STRUCTURAL FRAMING SYSTEM

FastenMaster

FrameFAST™

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System Overview

In 1998 FastenMaster invented the TimberLOK which established a whole new category of fasteners, the structural wood screw. For over twenty years, FastenMaster has continued to deliver innovative structural wood-to-wood fastening solutions that increase installation speed and safety. Our continued pursuit of innovation is driven by a relentless commitment to providing solutions for the professional builder. This Pro Driven focus is why FastenMaster is the trusted brand of professional contractors and structural design engineers.

The FrameFAST Structural Framing System by FastenMaster is designed to drive jobsite productivity. FrameFAST is a better way to make critical connections along the continuous load path. One screw, one tool, and three interchangeable heads replace a variety of clips, straps, and ties used to transfer forces from one framing member to the next.

Features & Benefits

- Installs 5x faster than traditional connectors[1]
- 6" FrameFAST screws replace commonly used framing clips, straps, and ties
- 3 Interchangeable heads accommodate a variety of structural connections
- Patented delivery system ensures correct installation angle and offset every time
- Eliminates ladders, nail guns and hoses
- Code compliant across USA and Canada

Allowable design values for all continuous load path applications can be found in our published evaluation reports at fastenmaster.com. These reports, based on independent accredited third-party testing to ASTM and ICC-ES standards, can be used by design professionals to specify FrameFAST or substitute for existing connections.

Footnote 1: Based on a side-by-side time study comparing the installation of FrameFAST versus traditional hurricane ties when securing roof trusses to wall plates in a wood framed structure.

Increases Installation Speed

FrameFAST installs 5x faster than traditional connectors. No need to position a ladder and haul heavy tools up and down. With FrameFAST the installer simply loads a FrameFAST screw, positions the tool, and drives.

One Screw. No Decisions.

The system utilizes 6" FrameFAST screws for a variety of structural connections. This greatly reduces jobsite errors by eliminating the need to choose the correct fastener for each connection and provides for easier inspection.

Accurate and Consistent

The patented FrameFAST delivery system ensures accurate installation of the FrameFAST screw. Three application specific installation heads install the screw at the correct angle, precise offset, and proper depth to optimize thread engagement. These three attributes are critical to the strength and integrity of the connection.

Reduces Safety Hazards

The FrameFAST system enables builders to make these connections standing safely on the floor. By eliminating the need for ladders and pneumatic nailers, safety hazards that lead to trips, falls, and other injuries are significantly reduced.

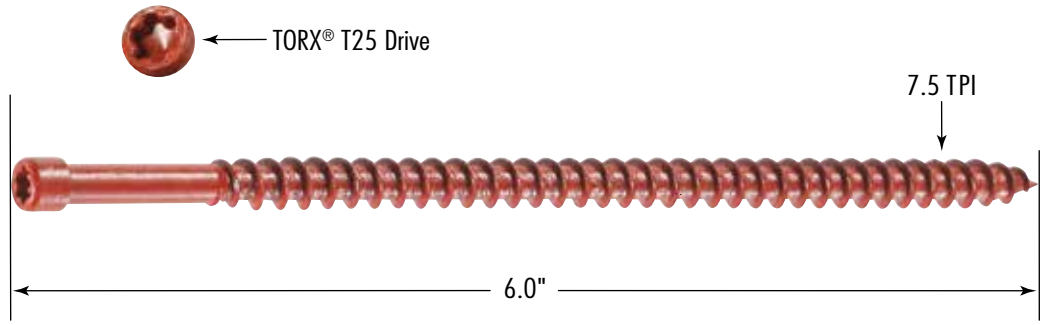
Code Compliant

The FastenMaster FrameFAST System provides a code compliant solution that eliminates the need for commonly used ties, clips and straps on many projects. Supporting documentation, including evaluation reports and engineer sealed documents specific to each connection, are available at fastenmaster.com.

FRAMEFAST SYSTEM

The FrameFAST Structural Screw

The 6" FrameFAST structural screw is engineered to provide superior uplift and lateral strength. Made of hardened steel, the FrameFAST screw is code compliant throughout the United States and Canada.



