

ADDRESS . . : 18 SIMPLY COUNTRY LN
CONTRACTOR : STEPHENSON BUILDERS, INC.
OWNER . . . : SOUTHERN LIVING INVESTMENTS
PARCEL . . . : 08-0641- - -0051- -42-
APPL NUMBER: 17-50041814 CP NEW RESIDENTIAL (SFD)
DIRECTIONS : T/S: 07/11/2017 02:28 PM LLUCAS ----
401 N LEFT ON MORGAN FARM DRIVE
PREMISE# 84273526

SUBDIV: MORGAN FARMS
PHONE : (919) 427-8654
PHONE :

STRUCTURE: 000 000 60X74 3BDR 2.5 BATH W/GARAGE CRAWL FNSH

FLOOD ZONE : FLOOD ZONE X
BEDROOMS : 3.00
SEPTIC - EXISTING? : NEW SEPTIC
PROPOSED USE : SFD
WATER SUPPLY : COUNTY

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
B101 01	8/02/17 8/01/17	TI CA	R*BLDG FOOTING / TEMP SVC POLE VRU #: 003006335
A814 01	8/02/17 8/01/17	SB AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 003006319 18 SIMPLY COUNTRY LN LILLINGTON 27546 T/S: 08/01/2017 09:18 AM SBENNETT -----
B101 02	8/03/17 8/03/17	BS AP	R*BLDG FOOTING / TEMP SVC POLE VRU #: 003006715 T/S: August 03, 2017 11:39 AM BSUTTON -----
B103 01	8/18/17 8/18/17	BS AP	R*BLDG FOUND & TEMP SVC POLE VRU #: 003012622 T/S: August 18, 2017 09:40 AM BSUTTON -----
B105 01	8/24/17 8/24/17	BS AP	R*OPEN FLOOR VRU #: 003016268 T/S: August 24, 2017 10:43 AM BSUTTON -----
R425 01	9/26/17 9/26/17	TSG DA	FOUR TRADE ROUGH IN VRU #: 003029568 1-INSTALL CORRECT NAILS IN HANGERS WHERE REQUIRED 2-FRONT WINDOW NOT INSTALLED
R425 02	9/28/17 <u>9/28/17</u>	TI <u>APD</u>	FOUR TRADE ROUGH IN VRU #: 003030954 Re inpection for 2 framing items.... Window missing and hanger nails. Call drew with any questions 919-730-7802. Thanks!

COMMENTS AND NOTES

233 Cambridge
(919) 390-8954



michael quinn and associates, p.c.

6767 peachtree industrial blvd. • suite p
norcross, georgia 30092
770-452-0744

September 27, 2017

Mr. Jeff Daugherty
US Lumber
3312 North Berkeley Lake Road
Suite D
Duluth, Georgia 30096

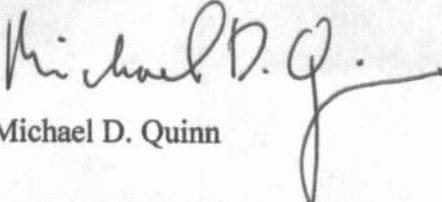
RE: Lot 29 Morgan Farm
MQ + A Project No. 17007.25

Dear Jeff:

This letter is in regard to a portion of the I-joist floor framing at the referenced project. Portions of the I-joists are attached to the supporting members with Simpson IUS2.37/11.88 face-mount hangers, utilizing 10d x 1-1/2" nails. The maximum hanger load is 672 pounds; the allowable hanger load per Simpson for this hanger is 912 pounds, which has been reduced 23% for the short nails. No repairs are necessary.

Please do not hesitate to call if you have any questions or if we can be of further assistance.

Sincerely,
MICHAEL QUINN AND ASSOCIATES, P.C.


