

HL

Heavy Angle and Gusset

Versatile angle gussets and heavy angles promote standardization and construction economy, and are compatible with Simpson Strong-Tie structural hardware.

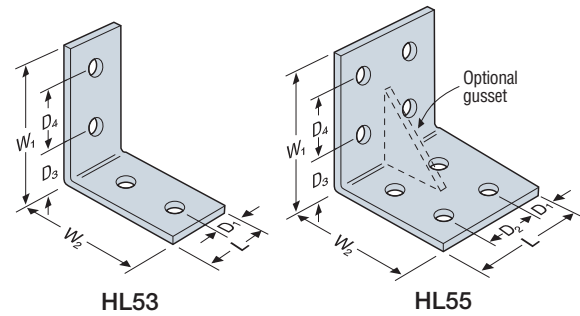
Finish: 8 ga. models — galvanized; 3 ga. models — Simpson Strong-Tie gray paint. May be ordered HDG or black powder coat (add HDG or PC to model no.); contact Simpson Strong-Tie.

Options:

- Gussets may be added to HL models when $L \geq 5"$ (specify G after model number, as in HL46G).

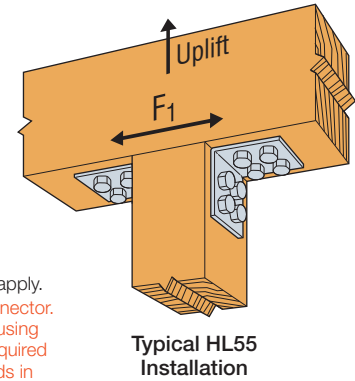
Codes: See p. 11 for Code Reference Key Chart

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



Model No.	Ga.	Dimensions (in.)						Bolts (Total)		DF/SP Allowable Loads		Code Ref.
		W ₁ and W ₂	L	D ₁	D ₂	D ₃	D ₄	Qty.	Dia.	Uplift (160)	F ₁ (160)	
Single Row Angles												
HL33	8	3 3/4	2 1/2	1 1/4	—	2	—	2	1/2	740	1,040	—
HL35	8	3 3/4	5	1 1/4	2 1/2	2	—	4	1/2	740	1,310	
HL37	8	3 3/4	7 1/2	1 1/4	2 1/2	2	—	6	1/2	740	1,310	
HL43	3	4 1/4	3	1 1/2	—	2 3/4	—	2	3/4	1,275	1,445	
HL46	3	4 1/4	6	1 1/2	3	2 3/4	—	4	3/4	1,275	1,680	
HL49	3	4 1/4	9	1 1/2	3	2 3/4	—	6	3/4	1,275	1,680	
Double Row Angles												
HL53	8	5 3/4	2 1/2	1 1/4	—	2	2 1/2	4	1/2	740	1,310	—
HL55	8	5 3/4	5	1 1/4	2 1/2	2	2 1/2	8	1/2	740	1,310	
HL57	8	5 3/4	7 1/2	1 1/4	2 1/2	2	2 1/2	12	1/2	740	1,310	
HL73	3	7 1/4	3	1 1/2	—	2 3/4	3	4	3/4	2,445	2,885	
HL76	3	7 1/4	6	1 1/2	3	2 3/4	3	8	3/4	2,445	4,310	
HL79	3	7 1/4	9	1 1/2	3	2 3/4	3	12	3/4	2,445	4,310	

1. See pp. 266–267 for Straps and Ties General Notes.
2. For SPF/HF lumber, use 0.85 x DF/SP allowable loads.
3. Parts should be centered on the face of the member, which is at least as wide as the angle, to which they are attached.
4. Wood members for the “3” and “5” series must have a minimum thickness of 3 1/2" for table loads to apply.
5. Wood members for the “4” and “7” series must have a minimum thickness of 5 1/8" for table loads to apply.
6. Allowable loads are for a single connector. Uplift loads may be doubled when using two connectors. Connectors are required on both sides to achieve lateral loads in both directions. Lateral loads may not be doubled.
7. Lag screws of equal diameter (minimum 5" long) may be substituted for bolts in the beam with no reduction in load.



Z

Clip

The Z clip secures 2x4 flat blocking between joists or trusses to support sheathing.

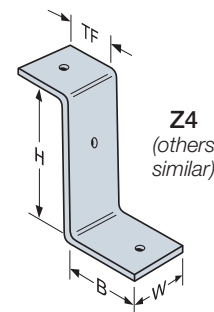
Material: See table

Finish: Galvanized

Installation:

- Use all specified fasteners; see General Notes.
- Z clips do not provide lateral stability. Do not walk on stiffeners or apply load until diaphragm is installed and nailed to stiffeners.

Codes: See p. 11 for Code Reference Key Chart



Model No.	Ga.	Dimensions (in.)				Fasteners' (Total) (in.)	DF/SP Allowable Download (100/115/125/160)	Code Ref.
		W	H	B	TF			
Z2	20	2 5/16	1 1/2	1 3/8	1 3/8	(4) 0.148 x 1 1/2	420	IBC, FL, LA
Z4	12	1 1/2	3 1/2	2 1/8	1 3/4	(2) 0.162 x 3 1/2	420	
Z28	28	2 5/16	1 1/2	1 3/8	1 3/8	0.148 x 1 1/2 ¹	—	—
Z38	28	2 5/16	2 1/2	1 3/8	1 3/8	0.148 x 1 1/2 ¹	—	
Z44	12	2 1/2	3 1/2	2	1 3/8	(4) 0.162 x 3 1/2	775	IBC, FL, LA

1. Z28 and Z38 do not have nail holes. Fastener quantity and type shall be per designer.
2. Z4 loads apply with a nail in the top and a nail in the seat.
3. For SPF/HF lumber, use 0.86 x DF/SP allowable loads.
4. **Fasteners:** Nail dimensions are listed diameter by length. See pp. 21–22 for fastener information.

