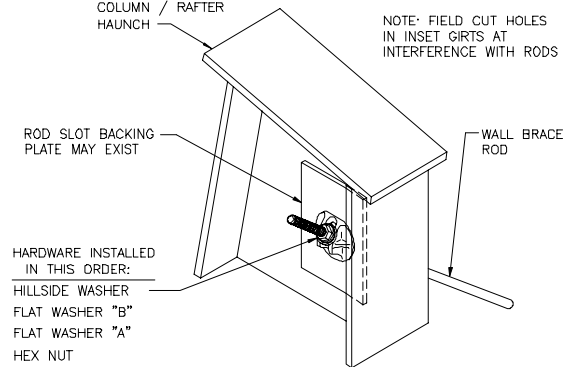
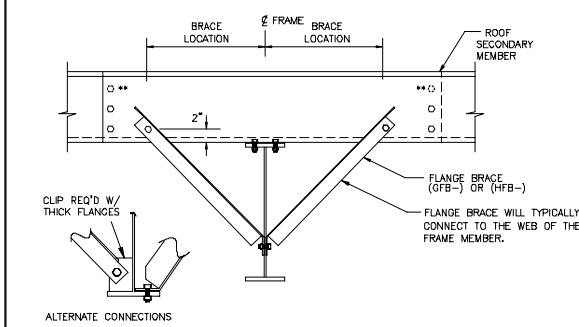


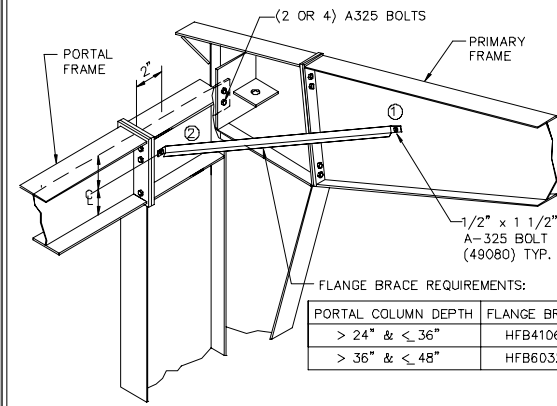
WASHERS				
ROD DIA.	NUT	A	B	HILLSIDE
3/8"	095321	096408	46040	043657
1/2"	095230	095872	095946	043657
5/8"	095233	095945	095946	043657
3/4"	095235	095946	095948	043658
7/8"	095237	095947	095948	043658
1"	095238	095948	095949	043659
1 1/8"	095239	095949	095949	043659



WASHERS				
ROD DIA.	NUT	A	B	HILLSIDE
3/8"	095321	096408	46040	043657
1/2"	095230	095872	095946	043657
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7/8"	095237	095947	095948	043658
1"	095238	095948	095949	043659
1 1/8"	095239	095949	095949	043659



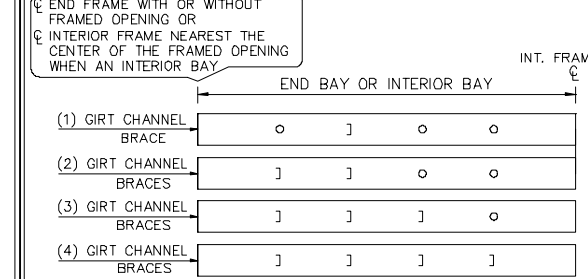
FLANGE BRACE REQUIREMENTS:
 RULE#1- ALL FLANGE BRACES ON CROSS SECTIONS MUST BE INSTALLED.
 RULE#2- SINGLE FLANGE BRACES ARE REQUIRED WHEN PART MARK ON CROSS SECTION IS NOT ACCOMPANIED BY (2).
 RULE#3- FLANGE BRACES ARE REQUIRED BOTH SIDES OF THE FRAME WEB WHEN PART MARK IS ACCOMPANIED BY (2).
 RULE#4- WHENEVER POSSIBLE, PLACE SINGLE BRACES TOWARD THE CENTER OF THE BUILDING.
 RULE#5- WHENEVER POSSIBLE, PLACE ALL SINGLE BRACES ON THE SAME SIDE OF THE FRAME WEB.
 ** 10" & 11 1/2" PURLINS REQUIRE 3 BOLTS AT EACH END OF PURLIN LAP.



