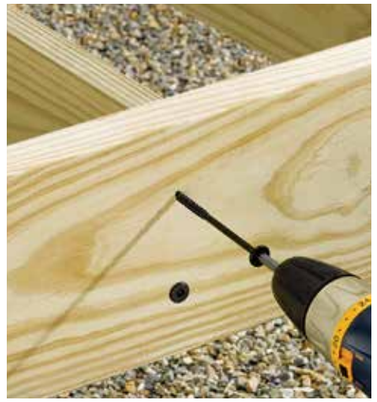


HeadLOK®
HEAVY DUTY FLATHEAD FASTENER

FEATURES
- No predrilling
- Faster, easier than 3/8" lag screws
- Non-countersinking head style
- Guaranteed corrosion resistance. ACQ approved
- IBC/IRC code compliant. ICC-ES ESR-1078
- Free SpiderDrive™ bit in every package

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

PACKAGING QUANTITIES
12 pc clamshell, 50 pc box, 250 pc bucket, 500 pc bucket *(2 7/8" only)*

DESCRIPTION
HeadLOK is a heavy duty wood screw that does it all with an internal drive and flat head. HeadLOK offers higher design shear than 3/8" lag screws and no predrilling is needed! HeadLOK zips right in and is ideal for many wood-to-wood applications including decks, fences, SIPs, kitchen cabinets and more. The patented SpiderDrive® eliminates cam-out and improves installation speed.

OTHER LENGTHS: 1 5/8", 3 3/4", 5", 5 1/2", 6 1/2", 7", 7 1/2", 8", 8 1/2", 9", 9 1/2", 10", 11", 12", 13", 14", 15", 16", 18"

PACKAGING QUANTITIES
250 pc bucket, 500 pc bucket *(1 5/8" only)*

INSTALLATION PROCEDURE
HeadLOK should be installed using a high torque, 1/2" variable speed drill (18V if cordless). Drive the HeadLOK head flush to the surface. No predrilling required when proper end and edge distances are maintained.

GUARANTEED CORROSION RESISTANCE
HeadLOK is guaranteed not to rust or corrode for the life of the project. The fastener has also been tested and approved for use in ACQ. HeadLOK is not recommended for saltwater applications.

For additional technical data, refer to page 47 of this catalog

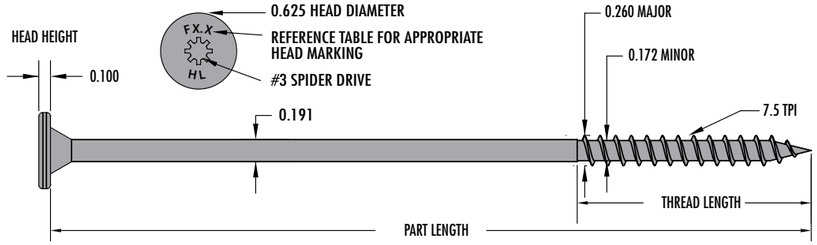
HeadLOK Carded Bit	
PACKAGING QTY	**SKU**
2 per card	FMSPIDER3-2PK

HeadLOK SKU Selection Guide		
LENGTH	**PACKAGING QTY**	**SKU**
2 7/8"	12 pc clamshell	FMHLGM278-12
	50 pc box	FMHLGM278-50
	500 pc bucket	FMHLGM278-500
4 1/2"	12 pc clamshell	FMHLGM412-12
	50 pc box	FMHLGM412-50
	250 pc bucket	FMHLGM412-250
6"	12 pc clamshell	FMHLGM006-12
	50 pc box	FMHLGM006-50
	250 pc bucket	FMHLGM006-250
1 5/8"	500 pc bucket	FMHLGM158-500
3 3/4"	250 pc bucket	FMHLGM334-250
5"	250 pc bucket	FMHLGM005-250
5 1/2"	250 pc bucket	FMHLGM512-250
6 1/2"	250 pc bucket	FMHLGM612-250
7"	250 pc bucket	FMHLGM007-250
7 1/2"	250 pc bucket	FMHLGM712-250
8"	250 pc bucket	FMHLGM008-250
8 1/2"	250 pc bucket	FMHLGM812-250
9"	250 pc bucket	FMHLGM009-250
9 1/2"	250 pc bucket	FMHLGM912-250
10"	250 pc bucket	FMHLGM010-250
11"	250 pc bucket	FMHLGM011-250
12"	250 pc bucket	FMHLGM012-250
13"	250 pc bucket	FMHLGM013-250
14"	250 pc bucket	FMHLGM014-250
15"	250 pc bucket	FMHLGM015-250
16"	250 pc bucket	FMHLGM016-250
18"	250 pc bucket	FMHLGM018-250

