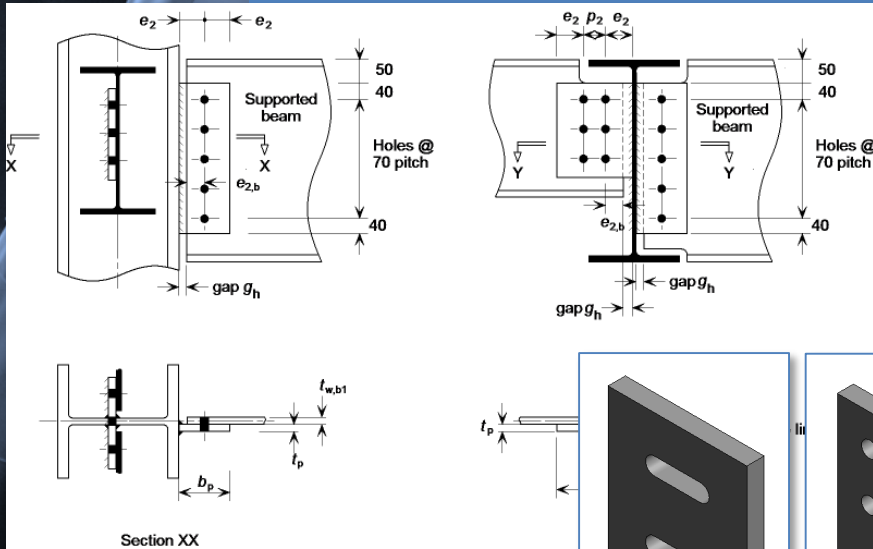


ARCH 2431. Building Technology III

Building Information Modeling with Revit

Steel Connections *#5 Fin & Splice Plates* *Notched Beams*

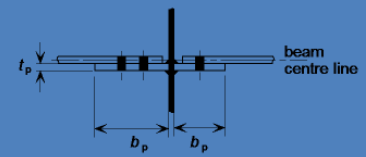
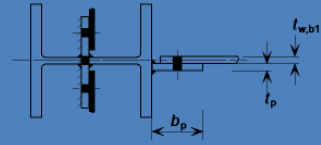
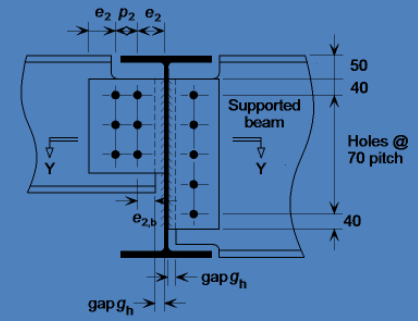
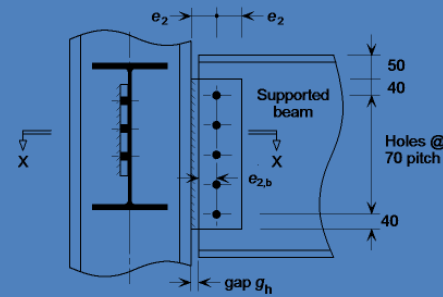
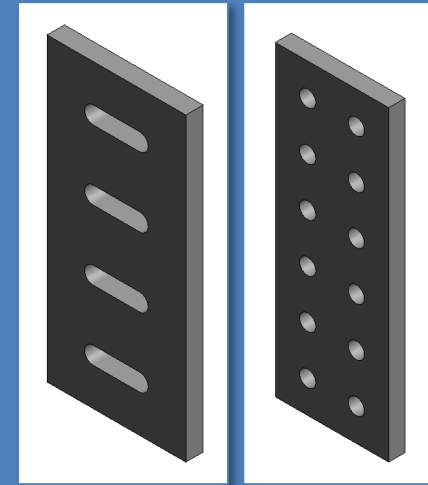


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Fin & Splice Plate Connections



Section XX

Section YY

- Connection Details
- Fin Plate & Splice Plate Connections
- Notched Beam to Beam Connection
- Updated Project Sheet

