

KBS1Z

Knee-Brace Stabilizer

The KBS1Z knee-brace stabilizer makes a structural connection between knee bracing and columns or beams to help stabilize free-standing structures and comply with many prescriptive deck bracing requirements such as AWC's DCA6 Prescriptive Residential Wood Deck Construction Guide. Factory-formed at a 45° angle and easily installed with nails, the KBS1Z braces 2x, 4x and 6x in line post-to-beam configurations. Check with your local building department for deck bracing requirements.

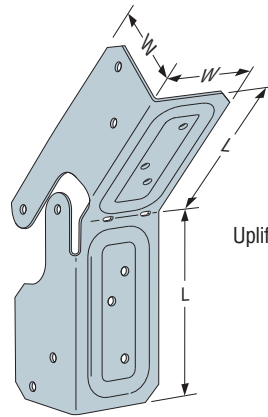
Material: 16 gauge

Finish: ZMAX® coating

Installation:

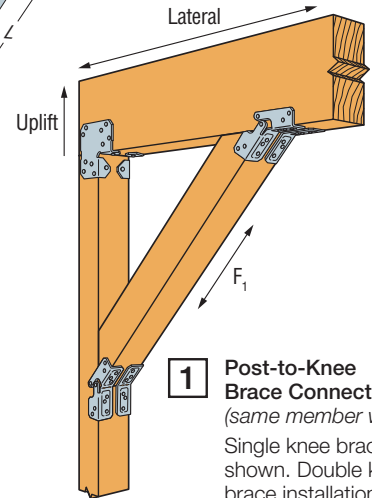
- Use all specified fasteners; see General Notes.
- For installations at an angle other than 45°, bend KBS1Z along slots to desired angle. Bend one time only.
- **Knee Brace:**
 - Cut braces at desired angle
 - Bend KBS1Z to desired angle if required
 - Install fasteners to secure in place
 - For equal-width members, install (2) KBS1Z on each end of brace (see connection type 1)
 - For 2x knee brace, install single KBS1Z on each end of brace (see connection type 2)
- **Beam-to-Post:**
 - Install in pairs; see illustrations 3 or 4 for quantity and configuration
 - **Part used as a column cap; does not replace a knee brace**

Codes: See p. 12 for Code Reference Key Chart



KBS1Z

U.S. Patent
9,045,895



**1 Post-to-Knee
Brace Connection**
(same member width)
Single knee brace shown. Double knee brace installation similar.

These products are available with additional corrosion protection. For more information, see p. 15.



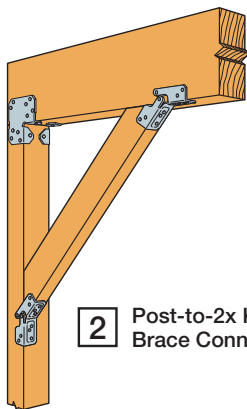
Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 335–337 for more information.

Model No.	Dimensions (in.)		Type of Connection	Connectors per Joint	Fasteners Each Connector	Direction of Load	Allowable Loads (160)				Code Ref.	
	W	L					In-Service Moisture Content					
							≤ 19%		> 19%			
							DF/SP	SPF/HF	DF/SP	SPF/HF		
KBS1Z	1½	3	1	2	(12) 0.131 x 2½	F ₁ – Brace angle = 45°	1,175	1,010	1,055	860	IBC, FL, LA	
						F ₁ – Brace angle = 30° or 60°	835	720	835	720		
			2	1	(12) 0.131 x 1½	F ₁ – Brace angle = 45°	630	540	470	385		
						F ₁ – Brace angle = 30° or 60°	510	440	395	330		
			3	4	(12) 0.131 x 2½	Uplift	1,160	1,000	1,160	1,000		
						Lateral	1,725	1,480	1,725	1,480		
			4	2	(12) 0.131 x 2½	Uplift	540	465	540	465		
						Lateral	485	420	430	370		
				4		Uplift	900	775	900	775		
						Lateral	1,270	1,095	1,270	1,095		

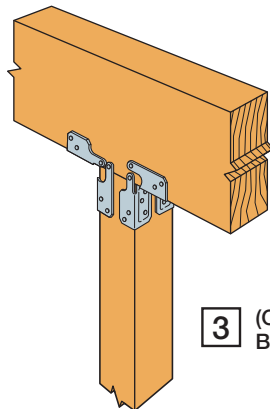
1. Allowable loads have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern.

2. For braces installed at intermediate angles, allowable loads may be interpolated between loads listed for brace angle = 45° and those listed for brace angle = 30° or 60°.

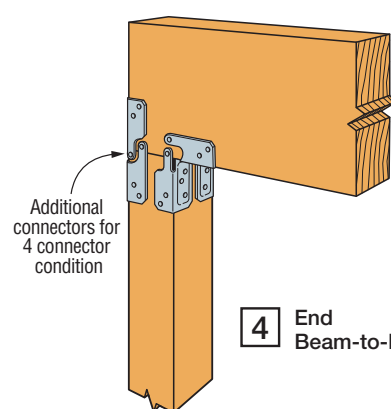
3. **Fasteners:** Nail dimensions in the table are listed diameter by length. See pp. 21–22 for fastener information.



**2 Post-to-2x Knee
Brace Connection**



**3 (Continuous)
Beam-to-Post**



**4 End
Beam-to-Post**