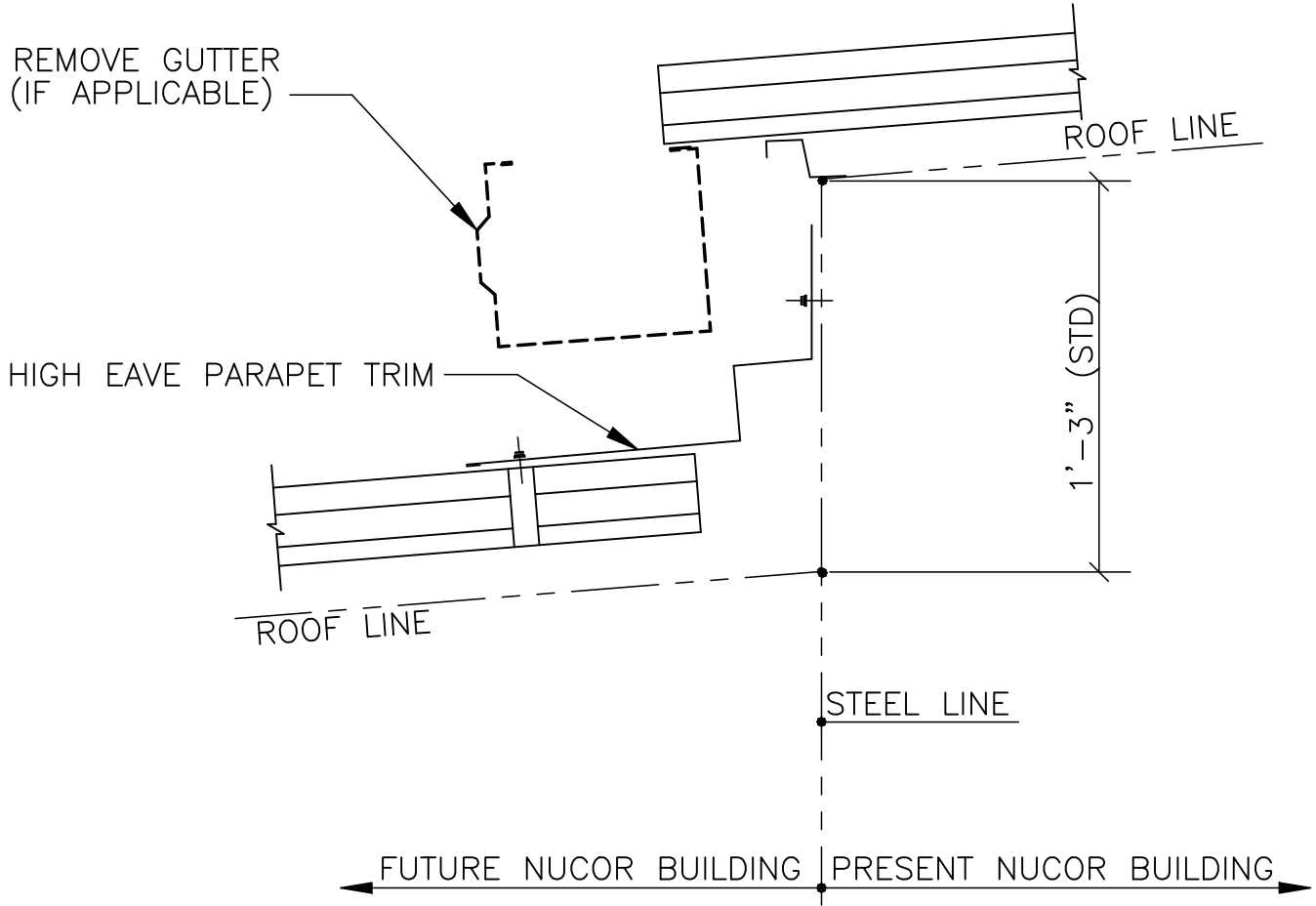
DETAIL NAME IF APPLICABLE  
**FE0090PE.DWG**

