

MULTIPLE MEMBER WOOD BEAMS

CONNECTION DETAILS

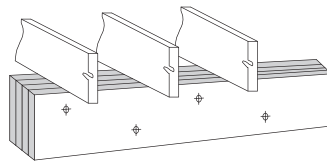
The HeadLOK Structural Wood Fastener is a code-compliant screw with a variety of uses in framing and construction including the joining multiple plies of dimensional lumber for headers and beams. When installed as instructed in this bulletin, these fasteners can be used to replace nails and bolts prescribed by code or specified by an engineer.



LOAD TYPE

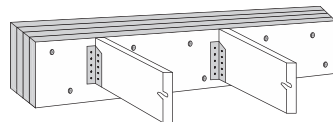
Top Loaded Beam:

Floor or ceiling joists rest on top of the beam.

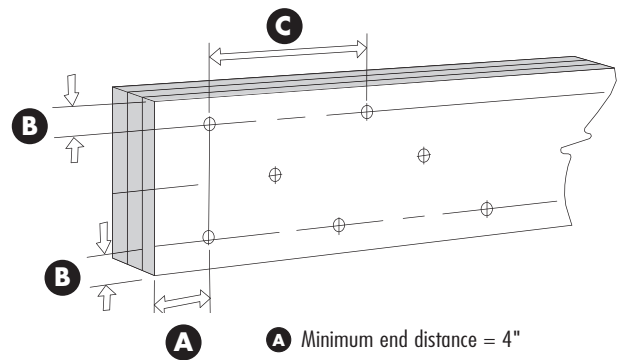


Side Loaded Beam:

Floor joists are joined into the sides of the beam, typically using joist hangers.



SPACING REQUIREMENTS



- A** Minimum end distance = 4"
- B** Minimum edge distance = 1 1/2"
- C** On-center spacing = based on fastening pattern guide on reverse

INSTALLATION INSTRUCTIONS

- Choose the fastener length that ensures maximum thread engagement in the final ply without point passing through.
- Using fastening pattern on reverse, determine the appropriate fastener layout based on:
 - A. Load Type: Top or Side Loaded
 - B. Assembly Configuration: Assemblies A through C
 - C. Design Load, in pounds per lineal feet (plf) if Side Loaded Beam
- Using an impact driver or 1/2" low speed/high torque drill, install a row of two fasteners 4" from both ends of the beam.
- Install the remaining screws at the proper spacing in staggered rows along the face of the beam. Maintain the proper top and bottom edge distance.
- Drive the fastener until the washer head is flush to the surface. Do not overdrive.



Effective May 1, 2021. Please reference our website to ensure that you are using the most up to date version.

153 BOWLES ROAD, AGAWAM, MA 01001

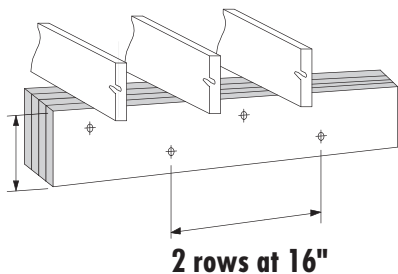
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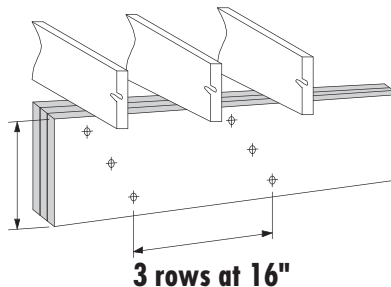
FASTENMASTER.COM

FASTENING PATTERNS FOR TOP LOADED BEAM

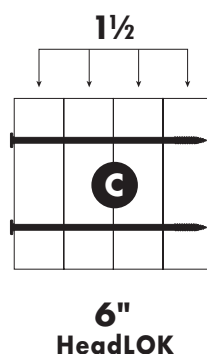
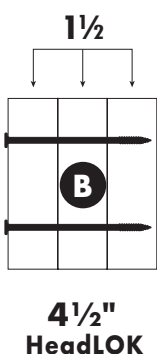
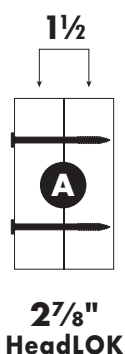
2x6 up to 2x10 beams



2x12 beams



FASTENING PATTERNS FOR SIDE LOADED BEAM



ALLOWABLE UNIFORM LOAD (plf) FOR DIMENSIONAL WOOD BEAMS ATTACHED USING HEADLOK

Fasteners Per Row	Spacing Between Rows (inches)	Assembly A			Assembly B			Assembly C		
		SPF (0.42)	D.Fir (0.50)	S.Pine (0.55)	SPF (0.42)	D.Fir (0.50)	S.Pine (0.55)	SPF (0.42)	D.Fir (0.50)	S.Pine (0.55)
2	24	300	360	420	220	270	310	200	240	280
	16	450	540	630	340	400	470	300	360	420
	12	600	720	840	450	540	630	400	480	560
3	24	450	540	630	340	400	470	300	360	420
	16	675	810	950	500	600	710	450	540	630
	12	900	1080	1260	670	810	940	600	720	840

- Allowable loads calculated using design values determined through individual and system testing to ICC-ES AC-233 and reported in ICC-ES Evaluation Report ESR-1078.
- Values listed reflect 100% stress level (CD=1.0). The designer may apply adjustment factors to increase or decrease these loads according to the most current National Design Specification for Wood Construction (NDS) based on conditions for each assembly.
- Table loads relate only to the capacity of the fastener to transfer shear loads between plies. Capacity of the beam may be less and should be checked against the NDS or prescriptive design in the appropriate IRC/IBC code.

- To minimize rotation, 6" wide dimensional wood beams may be side loaded only when loads are applied to both sides of the beam with the lesser loaded side bearing at least 25% of the overall design load.
- The loads in the table above assume that the fasteners may be installed in the weakest condition, where the greatest loads are applied to pointed side of the fastener.