The FrameFAST Tool

With both corded and cordless power options, it's easy to choose the FrameFAST tool that's right for any crew.
The corded tool runs off a standard power supply, while the cordless options include high-torque Milwaukee or DEWALT drivers that install up to 200 screws per charge.

Cordless DEWALT

Cordless Milwaukee

Corded Milwaukee

FrameFAST Product Offerings

Fastener	SKU
6" Fastener Structural Framing Screw 200pc box (with Torx Plus Drive Bit)	FMFF006-200

Tool Description	SKU
FrameFAST Tool	FMFFTOOL-T2TP
FrameFAST Cordless (with Milwaukee Drill)	FMFFTOOL-T2TP-MILC
FrameFAST Cordless (with DEWALT Drill)	FMFFTOOL-T2TP-DWC

Additional Heads	SKU
Truss to Top Plate Head	FMFFHEAD-T2TP
Stud to Plate Head	FMFFHEAD-S2P
Plate to Rim Head	FMFFHEAD-P2R

All FrameFAST Tools include (2) replacement Torx Plus drive bits and the FrameFAST Truss-to-Top-Plate head. Cordless tools do not include battery or charger.

INTERCHANGEABLE HEADS

Truss to Top Plate Head

The FrameFAST Truss to Top Plate Head (FMFFHEAD-T2TP) is specifically designed for the connection between the truss and the top plate of the wall.

Features:

- Fastener installation is consistently optimized at a 22½˚ angle and 3" offset
- Alignment wings center the screw on the truss
- Accommodates trusses that are installed directly over single top plates, double top plates, and raised headers

Stud to Plate Head

The FrameFAST Stud to Plate Head (FMFFHEAD-S2P) is designed for the connection between the wall stud and the wall's top and bottom plates.

Features:

- Fastener installation is consistently code-compliant at 30˚ angle and 3½" offset from stud end
- Alignment wings center the screw on the stud
- Reversible head with magnetic screw holder allows for both upward and downward installations

Plate to Rim Head

The FrameFAST Plate to Rim Head (FMFFHEAD-P2R) is designed to install the FrameFAST screw either upwards through the top plate and into the rim above, or downwards through the bottom plate and into the rim below.

Features:

- Consistently installs the FrameFAST screw through the plate at the proper angle and offset
- Adjustable foot bracket accommodates a variety of wall depths
- Preset angles of 0˚ or 12˚ allow for a wide range of connections

