



Current Date: 2/24/2023 8:22 AM  
Units system: English  
File name:

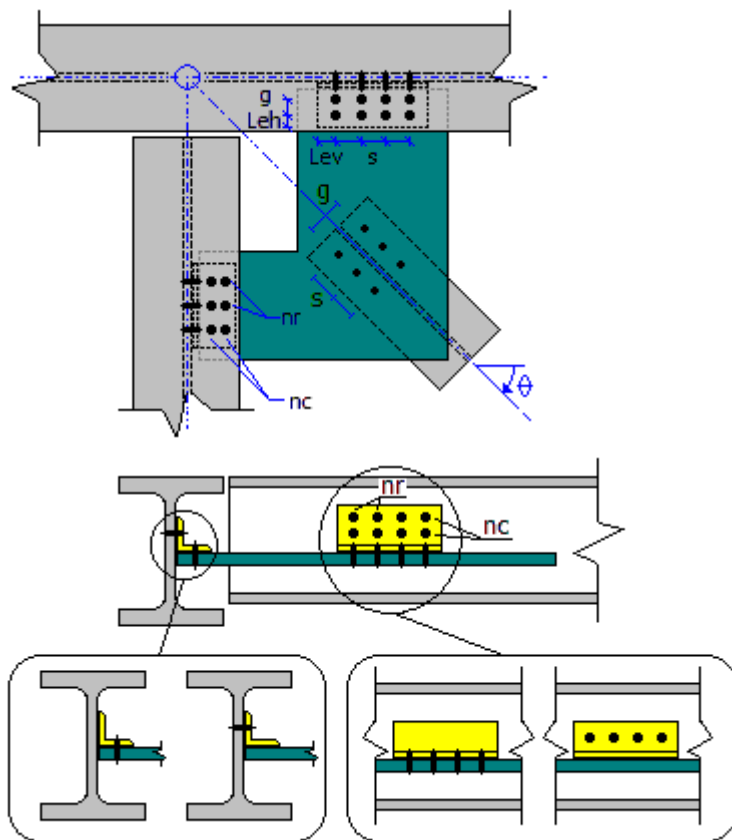
# Steel Connections Data

## Connection: 5 - HBBB\_DW

Family: Horizontal Beams - Brace (HBBB)  
Type: Gusset  
Description: Typ Bracing Conn

### General information

#### Connector



### Members

#### Existing members

Front beam : Yes

#### General

Gusset directly bolted to members : No

Vertical offset : 0 in

#### Girder

##### General

Section : W 16X77

Material	:	A992 Gr50
<b>Beam</b>		
<u>General</u>		
Section	:	W 14X30
Material	:	A992 Gr50
Setback	:	0.5 in
<b>Brace</b>		
<u>General</u>		
Section	:	L 6X6X1_2
Material	:	A36
Skew angle (degrees)	:	60
Long leg on gusset side	:	No
Connected above gusset	:	Yes
<u>Additional geometric data</u>		
wpx: WP horizontal displacement	:	0 in
wpz: WP transversal displacement	:	0 in

## Interfaces

<b>Gusset</b>		
<u>Gusset</u>		
Thickness	:	0.5 in
Material	:	A36
Gusset clearance (beam side)	:	5 in
Gusset clearance (girder side)	:	5 in
Consider external diagonal cut	:	No
Internal edge distance to bolts	:	5 in
<b>Gusset-to-Girder connection</b>		
<u>General</u>		
Connector type	:	Connection: Directly welded
<u>Directly welded</u>		
Beam weld	:	E70XX
D: Weld size to beam (1/16 in)	:	5
Weld length	:	20 in
<b>Gusset-to-Beam connection</b>		
<u>General</u>		
Connector type	:	Connection: Directly welded
<u>Directly welded</u>		
Beam weld	:	E70XX
D: Weld size to beam (1/16 in)	:	3
Weld length	:	20 in
<b>Gusset-to-Brace connection</b>		
<u>General</u>		
Bolts	:	3/4" A325 N
Gusset hole type	:	Standard (STD)
Brace hole type	:	Standard (STD)
nr: Transverse rows of bolts	:	1
nc: Longitudinal rows of bolts	:	5
s: Pitch - longitudinal center-to-center spacing	:	3 in
Lev: Longitudinal distance to the edge	:	1.5 in
Leh: Transversal distance to the edge	:	1.5 in