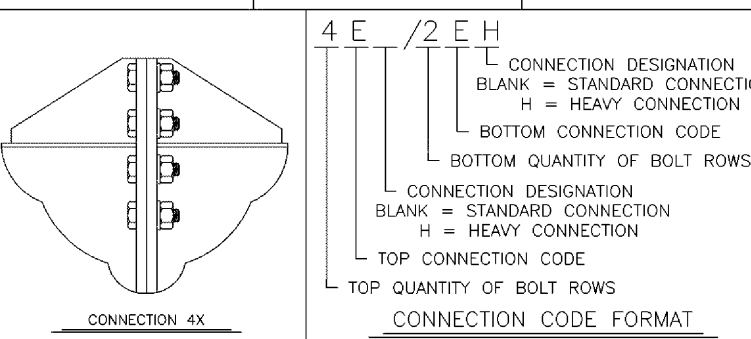
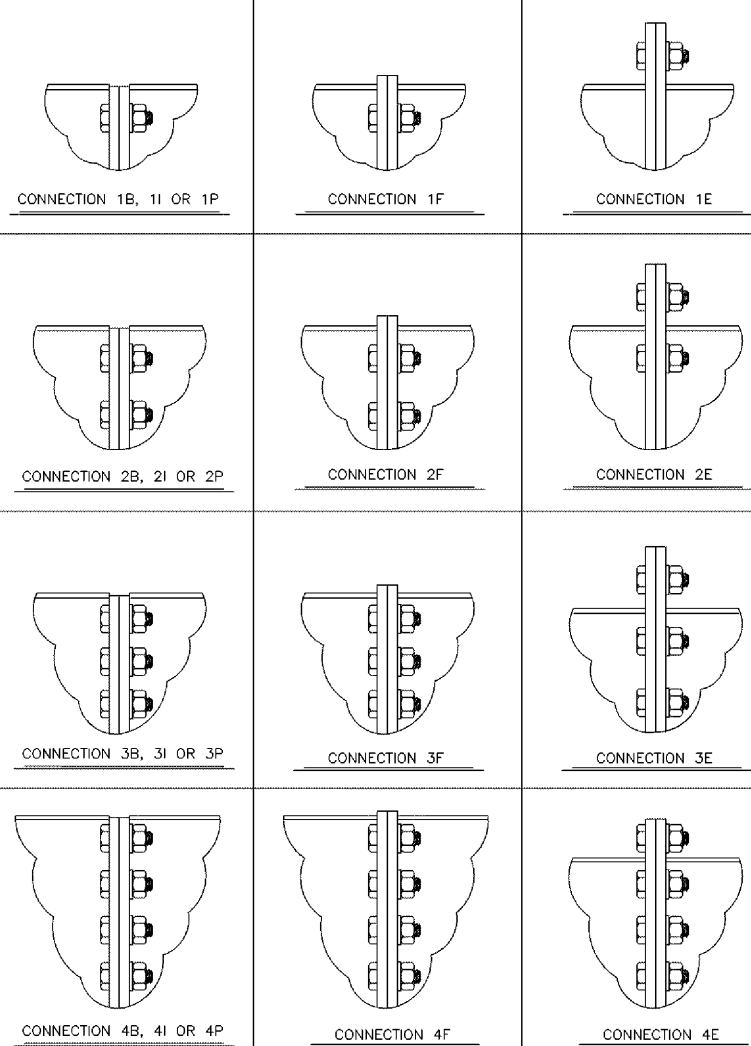


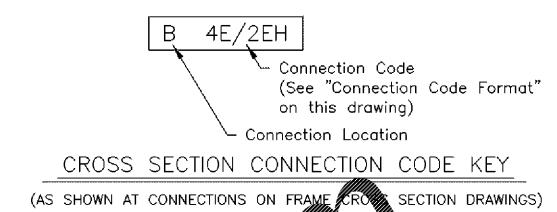
CONNECTION CODES
(FOR TOP AND BOTTOM BOLT PATTERN)