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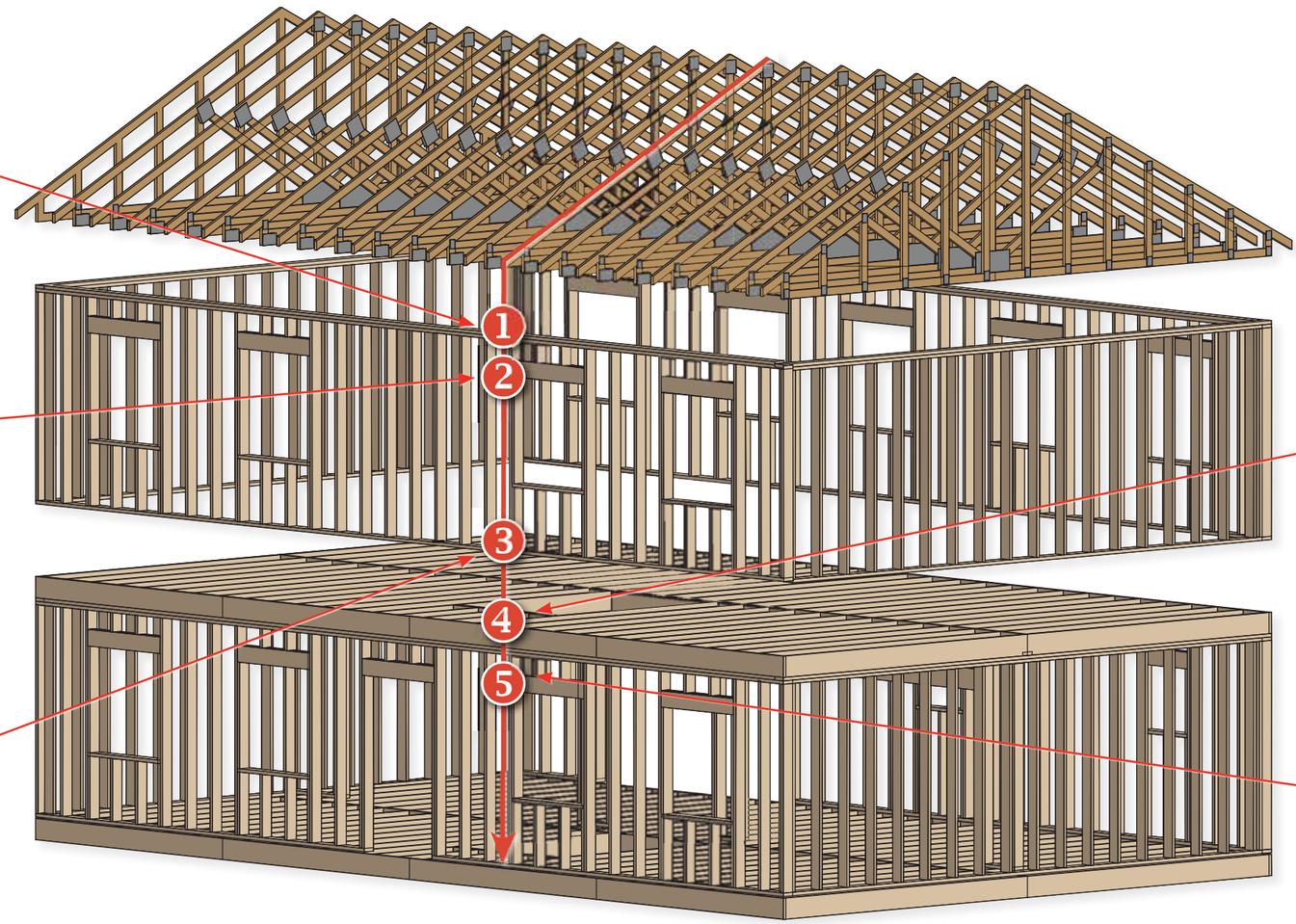
CONTINUOUS LOAD PATH



1 **Truss To Top Plate**

2 **Stud To Top Plate**

3 **Stud To Bottom Plate**

4 **Bottom Plate To Rimboard**

5 **Top Plate To Rimboard**

Three Installation Heads

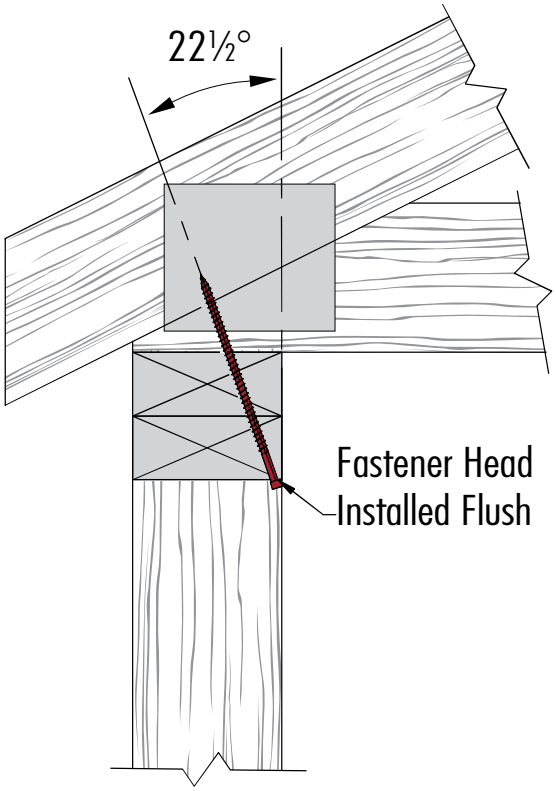
One Screw. One Tool.
Three Interchangeable Heads.

For More Information, Call
Or Visit Our Website Today!

