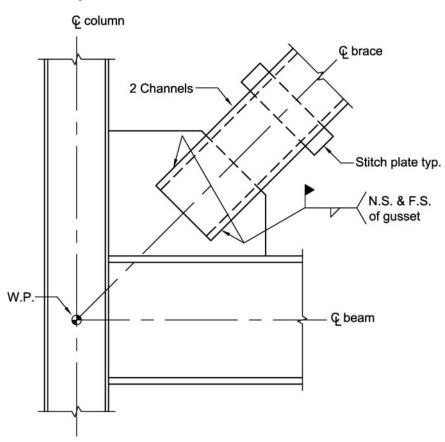
## Revisions and Errata List AISC Steel Design Guide 29, 1st Edition, 1<sup>st</sup> printing (Printed Edition) and March 2015 Revision (Digital Edition) February 16, 2023

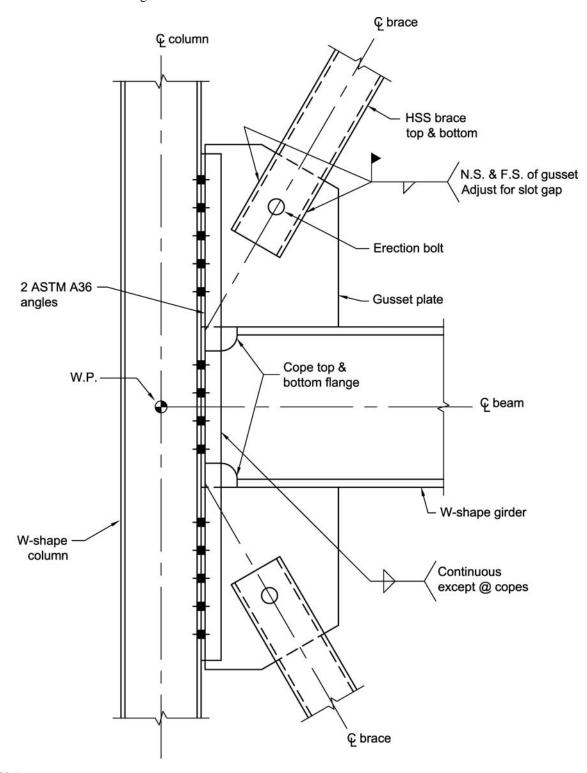
The following list represents corrections made to the first printing (dated 2013) and the March 2015 revision (digital edition) of the first edition of AISC Design Guide 29, *Vertical Bracing Connections—Analysis and Design*.

## Page(s) Item

To correct the gusset plate to brace weld symbol, Figure 3-10 is replaced with the following:



To correct the gusset plate to brace weld symbol, Figure 3-12 is replaced with the following:



## Note:

Beam copes can be eliminated by using discontinuous connecting angles to column. Disparity between web thickness and gusset thickness may require fills.

The equation for 
$$e_2$$
 in Figure 4-2b is replaced with the following:  

$$e_2 = \left(e_b + \overline{\beta}\right) \sin \theta - e_c \cos \theta$$

127 Under the heading "Tension rupture component," revise the text as follows:

$$U_{bs} = 1$$
 from AISC Specification Section J4.3 because the bolts are uniformly loaded  $A_{nt} = (0.435 \text{ in.}) [7.96 \text{ in.} -5.00 \text{ in.} -1(1\P + \P \text{ in.})]$ 

$$= 0.80 \text{ in.}^2$$

$$U_{bs} F_u A_{nt} = 1(65 \text{ ksi}) (0.80 \text{ in.}^2)$$

$$= 52.0 \text{ kips}$$

The available strength for the limit state of block shear rupture is:

$$0.60F_u A_{nv} + U_{bs} F_u A_{nt} = 285 \text{ kips} + 52.0 \text{ kips}$$
  
= 337 kips  
 $0.60F_y A_{gv} + U_{bs} F_u A_{nt} = 351 \text{ kips} + 52.0 \text{ kips}$   
= 403 kips

Replace the first line of text and calculation box with the following:

Therefore,  $R_n = 337$  kips.

LRFD	ASD
$\phi R_n = 0.75(2)(337 \text{ kips})$ = 506 kips > 270 kips <b>o.k.</b>	$\frac{R_n}{\Omega} = 2\left(\frac{337 \text{ kips}}{2}\right)$ = 337 kips > 180 kips <b>o.k.</b>