ADDITIONAL RESOURCES
Ask the FastenMaster Installation Video
Our Ask the FastenMaster video series includes installation information for many of our products, including our **HeadLOK Flathead 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

HeadLOK®
PRODUCT SPECIFICATION



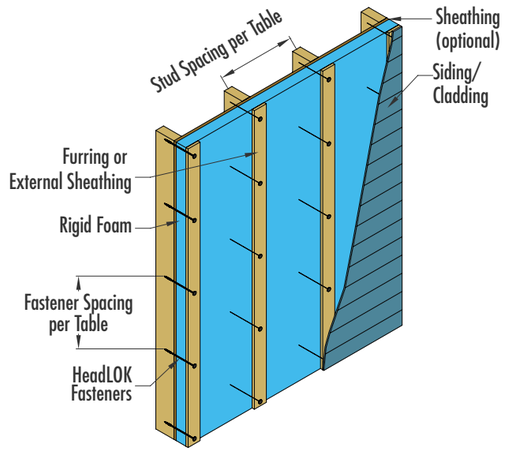
HeadLOK Selection Guide			
Part Length	**Thread Length**	**Head Markings**	**Part Number**
2 7/8"	2"	F2.9HL	FMHLGM278
4 1/2"	2"	F4.5HL	FMHLGM412
6"	2"	F6.0HL	FMHLGM006

Other Lengths: 1 5/8", 3 3/4", 5", 5 1/2", 6 1/2", 7", 7 1/2", 8", 8 1/2", 9", 9 1/2", 10", 11", 12", 13", 14", 15", 16", 18"

HEADLOK SAMPLE APPLICATION

Attachment of Furring or Sheathing over Rigid Foam

Recent changes in the Energy Code have resulted in an increased use of rigid insulation over exterior walls. Attaching the finish materials (siding) requires a furring strip or sheathing be mechanically attached to the structural framing of the building over the insulation layer. The HeadLOK has been tested and approved for use in this unique cantilevered condition. A guide to proper fastening is shown in **Table A**. For instructions and additional technical information, consult the **Rigid Foam to Wood Framing Technical Evaluation Report, TER 1009-01,** at www.FastenMaster.com.



HeadLOK Allowable Loads									
Withdrawal			**Head Pull Through**			**Shear**			
						Perp. to Grain		**Parallel to Grain**	
SPF/ H.Fir	D.Fir	S.Pine	SPF/ H.Fir	D.Fir	S.Pine	SPF/ H.Fir	D.Fir/ S.Pine	SPF/ H.Fir	D.Fir/ S.Pine
340	440	520	400	520	600	230	270	250	290

Footnotes
- Values above taken from ICC Evaluation Report ESR #1078
- Loads have not been increased to accommodate for NDS load durations or other factors
- Withdrawal values assume full thread penetration into main member
- Head pull through values assume 1 1/2" or greater side member under head
- Shear values assume a min. side member thickness of 1 1/2" & main member thickness of 2 1/2"