800·518·3569

FastenMaster.com

TRUSS TO TOP PLATE



Articulating Alignment Wings

Standard position | Left wing rotated | Right wing rotated

Adjustable Stability Cleats

Standard position
Horizontal ceiling joist
or truss chord

Partially extended
3/12 rafter pitch

Fully extended
6/12 rafter pitch

Truss to Top Plate

FrameFAST is used to resist both uplift and lateral loads on trusses or rafters attached to the top plates of the wall. The fastener is installed at the prescribed angle through the top plates or header and into the center of the truss or rafter above. The FrameFAST tool, with the patented Truss to Top Plate Head, ensures proper location and installation angle every time.

To verify the adequacy of this connection for your specific application, confirm that the allowable loads in **Table A** meet or exceed the design specification or the capacity of the specified connector on your plans.

Table A Truss to Top Plate

Allowable Loads (in Pounds per Connection)

Species Group (Specific Gravity) [2, 3]	Uplift	(F1) Parallel to Wall Without Blocking)	(F1) Parallel to Wall (With Blocking)	(F2) Perpendicular to Wall
So. Pine (0.55)	690	285	650	485
Douglas Fir - Larch (0.50)	655	300	600	455
Spruce - Pine - Fir/ Hem-Fir (0.42)	595	330	520	400

SI: 1 lb = 44.5 N

1. Wood Truss, rafter, or floor joist members shall be a minimum of 2" nominal thickness. Design of truss, rafter, or floor joist members is by others
2. Equivalent specific gravity of structural composite lumber (SCL) shall be equal to or greater than the specific gravities provided in this table. Refer to product information from SCL manufacturer.
3. For applications involving members with different specific gravities, use the allowable load corresponding to the lowest specific gravity.
4. No further duration of load increases permitted.
5. Use reduction factor of 0.80 when connecting each ply of multiply trusses to the top plate
6. See Figure 3 and Figure 4 in TER 1503-03 for blocking requirements between trusses, rafters, or floor joists.
7. For embedment depths into main member of less than 2-1/2" (full penetration) reduced allowable uplift shall be calculated using Section 5.2.2 and Figure 5 in TER 1503-03. For embedment depths greater than 2-1/2", no further increases allowed

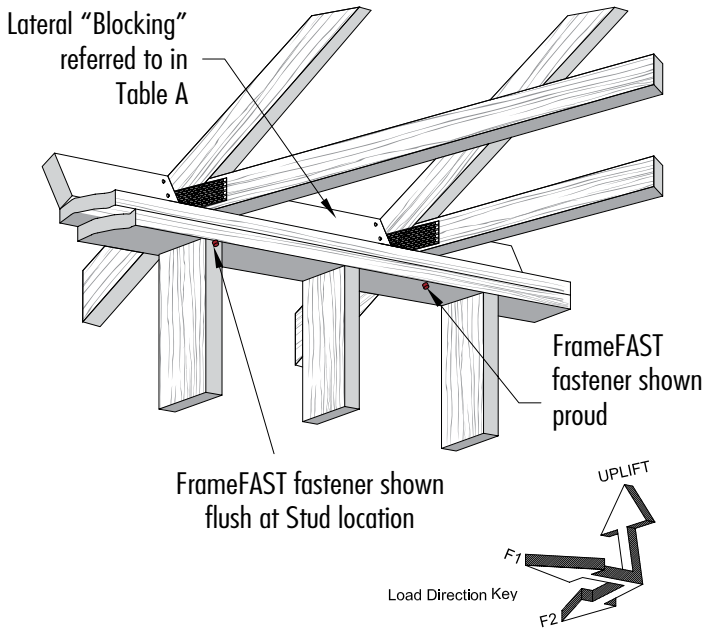
Installation Steps:

- Center the truss between alignment wings
- Press the head flush against the side of the plate
- Push firmly upward until cleats embed into the truss
- Drive the screw until it automatically disengages

Additional Tips:

- Install fasteners into girder trusses by rotating alignment wings aside
- For vaulted ceilings, bring back cleat upward to meet angle of truss
- Head can be left up to 1/4" proud for inspection without a reduction in connection strength

For complete installation instructions and additional technical information, consult the **Truss and Rafter to Top Plate Technical Evaluation Report, TER No. 1503-03**, available at FastenMaster.com.



