

ARCH 2431. Building Technology III

Building Information Modeling with Revit

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



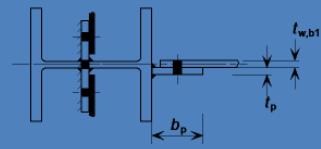
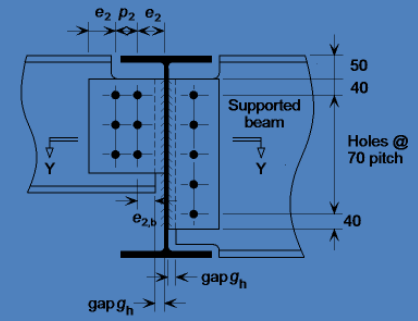
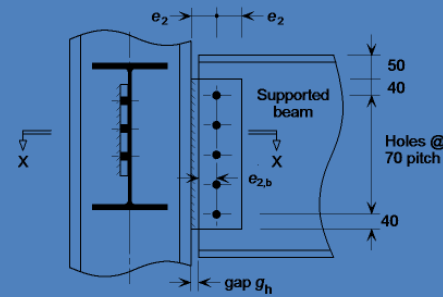
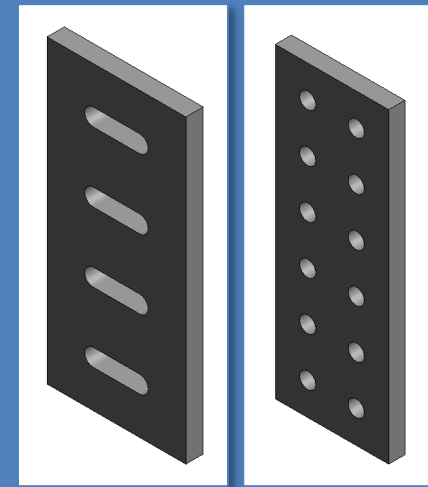
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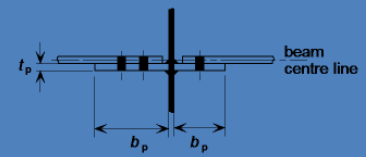
Pking@CityTech.Cuny.Edu

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

Fin & Splice Plate Connections



Section XX



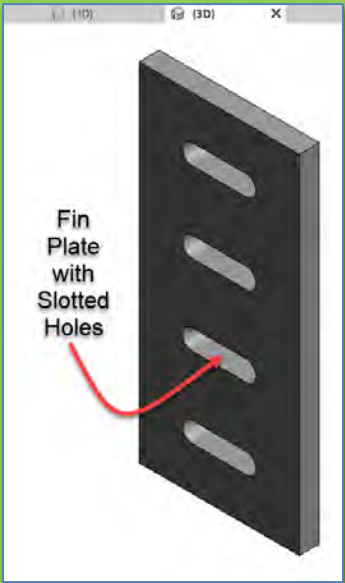
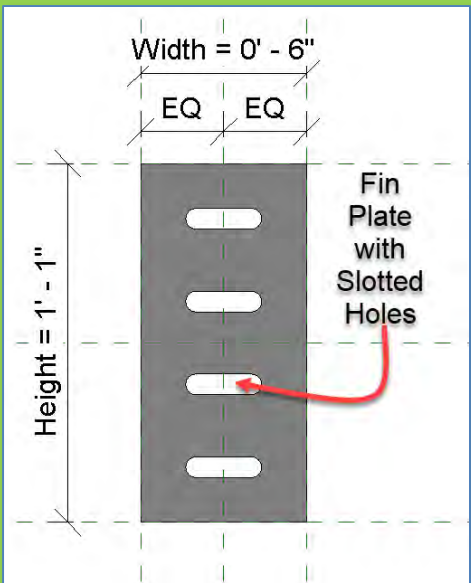
Section YY

Fin Plates & Splice Plates for Column Connections

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

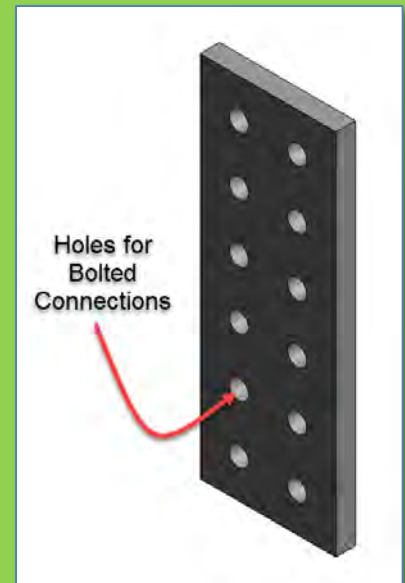
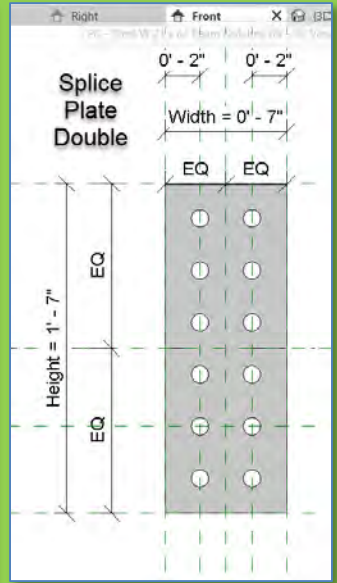
Fin Plate