Table A Rigid Foam Application

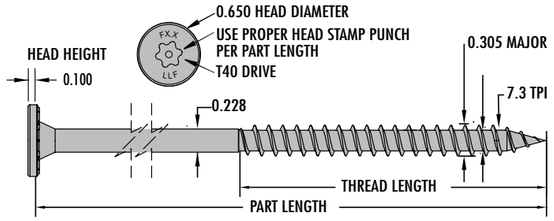
Recommended Spacing Between Fasteners - Inches

Exterior Layer	Foam Thickness Inches	Max. Allowable Cladding Weight (psf) to be Supported			
		10	15	20	25
1 x 4 Furring over Foam	1	24	24	16	16
	1.5	24	24	16	12
	2	24	16	16	12
	3	16	12	8	8
	4	16	12	8	NA
3/8" Sheathing over Foam	1	12	12	12	12
	1.5	12	12	12	12
	2	12	12	12	12
	3	12	12	8	8
	4	12	12	8	6

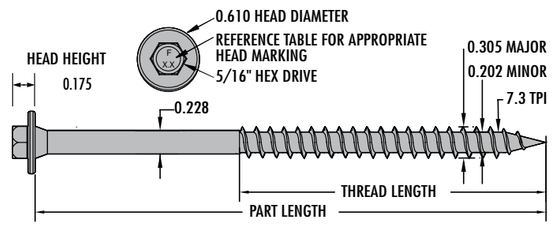
Table A Footnotes
- Table patterns generated through testing and reported in TER 1009-01
- Assumes 2" minimum thread engagement into stud or stud/sheathing
- Patterns based on 24" on center stud spacing. Less restrictive patterns available for 16" stud spacing in TER 1009-01

LedgerLOK®
PRODUCT SPECIFICATION

FLAT HEAD STYLE



HEX HEAD STYLE



LedgerLOK Selection Guide

Hex Head Selection Guide

Part Length	Thread Length	Head Markings	Part Number
3 5/8"	2"	F3.6	FMLL358
5"	3"	F5.0	FMLL005

Flat Head Selection Guide

3 5/8"	2"	LLF3.6	FMLLF358
5"	3"	LLF5.0	FMLLF005

LedgerLOK Allowable Loads			
Shear		**Withdrawal**	
SPF/H. Fir	D. Fir/S. Pine	SPF/ H. Fir	D. Fir/S. Pine
250	310	315	405

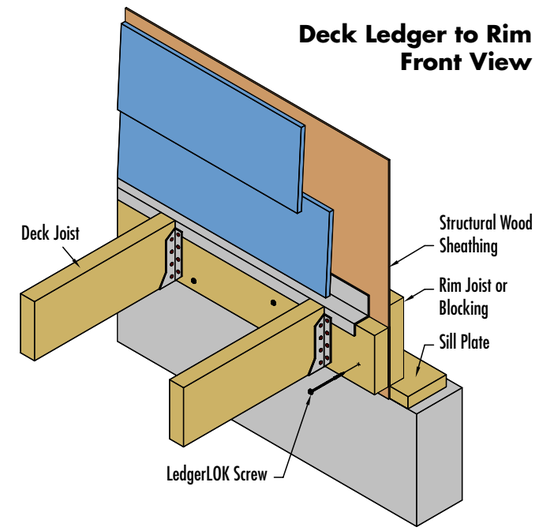
Footnotes
- Values above taken from ICC Evaluation Report ESR #1078
- Loads have not been increased to accommodate for NDS load durations or other factors
- Shear values assume a minimum side member of 1 1/2" and main member of 1 1/2"
- Withdrawal loads assume a minimum side thread penetration of 1 1/2" into rim board

LEDGERLOK APPLICATION

Deck Ledger to Rim Board Connection

One of the most critical connections when designing and building an exterior deck is between the deck ledger and the rim board of the house. Recent changes in code have addressed this application with specific lag screw spacing requirements. The LedgerLOK has been designed and tested to make this attachment in a code compliant manner without the need for predrilling. Refer to **Table A** for a general fastening guide. For instructions and additional technical information, consult the **Deck Ledger to Rim Technical Evaluation Report, TER No. 1203-03,** available at www.FasterMaster.com.

