

A diagram showing a bolted joint. A bolt is shown passing through a plate. A dimension line indicates a distance of 2.5 in from the center of the bolt to the edge of the plate.

Technical drawing of a rectangular plate with the following dimensions and specifications:

- Overall width: 1.5 in
- Overall height: 8.5 in
- Plate thickness: 1.25 in
- Internal width: 2x3 in=6
- Internal height: 4
- Material: HSS SQR 6X6X5 .16 A500 GrB rectangular
- Material: W 12X22 A992 Gr50
- Material: PL 1/2x4x8 1/2 A36

SCALE: - NOT TO SCALE

CONN.ID - 7.1

SCALE: - NOT TO SCALE

A diagram of a bolted joint. A bolt is shown passing through a rectangular plate and a cylindrical component. A dimension line indicates a distance of 2.5 in from the left face of the plate to the center of the bolt.

Diagram of a rectangular HSS column with four A500 GrB rectangular gusset plates. The column has a height of 14.5 ft and a width of 1.5 in. The gusset plates are 4x3 in (12 in) and are spaced 25 in apart. The column is labeled HSS 60X6X5.16 A500 GrB rectangular. The gusset plates are labeled W 18X3 A992 Gr50. The column is supported by a PL 1/2x4x14 1/2 A36 plate.

Front view

5/16

5/16

5Bolts:1" A490 N
Hole type (connector):Short Slotted (SSL)
Direction:Horizontal
Hole type (beam):Standard (STD)

3

0.5 in

This diagram shows the front view of a vertical beam assembly. The beam is represented by a dashed blue outline. Five horizontal bolts, shown in brown, are spaced vertically along the beam. A dimension line on the right indicates a spacing of 3 units between the centerlines of the bolts. A dimension line at the bottom indicates a width of 0.5 in for the beam. A callout box in the upper right corner provides specifications for the bolts: 5Bolts:1" A490 N, Hole type (connector):Short Slotted (SSL), Direction:Horizontal, and Hole type (beam):Standard (STD). A section line with the number 5/16 is shown at the top left, with a break symbol at the bottom.

SCALE: - NOT TO SCALE

Technical drawing of a rectangular plate with dimensions and material specifications:

- Overall width: 1.5 in
- Overall height: 14.5 in
- Plate thickness: 0.25 in
- Number of holes: 3
- Hole spacing (center-to-center): $4 \times 3 \text{ in} = 12$
- Material: **W 18X60 A992 Gr50**
- Plate label: **PL 1/2x4x14 1/2 A36**

SCALE: - NOT TO SCALE

A diagram of a bolted joint. A bolt is shown passing through a rectangular plate. A green arrow points to the right from the center of the bolt, indicating the direction of the applied force. A dimension line below the bolt indicates a distance of 2.5 in from the center of the bolt to the right edge of the plate.

Technical drawing of a rectangular HSS column section. The drawing shows a cross-section of the column with dimensions and material specifications.

- Dimensions:**
 - Overall height: 20.5
 - Overall width: 1.5 in
 - Distance from top flange to centerline of column: 1.25 in
 - Distance from centerline of column to bottom flange: 3.09
 - Distance from centerline of column to bottom flange (labeled 4): 4
 - Distance from centerline of column to bottom flange (labeled 6x3 in=18): 6x3 in=18
- Material Specifications:**
 - Column material: HSS 30x1 1/2x10x1/2 A500 Gr50 rectangular
 - Flange material: W 24x176 A992 Gr50
 - Flange material: PL 3/4x4x20 1/2 A36

Front view

7Bolts: 1" A490 N
Hole type (connector): Short Slotted (SSL)
Direction: Horizontal
Hole type (beam): Standard (STD)

8/16
8/16

3.09

0.75 in

SCALE: - NOT TO SCALE

CONN.ID - 9.1

 **Gelinas Structural**
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PREPARED FOR:
D. CRONIN'S WELDING SERVICE, INC.,
70 STATE STREET,
LAWRENCE, MA 01843

