

# LSSR

## Slopeable/Skewable Rafter Hanger

The patent-pending LSSR light slopeable/skewable rafter hanger is the next generation of field-adjustable rafter hangers. One of its key features is that it can be installed after the rafter has been tacked into place. A versatile hanger, it is field adjustable for skews up to 45° and features an innovative hinged swivel seat which adjusts up to a 45° slope. **New models are now available for 2x lumber.**

### Features:

- Makes it possible to install after the rafters are already in place
- Flange design allows for easy skew adjustment, from 0° to 45°
- Swivel seat adjusts easily from 0° to 45° up or down

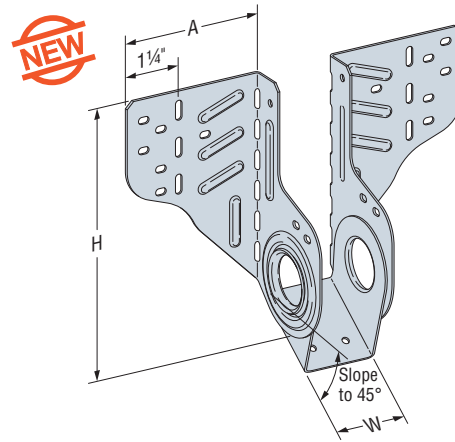
**Material:** See table

**Finish:** ZMAX® coating

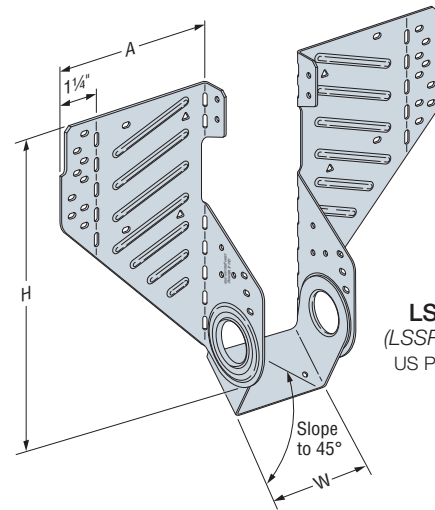
### Installation:

- Use all specified fasteners; see General Notes
- **Limit on-center spacing of rafters and joists with LSSR210-2Z and LSSR410Z to 14" o.c. minimum; for the LSSR26Z, LSSR28Z and LSSR210Z, limit on-center spacing to 8" o.c. minimum.**
- For a common rafter:
  - Slide hanger into position; adjust seat and install seat nails
  - Make sure side stirrups are snug close to the joist, bend lines are plumb
  - Install a face nail on each side to hold in place
  - Install all round and obround holes on the header and joist
- For jack rafters:
  - Fold acute side forward
  - Slide hanger into position; adjust seat and install seat nails
  - Make sure hanger is snug close to the joist, bend line is plumb
  - Install obround nails on acute side, both header and joist
  - Make sure hanger is snug close to the joist and header; bend line is plumb
  - Install joist nails on obtuse side
  - Bend obtuse side flange back so that header flange is flush against header
  - Install header nails

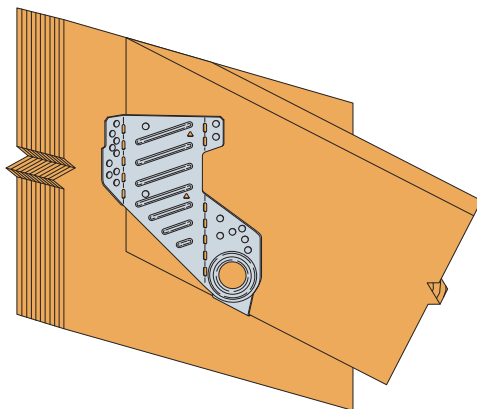
**Codes:** See p. 11 for Code Reference Key Chart



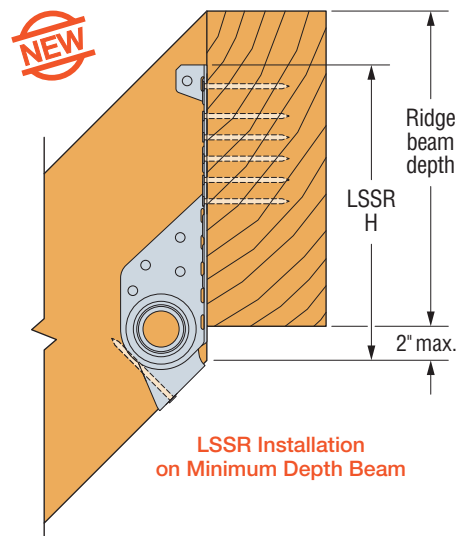
**LSSR26Z**



**LSSR210-2**  
(LSSR410Z similar)  
US Patent Pending



Typical Sloped and Skewed  
LSSR Installation



**LSSR Installation**  
on Minimum Depth Beam



For more information and to watch an installation video, go to [strongtie.com/lssr](https://strongtie.com/lssr).

