

# Load Plate Basket™ Assembly

## For Saw-Cut Contraction Joints



### Proven. Easy to Install. Cost Effective.

Since 1998, contractors and engineers have used the Load Plate Basket™ Assembly in saw-cut contraction joints to achieve superior load transfer in concrete slabs. PNA's Load Plate Basket™ Assemblies, when used in a "strategic reinforcement" design, provide a more efficient way to deliver the durable, maintenance-free slabs your customers expect. Load Plate Basket™ Assemblies help you:

- Collect your retainage
- Reduce your callbacks and save labor
- Limit your liability by complying with the latest ACI 302.1R-04 and ACI 360R-06 guidelines
- Optimize the amount of steel in a project
- Deliver cost-effective slabs-on-ground

### Fast, Simple Installation

- Requires fewer man hours for installation than historical methods
- Easy to handle — can be carried and installed by one person
- Shipping wires do not have to be cut during placement\*
- Construction tolerances allow for misalignment without causing restraint in the panels
- Can be installed during concrete placement
- Eliminates obstacles for the laser screed
- Fully welded assemblies, offering stable dowel support during installation
- Bundled and shipped on skids, for easy handling
- Allows subgrade leveling after installation to prevent rutting, restraint and cracking
- Custom and stock baskets are available through our national distribution network

**Doweled construction and contraction joints are recommended when load transfer is required ...**

— ACI 302.1R-04

### Well Engineered for Optimal Joint Performance

- Eliminates restraint and allows slab panels to float freely
- Provides an increased bearing area of steel at the joints for superior load transfer
- Load Plate Basket™ clips hold foam in place to allow lateral movement of adjacent panels during slab shrinkage without causing restraint
- Increases joint stability to extend the life of joint fillers
- Can be located up to within six inches of a joint intersection
- Dowels are sawn and deburred per industry guidelines

### Optimizes Steel

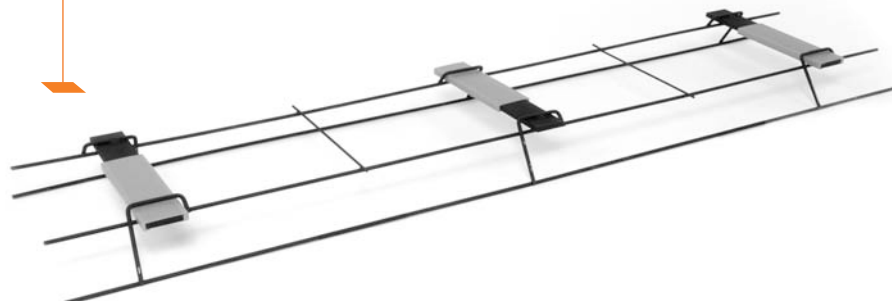
PNA's plate dowel assemblies, used in a "strategic reinforcement" design, allow you to use steel only at the saw-cut joints and not throughout the slab. This provides superior positive load transfer at the contraction joints while offering a more efficient use of steel; lowering project costs.

### ACI 302.1R-04 Table 3.1

Dowel size and spacing for rectangular dowels  
(ACI Committee 325 1956)

Slab depth, in. (mm)	Dowel dimensions, in. (mm)	Dowel spacing center-to-center, in. (mm)
5 to 6 (125 to 150)	3/8 x 2 x 12 (10 x 50 x 300)	19 (475)
7 to 8 (175 to 200)	1/2 x 2-1/2 x 12 (12 x 60 x 300)	18 (450)
9 to 11 (225 to 275)	3/4 x 2-1/2 x 12 (19 x 60 x 300)	18 (450)

NOTE: For the complete chart see ACI 302.1R-04 Table 3.1



# Instructions for Use

## Step 1

Measure and mark (notch or nail) the saw-cut location on the forms.



## Step 2

Pull string lines then spray paint saw-cut locations on the subgrade.

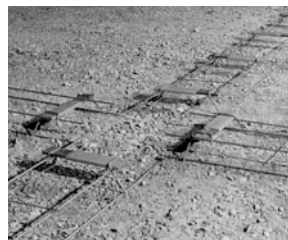


## Step 3

Lay out one row of baskets over painted marks on the subgrade. Keep plates a minimum of 6 inches away from the intersection of two joints.

Specific basket lengths can be ordered from stock or custom manufactured to minimize cutting and piecing.

Note: Shipping wires do NOT need to be cut during installation.\*



## Step 4

Place concrete (be careful to maintain alignment of baskets over paint marks).



## Step 5

Screed and finish concrete. Use internal vibration per industry guidelines.



## Step 6

Use notches or nails on forms to snap chalk-lines and saw-cut joints as normal to the specified depth.



### LOAD TRANSFER SYSTEMS

- DIAMOND DOWEL® SYSTEM
- PD<sup>3</sup> BASKET™ ASSEMBLY
- LOAD PLATE BASKET™ ASSEMBLY

### JOINT PROTECTION PRODUCTS

- ARMOR-EDGE® JOINT ASSEMBLY
- ARMOR-EDGE® N2E JOINT ASSEMBLY
- ARMOR-EDGE® ALL STEEL JOINT

### CURING COVERS

- HYDRACURE™ S16 – SINGLE-USE
- HYDRACURE™ M5 – MULTI-USE

### OTHER

- 1/2" SQUARE DOWEL BASKET
- BOLLARD BASE



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\*Source: American Concrete Pavement Association, *R&T Update*, "Dowel Basket Tie Wires: Leaving Them Intact Does Not Affect Pavement Performance," January 2005.