

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: 7 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.

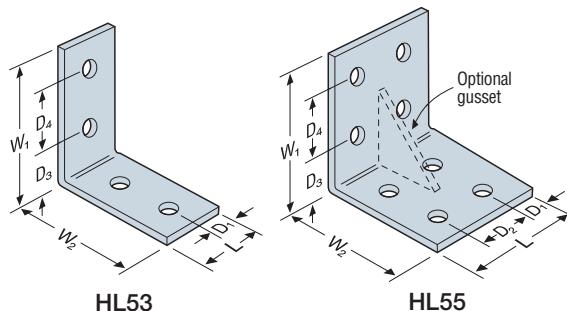
Options:

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

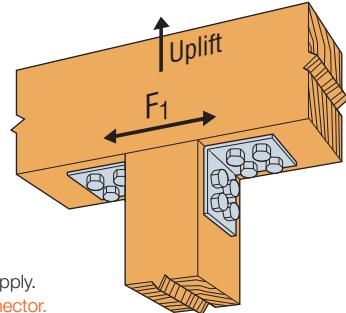
Codes: See p. 11 for Code Reference Key Chart

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.	
Single Row Angles										
HL33	7	3 1/4	2 1/2	1 1/4	—	2	—	2	1/2	740 1,040
HL35	7	3 1/4	5	1 1/4	2 1/2	2	—	4	1/2	740 1,310
HL37	7	3 1/4	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	7	5 1/4	2 1/2	1 1/4	—	2	2 1/2	4	1/2	740 1,310
HL55	7	5 1/4	5	1 1/4	2 1/2	2	2 1/2	8	1/2	740 1,310
HL57	7	5 1/4	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



- See pp. 266–267 for Straps and Ties General Notes.
- For SPF/HF lumber, use 0.85 x DF/SP allowable loads.
- Parts should be centered on the face of the member, which is at least as wide as the angle, to which they are attached.
- Wood members for the "3" and "5" series must have a minimum thickness of 3 1/2" for table loads to apply.
- Wood members for the "4" and "7" series must have a minimum thickness of 5 1/8" for table loads to apply.
- 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.
- Lag screws of equal diameter (minimum 5" long) may be substituted for bolts in the beam with no reduction in load.



Typical HL55 Installation

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 ¹ (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 1/8	1 1/8	(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 1/8	1 1/8	0.148 x 1 1/2 ¹	—	—
Z38	28	2 5/16	2 1/2	1 1/8	1 1/8	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

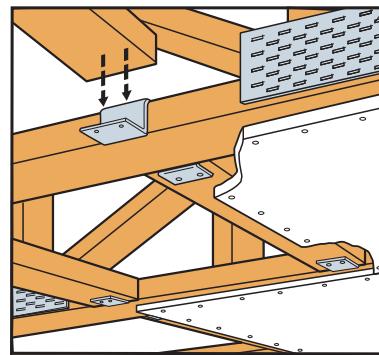
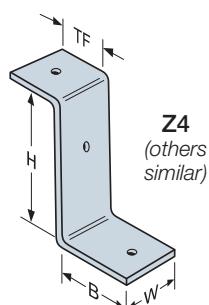
1. Z28 and Z38 do not have nail holes. Fastener quantity and type shall be per designer.

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.



Typical Z2 Installation