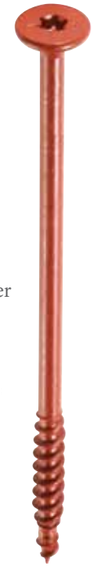
FlatLOK®
STRUCTURAL WOOD SCREW



FEATURES
- No predrilling
- Strip-out resistant #40 TORX® ttap® drive system
- Guaranteed corrosion resistance. ACQ approved
- Approved for single-sided installation
- Code compliant based on testing per ICC-ES AC233
- Free bit in every package

LENGTHS: 2 7/8", 3 1/2", 4", 4 1/2", 5", 6", 6 3/4"

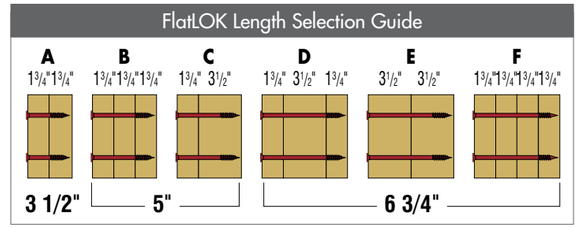
PACKAGING QUANTITIES
50 pc box, 250 pc bucket
500 pc bucket *(2 7/8" only)* 200 pc bucket *(6 3/4" only)*

DESCRIPTION
FlatLOK is designed for various multi-ply dimensional and engineered wood connections. FlatLOK is approved for single-sided installation. Not intended for use on exterior deck ledgers; FastenMaster LedgerLOK is designed specifically for this application.

MEET CODE. LOWER COST.
Meet Code: Tested and proven to meet manufacturers' requirements for single-sided installation of multi-ply LVL, LSL and PSL.
Lower Cost: Requires no predrilling, saving time and labor.

INSTALLATION PROCEDURE
FlatLOK should be installed using an impact driver or high torque 1/2" variable speed drill (minimum 18V if cordless). No predrilling is required when properly installed. Bring fastener flush with wood surface, do not overdrive.

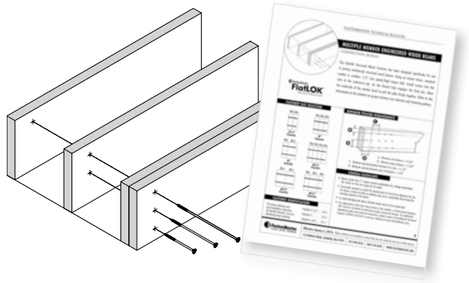
GUARANTEED CORROSION RESISTANCE
FlatLOK is guaranteed not to rust or corrode for the life of the project. FlatLOK is not recommended for use in saltwater applications.



Footnotes
- Fasteners should be installed in a staggered pattern at least 1 3/4" from top or bottom edge and 3 3/4" from either end of the beam

FlatLOK SKU Selection Guide			
LENGTH	**TYPICAL APPLICATIONS**	**PACKAGING QTY**	**SKU**
2 7/8"	2-Ply Roof Girder Trusses	50 pc box	FMFL278-50
		500 pc bucket	FMFL278B-500
3 1/2"	2-Ply LVL Beams	50 pc box	FMFL312-50
		250 pc bucket	FMFL312B-250
4"	Interior Corridor Ledgers	50 pc box	FMFL004-50
		250 pc bucket	FMFL004B-250
4 1/2"	3-Ply Roof Girder Trusses	50 pc box	FMFL412-50
		250 pc bucket	FMFL412B-250
5"	3-Ply LVL Beams	50 pc box	FMFL005-50
		250 pc bucket	FMFL005B-250
6"	4-Ply Roof Girder Trusses	50 pc box	FMFL006-50
		250 pc bucket	FMFL006B-250
6 3/4"	4-Ply LVL Beams	50 pc box	FMFL634-50
		200 pc bucket	FMFL634B-200

ADDITIONAL RESOURCES



FastenMaster Technical Bulletins
Our **Multiple Member Engineered Wood Beams technical bulletin,** which includes detailed installation instructions, fastening requirements and design loads, are available for download from our website.

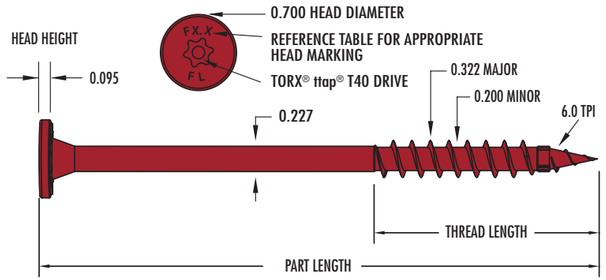
For additional technical data, refer to pages 49-52 of this catalog

ask the FastenMaster®

Ask the FastenMaster Installation Video
Our Ask the FastenMaster video series includes installation information for many of our products, including our **FlatLOK Structural Wood Screw video.** These can be viewed on our website.

