L, LS and S/LS Utility Clips and Skewable Angles

L, LS and S/LS angles are load rated and provide the correct thickness and number of fasteners the specifier is looking for compared with field fabricated clip angles. These angles also have well-defined fastener locations, and testing ensures that the tabulated load values account for connection eccentricities. The connectors are general utility reinforcing angles with multiple uses. LS and S/LS connectors are skewable and can be used to attach members intersecting at angles.

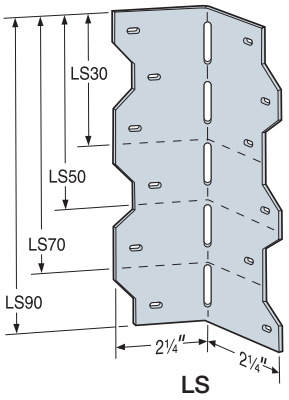
Material: L — 54 mil (16 ga.); LS — 43 mil (18 ga.); S/LS — 43 mil (18 ga.)

Finish: Galvanized (G90)

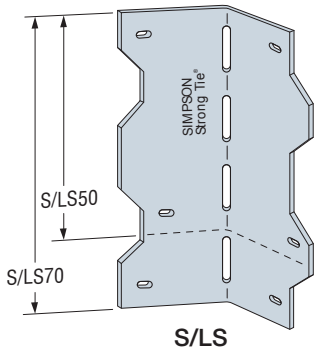
Installation:

- Use all specified fasteners
- S/LS — field-skewable; bend one time only
- CFS framing must be constrained against rotation when using a single S/LS per connection

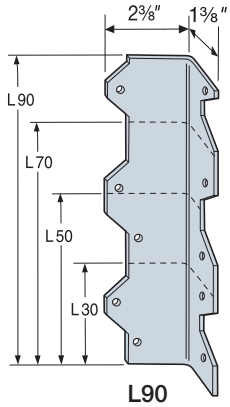
Codes: See p. 11 for Code Reference Key Chart



LS



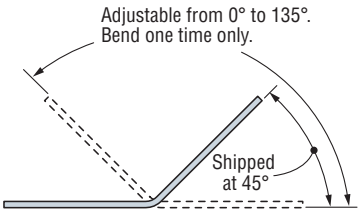
S/LS



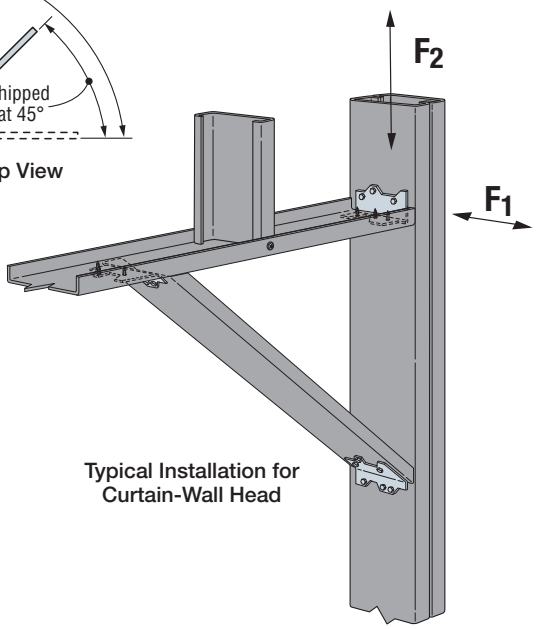
L90

Model No.	Length (in.)	Fasteners	Allowable Load (lb.)						Code Ref.
			33 mil (20 ga.)		43 mil (18 ga.)		54 mil (16 ga.)		
			F_1	F_2	F_1	F_2	F_1	F_2	
L30	3	(4) #10	200	60	315	85	610	—	IBC, FL, LA
L50	5	(6) #10	475	—	675	90	750	110	
L70	7	(8) #10	705	—	760	110	1,100	110	
L90	9	(10) #10	795	—	945	110	1,740	110	
LS30	3⅜	(6) #10	200	—	370	—	500	—	
S/LS50	4⅞	(4) #10	200	—	370	—	500	—	
S/LS70	6⅜	(6) #10	465	—	575	—	715	—	
LS90	7⅞	(12) #10	465	—	895	—	915	—	