FLANGE BRACE REQUIREMENTS:

PORTAL COLUMN DEPTH	FLANGE BRACE
> 24" & < 36"	HFB4106
> 36" & < 48"	HFB6032

NOTES:
 ① FIELD DRILL 9/16" HOLES IN PRIMARY AND PORTAL FRAME WEBS FOR FLANGE BRACE CONNECTIONS.
 ② DRILL 9/16" HOLE IN PORTAL FRAME COLUMN WEB APPROX. 2" FROM BOLTING PLATE @ BEAM C.



STANDARD NOTES:
 - GIRTS HAVE CLUSTERS OF 4 HOLES FOR ATTACHING CHANNEL BRACES. THESE CLUSTERS ARE REPRESENTED BY ONE OF THE SYMBOLS BELOW:
 O- DO NOT INSTALL BRACES AT THIS CLUSTER LOCATION.
 J- INSTALL BRACES AT THIS CLUSTER LOCATION. SEE SECONDARY WALL DRAWINGS FOR BRACE REQUIREMENTS.
 - INSTALL BRACES WORKING FROM THE LOWEST GIRT TOWARD THE EAVE.
 - CHANNEL BRACE MAY BE LOCATED IN EITHER SET OF SLOTS IN CLUSTER PROVIDED THEY ARE ALIGNED FROM TOP TO BOTTOM IN A GIVEN BAY.

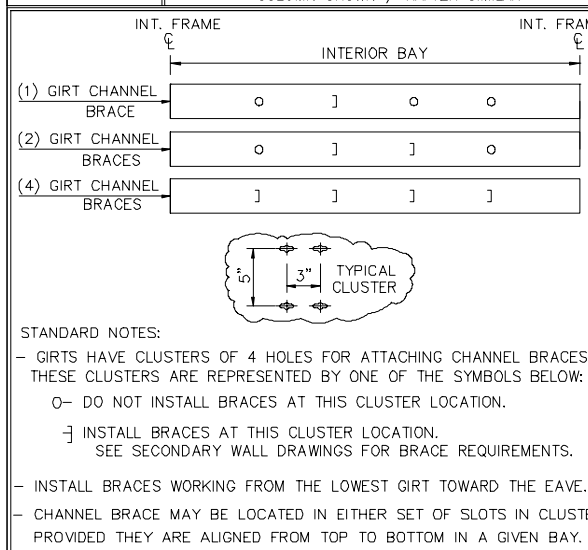
REV. DATE: 05/10/10 | REV. NO. 01 | BRO2H1 | ROD BRACING THRU ROD SLOT COLUMN SHOWN / RAFTER SIMILAR

REV. DATE: 05/10/10 | REV. NO. 02 | BRO2J1 | ROD BRACING THRU ROD SLOT SIDEWALL COLUMN SHOWN / RAFTER SIMILAR

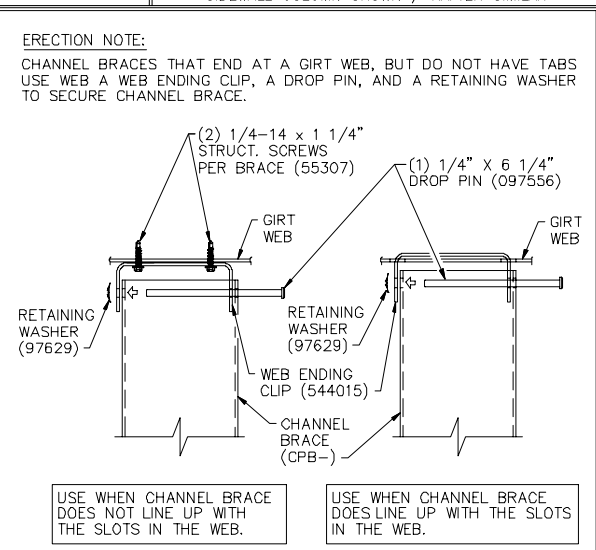
REV. DATE: 07/01/09 | REV. NO. 00 | BRO6AE | TYPICAL FLANGE BRACE CONNECTIONS CONT. PURLIN LAP SHOWN, CONT. GIRT & SIMPLE PURLIN