- Welded to columns or beams for connecting beams
- Slotted holes allow for horizontal adjustment



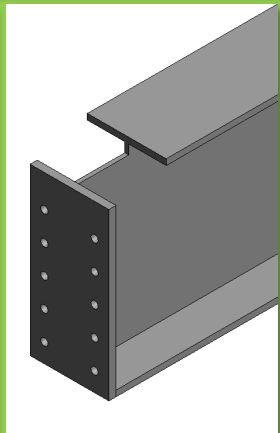
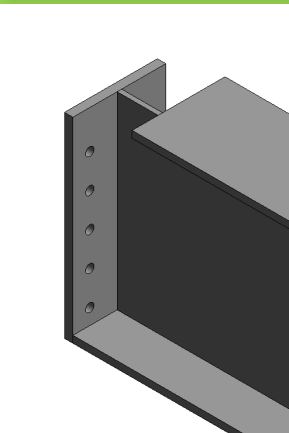
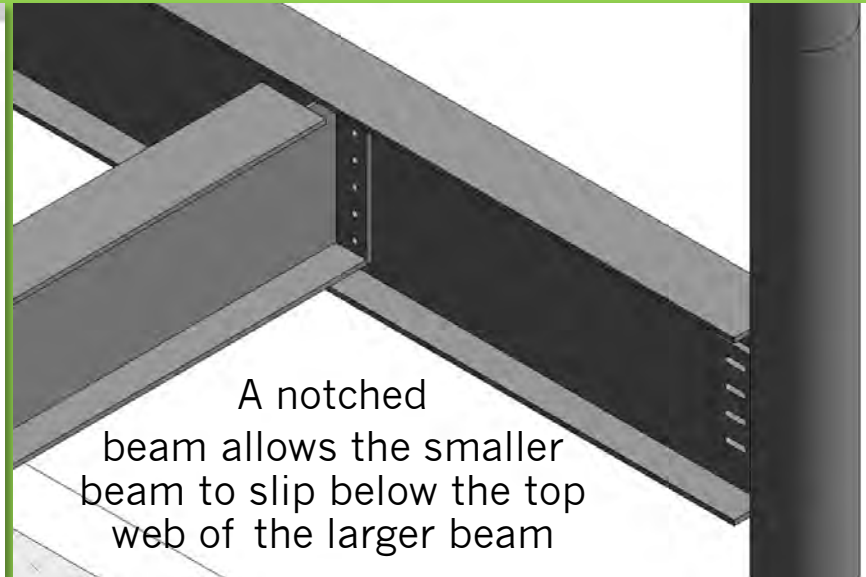
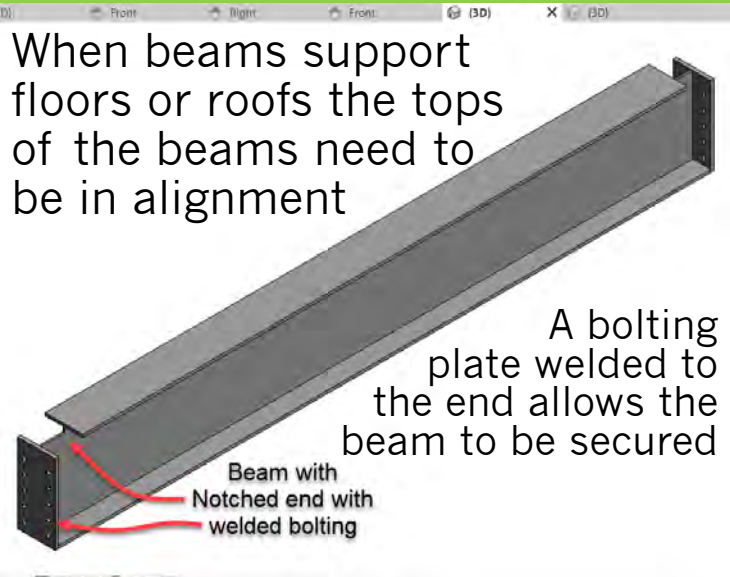
Splice Plates

- Used for vertical connections from column to column
- Holes allow for bolted connections



Notched Beam with Bolting Plate

- Connection Details
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Use W 18 x 119 Notched Beam with Bolting plate