Michael D. Quinn



consulting engineers

September 26, 2017

Greg Dudley
Guy C. Lee Building Material
151 HC Highway 42 E.
Clayton, NC 27527

(919) 553-6699

Subject: Lot 29 Morgan Farms

Greg,

Per our conversation today concerning the use of 10d x 1-1/2" nails with a Simpson IUS 2.37/11.88 hanger, the hanger manufacturer has published documentation to support this application.

On page 27 in the 2017 – 2018 Simpson product guide Simpson has a chart for the substitution of nails with hangers. The allowable carrying capacity of the IUS 2.37/11.88 hanger using a 10d x 3" nail is 1,185 pounds. Based on the nail chart we can multiply this by 0.77 to determine its capacity with 10d x 1-1/2" nails. The new allowable capacity is 912 pounds.

After reviewing the engineering on all the second floor joists that are supported by this hanger the maximum reaction is 670 pounds. So in conclusion, the use of 10d x 1-1/2" nails does not effect the performance of the joist or hanger for our application.

I have enclosed the Simpson catalog pages for your review. Please do not hesitate to contact me if you have any other questions.

David Leasure
US Lumber

Face-Mount Hangers – I-Joists

Actual Joist Size (in.)	Model No. ³	Web Stiff Req.	Ga.	Dimensions (in.)			Min./Max. ²	Fasteners ⁴		Allowable Loads ⁵						Code Ref.	
				W	H	B		Face	Joist	DF/SP Species Header				SPF/HF Species Header			
										Uplift (160)	Floor (100)	Snow (115)	Roof (125)	Floor (100)	Snow (115)		Roof (125)
1½ x 9½	U210	✓	16	1⅞	7⅞	2	—	(6) 10d	(6) 10d x 1½"	1,110	1,215	1,375	1,485	1,045	1,185	1,275	19, FL, L12
	MIU1.56/9	—	16	1⅞	8⅞	2½	—	(16) 16d	(2) 10d x 1½"	230	2,305	2,615	2,820	1,980	2,245	2,425	
1½ x 11¼ – 11⅞	U210	✓	16	1⅞	7⅞	2	—	(6) 10d	(6) 10d x 1½"	1,110	1,215	1,375	1,485	1,045	1,185	1,275	
	MIU1.56/11	—	16	1⅞	11⅞	2½	—	(20) 16d	(2) 10d x 1½"	230	2,880	3,060	3,080	2,475	2,695	2,695	
1¾ x 9½	IUS1.81/9.5	—	18	1⅞	9½	2	—	(8) 10d	—	75	950	1,080	1,165	815	925	1,000	
1¾ x 9¼ – 9½	MIU1.81/9	—	16	1⅞	8⅞	2½	—	(16) 16d	(2) 10d x 1½"	230	2,305	2,615	2,820	1,980	2,245	2,425	
	IUS1.81/11.88	—	18	1⅞	11⅞	2	—	(10) 10d	—	75	1,185	1,345	1,455	1,020	1,160	1,250	
1¾ x 11⅞	MIU1.81/11	—	16	1⅞	11⅞	2½	—	(20) 16d	(2) 10d x 1½"	230	2,880	3,135	3,135	2,475	2,695	2,695	
	IUS1.81/14	—	18	1⅞	14	2	Min.	(12) 10d	—	75	1,420	1,615	1,745	1,220	1,390	1,500	
1¾ x 14	MIU1.81/14	—	16	1⅞	14	2	Max.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
	IUS1.81/16	—	18	1⅞	16	2	Min.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
1¾ x 16	MIU1.81/16	—	16	1⅞	16	2	Max.	(16) 10d	—	75	1,895	1,980	1,980	1,630	1,705	1,705	
	IUS1.81/18	—	18	1⅞	18	2	Min.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
1¾ x 18 – 20	MIU1.81/18	—	16	1⅞	17⅞	2½	—	(26) 16d	(2) 10d x 1½"	230	3,500	3,530	3,550	3,220	3,465	3,480	
2 x 9½	IUS2.06/9.5	—	18	2⅞	9½	2	—	(8) 10d	—	75	950	1,080	1,165	815	925	1,000	
2 x 11⅞	IUS2.06/11.88	—	18	2⅞	11⅞	2	—	(10) 10d	—	75	1,185	1,345	1,455	1,020	1,160	1,250	