STUD TO PLATE

Articulating Alignment Wings

Indicator Tabs

Stud to Plate

Connections between the top and bottom of the stud and the wall plates increase uplift capacity. The Stud to Plate Head is engineered to precisely install the FrameFAST fastener 3½" from the end of the stud and at a 33˚ angle. Both the installation angle and the offset are critical to the strength of this connection.

Confirm that the FrameFAST allowable loads in Table B meet or exceed the design criteria or the capacity of the specified connector on your plans. Fasteners at every stud may not be necessary: spacing may be adjusted to meet the required design loads.

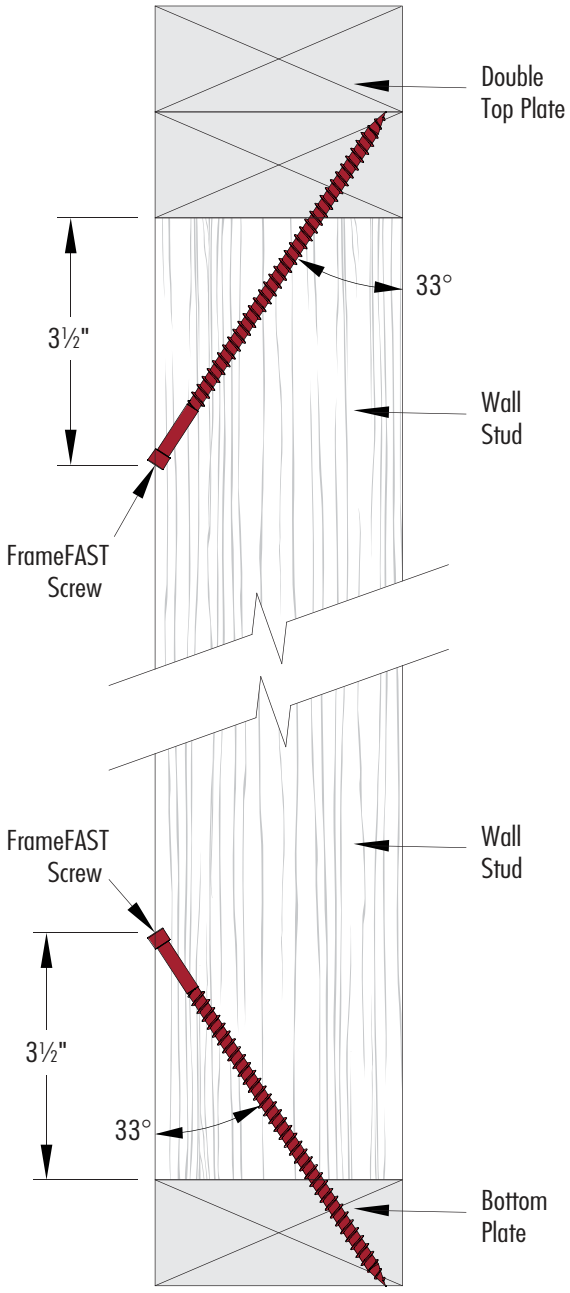
Table B Stud to Top and Bottom Plate

Allowable Loads (in Pounds per Connection)

Species Group (Specific Gravity)[2, 3]	Uplift	Lateral
So. Pine (0.55)	665	430
Douglas Fir - Larch (0.50)	560	360
Spruce - Pine - Fir / Hem-Fir	340	220

SI: 1 lb = 44.5 N

1. For applications involving members with different specific gravities, G, use the allowable load corresponding with the lowest specific gravity. For EWP rim boards (i.d. OSB, LSL, LVL), the top / bottom plates shall be minimum SPF dimensional lumber. Dimensional lumber members shall be a minimum of 2" nominal thickness.
2. Design values are based on a load duration factor, C_D , of 1.6. No further duration of load increases permitted. Reduce design values for other load durations as applicable.
3. Equivalent specific gravity values for withdrawal of nails or screws installed in edge.
4. Equivalent specific gravity values are dowel bearing of nails or screws installed in edge
5. Equivalent specific gravity values are for withdrawal of nails installed in face.
6. Equivalent specific gravity values are dowel bearing of nails or screws installed in face.
7. See Figure 4 on TER 1801-02 for clarification of load orientations and Figure 3 on TER 1801-02 for installation details.