PROJECT NAME :
BEAM-TO-COLUMN SHEAR & MOMENT,
26 HERON STREET,
WEST ROXBURY, MA

REV	DATE	DESCRIPTION
0	10.17.2025	ISSUED FOR CONSTRUCTION

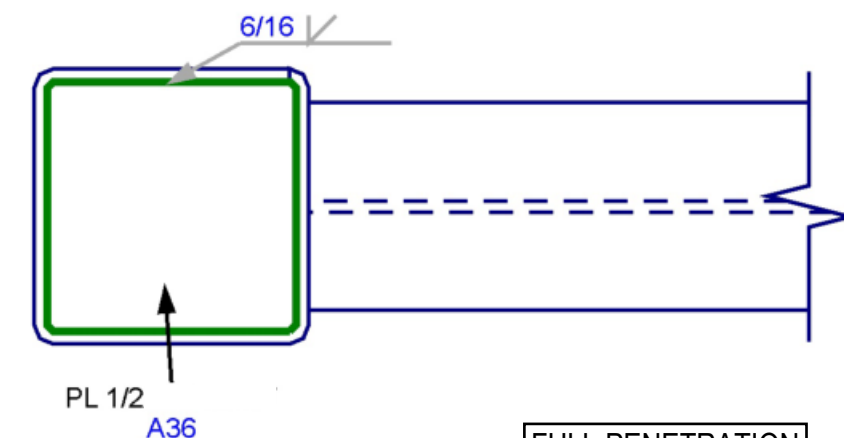
JOB NO. 25729

SHEET NO.

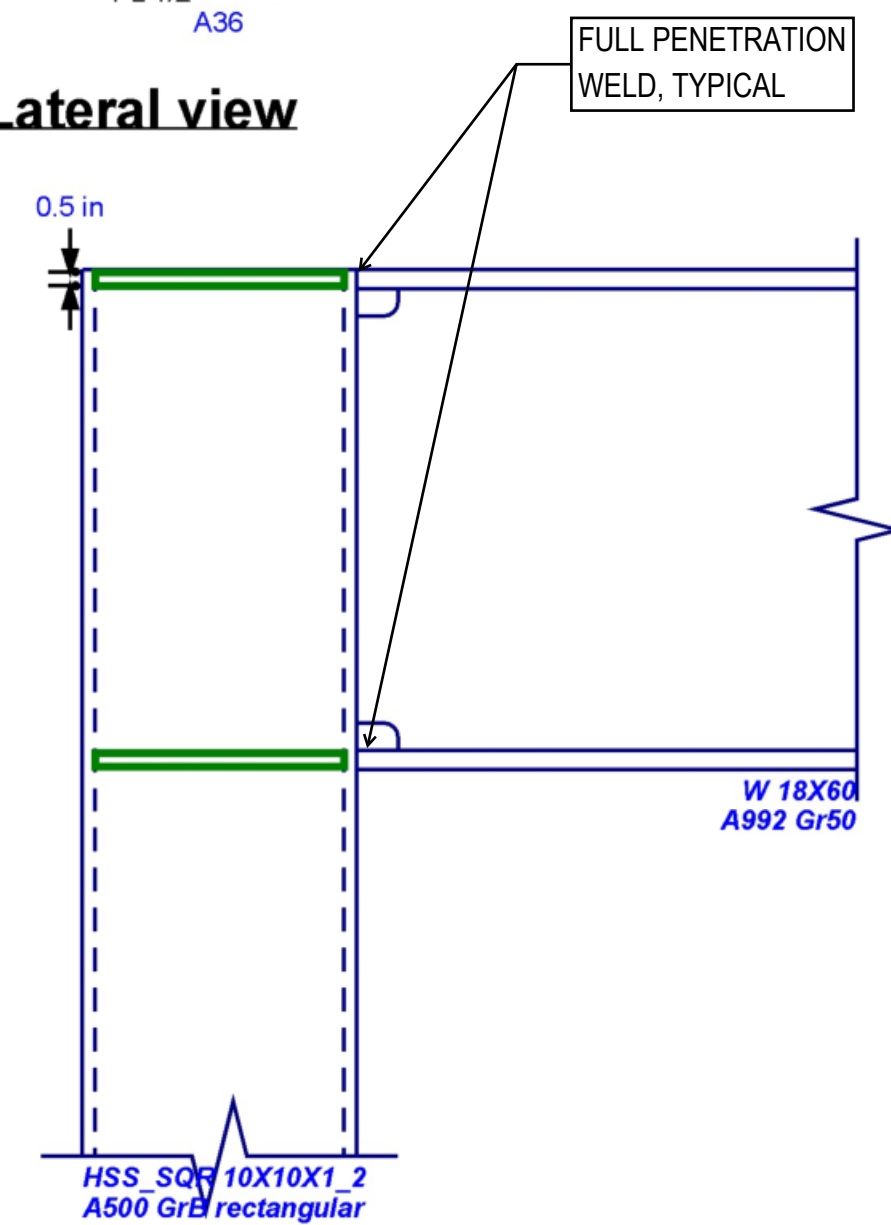
SHEET NO.