2 x 14	IUS2.06/14	—	18	2⅞	14	2	Min.	(12) 10d	—	75	1,420	1,615	1,745	1,220	1,390	1,500	
	MIU2.06/14	—	16	2⅞	14	2	Max.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
2 x 16	IUS2.06/16	—	18	2⅞	16	2	Min.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
	MIU2.06/16	—	16	2⅞	16	2	Max.	(16) 10d	—	75	1,895	1,980	1,980	1,630	1,705	1,705	
2⅞ x 9½	IUS2.06/9.5	—	18	2⅞	9½	2	—	(8) 10d	—	75	950	1,080	1,165	815	925	1,000	
	HU2.1/9	✓	14	2⅞	9⅞	2½	—	(14) 16d	(6) 10d x 1½"	915	2,085	2,350	2,530	1,795	2,025	2,180	
2⅞ x 11⅞	IUS2.06/11.88	—	18	2⅞	11⅞	2	—	(10) 10d	—	75	1,185	1,345	1,455	1,020	1,160	1,250	
	MIU2.1/11	—	16	2⅞	11⅞	2½	—	(20) 16d	(2) 10d x 1½"	230	2,880	3,135	3,135	2,475	2,695	2,695	
2⅞ x 11	HU2.1/11	✓	14	2⅞	11	2½	—	(16) 16d	(6) 10d x 1½"	915	2,380	2,685	2,890	2,050	2,315	2,490	
	IUS2.06/16	—	18	2⅞	16	2	—	(14) 10d	—	75	1,420	1,615	1,745	1,220	1,390	1,500	
2⅞ x 16	IUS2.06/16	—	18	2⅞	16	2	—	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
2¼ x 9½ to 20	2¼"-wide joists use the same hangers as 2⅞"-wide joists with the following load adjustments to the table loads: IUS download is the lesser of the table load or 1,400 lb.; IUS uplift is 55 lb.; MIU and U downloads are the lesser of the table load or 2,140 lb.																
2⅞ x 9½	IUS2.37/9.5	—	18	2⅞	9½	2	—	(8) 10d	—	75	950	1,080	1,165	815	925	1,000	
	MIU2.37/9	—	16	2⅞	9	2½	—	(16) 16d	(2) 10d x 1½"	230	2,305	2,615	2,820	1,980	2,245	2,425	
	U3510/14	✓	16	2⅞	9	2	—	(14) 16d	(6) 10d x 1½"	1,110	2,015	2,285	2,465	1,735	1,965	2,120	
	HU359 / HUC359	✓	14	2⅞	8⅞	2½	Min.	(14) 16d	(6) 10d x 1½"	915	2,085	2,350	2,530	1,795	2,025	2,180	
2⅞ x 11⅞	HU359 / HUC359	✓	14	2⅞	8⅞	2½	Max.	(18) 16d	(10) 10d x 1½"	1,895	2,680	3,020	3,250	2,305	2,605	2,800	
	IUS2.37/11.88	—	18	2⅞	11⅞	2	—	(10) 10d	—	75	1,185	1,345	1,455	1,020	1,160	1,250	
	MIU2.37/11	—	16	2⅞	11⅞	2½	—	(20) 16d	(2) 10d x 1½"	230	2,880	3,135	3,135	2,475	2,695	2,695	
	U3516/20	✓	16	2⅞	10⅞	2	—	(16) 16d	(6) 10d x 1½"	1,110	2,305	2,615	2,820	1,980	2,245	2,425	
2⅞ x 14	HU3511 / HUC3511	✓	14	2⅞	11⅞	2½	Min.	(16) 16d	(6) 10d x 1½"	915	2,380	2,685	2,890	2,050	2,315	2,490	
	HU3511 / HUC3511	✓	14	2⅞	11⅞	2½	Max.	(22) 16d	(10) 10d x 1½"	1,895	3,275	3,695	3,970	2,820	3,180	3,425	
	IUS2.37/14	—	18	2⅞	14	2	Min.	(12) 10d	—	75	1,420	1,615	1,745	1,220	1,390	1,500	
	MIU2.37/14	—	16	2⅞	14	2	Max.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
2⅞ x 16	HU3514 / HUC3514	✓	14	2⅞	13½	2½	Min.	(18) 16d	(8) 10d x 1½"	1,515	2,680	3,020	3,250	2,305	2,605	2,800	
	HU3514 / HUC3514	✓	14	2⅞	13½	2½	Max.	(24) 16d	(12) 10d x 1½"	2,015	3,570	4,030	4,335	3,075	3,470	3,735	
	IUS2.37/16	—	18	2⅞	16	2	Min.	(14) 10d	—	75	1,660	1,885	1,980	1,425	1,620	1,705	
	MIU2.37/16	—	16	2⅞	16	2	Max.	(16) 10d	—	75	1,895	1,980	1,980	1,630	1,705	1,705	
2⅞ x 16	HU3516/22 / HUC3516/22	✓	14	2⅞	15½	2½	—	(24) 16d	(2) 10d x 1½"	230	3,455	3,920	4,045	2,970	3,370	3,480	
	HU3516/22 / HUC3516/22	✓	14	2⅞	14¼	2½	—	(20) 16d	(8) 10d x 1½"	1,515	2,975	3,360	3,610	2,565	2,895	3,110	