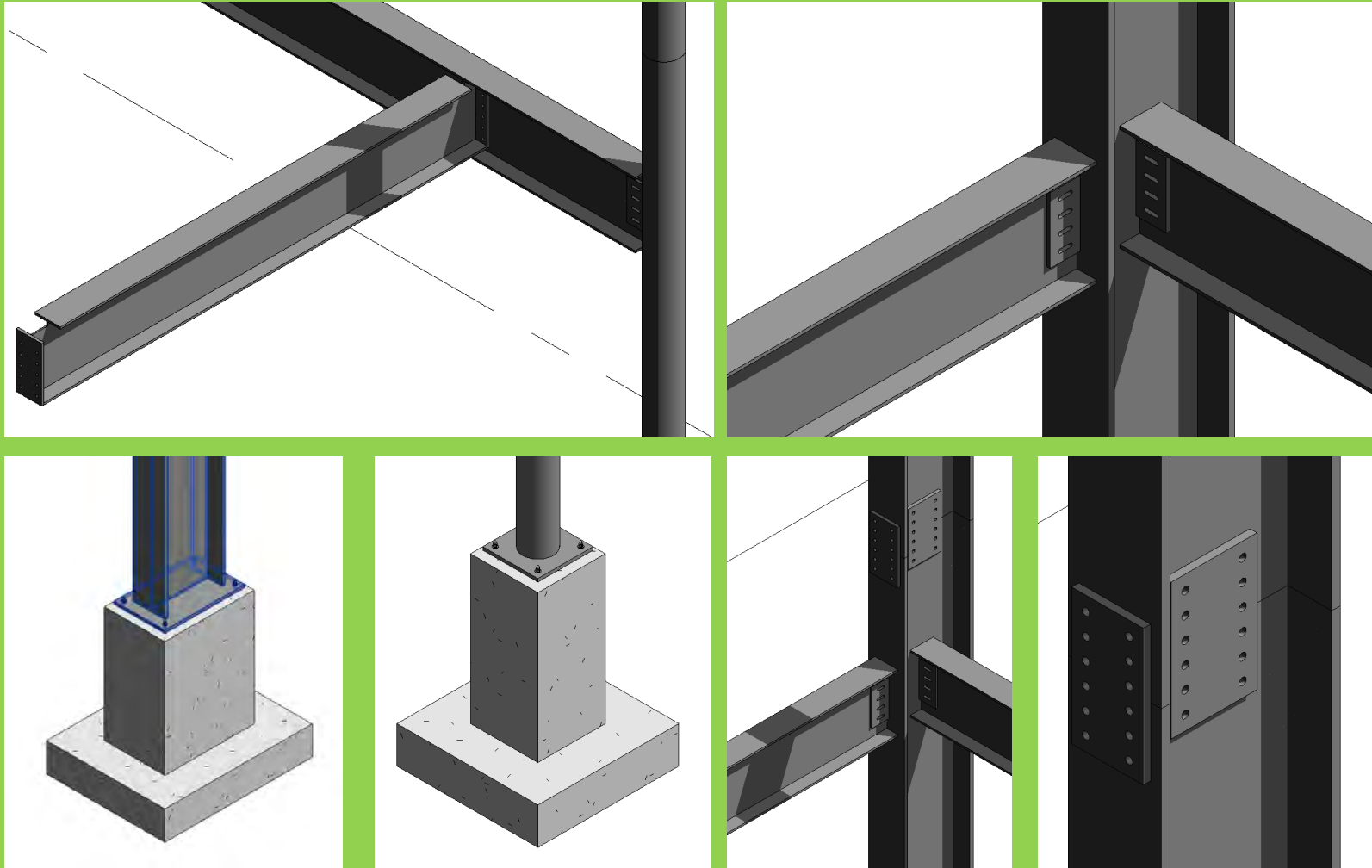
Designation Imperial (in x lb/ft)	Depth h (in)	Width w (in)	Web Thickness t _w (in)	Flange Thickness t _f (in)	Sectional Area (in ²)	Weight (lb/ft)	Static Parameters			
							Moment of Inertia I _x (in ⁴)	I _y (in ⁴)	S _x (in ³)	S _y (in ³)
W 27 x 178	27.8	14.09	0.725	1.190	52.3	178	6990	555	502	78.8
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 consists of several views of a steel connection. The top row shows a plan view on the left with dimensions and callouts (A, B, 1, 2), followed by two isometric views. The bottom row shows two elevation views on the left with callouts (1, 2, A, B) and another isometric view on the right. The right side of the drawing features a title block with a smiley face icon, a line for 'STUDENT NAME HERE', a large blank area for notes, a table with columns 'No.', 'Description', and 'Date', and a section for 'PROFESSOR KING STEEL CONNECTIONS PLANS ELEVATIONS AND ISOMETRICS'. At the bottom of the title block, the sheet number 'S101' is displayed.

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

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