Job 25729
October 17, 2025

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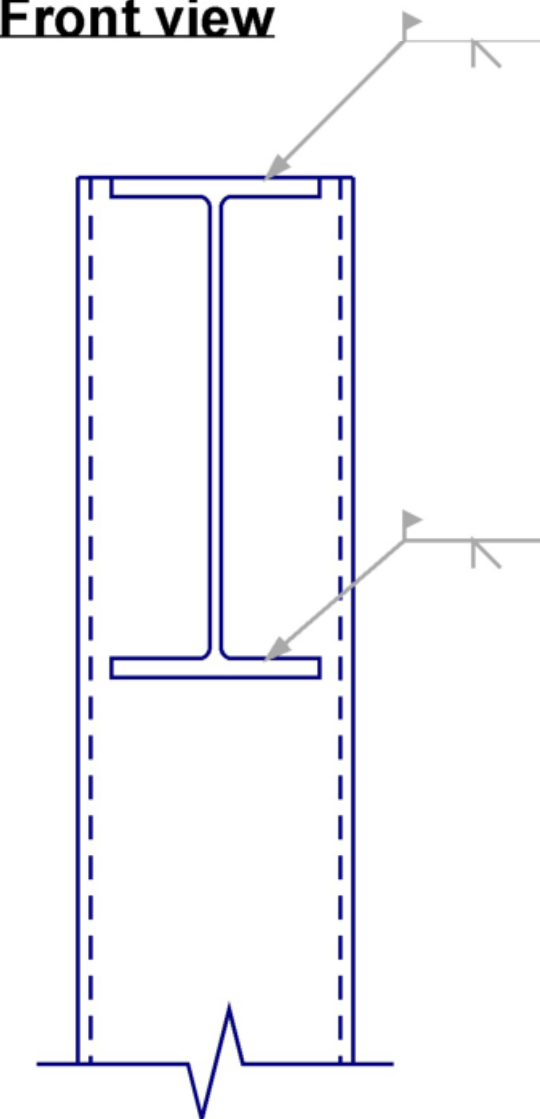
Lateral view



