

# Square Dowel

## An engineered load transfer system for horizontal movement in concrete slabs

The size and rectangular-shape of the Square Dowel provides concrete joint stability, load transfer and smooth slab-to-slab transition, without restraining floor movement.

The plastic sleeve is nailed to lumber edge forms before concrete placement and the steel plate slides into the sleeve after forms are removed in preparation for the adjoining slab.

The Square Dowel simplifies dowel installation, eliminates slab edge drilling and reduces labor costs for all types of ground level concrete slabs, including floors, flatwork and pavement.

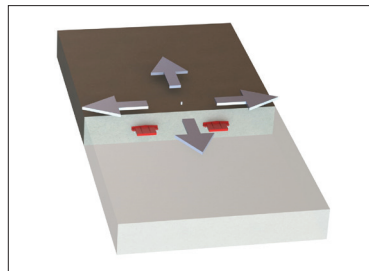
The plastic sleeve allows movement and the steel plate provides maximum bearing, bending and punching resistance, without the risk of slab interlock common with other methods.

A properly installed Square Dowel is recommended for joints up to 0.20" wide and is suitable for all types of ground level concrete slabs, such as jointed floors, flatwork and pavement.

A Square Dowel installation conforms to ACI 302.1R Guide for Concrete Floor and Slab Construction and ACI 360 Design of Slabs-on-Ground.



*Rigid, high-density plastic sleeve quickly attaches to edge forms and minimizes related labor costs.*

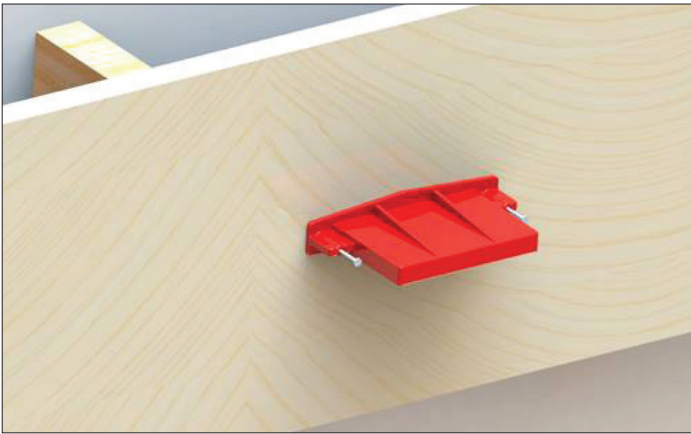


Square Dowel Set (One Sleeve and One Plate)			
Part No.	Description	Slab	Spacing*
SBSD14SL	SB Square Dowel 1/4" Sleeve Only (Blue)	5" to 6"	18"
SBSD14PL	SB Square Dowel 1/4" Plate Only 1/4" x 4" x 6"		
SBSD38SL	SB Square Dowel 3/8" Sleeve Only (Red)	7" to 8"	18"
SBSD38PL	SB Square Dowel 3/8" Plate Only 3/8" x 4" x 6"		

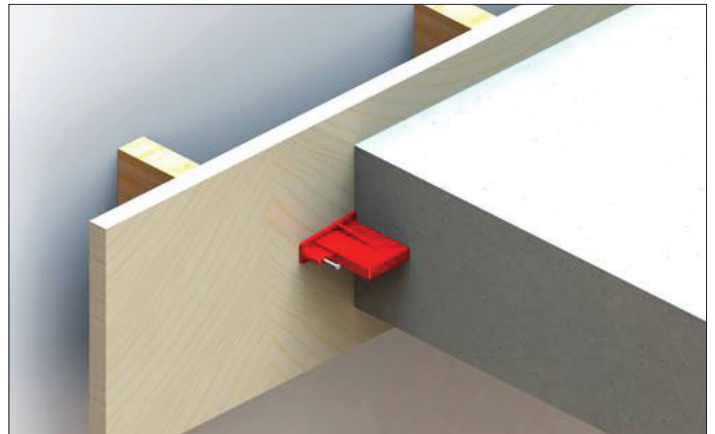
\* Spacing shown based on ACI 360 Design of Slabs-on-Ground.

## Square Dowel Installation

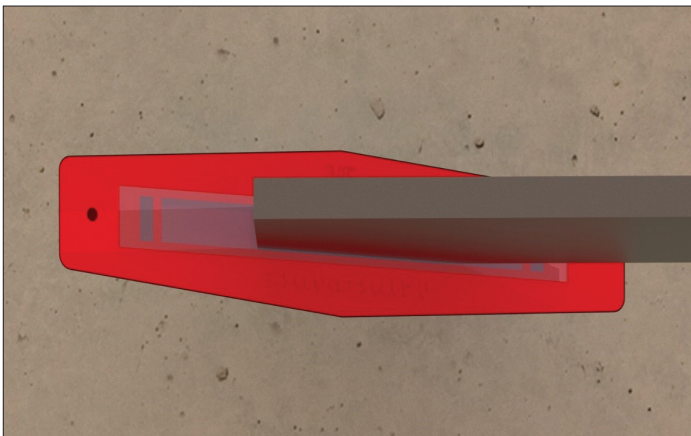
1. Mark a horizontal line on formwork for the half slab thickness. Mark a vertical line for the center-to-center spacing of the dowel sleeve. Fasten all dowel sleeves securely at each marked location. Position and tie any remaining slab reinforcement.



2. Place concrete normally, completely surrounding each dowel sleeve location. All dowel sleeves require adequate vibrator compaction to eliminate any air entrapment under the sleeve. Do not strike/damage dowel sleeves with the vibrator.



3. When concrete reaches sufficient strength, adjoining slab base can be levelled and compacted. Insert the steel plate dowels into the sleeves by puncturing the protective cover strips. The plate dowels should be completely inserted into the sleeves.



4. Position and tie any remaining slab reinforcement. The adjoining slab can now be placed against the face of the first and the exposed steel plate dowels. Place concrete normally, completely surrounding each plate dowel location.

