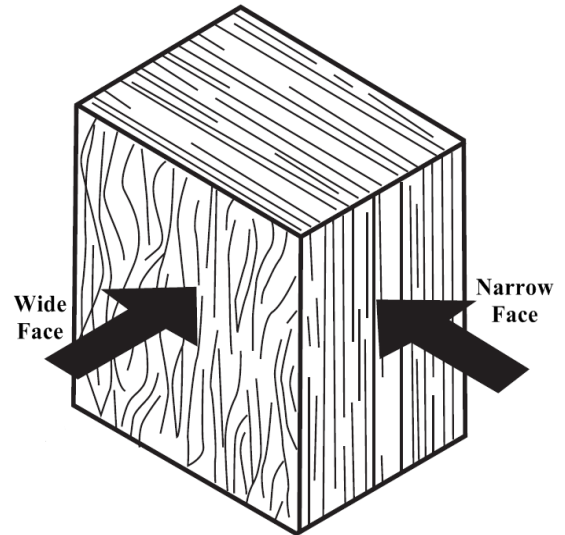


Design of Column Caps/Bases, Holdowns, and Straps Fastened Into the Narrow Face of SCL

This technical bulletin addresses the design of column caps, hold downs, straps, and face mount hangers being fastened into the narrow face of structural composite lumber (SCL). Previous recommendations limited applications to those installed into the wide face only. New testing conducted by Simpson Strong-Tie has shown that narrow face installations are possible with reductions to the capacities.

The following tables provide the reduction factors for a given connector series and product type. The reduction factors listed in the table apply to DF published values in the Simpson Catalog only when attached to the narrow face of the SCL member. If the fastener in question is applied to a square member, assume that it will be installed into the narrow face unless installation into the wide face can be field verified.

For other fastener types not mentioned here, contact Simpson Strong-Tie® for further information.



Reduction Factors

Connector Type	Simpson Connector Series	SCL Type ¹		
		LSL	PSL	LVL
Column/Post Caps/Bases – Nailed Applications	BC, AC, ACE, PC, LPC, ABA, ABE	1.00	0.90	N/A
	ABU, PB, PBS, EPB, LCB ²	Do Not use in Narrow Face		
Column Caps/Bases – SDS Screw Applications	CCQ, CBSQ, CBQ	1.00	0.90	N/A
Straps, Strap Holdowns – Nailed Applications	HTT22, LTT20B, LTTI31, FSC, STHD, LSTHD	0.90	0.75	0.75
	(LSTA, MSTA, MSTC, MSTI, LSTI) ³	0.90	0.75	0.75
	HTT16, LTT19, MTT28B, LCE	0.80	0.65	0.65
	MST, ST, CMST, PA, PAHD, HPAHD, PAI, CS, MSTA49	Contact Weyerhaeuser.		
Face Mount Hangers	HUCQ	1.00	0.90	N/A
Holdowns – SDS Screw Applications ⁴	HDU, HDC, PHD	0.90	0.75	N/A
Holdowns – SDS Screw Applications ⁵	HDU, HDC, HHDQ	0.75	N/A	
Holdowns – Bolted Applications ⁶	HD, HD-A	0.80	0.75	N/A
			0.45	N/A

(1) For column caps and bases, reductions apply only to the uplift loads. For holdowns and straps the reductions apply to the tension loads. For hangers, reductions apply to both uplift and download.

(2) Nailed Applications Only.

(3) If installed with a fastener end distance greater than or equal to 3 inches. Otherwise the reduction factor is 0.50 across all three SCL types.

(4) Published catalog capacities **less** than 6000 lbs.

(5) Published catalog capacities **greater** than 6000 lbs.

(6) Published catalog capacities **less** than 4000 lbs.

(7) Published catalog capacities **greater** than 4000 lbs.