NOTES:-

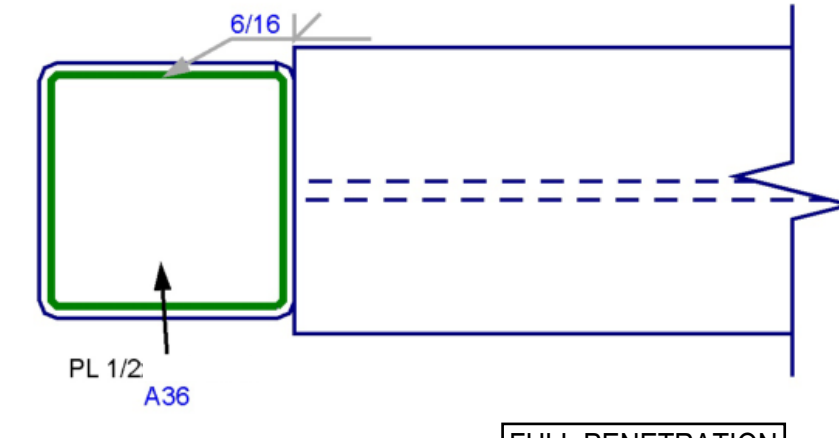
- 1) REFER TO **CONNECTION - 8 FOR SHEAR** CONNECTION DETAILS.
- 2) DIAPHRAGM PLATE SIZES WILL BE
FOR HSS6x6x5/16" - 7x7x1/2" THICK
FOR HSS8x8x5/16" - 9x9x1/2" THICK
FOR HSS10x10x1/2" - 11x11x1/2" THICK,
- 3) REFER TO TYPICAL MOMENT CONNECTION BELOW.

