

SUITABLE FOR
EI30 Concealed Frame
EI30 Shadow-Gap
EI30 Visible Trim
NFR Concealed Frame
NFR Shadow-Gap
NFR Visible Trim

Self-supporting Head

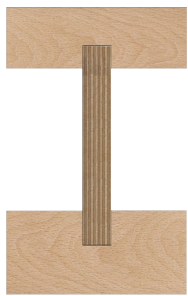
SEL-PRT-00039 | Rev. 2

Part 2

Enhancement Installation



COMPONENTS



Self-supporting I-Beam



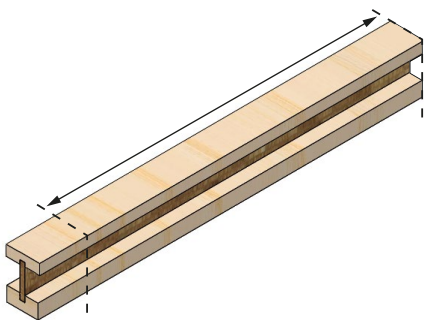
Self-supporting Stud

Follow standard Enigma Frame Installation Instructions to construct your studwork, however, please note:

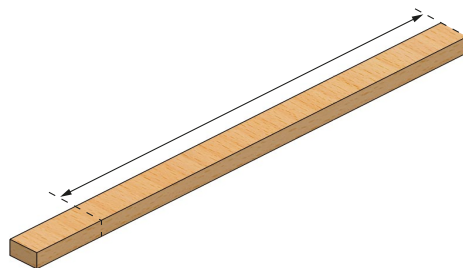
Studwork opening width must be **+94mm**
(To allow for studs)

Studwork opening height must be **+220mm**
(To allow for Self-Supporting I-Beam)

INSTALLATION STEPS



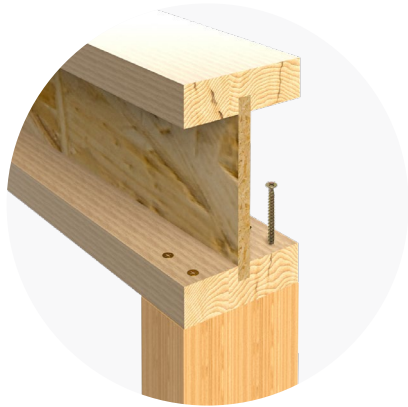
1. CUT 'I-BEAM' TO WIDTH
Cut down the **Self-Supporting I-Beam** to the structural opening width calculated above.



2. CUT 'STUDS' TO HEIGHT
Cut down both **Self Supporting Studs** to the structural opening height **-220mm** (to allow for I-Beam)



3. PREPARE 'I-BEAM'
Pilot drill clearance holes in the **Self Supporting I-Beam** at each end. (x8 in total)



4. PREPARE 'I-BEAM'

Screw fix the **Self Supporting I-Beam** to the **Self Supporting Stud** using the **No.10 × 100mm Screws** provided.



5. INSTALL ASSEMBLY

Fix the **Self Supporting Studs** to the surrounding studwork using appropriate fixings.