Installation Steps:

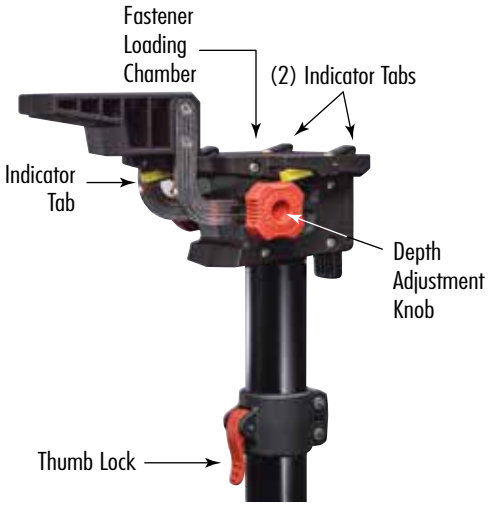
- Center the stud between alignment wings
- Slide along the stud until the cleats engage the plate
- Check that the indicator tabs are fully depressed
- Drive the screw until it automatically disengages

Additional Tips:

- The magnetic bit will hold screw in downward installations
- For stud packs, rotate alignment wings aside to access each stud

For complete installation instructions and additional technical information, consult the **Stud to Plate and Plate to Rim Board Technical Evaluation Report, TER No. 1801-02,** available at FastenMaster.com.

PLATE TO RIM



Wall Depth Adjustment

Rimboard Depth Gauge

Plate to Rim

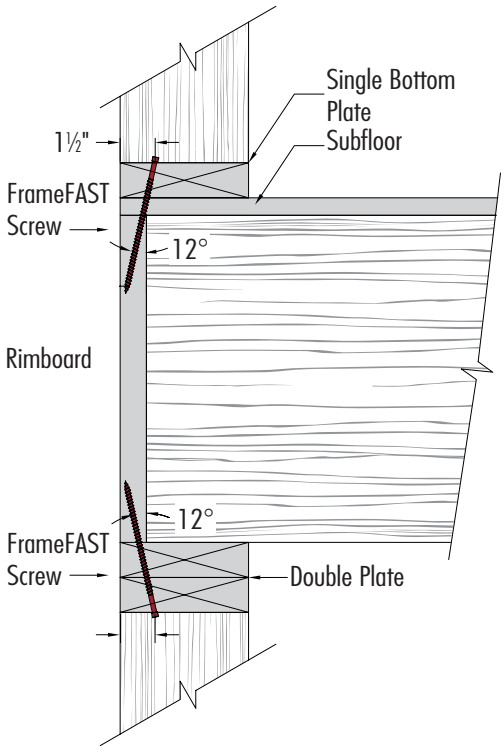
Shear and uplift loads between floors frequently require straps or clips on the exterior of the building to transfer these forces. The 6" FrameFAST screw can be more easily installed from the interior of the building to make this connection. The Plate to Rim Head installs the FrameFAST screw upwards through the wall plate and into the rim above, or downwards through the wall plate and into the rim below at the right angle and location.

Table C Plate to Rim Board

Load Direction	Configuration	Allowable Design Value (lbf)[1,2]					
		Rim Board Species (Specific Gravity or Equivalent Specific Gravity)					
		SPF (0.42)	DF-L (0.50)	SP (0.55)	1-1/8" OSB (0.50)[5]	1-1/4" LSL (0.46)[3]	1-1/4" LVL (0.47)[3]
Uplift	Single Plate to Rim Board	210	245	325	195	165	110
	Double Plate to Rim Board	475	590	595	360	610	570
		SPF (0.42)	DF-L (0.50)	SP (0.55)	1-1/8" OSB (0.50)[6]	1-1/4" LSL (0.46)[4]	1-1/4" LVL (0.47)[4]
Lateral	Single Plate to Rim Board	340	265	395	340	210	320
	Double Plate to Rim Board	495	595	650	230	485	440
	Double Plate to Blocking	495	595	650	230	485	440