Front view

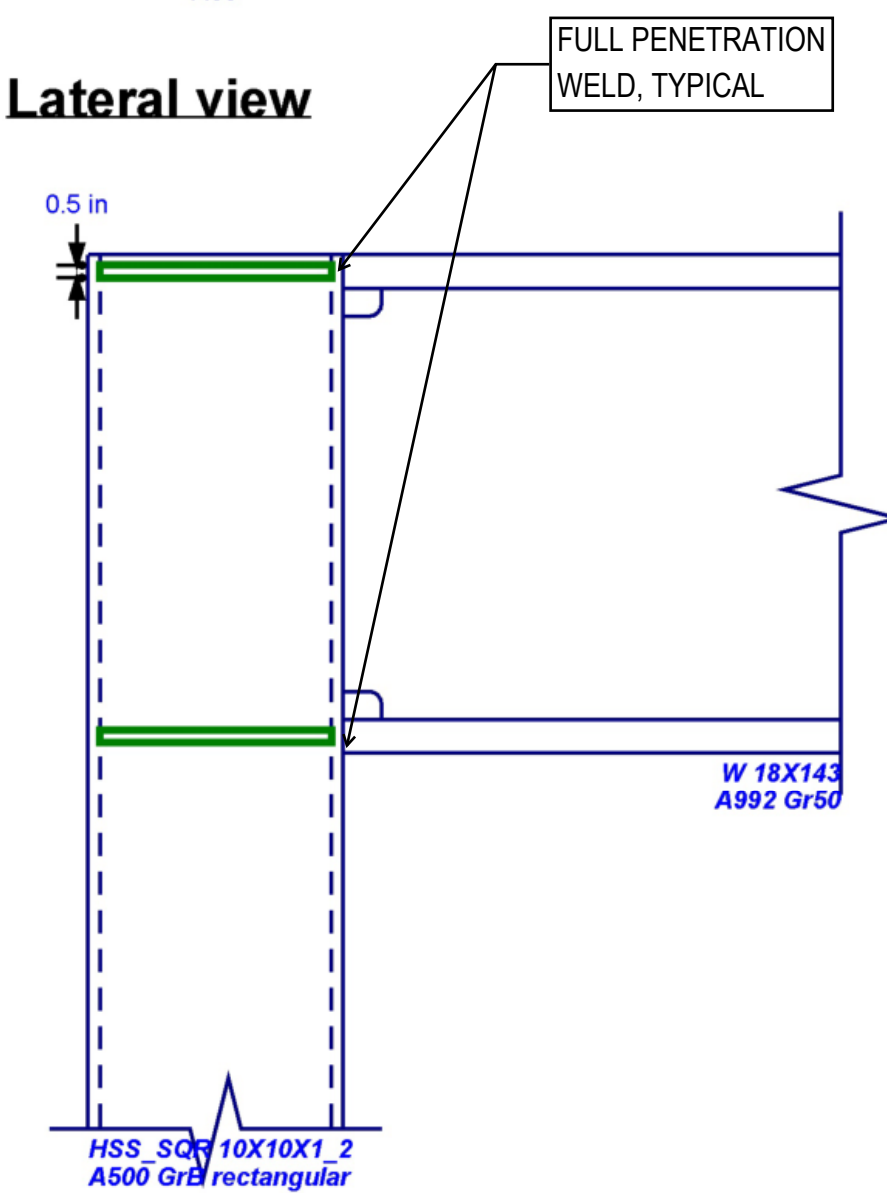


CONN. ID - 10

W18x60 THRU W18x76 STEEL BEAM TO HSS10x10x1/2" COLUMN - MOMENT CONNECTION



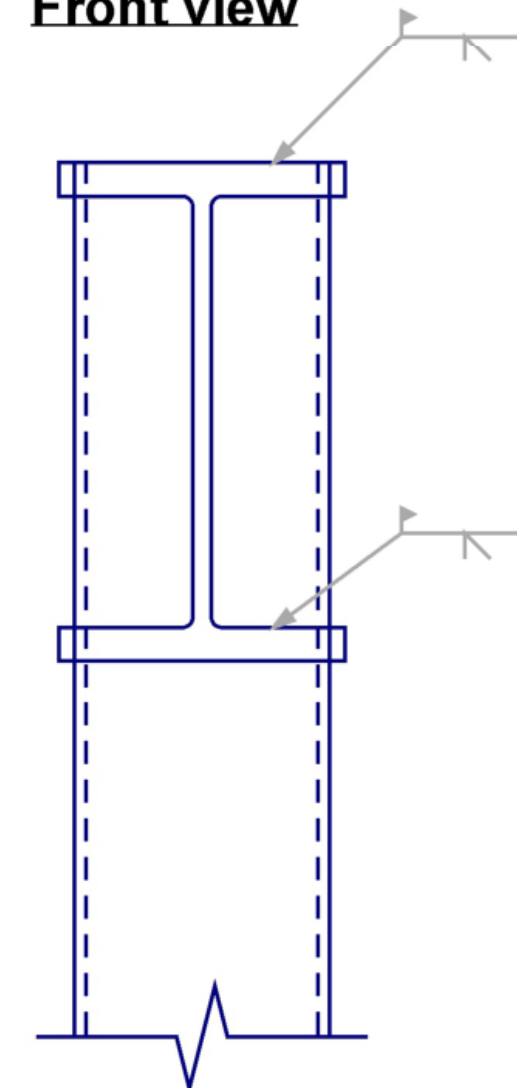
Lateral view



NOTES:-

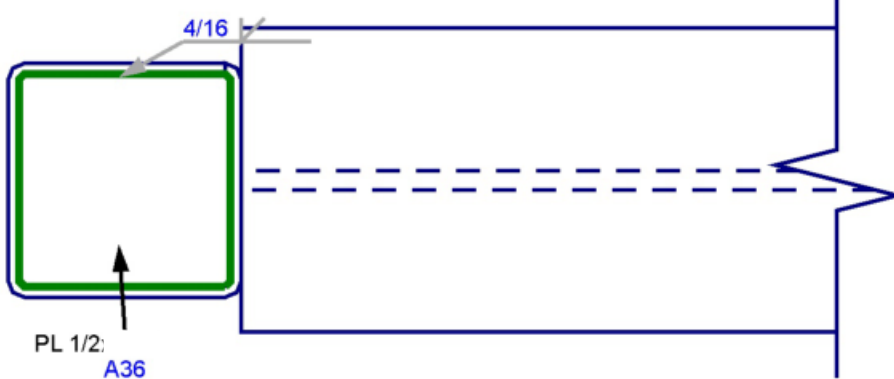
- 1) REFER TO **CONNECTION - 7.1 FOR SHEAR** CONNECTION DETAILS.
- 2) DIAPHRAGM PLATE SIZES WILL BE
FOR HSS6x6x5/16" - 7x7x1/2" THICK
FOR HSS8x8x5/16" - 9x9x1/2" THICK
FOR HSS10x10x1/2" - 11x11x1/2" THICK,
- 3) REFER TO TYPICAL MOMENT CONNECTION BELOW.

