



Dificonsa

# Flat Dowel

Tapered plate dowels for formed construction joint.



## PRODUCT DESCRIPTION

**Flat Dowel** are a plate dowels suited for construction joints in concrete slabs and pavements. They transfer vertical loads across the joint and minimize differential deflection between adjacent slab panels under load. Easy to install, they attach directly to wooden form board or metal separation plates.

## ADVANTAGES

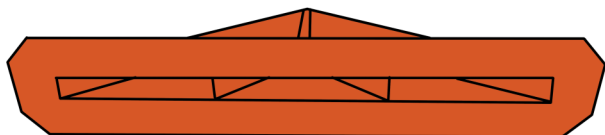
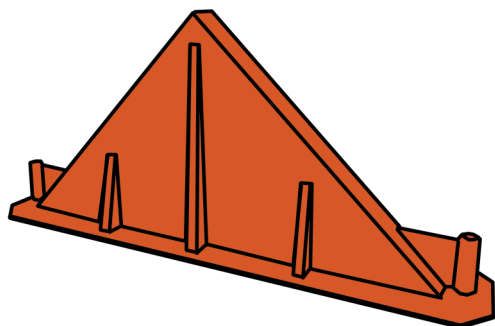
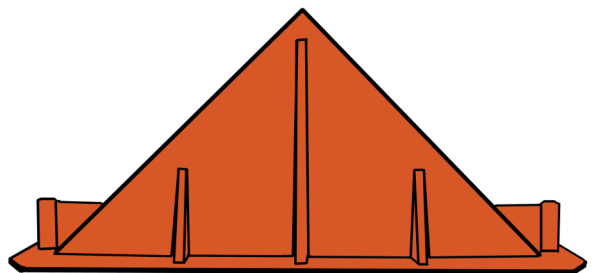
- They are more cost effective; the same amount of steel provides more strength where it's needed.
- They are easier to align during construction.
- Decrease tensile stresses by allowing movement parallel to the joint.
- Allows free horizontal movement of the concrete without restraint.
- Eliminates drilling bulkheads, greasing dowels, removing and reinstalling dowels.
- Minimizes horizontal and vertical alignment deviations of the tapered plate.
- Reduces job-site strip hazards.

## LOCATION & PLACEMENT

During the work process, all **FlatDowel** must be protected against damage, dirt, concrete splashes and free of oil.

- Set up formwork.
- Locate and mark at specified location, usually at center of slab but at least 2 1/4" from top of slab.
- Align **FlatDowel** sleeve at specified location
- Nail the **FlatDowel** to formwork. Repeat at specified spacing along entire length of the formwork. Place the **FlatDowel System** up to within 6 inches ( 150 mm ) of joint intersection per industry guides.
- Install any reinforcement needed.
- Place and finish concrete per ACI specification pour at least 18 inches from **FlatDowel System**.
- Use internal vibration to consolidate the concrete around the **FlatDowel System** per industry guides.
- After concrete cures, remove formwork with base & bend nails away from plate.
- Insert the **FlatDowel** plate into the slot. Center the corner of the plate in the middle of the label and push straight through the label into the pocket former.
- Plate should be inserted within 48 hours.

## DESIGN



## NOTE:

Installer is responsible for proper application of the product. The visits made by **Concoisa** personnel are only for the purpose of making technical recommendations, not to provide supervision or quality control.

**Limited warranty: Concoisa S.A. de C.V.** warrants that the product is manufactured free of defects according to standard formulations and contains all the components for proper application, as stated in our current technical data sheet. This product must be used as directed and within its stated shelf life. **Concoisa S.A. de C.V.** will replace or, at our option, refund the purchase price of any product, excluding the cost of labor, that is found to be defective. Our product recommendations are based on industry standards and testing procedures. It is the buyer's obligation to test the suitability of the product for its intended use before using it. We do not make any written, express or implied warranties in connection with any specific method of application or use of the product.

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Slab Depth In. (mm)	Dowel Dimensions*, in. (mm)			Dowel Spacing Center-to-Center in. (mm)		
	Round	Square	Diamond Shaped**	Round	Square	Diamond Shaped
5" to 6" 130 - 150	3/4" x 14" 19 x 360	3/4" x 14" 19 x 360	1/4" x 4-1/2" x 4-1/2" 6 x 110 x 110	12" 300	14" 360	18" - 24" 460 - 610
7" to 8" 180 - 200	1" x 16" 25 x 410	1" x 16" 25 x 410	3/8" x 4-1/2" x 4-1/2" 9 x 110 x 110	12" 300	14" 360	18" - 24" 460 - 610
9" to 11" 230 - 280	1-1/4" x 18" 32 x 460	1-1/4" x 18" 32 x 460	3/4" x 4-1/2" x 4-1/2" 19 x 110 x 110	12" 300	14" 360	18" - 24" 460 - 610

\* Total dowel length includes allowance made for joint opening and minor errors in positioning dowels.

\*\* Construction tolerances required make it impractical to use diamond-shaped load plates in saw-cut contraction joints. Note: Table values based on maximum opening of .2 in. (5 mm). Dowels must be carefully aligned and supported during concrete operations. Misaligned dowels may lead to cracking.