Deck Ledger to Rim Front View



Footnote
- Fasteners should be installed in a staggered pattern at least 1 3/4" from top or bottom edge and 3 3/4" from end of the ledger and rim board

Table A Ledger to Rim Application

IRC Code Compliant Spacing of LedgerLOK Fasteners

Max. span from ledger to beam	6'	8'	10'	12'	14'	16'	18'
Spacing between fasteners	20"	15"	12"	10"	8"	7"	6"

Table A Footnotes
- Assumes 2 x 8 or greater nominal ledger board of treated Hem Fir or denser wood (D. Fir, S. Pine)
- Rim board may be 1" or greater in thickness and SPF or denser wood including LSL engineered wood rim material
- Spacing based on 40 psf live load and 10 psf dead load conditions. Adjustments made for wet service conditions
- Tabulated loads based on ICC-ES Report ESR #1078. Additional third party system testing to ASTM D-1761 used to provide equal strength to IRC Table 502.2.2 (2009)

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

REFERENCE CHARTS

The following tables are taken from ICC-ES ESR-1078 Evaluation Report. These can be used for reference when designing connections other than those described in the preceding pages. Please refer to the full report for additional information including conditions of use and minimum edge and end distances. This can be found at www.FastenMaster.com or www.icc-es.org.

Table 1 Reference Withdrawal Design Values (W)[1,2,3]

[Reference withdrawal design values *(W)* are in pounds per inch of thread penetration into side grain of main member]

Fastener	Thread Length, *L*[4] (inches)	*W* (lbf./in.) for Specific Gravities of:					
		0.57	0.55	0.50	0.46	0.43	0.42
OlyLog/TimberLOK	1.25 or 2.0	270	260	220	200	180	170
HeadLOK	2.0	290	270	230	200	180	170
LedgerLOK/LogHog	2.0 or 3.0	330	310	270	240	220	210
TrussLOK	1 1/2	—	—	180	—	—	—
ThruLOK[6]	NA	1140	1060	900	780	700	680

For **SI:** 1 inch = 25.4 mm, 1 lbf/in = 175 N/m.

[1]Tabulated reference withdrawal design values, *W*, apply to fasteners driven into the side grain of the main member, such that the screws are oriented perpendicular to the grain and loaded in direct withdrawal.
[2]Reference withdrawal design values must be multiplied by all applicable adjustment factors, in accordance with Section 4.1.
[3]Reference withdrawal design values are to be multiplied by the length of thread penetration into the main member, but must not exceed the head pull-through design values given in Table 2. Threaded length includes the tapered tip.
[4]See Tables 1A through 1F for thread lengths corresponding to specific fastener model numbers.
[5]The ThruLOK must be used with the ThruLOK washer and nut (supplied with the fastener). The nut must be installed such that it is snug against the main member, and at least 1/2" of the threaded portion of the shank (not including the tip) is within the nut.
[6]Tabulated withdrawal values for the ThruLOK are based on the head pull-through design values given in Table 2, as these values will govern designs in which the screw is subject to axial tension, where the ThruLOK is properly installed with the ThruLOK washer and nut (see footnote 5 above).

Table 2 Reference Head Pull-Through Design Values (P)[1,2]

Fastener	Minimum Side Member Thickness (inches)	*P* (lbf) for Specific Gravities of:					
		0.57	0.55	0.50	0.46	0.43	0.42
OlyLog/TimberLOK	1.5	220	200	160	130	110	110
HeadLOK	1.5	630	600	520	460	410	400
LedgerLOK/LogHog	1.5	320	290	240	200	180	170
TrussLOK	1.5	—	—	260	—	—	—
ThruLOK[3]	1.5	1140	1060	900	780	700	680

For **SI:** 1 inch = 25.4 mm, 1 pound = 4.448 kPa.