Front view

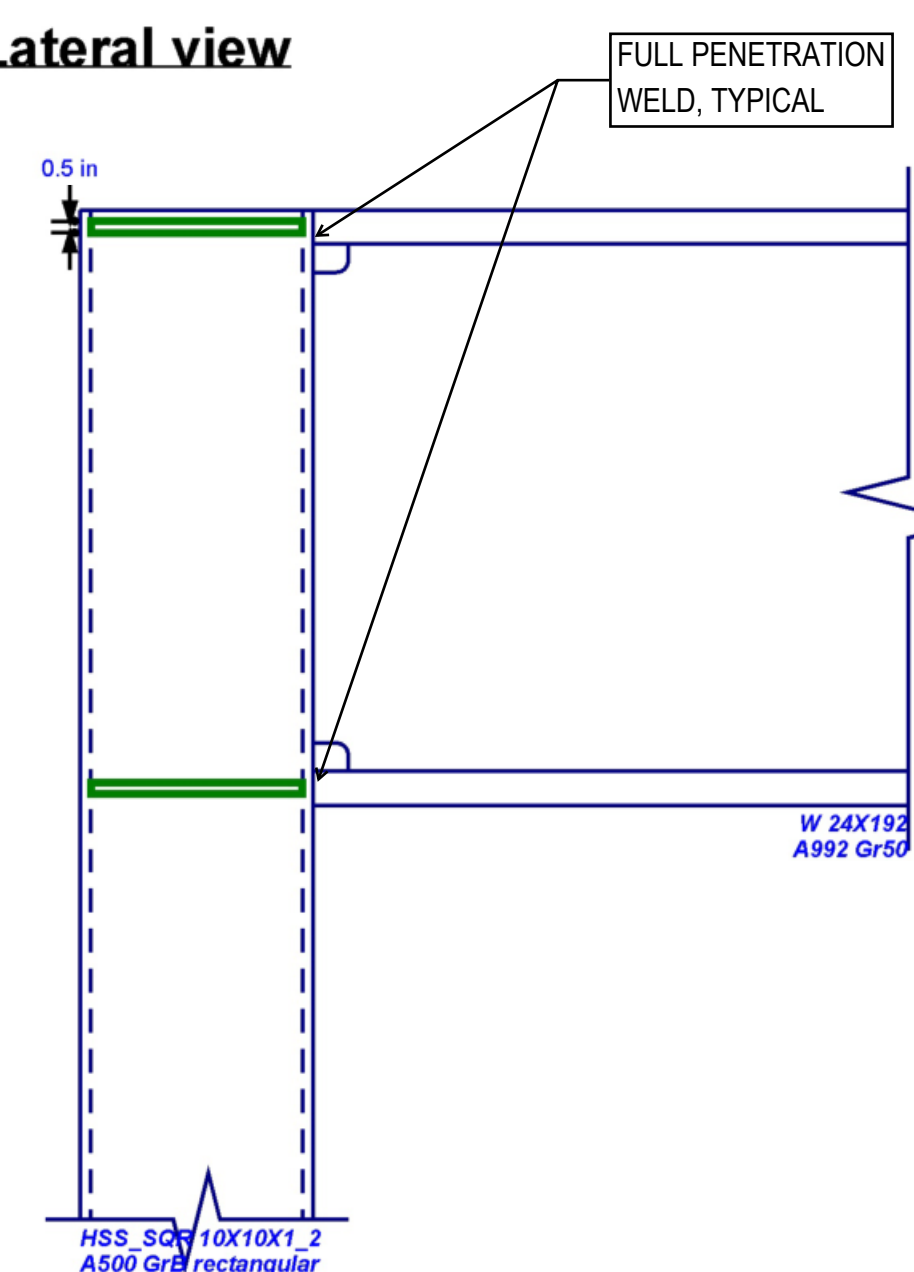


CONN.ID - 11

W18x143 STEEL BEAM TO HSS10x10x1/2" COLUMN - MOMENT CONNECTION
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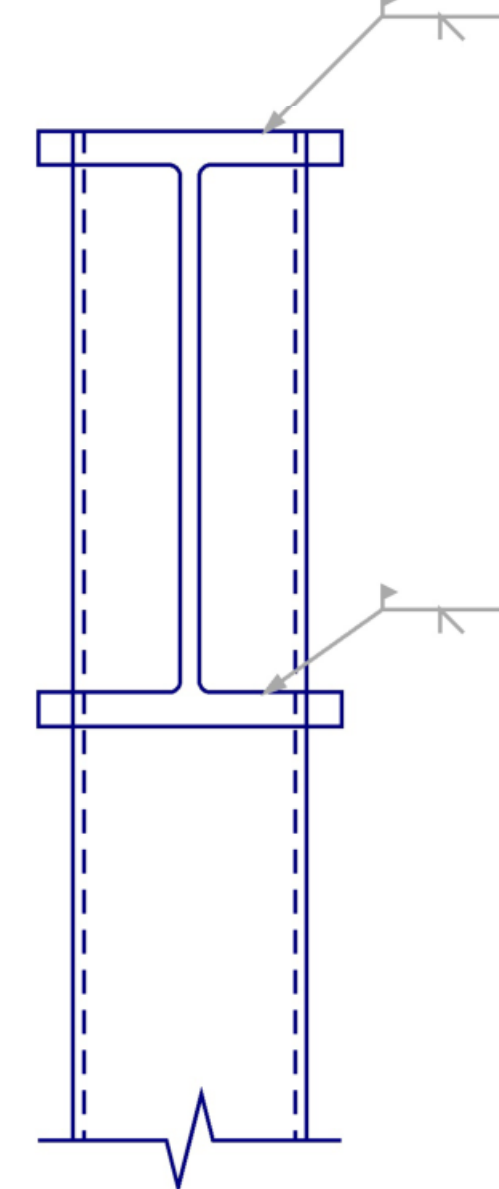
Lateral view