**4.8.26**



# PRODUCT & ENGINEERING MANUAL

## FE0100PE – LOW EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMOVED)



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

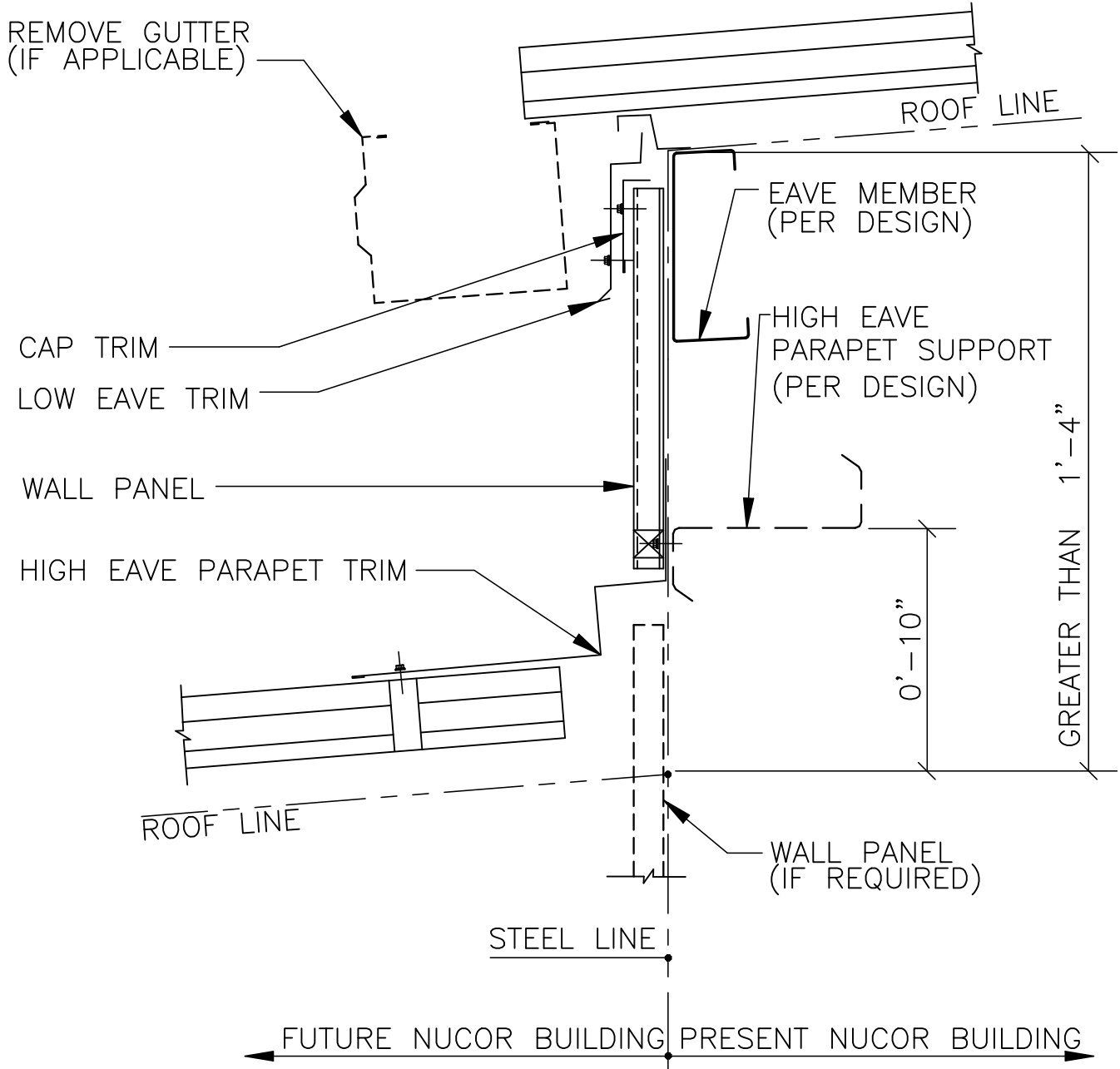
DETAIL NAME IF APPLICABLE  
**FE0100PE.DWG**