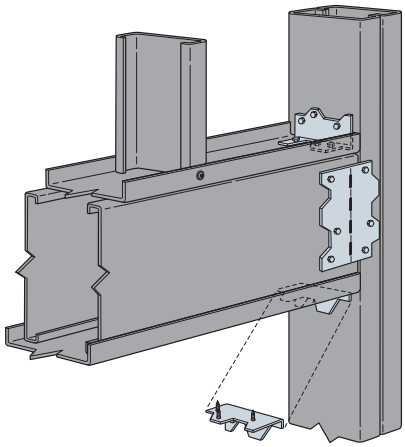
1. Loads are for one part only.
2. See *Fastening Systems* catalog (C-F-2019) on **strongtie.com** for more information on Simpson Strong-Tie fasteners.



LS and S/LS Top View



Typical Installation for Curtain-Wall Head


Typical Installation for Gravity Headers

L, LS and S/LS Utility Clips and Skewable Angles

L, LS, and S/LS angles are load rated, providing the correct thickness and number of fasteners for the specifier compared with field fabricated clip angles. These angles also have well-defined fastener locations, and testing ensures that the tabulated load values account for connection eccentricities. The connectors are general utility reinforcing angles with multiple uses. S/LS and LS connectors are skewable and can be used to attach members intersecting at angles.

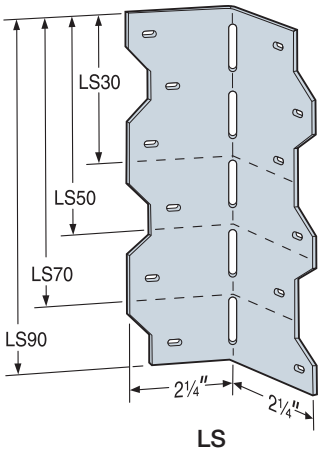
Material: L — 54 mil (16 ga.); S/LS and LS — 43 mil (18 ga.)

Finish: Galvanized (G90)

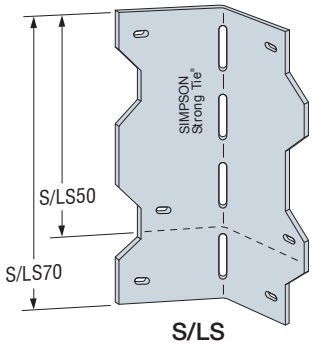
Installation:

- Use all specified fasteners
- S/LS and LS — Field-skewable; bend one time only
- CFS framing must be constrained against rotation when using a single S/LS or LS per connection

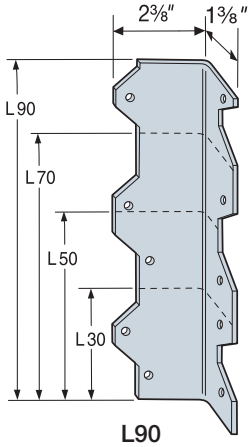
Codes: See p. 11 for Code Reference Key Chart