REV. DATE: 08/18/14 | REV. NO. 02 | BR12J1 | PORTAL FRAME DETAIL CONNECTION TO FRAME

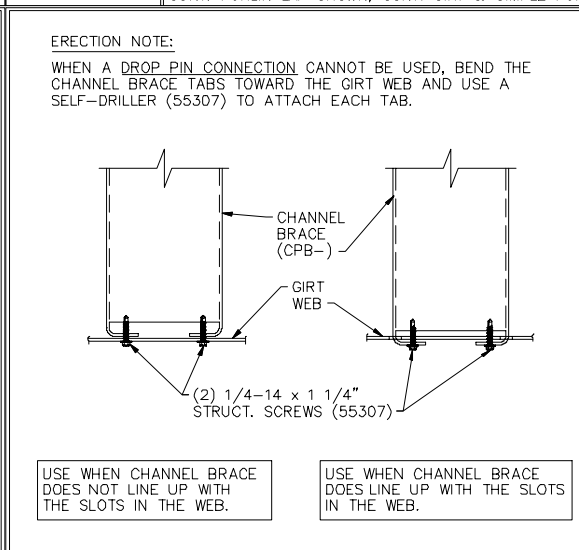
REV. DATE: 09/04/13 | REV. NO. 00 | BRR002 | CHANNEL BRACE CLUSTER LOCATION INTERIOR BAY WITH FRAMED OPENING OR END BAY



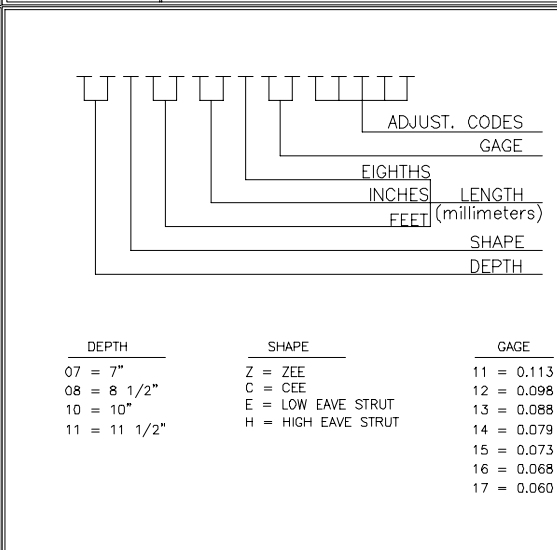
STANDARD NOTES:
 - GIRTS HAVE CLUSTERS OF 4 HOLES FOR ATTACHING CHANNEL BRACES. THESE CLUSTERS ARE REPRESENTED BY ONE OF THE SYMBOLS BELOW:
 O- DO NOT INSTALL BRACES AT THIS CLUSTER LOCATION.
 J- INSTALL BRACES AT THIS CLUSTER LOCATION. SEE SECONDARY WALL DRAWINGS FOR BRACE REQUIREMENTS.
 - INSTALL BRACES WORKING FROM THE LOWEST GIRT TOWARD THE EAVE.
 - CHANNEL BRACE MAY BE LOCATED IN EITHER SET OF SLOTS IN CLUSTER PROVIDED THEY ARE ALIGNED FROM TOP TO BOTTOM IN A GIVEN BAY.



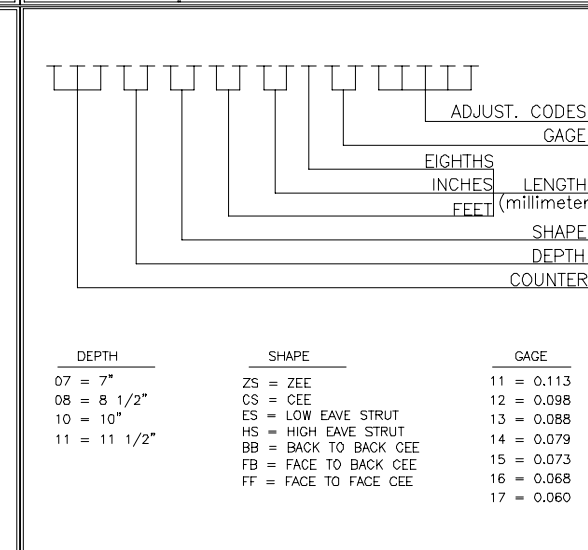
ERECTION NOTE:
 CHANNEL BRACES THAT END AT A GIRT WEB, BUT DO NOT HAVE TABS USE WEB A WEB ENDING CLIP, A DROP PIN, AND A RETAINING WASHER TO SECURE CHANNEL BRACE.
 (2) 1/4-14 x 1 1/4" STRUCT. SCREWS PER BRACE (55307)
 (1) 1/4" x 6 1/4" DROP PIN (097556)