**4.8.27**



# PRODUCT & ENGINEERING MANUAL

## FE0110PE – LOW EAVE FUTURE EXPANSION



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

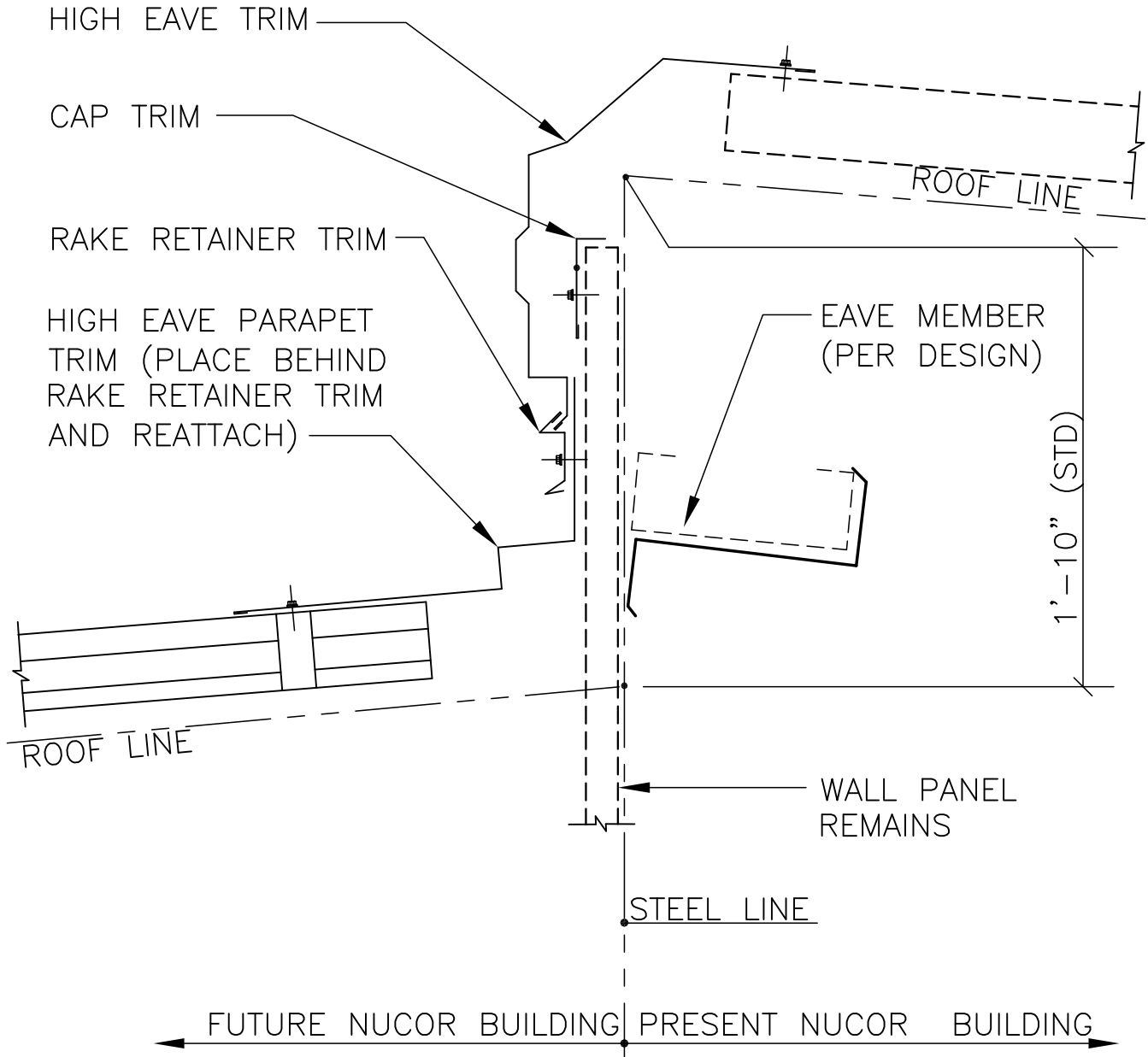
DETAIL NAME IF APPLICABLE  
**FE0110PE.DWG**

4.8.28



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## FE0120PE – HIGH EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMAINS)