LS



S/LS
US Patent 4,230,416

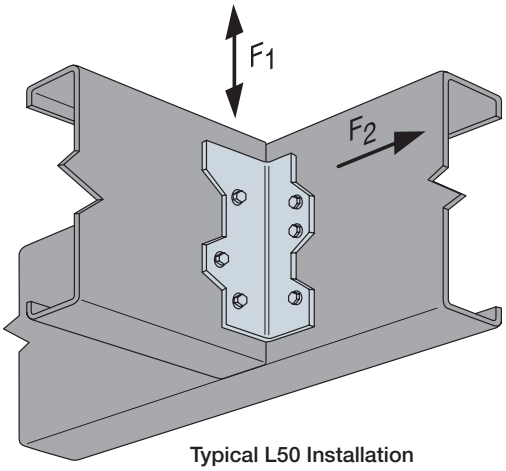


L90

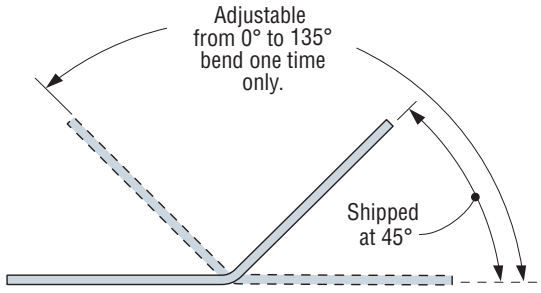
Model No.	Length (in.)	Fasteners[2]	Allowable Load (lb.)						Code Ref.
			33 mil (20 ga.)		43 mil (18 ga.)		54 mil (16 ga.)		
			F_1	F_2	F_1	F_2	F_1	F_2	
L30	3	(4) #10	200	60	315	85	610	—	
L50	5	(6) #10	475	—	675	90	750	110	
L70	7	(8) #10	705	—	760	110	1,100	110	
L90	9	(10) #10	795	—	945	110	1,740	110	
LS30	3⅜	(6) #10	200	—	370	—	500	—	—
S/LS50	4⅞	(4) #10	200	—	370	—	500	—	
S/LS70	6⅜	(6) #10	465	—	575	—	715	—	
LS90	7⅞	(12) #10	465	—	895	—	915	—	

These products are available with additional corrosion protection. Additional products on this page may also be available with this option. Check with Simpson Strong-Tie for details.

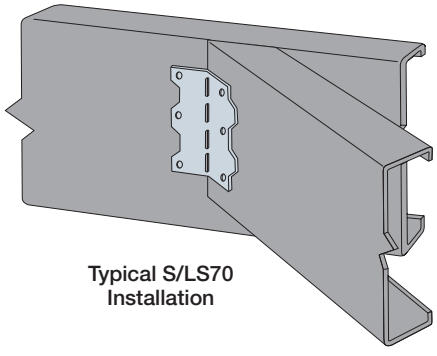
1. Loads are for one part only.
2. See *Fastening Systems* catalog (C-F-2019) on **strongtie.com** for more information on Simpson Strong-Tie fasteners.



Typical L50 Installation



S/LS Top View



Typical S/LS70 Installation

LS and S/LS Skewable Angles

LS and S/LS skewable angles are a cost effective method for connecting roof rafters to hip rafters.

Material: 43 mil (18 ga.)

Finish: Galvanized (G90)

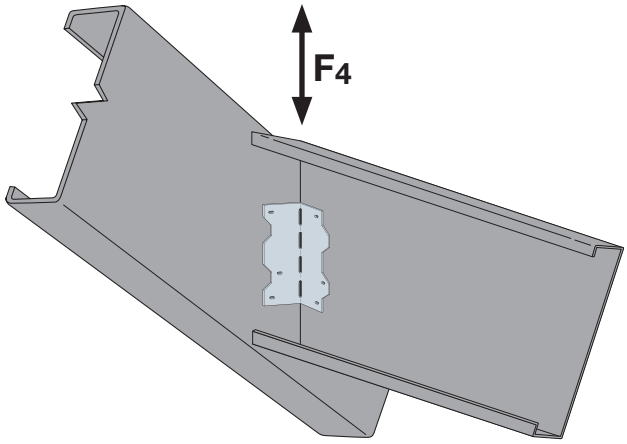
Installation:

- Use all specified fasteners
- Field-skewable; bend one time only

Codes: See p. 11 for Code Reference Key Chart

Model No.	Length (in.)	Fasteners[2]	Allowable Load (lb.)			Code Ref.
			33 mil (20 ga.)	43 mil (18 ga.)	54 mil (16 ga.)	
			F_4	F_4	F_4	
LS30	3⅞	(6) #10	200	370	500	—
S/LS50	4⅞	(4) #10	200	370	500	
S/LS70	6⅜	(6) #10	465	575	715	
LS90	7⅞	(12) #10	465	895	915	

1. Loads are for one part only.
2. See *Fastening Systems* catalog (C-F-2019) on **strongtie.com** for more information on Simpson Strong-Tie fasteners.