Fin Plates & Splice Plates for Column Connections

• Connection Details

• Fin Plate & Splice Plate Connections

• Notched Beam to Beam Connection

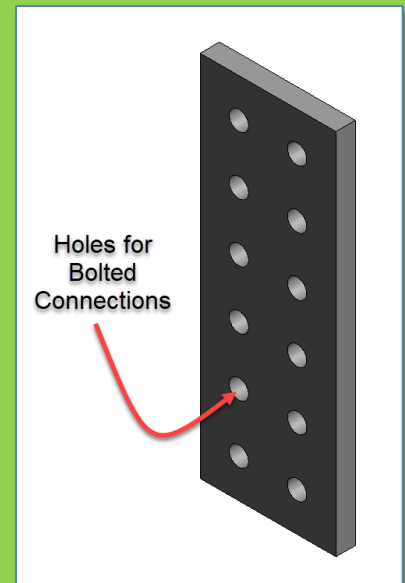
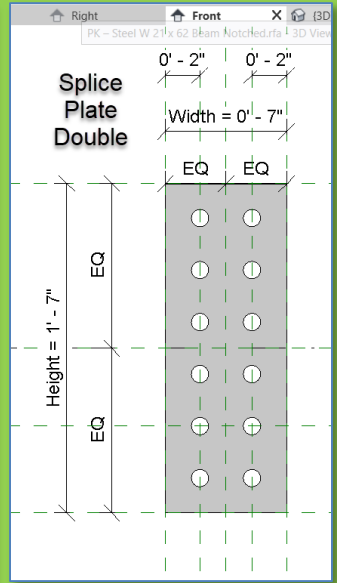
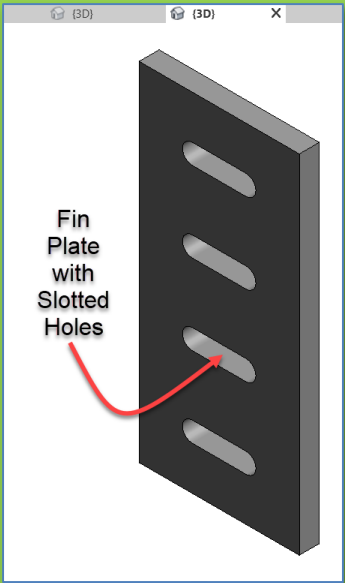
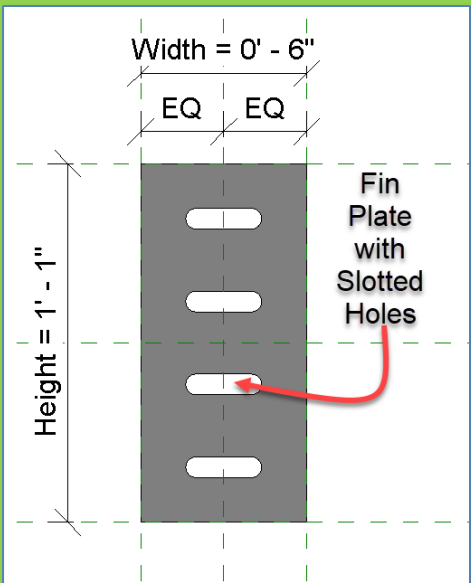
• Updated Project Sheet

Fin Plate

- Welded to columns or beams for connecting beams
- 3/8" Radius Slotted holes allow for horizontal adjustment