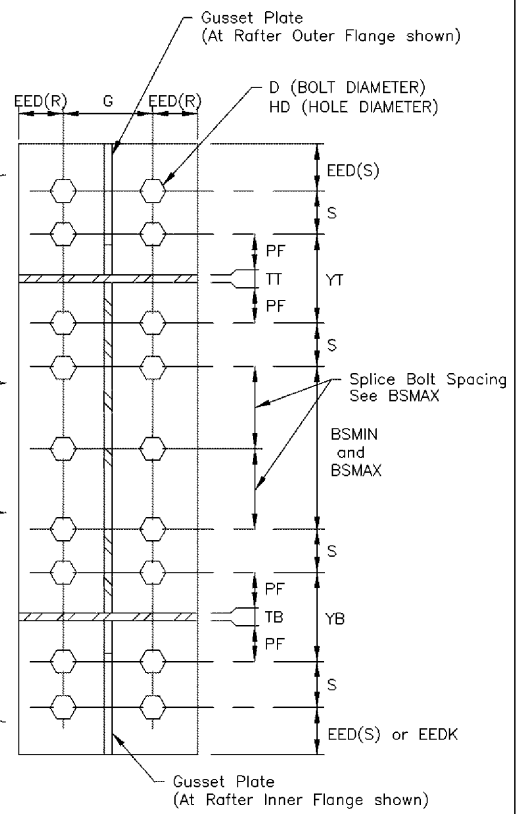
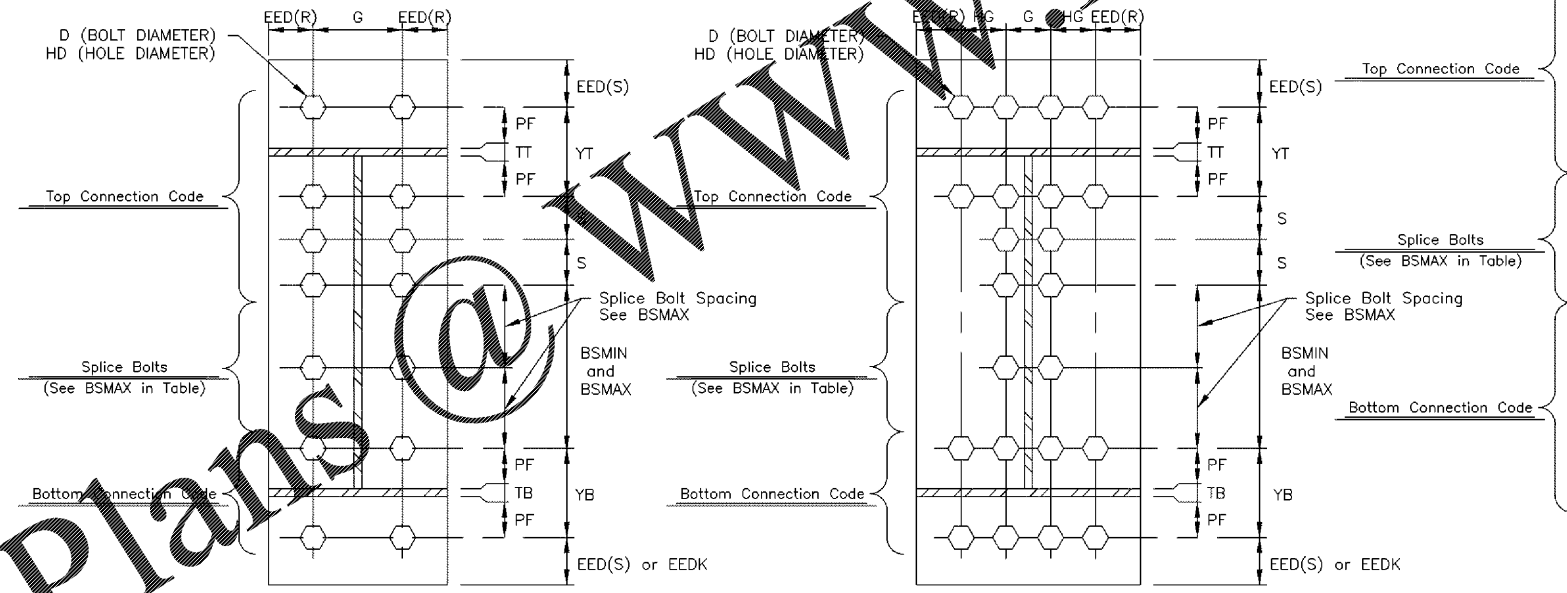
CONNECTION BOLT DATA