Typical Installation Between Roof Rafter and Hip Rafter

AHEP Adjustable Hip-End Purlin

The Simpson Strong-Tie AHEP is a structural purlin that also serves as an installation aid during the truss-erection process. The AHEP attaches to the step-down hip trusses at the leading edge, eliminating the need for drop top chords and C-stud fillers. The AHEP installs linearly, aligned with the end jacks, to maintain sheathing spacing from eave to hip or peak. Roof sheathing/decking attaches directly to the purlin. Adjustable in length, the AHEP is designed to accommodate a pitch range of 3/12 to 9/12.

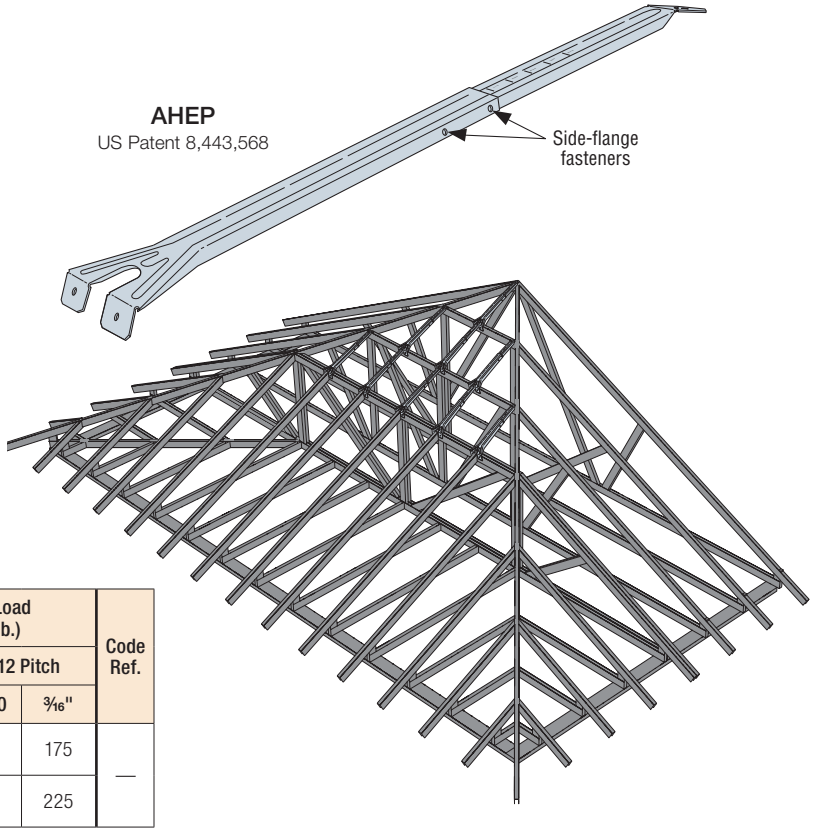
Material: 33 mil (20 ga.)

Finish: Galvanized

Installation:

- Use all specified fasteners; see General Notes

Codes: See p. 11 for Code Reference Key Chart



Model No.	Fasteners[3]		Sheathing Option	Allowable Down Load 33 mil (20 ga.) (lb.)				Code Ref.
	Side Flanges	Truss Ends		3/12 Pitch		9/12 Pitch		
				L/180	3⁄16"	L/180	3⁄16"	
AHEP	(4) #10	(4) #10	None	285	360	160	175	—
			½" wood sheathing	285	360	205	225	

1. Designer shall ensure attached members are adequately designed to resist applied loads.
2. Straight-line interpolation can be used to determine allowable loads for pitches between 3/12 and 9/12.
3. See *Fastening Systems* catalog (C-F-2019) on **strongtie.com** for more information on Simpson Strong-Tie fasteners.