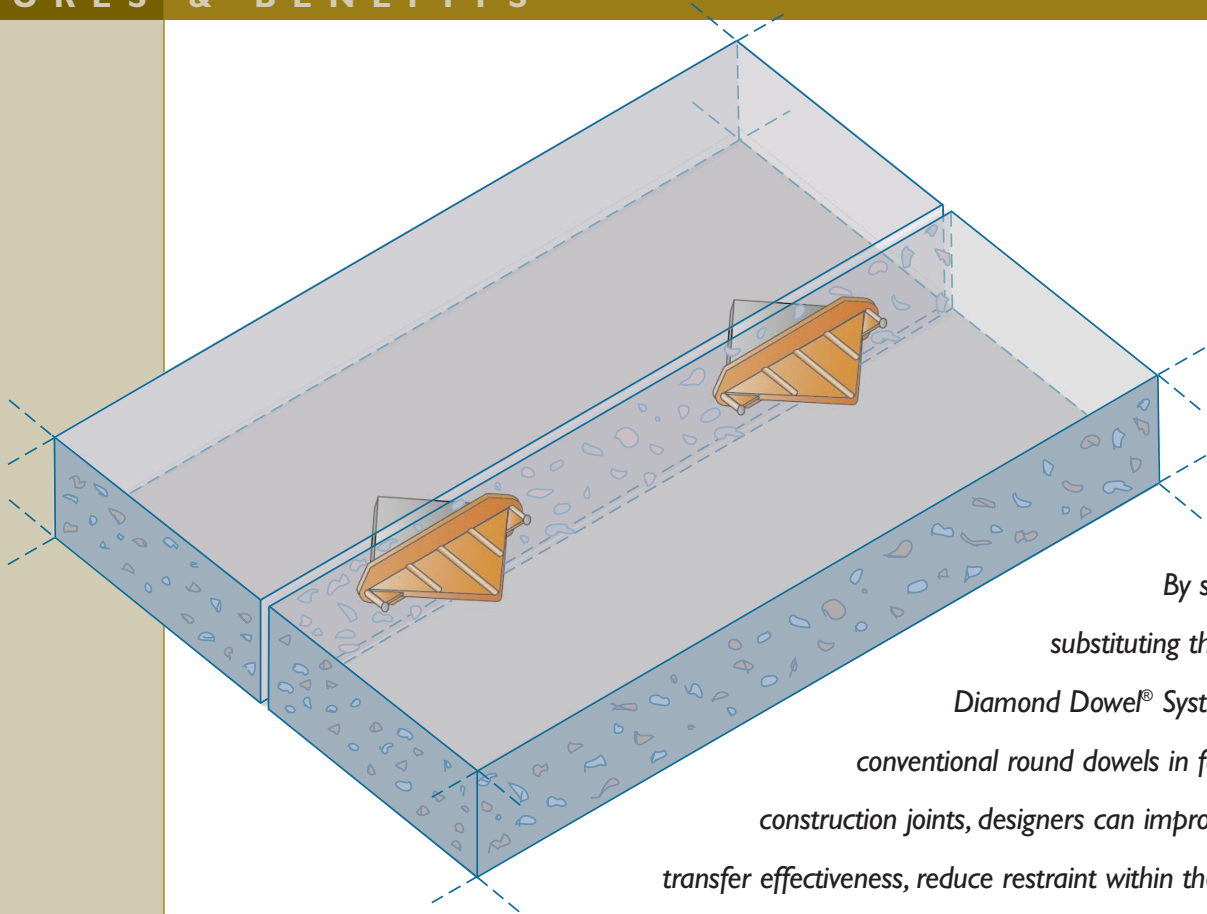




Diamond Dowel® System

F O R F O R M E D C O N S T R U C T I O N J O I N T S

FEATURES & BENEFITS



By simply substituting the Diamond Dowel® System for conventional round dowels in formed construction joints, designers can improve load transfer effectiveness, reduce restraint within the slabs, and minimize construction costs.