NAME	DESCRIPTION FOR A325 BOLT DIMENSIONS	A325 CONNECTION BOLT DIMENSIONS						
		1/2"	3/4"	7/8"	1"	1 1/4"	1 1/2"	
D	DIAMETER OF THE BOLT	1/2"	3/4"	7/8"	1"	1 1/4"	1 1/2"	
HD	BOLT HOLE DIAMETER	9/16"	13/16"	15/16"	1 1/16"	1 5/16"	1 9/16"	
G	BOLT GAUGE	2 1/2"	3"	4"	3 1/2"	4"	5 1/2"	
	MAX. WEB THICKNESS (Max. 5/16" Fillet Weld) WITHOUT WASHER	1"	1 1/8"	1 7/8"	1 1/4"	1 3/8"	2 1/8"	
	MAX. WEB THICKNESS (Max. 5/16" Fillet Weld) WITH WASHER	3/4"	7/8"	1 5/8"	7/8"	7/8"	1 7/8"	
HG	HEAVY CONN. BOLT GAUGE	N/A	2 1/4"	2 5/8"	3"	3 3/4"	4"	
S	NORMAL BOLT SPACING	2 1/2"	3"	3 1/4"	3 1/2"	4"	4 1/2"	
BSMIN	MINIMUM SPACING BETWEEN TOP & BOTTOM SETS OF BOLTS	1 1/2"	2 1/4"	2 5/8"	3"	3 3/4"	4"	
BSMAX	MAXIMUM BOLT SPACING BETWEEN TOP AND BOTTOM SETS OF BOLTS ON CONNECTION PLATES LESS THAN OR EQUAL TO 3/4" THICK	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	
	SPLICE BOLT SPACING (NOT TO EXCEED 2'-0")	{ 1/2 BSMAX (±1/8") WHEN BSMAX = 2'-0 1/8" TO 4'-0 { 1/3 BSMAX (±1/8") WHEN BSMAX = 4'-0 1/8" TO 6'-0 { 1/4 BSMAX (±1/8") WHEN BSMAX = 6'-0 1/8" TO 8'-0						
BFGD	MINIMUM BOLT-TO-FLANGE CLEARANCE AT OUT OF NUT SEE BOLT AT FLANGE DETAIL	1 1/2"	1 3/4"	1 7/8"	2 1/4"	2 1/2"	2 3/4"	
PF	MINIMUM BOLT-TO-FLANGE CLEARANCE AT CONNECTION PLATE SEE BOLT AT FLANGE DETAIL	(BFGD + RNWT) PF INSIDE OF FLANGE IS INCREASED BASED ON THE YT & YB VALUE. PF FOR CONNECTION B, F, I AND P ARE THE SAME AS USED ON CONNECTION E						
NWT	NUT AND WASHER THICKNESS	SEE BOLT AT FLANGE DETAIL. NUT THICKNESS IS EQUAL TO THE BOLT DIAMETER AND .15625" WASHER THICKNESS IS USED EVEN IF A WASHER IS NOT REQUIRED.						
RNWT	RISE ON NUT AND WASHER THICKNESS							
TT	THICKNESS TOP FLANGE	REFER TO FRAME CROSS SECTION DRAWING FOR LARGEST FLANGE THICKNESS EITHER SIDE OF THE CONNECTION.						
TB	THICKNESS BOTTOM FLANGE							
YT	BOLT SPACING TOP (ROUND UP TO NEXT 1/2", MIN = S)	3" + TT	3 1/2" + TT	3 3/4" + TT	4 1/2" + TT	5" + TT	5 1/2" + TT	
YB	BOLT SPACING BOTTOM (ROUND UP TO NEXT 1/2", MIN = S)	or TB Sloped	or TB Sloped	or TB Sloped	or TB Sloped	or TB Sloped	or TB Sloped	
EED(S)	MINIMUM SHEARED END EDGE DIMENSION	1 1/4"	1 1/4"	1 1/2"	1 3/4"	2 4"	2 5/8"	
EED(R)	MINIMUM ROLLED END EDGE DIMENSION	3/4"	1"	1 1/8"	1 1/4"	1 5/8"	2 1/4"	
EEDK	END EDGE DIMENSION AT KNEE CONNECTION	1 3/8"	1 3/8"	1 5/8"	1 7/8"	3/8"	2 3/4"	
BCWM	MINIMUM BOLT CLEARANCE FROM A FLANGE OR WEB WELD	WITHOUT WASHER	7/16"	5/8"	3/4"	13/16"	1 3/8"	
	WITH HARDENED WASHER	9/16"	3/4"	7/8"	1"	1 1/4"	1 1/2"	
WCSM	MINIMUM WIDTH OF CONNECTION PLATE (Standard Connection)	5"	6"	8"	8"	10"	12"	
WCHM	MINIMUM WIDTH OF CONNECTION PLATE (Heavy Connection)	N/A	10"	12"	12"	16"	18"	
TCMIN	MINIMUM THICKNESS OF CONNECTION PLATE	1/4"	3/8"	7/16"	1/2"	5/8"	1"	

Frame Documentation
A325 Connection Bolt Details
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Rev 03



Particular	Material
FB4_	L 2" x 2" x 14 Ga.
FB6_	L 2" x 2" x 14 Ga.
FB7_	L 2 1/2" x 2 1/2" x 3/16"



CONNECTION CODE DESCRIPTION

B = THIS DESCRIPTION CODE IS USED TO DEFINE SHEAR CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP FLANGE. CONNECTION PLATE LENGTH MUST BE A MINIMUM OF HALF THE RAFTER WEB DEPTH AND SHALL NOT EXCEED THE RAFTER TOTAL DEPTH.