I-BEAM MODIFICATION OVERVIEW

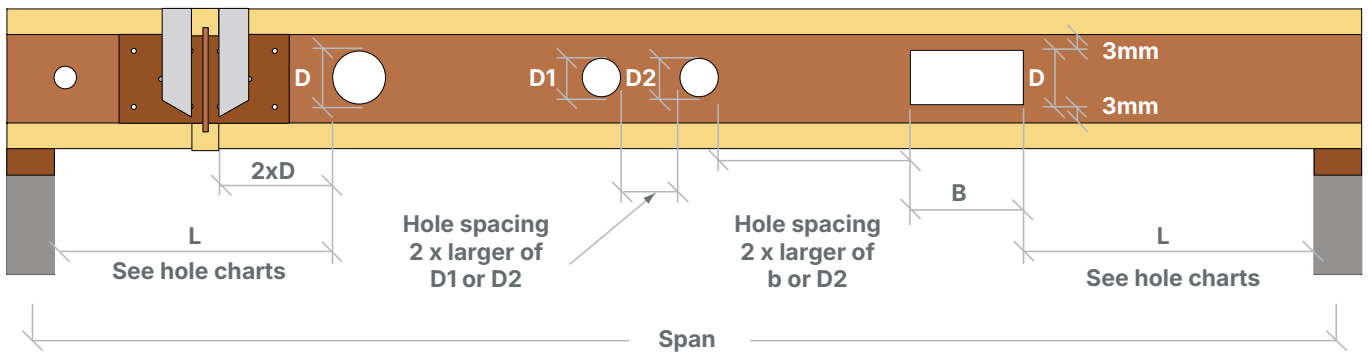
The maximum size of a service hole that can be cut in the web of a I-Beam at a particular location depends on the specific load configuration on the joist.

The table below gives the **minimum required distance, L (mm), from inside face of support to nearest edge of hole** for uniformly loaded, simply supported joists under standard domestic loading of **0.75kN/m² dead load and 1.5kN/m² imposed load** at up to 600mm centres.

IMPORTANT Service holes **MUST NOT BE CUT** in the joist flange.

Joist Depth (mm)	Joist Span (mm)	Minimum Required Distance Domestic Applications (Inside face of Support to nearest edge of Hole)							
		50mm		75mm		100mm		125mm	
		●+■	■	●+■	■	●+■	■	●+■	■
220	3000	300	300	361	656	721	838	838	1159
220	3500	300	300	500	824	895	1024	1024	1375
220	4000	300	300	651	1001	1078	1216	1216	1596
220	4500	300	449	813	1186	1268	1415	1415	1819
220	4890	300	566	945	1334	1420	1574	1574	1996

I-BEAM MODIFICATION CONDITIONS

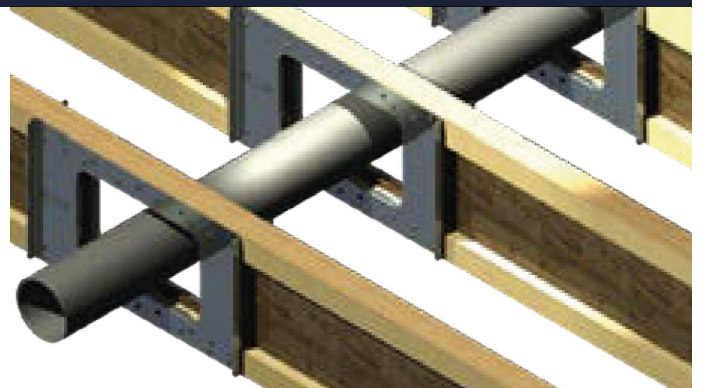


1. Calculated for joists in intermediate domestic floors ($G_k=0.75\text{kN/m}^2, q_k=1.5\text{kN/m}^2, Q_k=2\text{kN}$) at 600mm centres.
2. Where more than one hole is to be cut, the min. spacing between holes must be 2 times the width of the largest hole.
3. The rectangular hole width B should not exceed $1.5xD$.
4. Cut all holes carefully, do not overcut and do not cut flanges.
5. Where holes are required in rim and header joists of timber frame construction refer to the building designer.
6. Plastic plumbing is ideal with I-Beam joists. Where copper plumbing is to be used, careful consideration of the sequence of pipe installation is required.
7. The bearing support length used for this table is 45mm.
8. A 35mm hole may be drilled anywhere on the centre line of the web material provided there is a minimum of 35mm from the edge of the hole to the end of the joist and it is not directly over a support

REINFORCING PLATES

For guidance on using reinforcing plates for large and highly loaded applications please contact Selo Technical Support:

020 3880 0339



For help and advice with your installation contact our technical team:

Installation support **020 3880 0339**

Email sales@enigmapocketDoors.com

