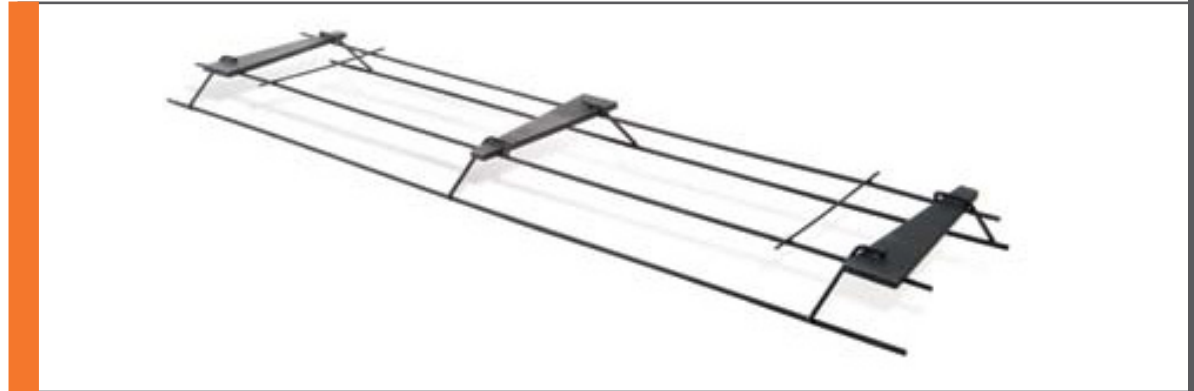


PD³ BASKET[®] ASSEMBLY



ALTERNATING TAPERED PLATE DOWELS FOR SAW-CUT CONTRACTION JOINTS



The specific size and tapered shape of the PD3 Basket[®] assembly reliably provides joint stability, positive load transfer and continuity of surface profile to minimize the potential for random slab cracking and joint spalling, eliminates tripping hazards, and delivers serviceable saw-cut contraction joints. When used with the Diamond Dowel[®] System in the “strategic reinforcement” design, the PD3 Basket[®] assembly helps optimize the steel in your projects by locating the steel where it’s needed most: at the joints. The PD3 Basket[®] assembly has realized return on investment for owners, designers, and contractors worldwide in more than three billion square feet of concrete placed in the last 25 years.

MINIMIZE RANDOM CRACKS AND PROMOTE JOINT ACTIVATION

- ▶ Minimizes slab cracking due to restrained two-way concrete drying shrinkage by using innovative tapered steel plates.
- ▶ Allows for easy access to fix subgrade rutting right up until concrete placement.
- ▶ Promotes joint activation with alternating tapered plate dowels in the basket assembly and a thin, even, factoryapplied debonding agent (max thickness of .002 inches [.05 mm] for minimizing dowel looseness) to release the concrete-steel bonding.

ENHANCE JOINT STABILITY

- ▶ Delivers acceptable joint stability per industry guides of less than .01 inch (.25 mm) and continuity of surface profile across the joint.
- ▶ Optimizes the use of materials by concentrating more mass (larger cross-sectional area) at joints to increase shear load transfer capacity.
- ▶ Provides dependable load bearing/transfer capabilities with an alternating configuration capable of accommodating lateral misalignment of at least ± 2 inches (50 mm) between saw-cut joints and baskets.
- ▶ Creates stable horizontal and vertical plate alignment with a fully-welded basket assembly fabricated to match the joint layout.

PERFORMANCE-BASED DOWEL DESIGN

The PD3 Basket[®] assembly’s engineered performance meets the industry (ACI 360, Guide to Design of Slabs-on-Ground) recommended requirement, i.e. total differential deflection between slab panels to .01 inches (.25 mm) for hard wheels and .02 inches (.50 mm) for air cushioned rubber tires. PNA optimizes dowel sizes and configurations for our clients on a project-by-project basis leveraging our proprietary mechanistic software known as the “Dowel Calculator”. The designs delivers desirable joint performance with apparent cost savings by maximizing the efficiency of material use.

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PRODUCT PERFORMANCE CHARACTERISTICS:

Processes

- ▶ All steel is sawn or plasma cut full depth and deburred per industry guidelines ensuring smooth plate edges that will minimize restraint.

Materials

- ▶ Extracted, harvested or recovered, as well as manufactured, in the USA from recycled steel and eligible for LEED[®] credits

Efficient Constructability

- ▶ Delivers a construction tolerance of at least ± 2 inches (50 mm) for saw-cut placement without significantly affecting the load transfer capacity.
- ▶ Reduces labor costs – can be carried and installed by one person during concrete placement.
- ▶ Allows for accelerated construction schedules.
- ▶ Eliminates obstacles for the laser screed.
- ▶ Offers stable dowel support and reliable alignment with fully-welded basket assemblies.
- ▶ Improves job-site efficiency with easy-to-handle bundled and skid-packed assemblies delivered on wooden pallets.
- ▶ Custom or stock baskets available through a national distribution network.

Basket Dimensions:

Cross-sectional area of steel at the outside edge of the saw-cut installation tolerance.

- ▶ 2" x 3/8" (50 mm x 10 mm)
- ▶ 2-1/2" x 1/2" (64 mm x 12 mm)
- ▶ 2-1/2" x 3/4" (64 mm x 20 mm)
- ▶ 12" (300 mm) long plate for at least ± 2 " (50 mm) tolerance (staking the basket assembly is recommended to ensure it remains within the allowable tolerance)

Steel Options:

- ▶ All plates are manufactured from steel certified to meet ASTM A36.

For corrosion resistance, plates can be manufactured from:

- ▶ Hot-dipped galvanized steel certified to meet ASTM A123/A 123M and ASTM A385; or
- ▶ Grade 304 stainless steel certified to meet ASTM A240

For price **quotes**, email inquiries to csr@pna-inc.com.

To place an **order**, email your purchase order (PO) to orderspna@pna-inc.com.

To speak with a Customer Service Representative, call 1 (800) 542-0214.

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MANUFACTURED IN THE U.S.A.

With a plant on both coasts (Charlotte, NC and Bakersfield, CA) PNA is a short distance to your next jobsite.

THE PD³ BASKET[®] ASSEMBLY HELPS YOU:

- Collect your retainage
- Reduce your callbacks and save labor
- Optimize the amount of steel in your project
- Limit your liability
- Deliver cost-effective concrete flatwork