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: KMC

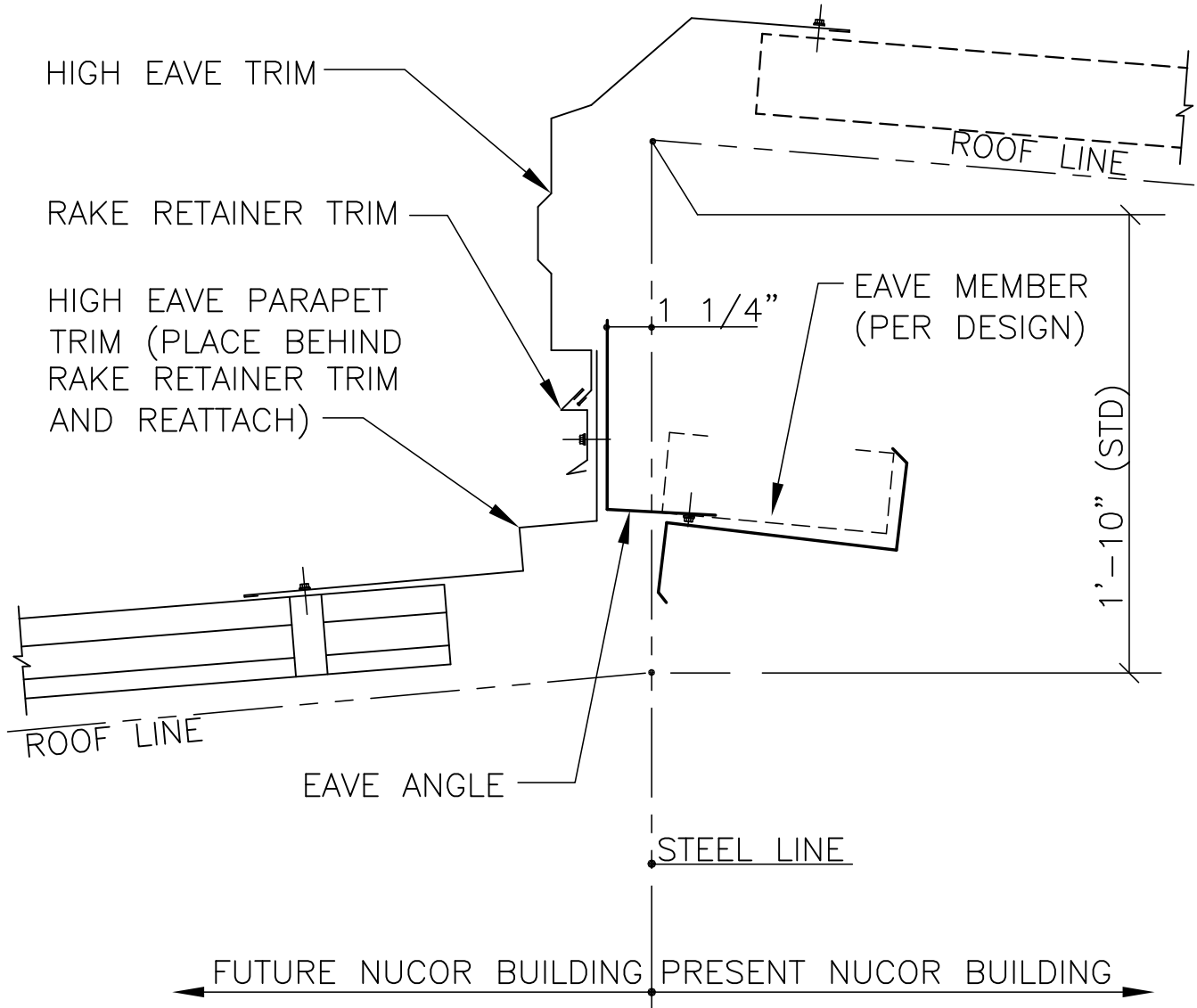
DETAIL NAME IF APPLICABLE  
**FE0120PE.DWG**

**4.8.29**



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## FE0130PE – HIGH EAVE FUTURE EXPANSION ROOF STEP (WALL PANEL REMOVED)