- Uplift loads based on DF/SP lumber and have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern. For SPF/HF use 0.86 x DF/SP uplift load.
- Min. nailing quantity and load values — fill all round holes; Max. nailing quantity and load values — fill all round and triangle holes.
- Hangers sorted in order of recommended selection for best overall performance and installation value.

- Web stiffeners are required where noted in the table or when the joist top flange isn't supported laterally by the hanger or when supporting double I-joists with flanges less than 1⅞" thick.
- Allowable downloads are based on a joist bearing capacity of 750 psi.
- Nails:** 16d = 0.162" dia. x 3⅞" long, 10d = 0.148" dia. x 3" long, 10dx1½" = 0.148" dia. x 1½" long. See pp. 26–27 for other nail sizes and information.

Codes: See p. 14 for Code Reference Key Chart.

Fastener Design Information

In some cases, it is desirable to install Simpson Strong-Tie face-mount joist hangers and straight straps with nails that are a different type or size than what is called out in the load table. In these cases, these reduction factors must be applied to the allowable loads listed for the connector.

Load Adjustment Factors for Optional Fasteners Used with Face-Mount Hangers and Straight Straps

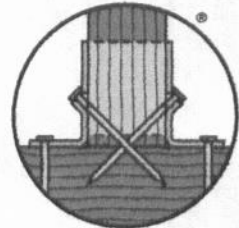
Catalog Nail	Replacement	Allowable Load Adjustment Factor	
		Face-Mount Hangers	Straight Straps ²
16d common (0.162" x 3½")	10d x 1½ (0.148" x 1½")	0.64	0.84 ^a
16d common (0.162" x 3½")	10d common (0.148" x 3") 12d common (0.148" x 3¼") 16d sinker (0.148" x 3¼")	0.84	0.84
16d common (0.162" x 3½")	16d x 2½ (N16) (0.162" x 2½")	1.00	1.00
10d common (0.148" x 3")	10d x 2½ (0.148" x 2½")	0.85	1.00
10d common (0.148" x 3")	10d x 1½ (0.148" x 1½")	0.77	1.00 ^a
16d sinker (0.148" x 3¼")			
10d common (0.148" x 3")	10d x 1¼ (0.148" x 1¼")	0.64	1.00 ^a
16d sinker (0.148" x 3¼")			
10d common (0.148" x 3")	16d sinker (0.148" x 3¼")	1.00	1.00
8d common (0.131" x 2½")	8d x 1½ (0.131" x 1½")	0.85	1.00
10d common (0.148" x 3")	8d common (0.131" x 2½")	0.83	0.83
16d common (0.162" x 3½")	SD #10 x 1½ (0.161" x 1½")	1.00 ^a	1.00
16d x 2½ (N16) (0.162" x 2½")			
10d common (0.148" x 3")	SD #9 x 1½ (0.131" x 1½")	1.00 ^a	1.00
16d sinker (0.148" x 3¼")			
10d x 1½ (0.148" x 1½")			
8d common (0.131" x 2½")			
8d x 1½ (0.131" x 1½")			