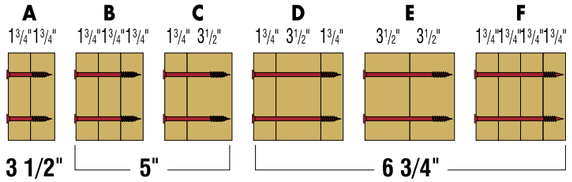
For technical support or to place an order: 800·518·3569 or www.FastenMaster.com

FlatLOK®
PRODUCT SPECIFICATION



FlatLOK Selection Guide			
Part Length	**Thread Length**	**Head Markings**	**Part Number**
2 7/8"	1 3/4"	F2.9	FMFL278
3 1/2"	2"	F3.5	FMFL312
4"	2"	F4.0	FMFL004
4 1/2"	2"	F4.5	FMFL412
5"	2"	F5.0	FMFL005
6"	2"	F6.0	FMFL006
6 3/4"	2"	F6.7	FMFL634

Table A Uniform Side Load Capacity (plf) Engineered Beam



Rows	Spacing	Detail A	Detail B	Detail C	Detail D	Detail E	Detail F
2	24	660	490	490	440	660	440
2	16	990	740	740	660	990	660
2	12	1320	980	980	880	1320	880
3	16	1480	1110	1110	990	1480	990
3	12	1980	1480	1480	1320	1980	1320
4	12	2640	1970	1970	1760	2640	1760

Table A Footnotes
- Values above calculated using individual FlatLOK properties taken from testing to ICC-ES Acceptance Criteria AC233
- Loads have not been increased to accommodate for NDS load duration or other factors

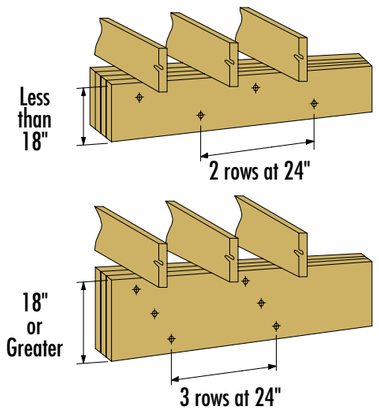
FLATLOK SAMPLE APPLICATIONS

Multiple-Ply Engineered Wood Beam Connection

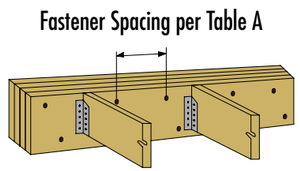
When joining together multiple plies of engineered wood together to act as a single beam, nailing patterns are typically aggressive, only satisfy up to three plies and require access to both sides. Through-bolts can be used to reduce the number of fasteners but require considerably more labor and cost to install.

The FlatLOK has been designed specifically to be installed from one side and to carry both top and side loads. Refer to the details below for common application guide lines. For more detailed design information, refer to Technical Evaluation Report, TER No. 1501-08 available at www.FastenMaster.com.

Top Loaded Beams



Side Loaded Beams



Footnotes
- Fasteners should be installed in a staggered pattern at least 1 3/4" from top or bottom edge and 3 3/4" from either end of the beam

Multiple-Ply Wood Truss Connection

Multiple roof trusses coupled together, commonly referred to as girder trusses, are used to address increased loads concentrated or uniformly applied to roof framing members. Nails are typically used to join these plies but can loosen during the truss installation process. Bolts are another option but require significantly more installation time and expense. The FlatLOK, installed from one side for up to four plies, makes this task easier and stronger than the other options. A design professional should be consulted to determine the proper fastener placement using the **Allowable Load Table B**. For more detailed information, consult the **TER 1501-08** available at www.FastenMaster.com.

Dimensional Lumber Selection Chart

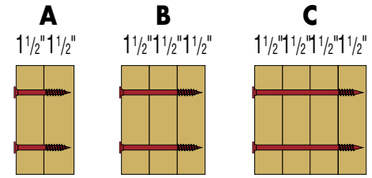


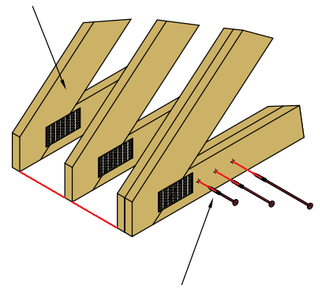
Table B Allowable Load Capacity (plf) Dimensional Beam

Spruce-Pine-Fir					Douglas-Fir					Southern Pine				
Rows	Spacing	Detail A	Detail B	Detail C	Rows	Spacing	Detail A	Detail B	Detail C	Rows	Spacing	Detail A	Detail B	Detail C
2	24	400	300	270	2	24	520	390	350	2	24	580	430	390
2	16	600	450	400	2	16	780	580	520	2	16	870	650	580
2	12	800	600	530	2	12	1040	780	690	2	12	1160	870	770
3	16	900	670	600	3	16	1170	870	780	3	16	1300	970	870
3	12	1200	900	800	3	12	1560	1160	1040	3	12	1740	1300	1160
4	12	1600	1200	1070	4	12	2080	1550	1390	4	12	2320	1730	1550

Table B Footnotes
- Values above calculated using individual FlatLOK properties taken from testing to ICC-ES Acceptance Criteria AC233
- Loads have not been increased to accommodate for NDS load duration or other factors

