

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.

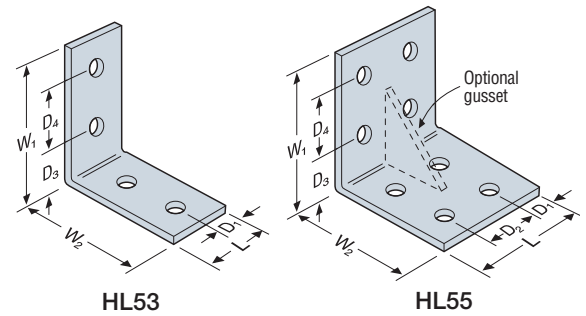
Finish: 7 gauge models — galvanized;
3 gauge models — Simpson Strong-Tie gray paint.
May be ordered HDG or black powder coat (add HDG or PC to model no.).

Options:

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

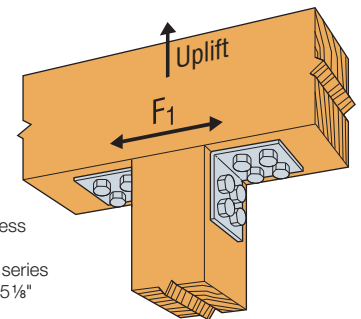
Codes: See p. 13 for Code Reference Key Chart

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



Model No.	Ga.	Dimensions (in.)								Bolts (Total)		DF/SP Allowable Loads		Code Ref.
		W1 and W2	L	D1	D2	D3	D4	Qty.	Dia.	Uplift (160)	F1 (160)			
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 3/4	2 1/2	1 1/4	—	2	2 1/2	4	1/2	740	1,310	—		
HL55	7	5 3/4	5	1 1/4	2 1/2	2	2 1/2	8	1/2	740	1,310			
HL57	7	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. 276–277 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.
8. All references to bolts are for structural-quality through bolts (not lag screws or carriage bolts) equal to or better than ASTM A307, Grade A.



Typical HL55 Installation

Z

Clip

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

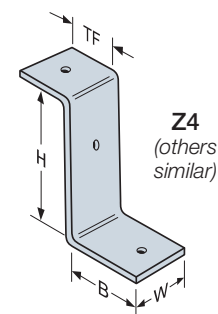
Material: See table

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.

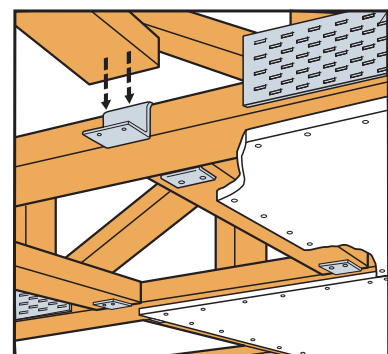
Codes: See p. 13 for Code Reference Key Chart



Z4 (others similar)

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 5/8	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 5/8	1 1/2	1 3/8	1 3/8	0.148 x 1 1/2 ¹	—	—
Z38	28	2 5/8	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. 23–24 for fastener information.



Typical Z2 Installation