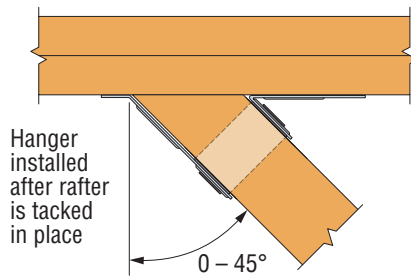
# LSSR

## Slopeable/Skewable Rafter Hanger (cont.)

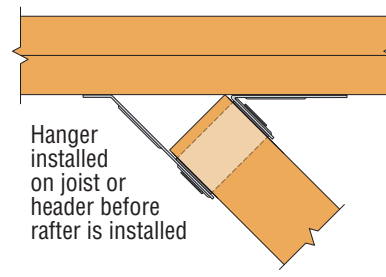
These products are available with additional corrosion protection. For more information, see p. 14.

Actual Joist Width (in.)	Model No.	Ga.	Dimensions (in.)			Fasteners (in.)		Allowable Loads								Code Ref.
			W	H	A	Face	Joist	DF/SP Species Header				SPF/HF Species Header				
								Uplift (160)	Floor (100)	Roof		Uplift (160)	Floor (100)	Roof		
		Snow (115)	Const. (125)	Snow (115)	Const. (125)											
<b>Sloped Only Hangers</b>																
1½	LSSR26Z	18	1¾	5%	2½	(12) 0.148 x 2½	(8) 0.148 x 1½	460	1,065	1,065	1,065	395	915	915	915	IBC, FL, LA
	LSSR28Z			7%		(14) 0.148 x 2½	(10) 0.148 x 1½	785	1,405	1,405	1,405	675	1,210	1,210	1,210	
	LSSR210Z			9%		(14) 0.148 x 2½	(10) 0.148 x 1½	785	1,405	1,405	1,405	675	1,210	1,210	1,210	
3	LSSR210-ZZ	16	3¾	8½	5%	(22) 0.162 x 2½	(18) 0.162 x 2½	695	2,365	2,365	2,365	600	2,035	2,035	2,035	
3½	LSSR410Z	16	3%	8½	5%	(22) 0.162 x 2½	(18) 0.162 x 2½	695	2,365	2,365	2,365	600	2,035	2,035	2,035	
<b>Skewed Hangers or Sloped and Skewed Hangers</b>																
1½	LSSR26Z	18	1¾	5%	2½	(11) 0.148 x 2½	(7) 0.148 x 1½	460	760	760	760	395	655	655	655	IBC, FL, LA
	LSSR28Z			7%		(13) 0.148 x 2½	(8) 0.148 x 1½	785	925	925	925	675	795	795	795	
	LSSR210Z			9%		(13) 0.148 x 2½	(8) 0.148 x 1½	785	1,150	1,150	1,150	675	990	990	990	
3	LSSR210-ZZ	16	3¾	8½	5%	(20) 0.162 x 2½	(13) 0.162 x 2½	695	1,810	1,810	1,810	600	1,555	1,555	1,555	
3½	LSSR410Z	16	3%	8½	5%	(20) 0.162 x 2½	(13) 0.162 x 2½	695	1,810	1,810	1,810	600	1,555	1,555	1,555	