[1]Reference head pull-through design values, *P*, must be multiplied by all applicable adjustment factors, in accordance with Section 4.1
[2]Design values apply to connections with minimum side member thicknesses, t_s, as given above
[3]The ThruLOK must be used with the ThruLOK washer and nut (supplied with the fastener). The nut must be installed such that it is snug against the main member, and at least 1/2" of the threaded portion of the shank (not including the tip) is within the nut

Table 3 Reference Lateral Design Values (*Z*) for Single Shear (Two Member) Wood-to-Wood Connections Loaded Parallel (Z_{II}) or Perpendicular ($Z_{\perp}$) to the Grain[1,2]

Fastener		Minimum Side Member Thickness[3], t_s (inches)	Minimum Main Member Penetration[4], p (inches)	*Z* (lbf) for Minimum Specific Gravities of:					
				0.50		0.46		0.42	
Designation	Length (inches)			Z_{II}	$Z_{\perp}$	Z_{II}	$Z_{\perp}$	Z_{II}	$Z_{\perp}$
OlyLog/TimberLOK	2 1/2	1 1/2	1	240	220	220	200	200	180
	4 & longer	1 1/2	2 1/2	280	260	260	230	240	210
	6 & longer	2 1/2	3 1/2	290	270	270	250	250	230
	8 & longer	3	5	290	270	260	250	240	230
HeadLOK	2 7/8	1 1/2	1 3/8	240	210	220	180	210	150
	4 1/2	1 1/2	3	280	260	260	240	250	220
	6 & longer	1 1/2	4 1/2	290	270	270	250	250	230
	6 & longer	2 1/2	3 1/2	300	280	280	260	270	240
	8 & longer	3	5	290	280	280	260	260	230
LedgerLOK	3 5/8	1 1/2	1 1/2	—	260	—	220	—	220
	3 5/8	1 1/2	2 1/8	310	310	290	280	270	250
	5	1 1/2	3 1/2	320	300	300	280	280	260
LogHog	9 & longer	6	3	310	300	290	280	270	260
TrussLOK	3 3/8	1 3/4	1 5/8	320	290	300	270	280	260
	5	1 3/4	3 1/4	330	300	310	270	290	250
	6 3/4	1 3/4	5	330	310	310	290	290	270

Fastener		Minimum Side Member Thickness[3], t_s (inches)	Minimum Main Member Penetration[4], p (inches)		*Z* (lbf) for Minimum Specific Gravities of:					
					0.5		0.46		0.42	
Designation	Length (inches)				Z_{II}	$Z_{\perp}$	Z_{II}	$Z_{\perp}$	Z_{II}	$Z_{\perp}$
ThruLOK[5]	6 1/4	1 1/2	3 1/4	4 1/4	350	320	320	300	300	270
	7	1 1/2	4	5	350	330	320	300	300	270
	8	1 1/2	3 1/2	4 1/2	350	330	320	300	300	270

For **SI:** 1 inch = 25.4 mm, 1 pound = 4.448kPa.

[1]Tabulated reference lateral design values, *Z*, apply to single shear (two-member) connections with wood main and side members having specific gravity as shown, in which the screw is oriented perpendicular to the grain and loaded laterally either parallel or perpendicular to the grain. For connections in which the main and side members have different specific gravities, use the lower of the two. Gaps are not permitted between the main and side members.
[2]Values must be multiplied by all applicable adjustment factors, in accordance with Section 4.1.
[3]Side members with thicknesses greater than the tabulated minimum side member thickness may be used, provided the corresponding tabulated minimum main member penetration is still achieved for the given screw length.
[4]Minimum main member penetration is the minimum length of the screw (including threaded, unthreaded and tip length) that must be embedded within the main member.
[5]The ThruLOK must be installed with the washer and nut, and must penetrate through the opposite face of the main member a sufficient distance to allow the nut to be tightened snugly against the main member, with at least 1/2", and no more than 1 1/2" of the ThruLOK screw engaged within the nut.

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