NOTES:-

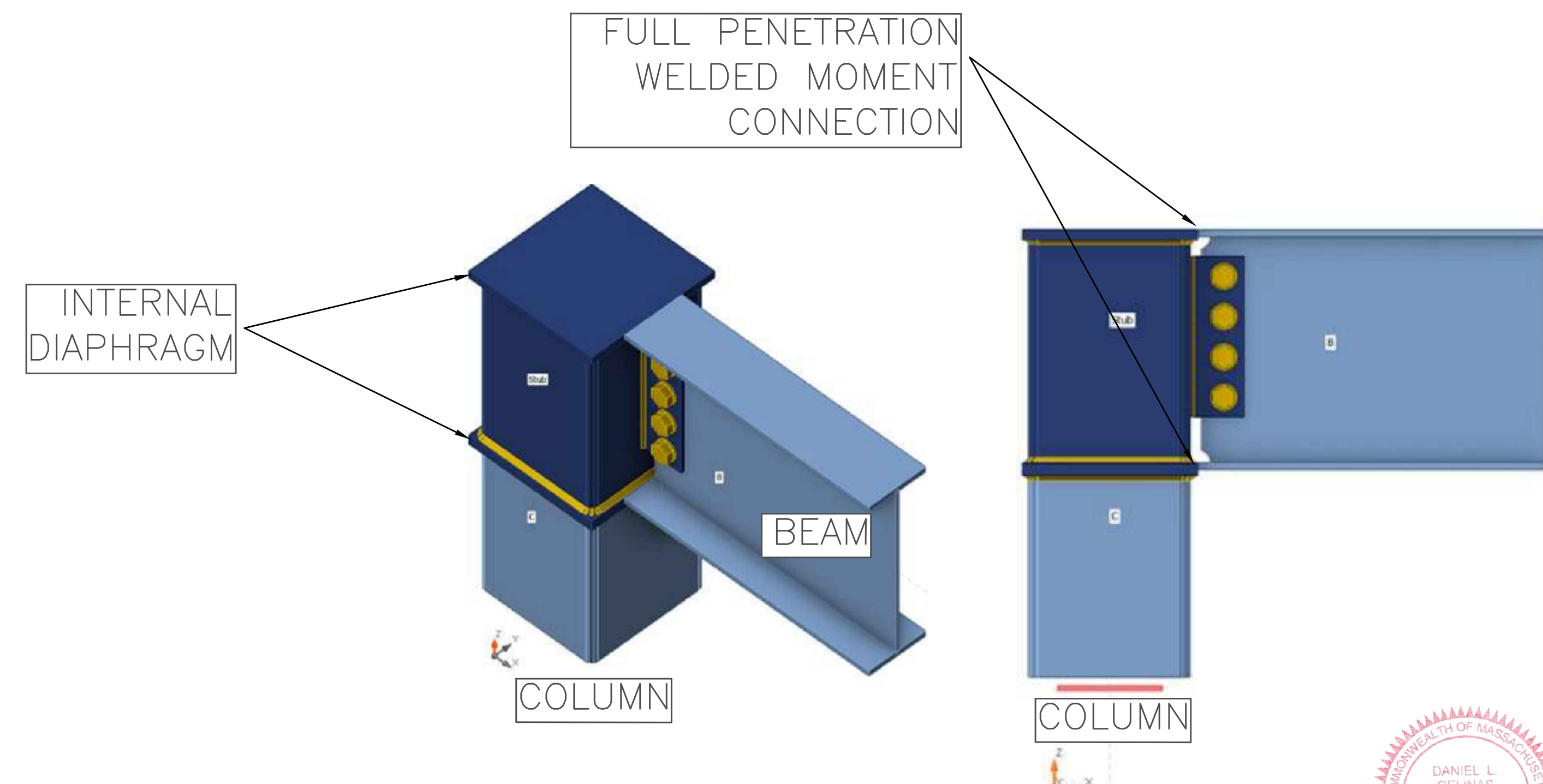
- 1) REFER TO **CONNECTION - 9.1 FOR SHEAR** CONNECTION DETAILS.
- 2) DIAPHRAGM PLATE SIZES WILL BE
FOR HSS6x6x5/16" - 7x7x1/2" THICK
FOR HSS8x8x5/16" - 9x9x1/2" THICK
FOR HSS10x10x1/2" - 11x11x1/2" THICK,
- 3) REFER TO TYPICAL MOMENT CONNECTION BELOW.

Front view

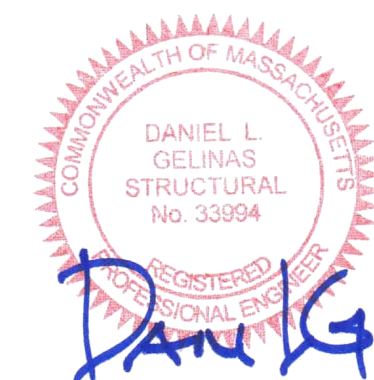


CONN.ID - 12

W24x192 STEEL BEAM TO HSS10x10x1/2" COLUMN - MOMENT CONNECTION



TYP. MOMENT CONNECTION



Job 25729
October 17, 2025

JOB NO.	REV	DATE	DESCRIPTION
	0	10.17.2025	ISSUED FOR CONSTRUCTION
SHEET NO.	25729		

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