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: \_\_\_\_\_

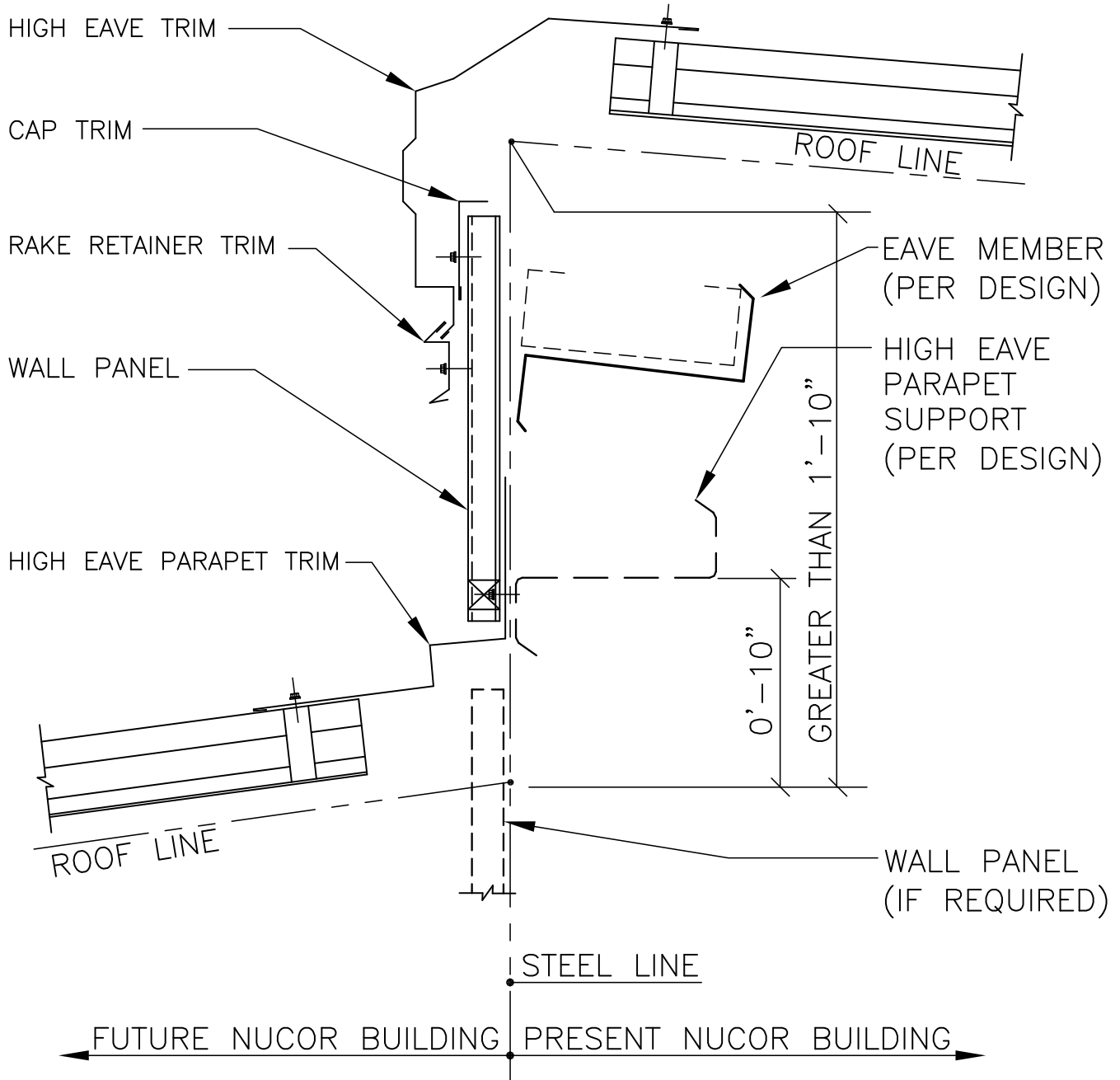
DETAIL NAME IF APPLICABLE  
**FE0130PE.DWG**

**4.8.30**



# PRODUCT & ENGINEERING MANUAL

## FE0140PE – HIGH EAVE FUTURE EXPANSION (BELOW EAVE)



LAST REVISION  
DATE: 04/17/09  
BY: AES CHK: \_\_\_\_\_

DETAIL NAME IF APPLICABLE  
**FE0140PE.DWG**

**4.8.31**