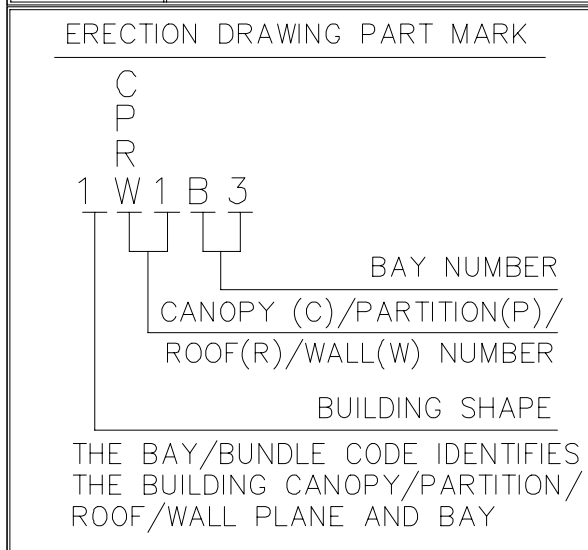
ERECTION NOTE:
 WHEN A DROP PIN CONNECTION CANNOT BE USED, BEND THE CHANNEL BRACE TABS TOWARD THE GIRT WEB AND USE A SELF-DRILLER (55307) TO ATTACH EACH TAB.



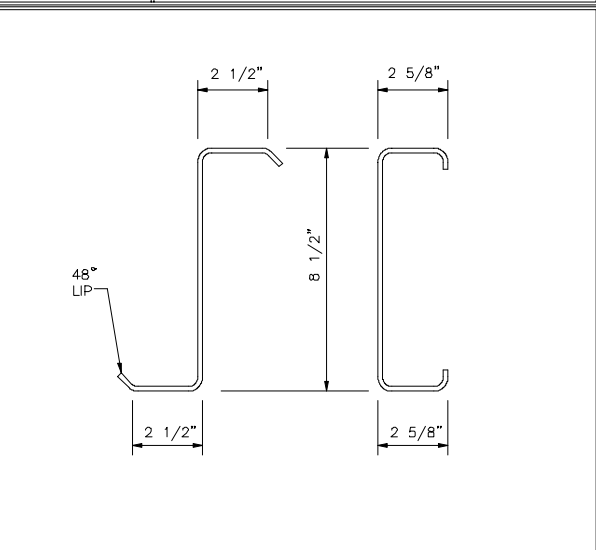
REV. DATE: 07/01/09 | REV. NO. 00 | EN51B1 | SECONDARY PART MARK NUMBER COMMON GENERATED MARK NUMBERS



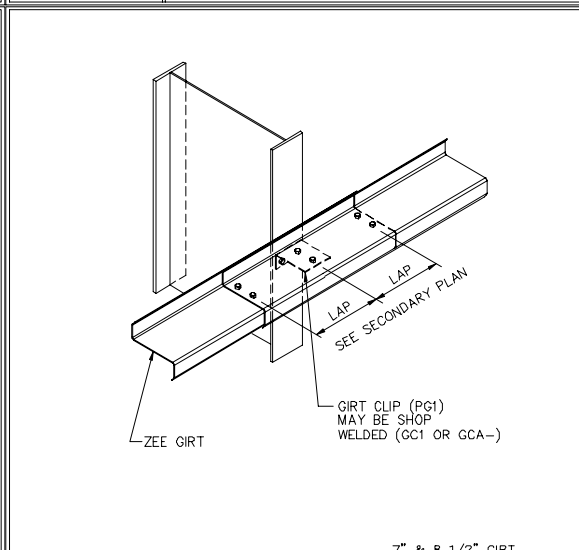
REV. DATE: 07/01/09 | REV. NO. 00 | EN51B2 | SPECIAL SECONDARY PART MARK KEY COMMON GENERATED MARK NUMBERS