SI: 1 lb = 44.5 N

1. For applications involving members with different specific gravities, G, use the allowable load corresponding with the lowest specific gravity. For EWP rim boards (i.d. OSB, LSL, LVL), the top / bottom plates shall be minimum SPF dimensional lumber. Dimensional lumber members shall be a minimum of 2" nominal thickness.
2. Design values are based on a load duration factor, C_D , of 1.6. No further duration of load increases permitted. Reduce design values for other load durations as applicable.
3. Equivalent specific gravity values for withdrawal of nails or screws installed in edge.
4. Equivalent specific gravity values are dowel bearing of nails or screws installed in edge
5. Equivalent specific gravity values are for withdrawal of nails installed in face.
6. Equivalent specific gravity values are dowel bearing of nails or screws installed in face.
7. See Figure 4 on TER 1801-02 for blocking requirements



Installation Steps:

- Set the angle of the head at either 0˚ or 12˚ based on rim location
- Adjust the depth setting so the head meets flush against the exterior sheathing
- Press the head firmly against the plate and sheathing
- Check that the indicator tabs are fully depressed
- Drive the screw until it automatically disengages

Additional Tips:

- The magnetic bit will hold screw in downward installations
- For upward installations, the Rim Board Depth Gauge should be used to measure and set the depth for proper installation.

For complete installation instructions and additional technical information, consult the **Stud to Plate and Plate to Rim Board Technical Evaluation Report, TER No. 1801-02,** available at FastenMaster.com.

FASTENMASTER STRUCTURAL PRODUCTS

NLB Connector™

FOR NON-BEARING WALL TO TRUSS CONNECTIONS

The NLB Fastener is a fastening system designed for connecting the top plate of non-load-bearing walls to trusses above. It allows for vertical movement of the truss while providing lateral stability to the wall. The NLB Fastener provides an easy-to-install and code-compliant method to make this connection using one fastener.

Features:

- No Predrilling
- Installs safely from the floor without the need of an ladder
- Allows for vertical movement of the truss while providing lateral stability to the wall
- Code compliant, ACQ approved
- Free setting tool and driver bit in every package

PAMFast™

AUTOFEED SCREW SYSTEM

The PAMFast AutoFeed Screw System is engineered to be smooth, fast, and easy for the Professional Contractor. Its simple but rugged design is built to last and delivers smooth, consistent screw driving every time.

Features:

- Designed for subfloor, decking, drywall, and more
- *PAMFast* drives productivity on the job site: faster installation, ergonomic, and easy to use
- No jams. No stripping out bits.
- Less reloading: 50 screws per collated strip
- *PAMFast* drives 3/4" - 3" screws

For more information call 800·518·3569 or visit FastenMaster.com

FlatLOK®
STRUCTURAL WOOD SCREW

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.

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

LedgerLOK®
LEDGER BOARD FASTENER

LedgerLOKs are the first wood screws engineered to fasten a deck ledger board to the rim joist of a house with no predrilling. The hex-head version allows for greater bit engagement, reducing cam-out. The Flat Head style, with TORX® ttap® drive system, provides flush to ledger installation saving additional time and money.

Features:
- No predrilling
- Replaces traditional 1/2" lag screws
- Hex washer head style on LedgerLOK
- TORX® ttap® Drive System on Flat Head style
- Guaranteed corrosion resistance. ACQ approved
- IBC/IRC code compliant. ICC-ES ESR-1078.

Lateral Tension System™
CODE COMPLIANT LATERAL DECK ATTACHMENT

Lateral Tension System™ (LTS) is a complete kit designed to meet the newest code for transferring lateral deck loads. The International Residential Code (IRC) requires that decks be designed to withstand both vertical and lateral loads. This 2015 code allows for tension ties to be attached to the deck joist then fastened directly to an interior sill plate, wall plate or stud – all from the outside.

Features:
- Meets the 2015 and 2018 IRC
- ACQ Approved Coating
- No predrilling required
- No interior access needed to install
- Free bits in every package

FastenMaster
PRO Driven

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