1. Allowable load adjustment factors shown in the table are applicable for all face-mount hangers and straight straps throughout this catalog, except as noted in the footnotes below.
2. Some products have been tested specifically with alternate fasteners and have allowable load adjustment factors or reduced capacities published on the specific product page. Those values on the product page may be used in lieu of the values calculated using this table.
3. This table does not apply to SUR/SUL/HSUR/HSUL hangers or to hangers modified per allowed options, or to connectors made from steel thicker than 10 ga.
4. Strong-Drive® SD Connector screw substitutions in this table do not apply to sloped, skewed or double-shear hangers. However, Strong-Drive SD Connector

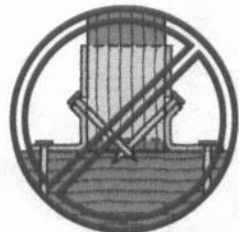
screws may be used in these connectors. For additional information and specific allowable loads, refer to strongtie.com/sd.

5. Nails and Strong-Drive SD Connector screws may not be combined in a connection.
6. Do not substitute 10d x 1½ nails for face nails on slope and skew combinations or skewed only LSU and LSSU.
7. For straps installed over sheathing use a 2½" long fastener minimum.
8. Where noted, use 0.80 for 10 ga., 11 ga., and 12 ga. products when using SPF lumber.
9. Where noted, use 0.92 for 10 ga., 11 ga., and 12 ga. products when using SPF lumber.

For LUS, MUS, HUS, HHUS and HGUS Hangers



Double-shear nailing shall use minimum 3" long nails



Shorter nails may not be used as double-shear nails

Fastening Identification



Round Holes

Purpose: To fasten a connector.

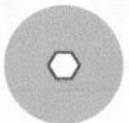
Fill Requirements: Always fill, unless noted otherwise.



Obround Holes

Purpose: To make fastening a connector in a tight location easier.

Fill Requirements: Always fill.



Hexagonal Holes

Purpose: To fasten a connector to concrete or masonry.

Fill Requirements: Always fill when fastening a connector to concrete or masonry.



Triangular Holes

Purpose: To increase a connector's strength or to achieve max. strength.

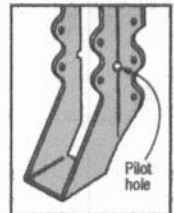
Fill Requirements: When the Designer specifies max. nailing.



Diamond Holes

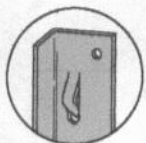
Purpose: To temporarily fasten a connector to make installing it easier.

Fill Requirements: None.



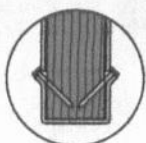
Pilot Holes

Tooling holes for manufacturing purposes. No fasteners required.



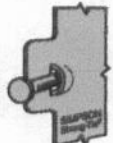
Speed Prongs

Used to temporarily position and secure the connector for easier and faster installation.



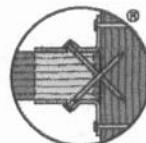
Positive Angle Nailing (PAN)

Provided when wood splitting may occur, and to speed installation.



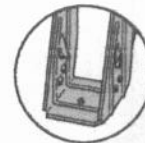
Dome Nailing

This feature guides the nail into the joist and header at a 45° angle. U.S. Patent 5,603,580



Double-Shear Nailing

The nail is installed into the joist and header, distributing the load through two points on each joist nail for greater strength. Double-shear nailing must be full-length catalog nail.



ITS/IUS Strong-Grip™

The Strong-Grip™ seat allows the I-joist to "snap" in securely without the need for joist nails.

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COMMENTS AND NOTES

233 Cambridge
(919) 390-8954



Michael quinn and associates, p.c.

6767 peachtree industrial blvd. • suite p
norcross, georgia 30092
770-452-0744

September 27, 2017

Mr. Jeff Daugherty
US Lumber
3312 North Berkeley Lake Road
Suite D
Duluth, Georgia 30096

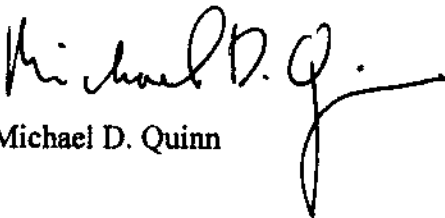
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MQ + A Project No. 17007.25

Dear Jeff:

This letter is in regard to a portion of the I-joist floor framing at the referenced project. Portions of the I-joists are attached to the supporting members with Simpson IUS2.37/11.88 face-mount hangers, utilizing 10d x 1-1/2" nails. The maximum hanger load is 672 pounds; the allowable hanger load per Simpson for this hanger is 912 pounds, which has been reduced 23% for the short nails. No repairs are necessary.

Please do not hesitate to call if you have any questions or if we can be of further assistance.

Sincerely,
MICHAEL QUINN AND ASSOCIATES, P.C.


Michael D. Quinn



consulting engineers

September 26, 2017

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(919) 553-6699

Subject: Lot 29 Morgan Farms

Greg,

Per our conversation today concerning the use of 10d x 1-1/2" nails with a Simpson IUS 2.37/11.88 hanger, the hanger manufacturer has published documentation to support this application.

On page 27 in the 2017 – 2018 Simpson product guide Simpson has a chart for the substitution of nails with hangers. The allowable carrying capacity of the IUS 2.37/11.88 hanger using a 10d x 3" nail is 1,185 pounds. Based on the nail chart we can multiply this by 0.77 to determine its capacity with 10d x 1-1/2" nails. The new allowable capacity is 912 pounds.

After reviewing the engineering on all the second floor joists that are supported by this hanger the maximum reaction is 670 pounds. So in conclusion, the use of 10d x 1-1/2" nails does not effect the performance of the joist or hanger for our application.

I have enclosed the Simpson catalog pages for your review. Please do not hesitate to contact me if you have any other questions.

David Leasure
US Lumber

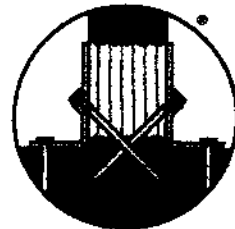
Fastener Design Information

In some cases, it is desirable to install Simpson Strong-Tie face-mount joist hangers and straight straps with nails that are a different type or size than what is called out in the load table. In these cases, these reduction factors must be applied to the allowable loads listed for the connector.

Load Adjustment Factors for Optional Fasteners Used with Face-Mount Hangers and Straight Straps

Catalog Nail	Replacement	Allowable Load Adjustment Factor	
		Face-Mount Hangers	Straight Straps
16d common (0.162" x 3 1/2")	10d x 1 1/2 (0.148" x 1 1/2")	0.64	0.64*
16d common (0.162" x 3 1/2")	10d common (0.148" x 3") 12d common (0.148" x 3 1/4") 16d sinker (0.148" x 3 1/4")	0.84	0.84
16d common (0.162" x 3 1/2")	16d x 2 1/2 (N16) (0.162" x 2 1/2")	1.00	1.00
10d common (0.148" x 3")	10d x 2 1/2 (0.148" x 2 1/2")	0.85	1.00
10d common (0.148" x 3")	10d x 1 1/2 (0.148" x 1 1/2")	0.77	1.00*
16d sinker (0.148" x 3 1/4")			
10d common (0.148" x 3")	10d x 1 1/2 (0.148" x 1 1/2")	0.64	1.00*
16d sinker (0.148" x 3 1/4")			
10d common (0.148" x 3")	16d sinker (0.148" x 3 1/4")	1.00	1.00
8d common (0.131" x 2 1/2")	8d x 1 1/2 (0.131" x 1 1/2")	0.85	1.00
10d common (0.148" x 3")	8d common (0.131" x 2 1/2")	0.83	0.83
16d common (0.162" x 3 1/2")	SD #10 x 1 1/2 (0.161" x 1 1/2")	1.00*	1.00
16d x 2 1/2 (N16) (0.162" x 2 1/2")			
10d common (0.148" x 3")	SD #9 x 1 1/2 (0.131" x 1 1/2")	1.00*	1.00
16d sinker (0.148" x 3 1/4")			
10d x 1 1/2 (0.148" x 1 1/2")			
8d common (0.131" x 2 1/2")			
8d x 1 1/2 (0.131" x 1 1/2")			

For LUS, MUS, HUS, HHUS and HGUS Hangers



Double-shear nailing shall use minimum 3" long nails



Shorter nails may not be used as double-shear nails

1. Allowable load adjustment factors shown in the table are applicable for all face-mount hangers and straight straps throughout this catalog, except as noted in the footnotes below.
2. Some products have been tested specifically with alternate fasteners and have allowable load adjustment factors or reduced capacities published on the specific product page. Those values on the product page may be used in lieu of the values calculated using this table.
3. This table does not apply to SUR/SUL/HSUR/HSUL hangers or to hangers modified per allowed options, or to connectors made from steel thicker than 10 ga.
4. Strong-Drive® SD Connector screw substitutions in this table do not apply to sloped, skewed or double-shear hangers. However, Strong-Drive SD Connector screws may be used in these connectors. For additional information and specific allowable loads, refer to strongtie.com/sd.
5. Nails and Strong-Drive SD Connector screws may not be combined in a connection.
6. Do not substitute 10d x 1 1/2" nails for face nails on slope and skew combinations or skewed only LSU and LSSU.
7. For straps installed over sheathing use a 2 1/2" long fastener minimum.
8. Where noted, use 0.80 for 10 ga., 11 ga., and 12 ga. products when using SPF lumber.
9. Where noted, use 0.92 for 10 ga., 11 ga., and 12 ga. products when using SPF lumber.

Fastening Identification



Round Holes

Purpose: To fasten a connector.

Fill Requirements: Always fill, unless noted otherwise.



Obround Holes

Purpose: To make fastening a connector in a tight location easier.

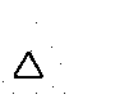
Fill Requirements: Always fill.



Hexagonal Holes

Purpose: To fasten a connector to concrete or masonry.

Fill Requirements: Always fill when fastening a connector to concrete or masonry.



Triangular Holes

Purpose: To increase a connector's strength or to achieve max. strength.

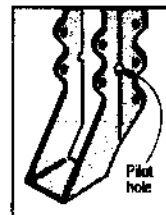
Fill Requirements: When the Designer specifies max. nailing.



Diamond Holes

Purpose: To temporarily fasten a connector to make installing it easier.

Fill Requirements: None.



Pilot Holes

Tooling holes for manufacturing purposes. No fasteners required.



Speed Prongs

Used to temporarily position and secure the connector for easier and faster installation.



Positive Angle Nailing (PAN)

Provided when wood splitting may occur, and to speed installation.



Dome Nailing

This feature guides the nail into the joist and header at a 45° angle. U.S. Patent 5,603,580



Double-Shear Nailing

The nail is installed into the joist and header, distributing the load through two points on each joist nail for greater strength. Double-shear nailing must be full-length catalog nail.



ITS/HUS Strong-Grip™

The Strong-Grip™ seat allows the I-joist to "snap" in securely without the need for joist nails.

UPDATED 04/17/17