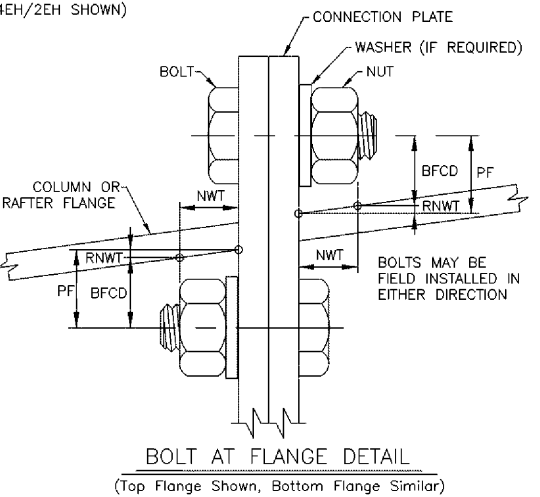
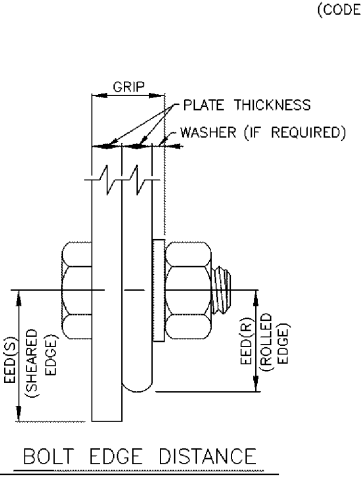
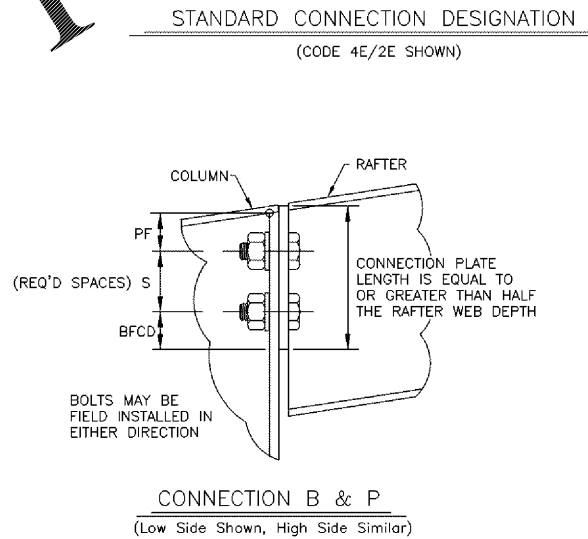
E = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED WITH ONE SET OUTSIDE THE TOP OR BOTTOM FLANGE AND THE REMAINING SETS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE.

F = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE AND CONNECTION PLATE PROJECTS 1/2" BEYOND THE TOP OR BOTTOM FLANGE.

I = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP OR BOTTOM FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP OR BOTTOM FLANGE.

P = THIS DESCRIPTION CODE IS USED TO DEFINE SHEAR CONNECTIONS. BOLTS ARE LOCATED INSIDE THE TOP FLANGE AND CONNECTION PLATE IS RECESSED 1/8" BELOW THE TOP FLANGE. CONNECTION PLATE LENGTH MUST BE A MINIMUM OF HALF THE RAFTER WEB DEPTH AND SHALL NOT EXCEED THE RAFTER TOTAL DEPTH.

4X = THIS DESCRIPTION CODE IS USED TO DEFINE MOMENT CONNECTIONS. BOLTS ARE LOCATED WITH TWO SETS EACH SIDE OF THE TOP OR BOTTOM FLANGE WITH A GUSSET PLATE OUTSIDE THE TOP AND BOTTOM FLANGE OR COLUMN CAP PLATE.



Rev	Date	Description
0	05/22/20	FOR ERECTOR INSTALLATION

MESCO Building Solutions
5244 Bear Creek Court
Irving, TX 75061
Voice 214-687-9999

Customer:
CROSS DEVELOPMENT LLC
4336 MARSH RIDGE RD
CARROLLTON, TX 75010-4447 US
MEAGAN VIEREN

Project Name & Location:
CC FIVE FORKS SC
CROSS DEVELOPMENT
1215 E BUTLER RD
GREENVILLE, SC 29607-9911 US

Drawing Status:
 Preliminary
 For Approval
 For Construction Permit
 For Erector Installation

Scale: NOT TO SCALE
 Drawn by: BNS 05/22/20
 Checked by: PNR 05/22/20
 Project Engineer: SH
 Job Number: 17-B-60327
 Sheet Number: E27

The engineer whose seal appears hereon is an employee for the manufacturer for the materials described herein. Said seal or certification is limited to the products designed and manufactured by manufacturer only. The undersigned engineer is not the overall engineer of record for this project.

Drawing has been digitally signed.

Jason Speagle
May 26, 2020

SOUTH CAROLINA
Professional Engineer
No. 26802
JASON SPEAGLE