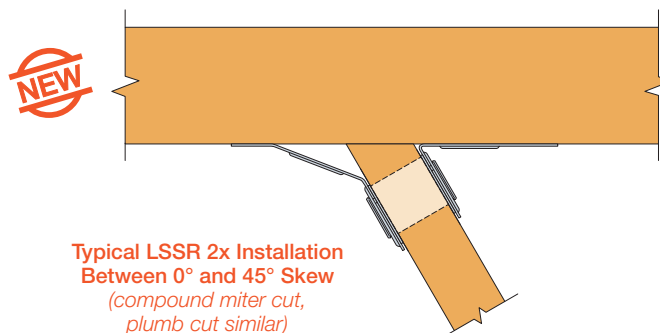
- Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- For slope-only installations, the four triangle holes may be filled for an allowable roof download of 3,015 lb. for DF/SP and 2,595 lb. for SPF/HF for LSSR 16GA.
- Roof loads are 125% of floor loads unless limited by other criteria. Floor loads may be adjusted for load durations according to the code provided they do not exceed those in the roof column.
- On the acute side of the skewed LSSR hanger, fill obround holes only.
- Fasteners:** Nail dimensions are listed diameter by length. See pp. 21–22 for fastener information.



**Typical LSSR Installation**  
(compound miter cut)



**Alternate LSSR Installation**  
(plumb cut)



# LSSR/LSU

## Slopeable/Skewable Rafter Hanger



This product is preferable to similar connectors because of (a) easier installation, (b) higher loads, (c) lower installed cost, or a combination of these features.

The patent-pending LSSR slopeable/skewable rafter hanger is the next generation of field-adjustable rafter hangers. One of its key features is it can be installed after the rafter has been tacked into place. A versatile hanger, it is field adjustable for skews up to 45° and features an innovative hinged swivel seat which adjusts up to a 45° slope. **New models are now available for single 2x truss members.** See pp. 118–119 for more information.

### Features:

- Makes it possible to install after the rafters are already in place
- Flange design allows for easy skew adjustment, from 0° to 45°
- Swivel seat adjusts easily from 0° to 45° up or down, and attaches to both sides of I-joist

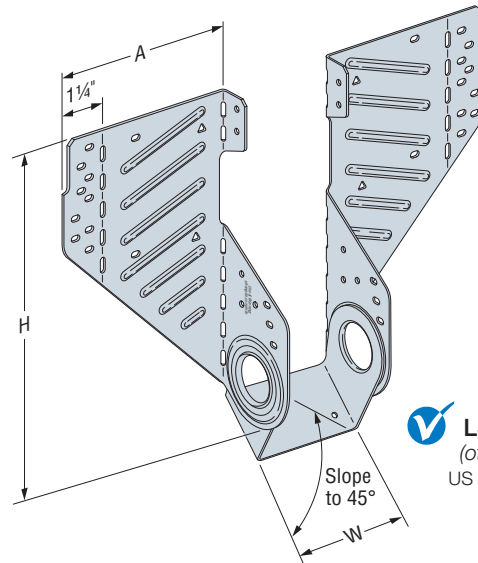
**Material:** See table on p. 157

**Finish:** ZMAX® coating

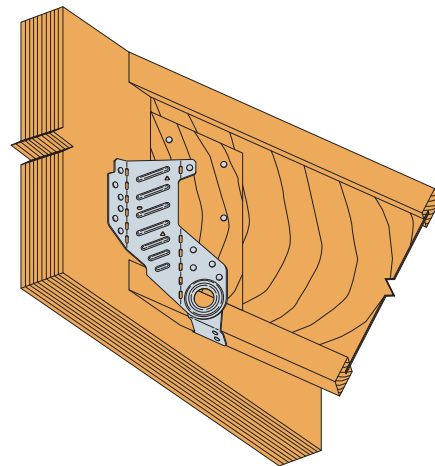
### Installation:

- Use all specified fasteners; see General Notes
- For a common rafter:
  - Slide hanger into position; Adjust seat and install seat nails
  - Make sure side stirrups are snug close to the joist; bend lines are plumb
  - Install a face nail on each side to hold in place
  - Install all round and obround holes on the header and joist
- For jack rafters:
  - Fold acute side forward
  - Slide hanger into position; adjust seat and install seat nails
  - Make sure hanger is snug close to the joist; bend line is plumb
  - Install obround nails on acute side, both header and joist
  - Make sure hanger is snug close to the joist and header; bend line is plumb
  - Install joist nails on obtuse side
  - Bend obtuse side flange back so that header flange is flush against header
  - Install header nails

