

Bollard Base

Make bollard installation quick, inexpensive and precise.

When your slab's finished, you're ready for bollard installation; it's that simple.

In demanding warehouse, retail and industrial environments, bollards are installed for a reason – to protect key elements of the building. But impact from forklifts can damage bollards and also your customer's slab.

With the PNA Bollard Base, you can easily and reliably install a replaceable bollard while producing a high-quality, finished appearance. Simply embed PNA's Bollard Base in the slab, remove excess paste and weld the bollard to the base.

By putting the Bollard Base on the subgrade before concrete placement, you eliminate the need for core drilling through the new slab, removing the concrete, and then refilling and patching around an embedded bollard.

The Bollard Base was designed as a freestanding unit to eliminate re-entrant corners and is secured to the surrounding concrete with headed anchors. The size and placement of the plate, rebar and anchors were engineered to ensure that the weakest point of the bollard system is the 8mm weld holding the bollard in place on the base.

The concrete slab stays intact, and the exposed steel is ready for grinding, repair and rewelding.

The PNA Bollard Base can be placed in a concrete slab-on-ground for future use without compromising the slab integrity. The base will take repetitive loading from fork truck traffic without being damaged.

PNA Bollard Bases are available in both round and square shapes for slab depths from 4 to 12 inches.

Faster, Easier and Reliable Installation

The PNA Bollard Base:

- Simplifies installation
- Is more constructible than historical methods – eliminates core drilling new slabs
- Reduces labor costs
- Facilitates installation of bollards to exacting tolerances
- Bottom of square-shaped base extends out 2" so that plate can be accurately and easily aligned with a permanent fixture on the job-site
- Features rebar anchors to keep base aligned and in place
- Makes future bollard replacement simple and quick

Better Engineering and More Cost Effective

- Reduces maintenance costs
- Reduces risk of concrete failure
- Does not induce stress or restraint
- Bollards can easily be repaired without damage to slab
- Offers design flexibility; embed in slab for use now or at a later date



Available in three sizes:
16" Square
24" Square
18" Round

Instructions for Use

Step 1

Level subgrade in accordance with industry guidelines.

Place Bollard Base on leveled subgrade with large flat plate facing up. Rebar should extend down toward subgrade. If using the square base, align the base using the feet to abut against walls or other permanent fixtures as detailed in the job drawings.



Step 2

Place and finish concrete around bollard base.

Step 3

Use internal vibration per industry guidelines.

Step 4

Finish to edge of plate. Remove excess paste.

Step 5

Connect bollard to Bollard Base with 8 mm circular weld.

LOAD TRANSFER SYSTEMS

- DIAMOND DOWEL® SYSTEM
- PD³ 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



800.542.0214

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