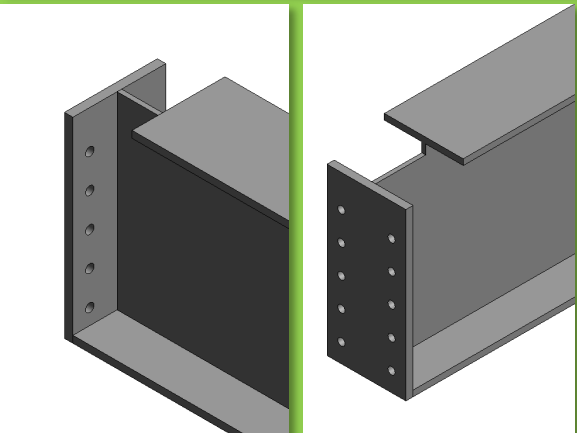
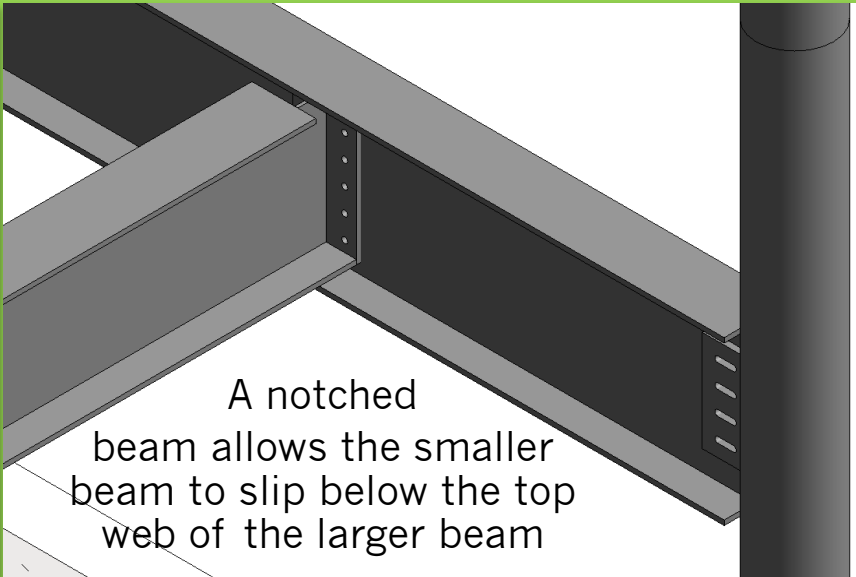
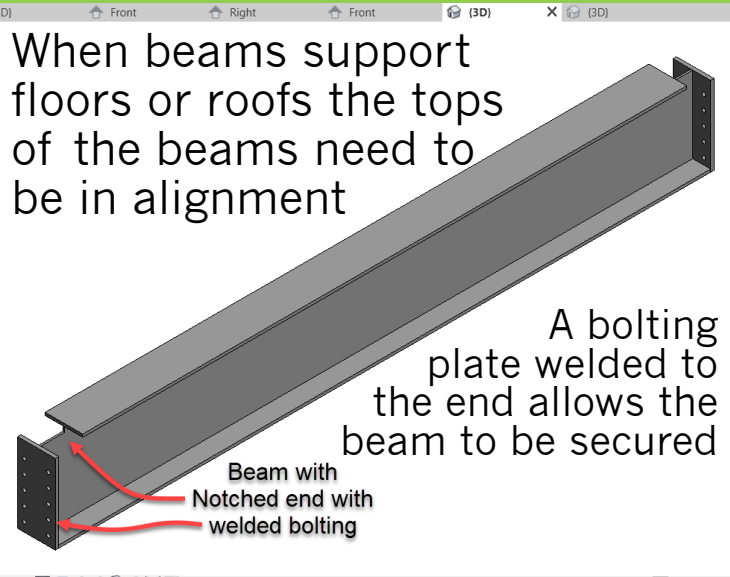
Splice Plates

- Used for vertical connections from column to column
- 3/8" Radius Holes allow for bolted connections



Notched Beam with Bolting Plate

- Connection Details
- Fin Plate & Splice Plate Connections
- Notched Beam to Beam Connection
- Updated Project Sheet