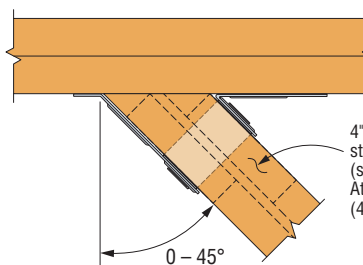
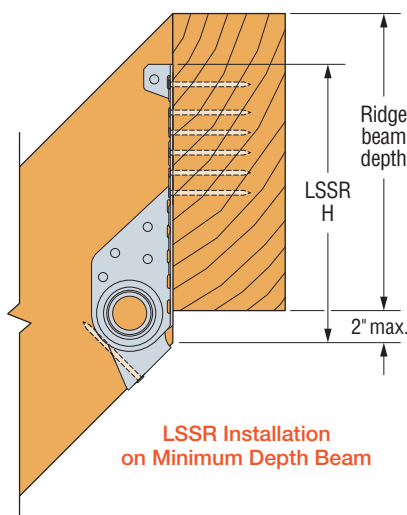
**Codes:** See p. 11 for Code Reference Key Chart



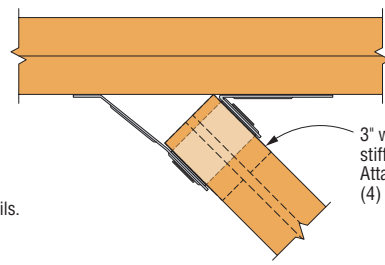
**LSSR210-2**  
 (others similar)  
 US Patent Pending



Typical LSSR Sloped and Skewed Installation



Typical LSSR Installation  
 (compound miter cut)



Alternate LSSR Installation  
 (plumb cut)



To watch an installation video, go to [strongtie.com/lssr](http://strongtie.com/lssr).

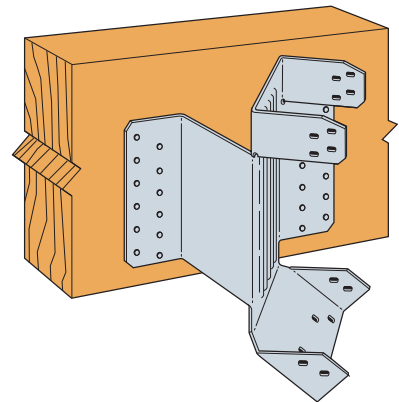
# LSSR/LSU

## Slopeable/Skewable Rafter Hanger (cont.)

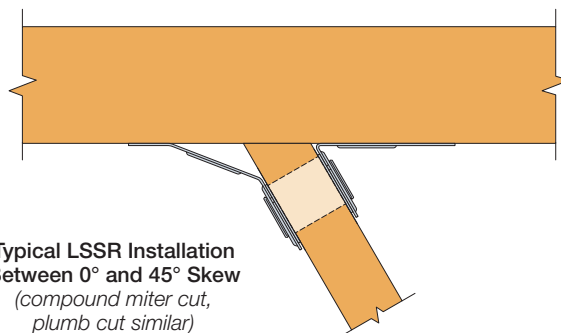
These products are available with additional corrosion protection. For more information, see p. 14.