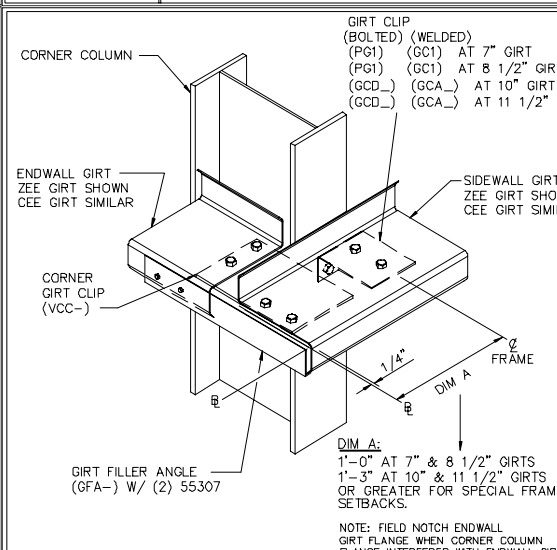
REV. DATE: 01/31/13 | REV. NO. 01 | EN51B3 | SECONDARY BUNDLE LOCATION KEY ALL SECONDARY DEPTHS



REV. DATE: 07/01/09 | REV. NO. 00 | EN53F1 | PURLIN AND GIRTS SIZES 8 1/2" 216mm



REV. DATE: 01/20/11 | REV. NO. 01 | WS01G3 | GIRTS CONN. AT COLUMN OUTSET CONTINUOUS GIRTS



REV. DATE: 08/18/14 | REV. NO. 02 | WS12A2 | GIRTS CONN. AT CORNER COLUMN ANY OUTSET GIRTS AT EW, ANY GIRTS AT SW

PERMIT SET- For Building Dept. Approval

1. UNLESS NOTED, USE 1/2 X 1 1/2 A325-N BOLT (49080) AND NUT (47120) W/O WASHERS. SNUG TIGHTEN BOLTS FOR ALL SECONDARY CONNECTIONS.
 2. FLANGE BRACES ARE AN INTEGRAL PART OF THE STABILITY OF THE STRUCTURAL SYSTEM AND MUST BE PROPERLY INSTALLED PRIOR TO ERECTION OF WALL AND ROOF SHEETS.
 3. REMOVAL OR ALTERATION OF ANY COMPONENT IS PROHIBITED.

THE BUTLER MFG. ENGINEER'S SEAL APPLIES ONLY TO THE WORK PRODUCT OF BUTLER MFG. AND DESIGN AND PERFORMANCE REQUIREMENTS SPECIFIED BY BUTLER. THE BUTLER MFG. ENGINEER'S SEAL DOES NOT APPLY TO THE PERFORMANCE OR DESIGN OF ANY OTHER PRODUCT OR COMPONENT FURNISHED BY BUTLER EXCEPT TO ANY DESIGN OR PERFORMANCE REQUIREMENTS SPECIFIED BY BUTLER.

THIS DRAWING, INCLUDING THE INFORMATION HEREON, REMAINS THE PROPERTY OF BUTLER MFG. IT IS PROVIDED SOLELY FOR ERECTING THE BUILDING DESCRIBED IN THE APPLICABLE PURCHASE ORDER AND SHALL NOT BE MODIFIED, REPRODUCED OR USED FOR ANY OTHER PURPOSE WITHOUT PRIOR WRITTEN APPROVAL OF BUTLER MFG.
 THE GENERAL CONTRACTOR AND/OR ERECTOR IS SOLELY RESPONSIBLE FOR ACCURATE GOOD QUALITY WORKMANSHIP IN ERECTING THIS BUILDING IN ACCORDANCE WITH THIS DRAWING, DETAILS REFERENCED IN THIS DRAWING, ALL APPLICABLE BUTLER MFG. ERECTION GUIDES, AND INDUSTRY STANDARDS PERTAINING TO PROPER ERECTION, INCLUDING THE CORRECT USE OF TEMPORARY BRACING.

BUTLER MANUFACTURING 1540 GENESSEE ST. KANSAS CITY, MO 64102			
REV.	DATE	BY	DESCRIPTION

BUTLER MANUFACTURING 1540 GENESSEE ST. KANSAS CITY, MO 64102		WALL SECONDARY SED'S	
BUILDER:	Sheridan	CUSTOMER:	Safelite
LOCATION:	Portland, Maine	PROJECT:	Safelite Auto
BUILDER'S PO#:	161003	JOB #:	16-008746-01
DATE:	4/29/2016	DRAWN/CHECK:	LC
VPC VERSION:	2015.2d	PAGE:	18