Use W 18 x 119 Notched Beam with Bolting plate

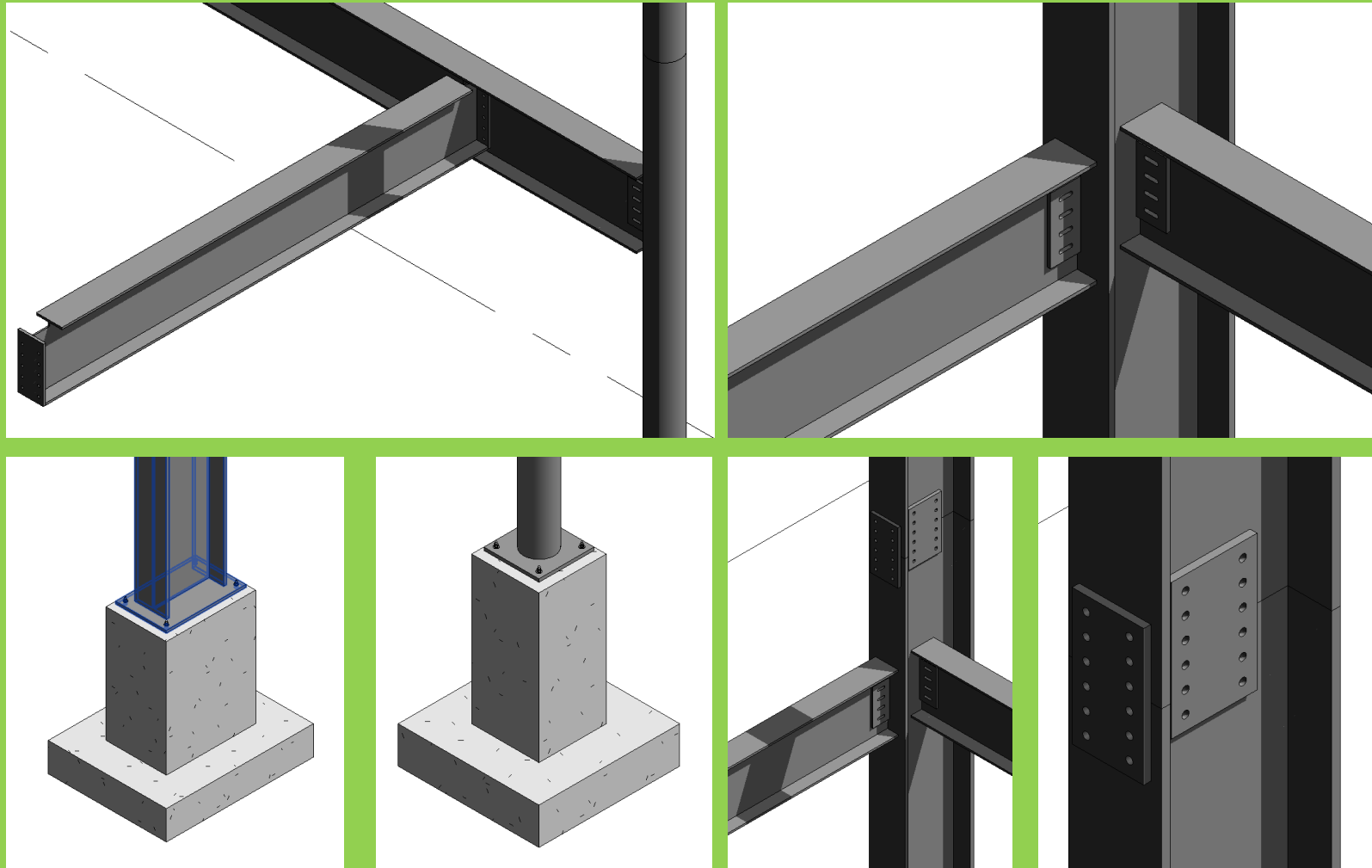
Designation Imperial (in x lb/ft)	Depth h (in)	Width w (in)	Web Thickness t_w (in)	Flange Thickness t_f (in)	Sectional Area (in ²)	Weight (lb/ft)	Static Parameters			
							Moment of Inertia I_x (in ⁴)	I_y (in ⁴)	Elastic Section Modulus S_x (in ³)	S_y (in ³)
W 27 x 178	27.8	14.09	0.725	1.190	52.3	178	6990	555	502	78.8
W 27 x 161	27.6	14.02	0.660	1.080	47.4	161	6280	497	455	70.9
W 18 x 119	19	11.27	0.655	1.060	35.1	119	2190	253	231	44.9
W 18 x 106	18.7	11.2	0.590	0.940	31.1	106	1910	220	204	39.4
W 18 x 97	18.6	11.15	0.535	0.870	28.5	97	1750	201	188	36.1

Depth = 19"
Web = .655"

Width = 11.27"
Flange = 1.060"

Isometric Views of the Project File

- Connection Details
- Fin Plate & Splice Plate Connections
- Notched Beam to Beam Connection
- Updated Project Sheet



Updated Sheet - Add Additional Sheets

- Connection Details
- Fin Plate & Splice Plate Connections
- Notched Beam to Beam Connection
- Updated Project Sheet

The drawing includes several views of a steel connection:

- Level 2 - Spliced Assembly:** A plan view showing two vertical columns (1 and 2) and two horizontal beams (A and B) with dimensions and section markers.
- Isometric View:** A 3D perspective view of the connection.
- Isometric 3/4:** A 3/4 isometric view of the connection.
- Front View:** A side elevation view of the connection.
- Right View:** A side elevation view from the right side of the connection.
- Perspective:** A shaded 3D perspective view of the connection.

On the right side of the drawing, there is a title block containing:

- A smiley face icon.
- A line for "STUDENT NAME HERE".
- Five sets of fields for "Consulted" (Name, Address, Phone, Email).
- A table with columns "No.", "Title/Rev.", and "Date".
- Project information: "PROFESSOR KING STEEL CONNECTIONS PLANS, ELEVATIONS AND ISOMETRICS".
- Fields for "Project Number", "Issue Date", "Scale", "Drawing No.", and "Checked".
- The drawing number "S101" and a scale of "1/8\" = 1'-0\"".
- A vertical label "DATE: 11/14/13" on the far right.

- Create additional sets of 4 views of connections & develop details
- Annotate with Notes & Leaders, Dimensions, Hatch & Detail Items

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Steel Connections
#5 Fin & Splice Plates, Notched Beams



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