Actual Joist Width (in.)	Model No.	Ga.	Dimensions (in.)			Fasteners (in.)		Allowable Loads								Code Ref.	
			W	H	A	Face	Joist	DF/SP Species Header				SPF/HF Species Header					
								Uplift (160)	Floor (100)	Roof		Uplift (160)	Floor (100)	Roof			
		Snow (115)	Const. (125)	Snow (115)	Const. (125)												
<b>Sloped Only Hangers</b>																	
1 3/4	LSSR1.81Z	18	1 13/16	8 15/16	4 1/8	(14) 0.148 x 2 1/2	(12) 0.148 x 1 1/2	510	1,565	1,565	1,565	440	1,345	1,345	1,345	IBC, FL, LA	
2 to 2 1/16	LSSR2.1Z	18	2 1/8	8 15/16	4 1/8	(14) 0.148 x 2 1/2	(12) 0.148 x 1 1/2	510	1,565	1,565	1,565	440	1,345	1,345	1,345		
2 5/16	LSSR2.37Z	18	2 3/8	8 15/16	4 1/8	(14) 0.148 x 2 1/2	(12) 0.148 x 1 1/2	510	1,565	1,565	1,565	440	1,345	1,345	1,345		
2 1/2	LSSR2.56Z	18	2 9/16	8 15/16	4 1/8	(14) 0.148 x 2 1/2	(12) 0.148 x 1 1/2	510	1,565	1,565	1,565	440	1,345	1,345	1,345		
3	LSSR210-2Z	16	3 1/8	8 15/16	5 1/8	(22) 0.162 x 2 1/2	(18) 0.162 x 2 1/2	695	2,365	2,365	2,365	600	2,035	2,035	2,035		
3 1/2	LSSR410Z	16	3 5/8	8 15/16	5 1/8	(22) 0.162 x 2 1/2	(18) 0.162 x 2 1/2	695	2,365	2,365	2,365	600	2,035	2,035	2,035	—	
Dbl 2	LSU4.12	14	4 1/8	9	2 1/4	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	3,215	3,700	4,020	990	2,785	3,200	3,480		
Dbl 2 1/16	LSU4.28	14	4 1/4	9	2 3/8	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	3,215	3,700	4,020	990	2,785	3,200	3,480		
Dbl 2 5/16	LSU3510-2	14	4 3/4	8 7/8	3 3/8	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	3,215	3,700	4,020	990	2,785	3,200	3,480		
Dbl 2 1/2	LSU5.12	14	5 1/8	9	2 1/4	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	885	3,215	3,700	3,785	760	2,785	3,200	3,280	IBC, FL, LA	
<b>Skewed Hangers or Sloped and Skewed Hangers</b>																	
1 3/4	LSSR1.81Z	18	1 13/16	8 15/16	4 1/8	(13) 0.148 x 2 1/2	(9) 0.148 x 1 1/2	510	1,205	1,205	1,205	440	1,035	1,035	1,035		
2 to 2 1/16	LSSR2.1Z	18	2 1/8	8 15/16	4 1/8	(13) 0.148 x 2 1/2	(9) 0.148 x 1 1/2	510	1,205	1,205	1,205	440	1,035	1,035	1,035		
2 5/16	LSSR2.37Z	18	2 3/8	8 15/16	4 1/8	(13) 0.148 x 2 1/2	(9) 0.148 x 1 1/2	510	1,205	1,205	1,205	440	1,035	1,035	1,035		
2 1/2	LSSR2.56Z	18	2 9/16	8 15/16	4 1/8	(13) 0.148 x 2 1/2	(9) 0.148 x 1 1/2	510	1,205	1,205	1,205	440	1,035	1,035	1,035		
3	LSSR210-2Z	16	3 1/8	8 15/16	5 1/8	(20) 0.162 x 2 1/2	(13) 0.162 x 2 1/2	695	1,810	1,810	1,810	600	1,555	1,555	1,555		
3 1/2	LSSR410Z	16	3 5/8	8 15/16	5 1/8	(20) 0.162 x 2 1/2	(13) 0.162 x 2 1/2	695	1,810	1,810	1,810	600	1,555	1,555	1,555		
Dbl 2	LSU4.12 <sup>d</sup>	14	4 1/8	9	2 1/4	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	2,300	2,300	2,300	990	1,990	1,990	1,990		
Dbl 2 1/16	LSU4.28 <sup>d</sup>	14	4 1/4	9	2 3/8	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	2,300	2,300	2,300	990	1,990	1,990	1,990		
Dbl 2 5/16	LSU3510-2 <sup>d</sup>	14	4 3/4	8 7/8	3 3/8	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	1,150	2,300	2,300	2,300	990	1,990	1,990	1,990		
Dbl 2 1/2	LSU5.12 <sup>d</sup>	14	5 1/8	9	2 1/4	(24) 0.162 x 3 1/2	(16) 0.148 x 1 1/2	885	1,790	1,790	1,790	760	1,550	1,550	1,550		

- Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
- For slope-only installations, the four triangle holes may be filled for an allowable roof download of 3,015 lb. for DF/SP and 2,595 lb. for SPF/HF for LSSR 16GA.
- Roof loads are 125% of floor loads unless limited by other criteria. Floor loads may be adjusted for load durations according to the code provided they do not exceed those in the roof column.
- LSU3510-2, LSU4.12, LSU4.28, and LSU5.12 skew options must be factory-ordered.
- Minimum 11" joist height for LSU3510-2, LSU4.12, LSU5.12; 9 1/2" for all others.
- On the acute side of the skewed LSSR hanger, fill obround holes.
- Fasteners:** Nail dimensions are listed diameter by length. See pp. 21–22 for fastener information.



The LSU5.12 must be factory-skewed 0° to 45°. It may be field-sloped to 45°. (LSU4.12, LSU4.28 and LSU3510-2 similar)  
Hanger shown skewed right.



Typical LSSR Installation  
Between 0° and 45° Skew  
(compound miter cut,  
plumb cut similar)