Features / Benefits

Better engineering –

- A more efficient use of the steel dowel material
- Increased bearing area of steel decreases bearing stress on concrete
- Allows for horizontal slab movement, minimizing stress concentrations on both slab and dowel
- Positive alignment insures free movement of joint
- Improved load transfer reduces potential joint edge spalling

Faster, easier installation

- Drilling of forms is eliminated
- Dowel alignment is maintained – no more constant re-straightening
- No more turning and pulling of dowels for form removal

Most cost effective aligned dowel system

- Diamond Dowels® are spaced further apart, yet achieve equivalent or superior performance to round or square dowels
- Reduced time and labor costs to install
- Increased reuse of forms

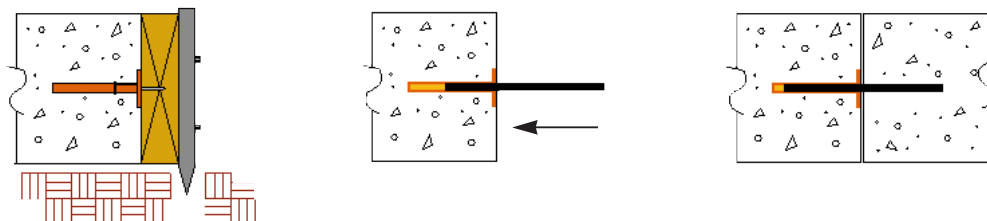


Diamond Dowel® System

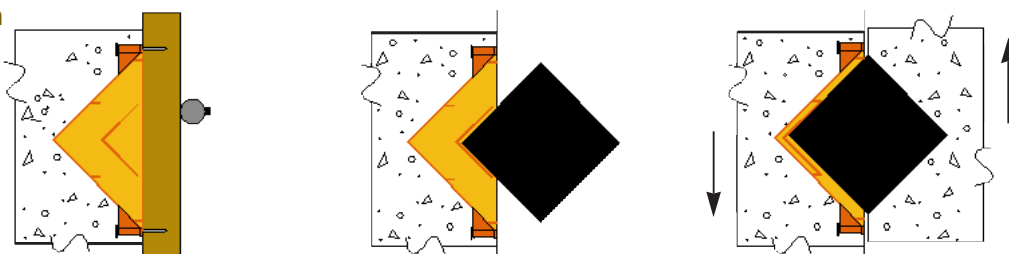
F o r F o r m e d C o n s t r u c t i o n J o i n t s

SPECIFICATIONS

Section



Plan



Diamond Dowel® Pocket Former is nailed to the wood form at the mid-slab depth

The form is stripped and the Diamond Dowel® Plate inserted into the slot, puncturing the tape seal and pushing the vertical spacer to the back of the pocket former

The unique design of the Diamond Dowel® System allows for the differential movement between slabs when the concrete shrinks

Diamond Dowel® spacings to match round dowel performance

Diamond Dowel® Plate Size	$\frac{3}{4}$ " Round Dowel Spacing		1" Round Dowel Spacing		1 $\frac{1}{4}$ " Round Dowel Spacing	
Thickness x sq. length	12"	18"	12"	18"	12"	18"
$\frac{1}{4}$ " x 4.5"	18"	24"	—	—	—	—
$\frac{3}{8}$ " x 4.5"	—	—	18"	24"	12"	18"

Example Specification...

- All formed construction joints will incorporate the PNA Diamond Dowel® System of load transfer.
- Diamond Dowel® Plates will be saw cut from hot rolled plate per ASTM A36.
- The Diamond Dowel® System will be supplied by and installed to PNA's recommendations. (Contact PNA Construction Technologies Inc. at 800-542-0214 for the most current installation guide).

The Diamond Dowel® System has become a recognized industry standard. Some of its benefits as listed in the latest revision of The Portland Cement Association's, "Concrete Floors on Ground", publication;

Find Out More

For more details, specifications and independent engineering reports, please give us a call. Together we can determine a joint solution for your construction needs. **1-800-542-0214**

Diamond Dowel® is a registered trademark of PNA Construction Technologies, Inc. US and foreign patents pending.

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