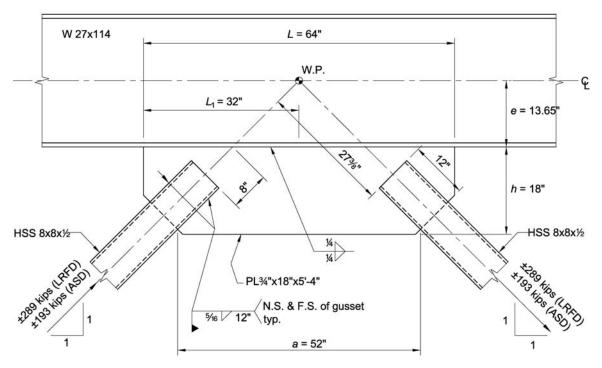
The calculation for  $\beta$  should be replaced with the following:

$$\beta = \frac{\alpha - e_b \tan \theta + e_c}{\tan \theta}$$
 (from *Manual* Eq. 13-1)
$$= \frac{16.3 - (8.85 \text{ in.})(1.33) + 0}{1.33}$$

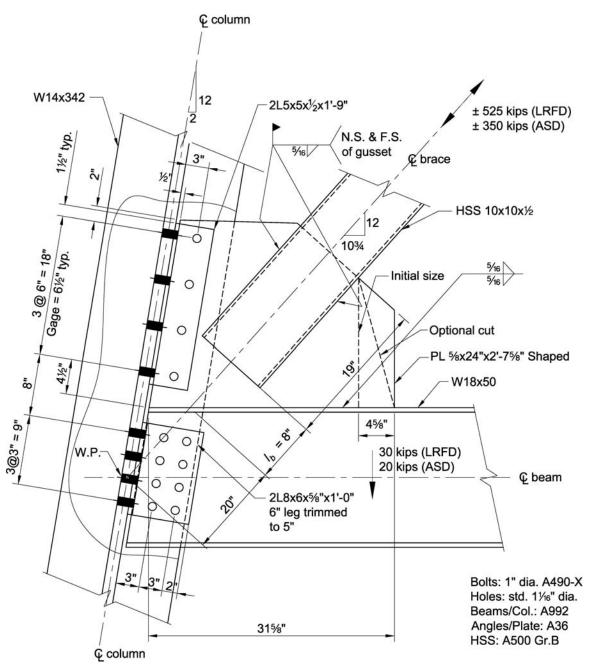
$$= 3.41 \text{ in.}$$

To correct the gusset plate to brace weld symbol, Figure 5-19 is replaced with the following:

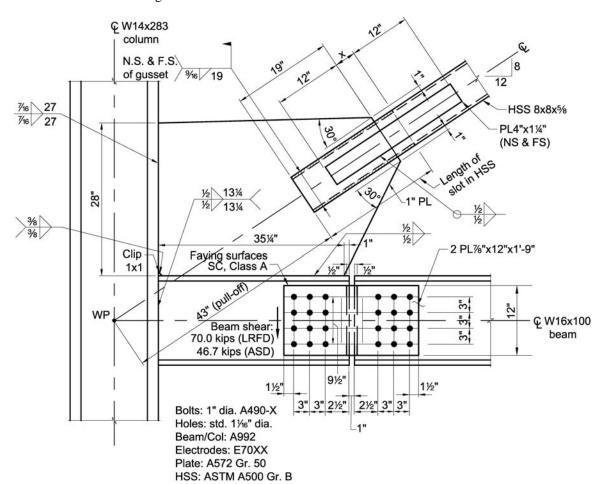
W-shape: A992 HSS: A500 Gr. B Plates: A572 Gr. 50



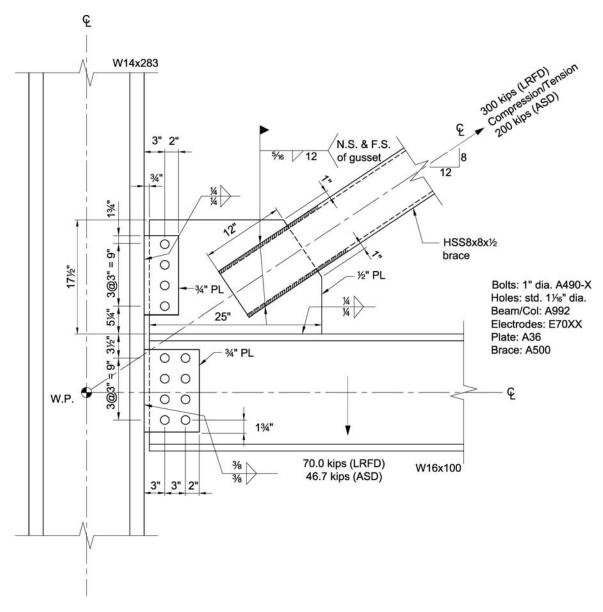
To correct the gusset plate to brace weld symbol, Figure 5-21 is replaced with the following:



To correct the gusset plate to brace weld symbol, Figure 6-1 is replaced with the following:



To correct the gusset plate to brace weld symbol, Figure 6-9 is replaced with the following:



To correct the gusset plate to brace weld symbol, Figure A-4 is replaced with the following:

