

L/LS/GA

Reinforcing and Skewable Angles

L — Staggered nail pattern reduces the possibility for splitting.
 LS — Field-adjustable 0° to 135° angles.
 GA — Gusset angles' embossed bend section provides added strength.

Material: L — 16 gauge; GA and LS — 18 gauge

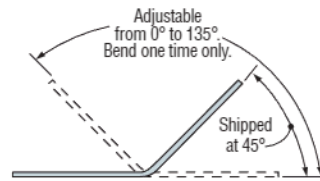
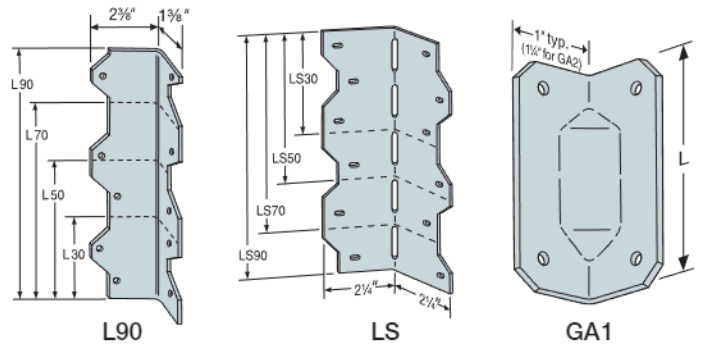
Finish: Galvanized. Some products available in stainless steel or ZMAX® coating.

Installation:

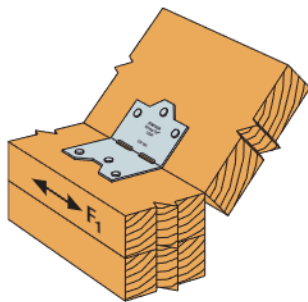
- Use all specified fasteners; see General Notes
- LS — Field skewable; bend one time only
- Joist must be constrained against rotation (for example, with solid blocking) when using a single LS per connection
- Nail the L angle's wider leg into the joist to ensure table loads and allow correct nailing

Codes: See p. 13 for Code Reference Key Chart

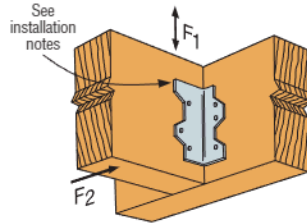
Web Applications: Visit app.strongtie.com/rws to access our Roof-to-Wall Selector web application.



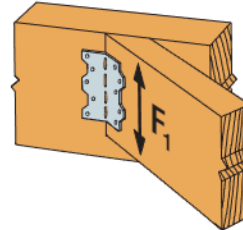
LS Top View



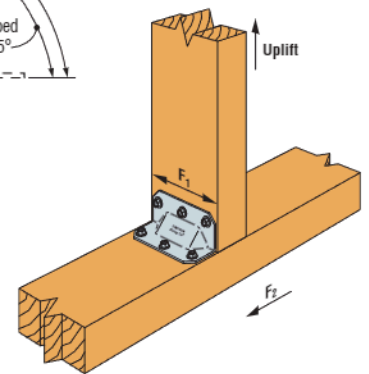
Typical LS30 Installation



Typical L50 Installation



Typical LS70 Installation



Typical GA Installation

These products are available with additional corrosion protection. For more information, see p. 16.

SS For stainless-steel fasteners, see p. 23.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 362–366 for more information.

| Model No. | Fasteners (in.) | L (in.) | Load Direction | DF/SP Allowable Loads | | | | SPF/HF Allowable Loads | | | | Code Ref. |
|-----------|--------------------|---------|---------------------------------|-----------------------|------------|------------|--------------------|------------------------|------------|------------|--------------------|--------------|
| | | | | Floor (100) | Snow (115) | Roof (125) | Wind/Seismic (160) | Floor (100) | Snow (115) | Roof (125) | Wind/Seismic (160) | |
| GA1 | (4) 0.148 x 1 1/2 | 2 3/4 | F ₁ , F ₂ | 235 | 270 | 290 | 350 | 200 | 230 | 250 | 300 | IBC®, FL, LA |
| | (4) #9 x 1 1/2" SD | | F ₁ | 340 | 375 | 375 | 375 | 225 | 260 | 280 | 325 | |
| | (4) #9 x 1 1/2" SD | | F ₂ | 340 | 395 | 430 | 435 | 225 | 260 | 280 | 360 | |
| GA2 | (6) 0.148 x 1 1/2 | 3 1/4 | F ₁ , F ₂ | 355 | 405 | 435 | 550 | 305 | 350 | 375 | 475 | IBC, FL, LA |
| | (6) #9 x 1 1/2" SD | | F ₁ | 515 | 590 | 640 | 695 | 335 | 385 | 420 | 540 | |
| | (6) #9 x 1 1/2" SD | | F ₂ | 515 | 590 | 640 | 820 | 335 | 385 | 420 | 540 | |
| L30 | (4) 0.148 x 1 1/2 | 3 | F ₁ | 245 | 250 | 250 | 250 | 210 | 215 | 215 | 215 | IBC, FL, LA |
| | | | F ₂ | 245 | 275 | 295 | 370 | 210 | 235 | 255 | 320 | |
| L50 | (6) 0.148 x 1 1/2 | 5 | F ₁ | 365 | 415 | 445 | 525 | 315 | 355 | 385 | 450 | |
| | | | F ₂ | 365 | 415 | 445 | 555 | 315 | 355 | 385 | 475 | |
| L70 | (8) 0.148 x 1 1/2 | 7 | F ₁ , F ₂ | 485 | 550 | 595 | 740 | 415 | 475 | 510 | 635 | |
| L90 | (10) 0.148 x 1 1/2 | 9 | F ₁ , F ₂ | 610 | 690 | 740 | 925 | 525 | 595 | 635 | 795 | |
| LS30 | (6) 0.148 x 1 1/2 | 3 3/8 | F ₁ | 320 | 320 | 320 | 320 | 275 | 275 | 275 | 275 | |
| | (6) 0.148 x 3 | | F ₁ | 355 | 395 | 395 | 395 | 305 | 340 | 340 | 340 | |
| SS LS50 | (8) 0.148 x 1 1/2 | 4 7/8 | F ₁ | 475 | 540 | 560 | 560 | 410 | 465 | 480 | 480 | |
| | (8) 0.148 x 3 | | F ₁ | 475 | 540 | 580 | 730 | 410 | 465 | 500 | 630 | |
| LS70 | (10) 0.148 x 1 1/2 | 6 3/8 | F ₁ | 590 | 645 | 645 | 645 | 510 | 555 | 555 | 555 | |
| | (10) 0.148 x 3 | | F ₁ | 590 | 675 | 725 | 915 | 510 | 580 | 625 | 785 | |
| LS90 | (12) 0.148 x 1 1/2 | 7 7/8 | F ₁ | 710 | 805 | 870 | 890 | 610 | 690 | 750 | 765 | |
| | (12) 0.148 x 3 | | F ₁ | 710 | 805 | 870 | 1,040 | 610 | 690 | 750 | 895 | |

- GA angles may be installed with 0.148" x 3" nails.
- GA1 uplift is 425 lb. for DF and 300 lb. for SPF when installed with Strong-Drive SD Connector screws.
- GA2 uplift is 370 lb. for DF and 260 lb. for SPF when installed with Strong-Drive SD Connector screws.
- Connectors are required on both sides to achieve F₂ loads in both directions.
- Fasteners:** Nail dimensions are listed diameter by length. SD screws are Simpson Strong-Tie Strong-Drive SD Connector screws. See pp. 23–24 for fastener information.
- Using Strong-Drive SD Connector screw (SD9112) for 0.148" x 1 1/2" and 0.148" x 3" nails will get the same load as nails.