Multi-Ply Truss Connection

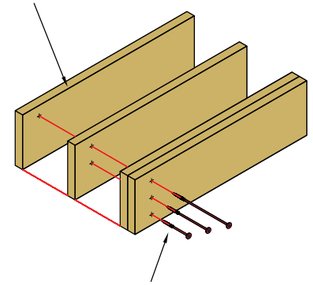
Metal Plated Roof Trusses



FlatLOK fastening pattern per truss manufacturer

Multi-Ply Dimensional Lumber Beam

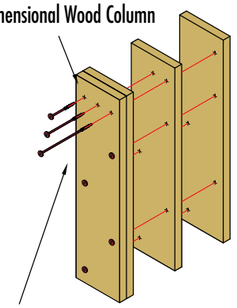
Dimensional Wood Beams



FlatLOK fastening pattern per building designer

Multi-Ply Dimensional Lumber Column

Dimensional Wood Column



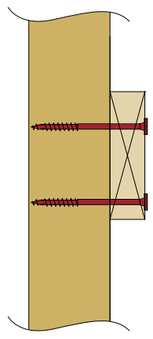
FlatLOK fastening pattern per building designer

For technical support or to place an order: 800·518·3569 or www.FastenMaster.com

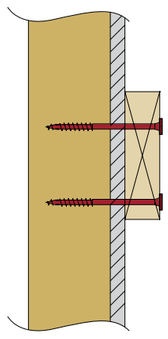
Ledger to Stud Configurations

Ledgers are used for interior construction to support corridor floor spans and stairwell landings. In most cases these are installed over layers of gypsum to achieve the appropriate fire rating and then into vertical studs. These unique conditions require a tested solution that considers both the cantilevered portion of the fastener and narrower edge of the framing used to make this connection. The FlatLOK has been evaluated and loads determined for this specific application when installed in accordance with the details below. For more detailed design information, refer to Technical Evaluation Report, TER No. 1611-01 available at www.FastenMaster.com.

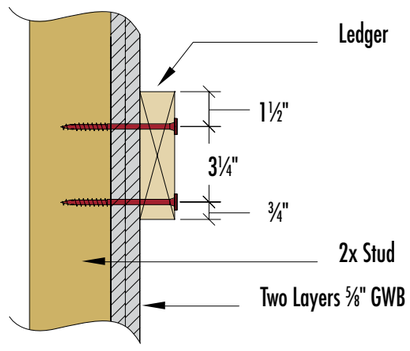
2 x 6 Ledger



No Gypsum

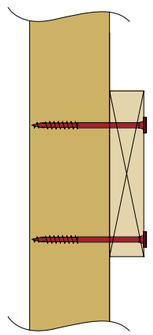


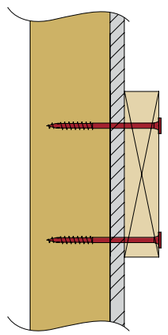
1 Large Gypsum

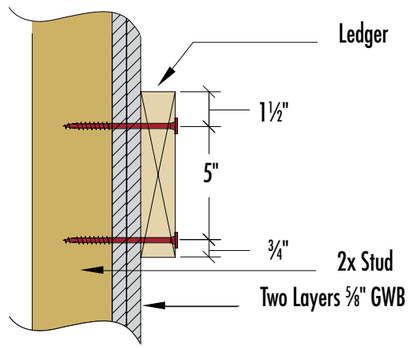


2 Large Gypsum

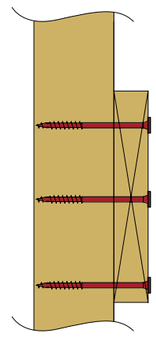
2 x 8 Ledger

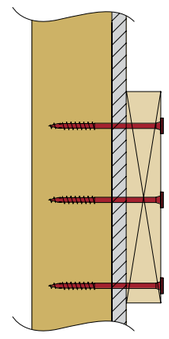






2 x 10 Ledger





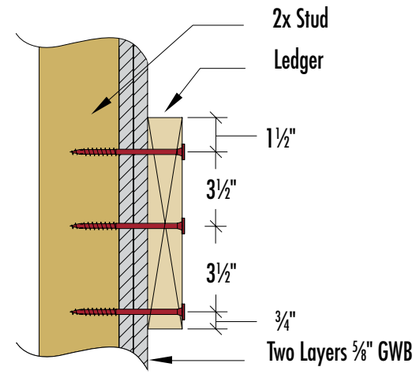


Table C Allowable Load per Stud Connection (lbs)							
Approved FlatLOK Length					Wood Species		
4"	4-1/2"	5"	Ledger Size	Fasteners per Stud	SPF	D. Fir	S. Pine
•	•	•	2 x 6	2	360	510	795
	•	•	2 x 8	2	580	735	900
		•	2 x 10	3	805	860	1075

Footnotes

- Values taken from Technical Report TER #1611-01
- Loads apply where ledger is applied up to two layers of 5/8" gypsum
- Additional fasteners and closer patterns other than those listed not allowed as they may induce splitting
- Where ledger and stud materials differ in species, use the lower density wood values

For technical support or to place an order: 800·518·3569 or www.FastenMaster.com