

**PRODUCT DATA SHEET**  
**QD**  
**QuicDiamond™ Plate Dowel**



**QUICDIAMOND™ SYSTEM INFORMATION**

<b>QD-025</b>	<b>1/4"</b>	1/4" x 4-1/2" x 4-1/2"
<b>QD-038</b>	<b>3/8"</b>	3/8" x 4-1/2" x 4-1/2"
<b>QD-075</b>	<b>3/4"</b>	3/4" x 4-1/2" x 4-1/2"
Sleeve Material: ABS / Plate Material: A-36 Steel		

**INSTALLATION**

**Preparation**

During progress of work all QuicDiamonds shall be protected from damage and should be free of oil, dirt and concrete spatter.

**Location & Placement of QuicDiamonds**

1. Set up formwork.
2. Locate and mark with chalk line at specified location, usually at center of slab but at least 2 1/4" from top of slab.
3. Align QuicDiamond™ Sleeve at specified location.
4. Use preset nails to attach QuicDiamond™ Sleeve to formwork.



5. Install any reinforcement needed.
6. Place and finish concrete per ACI specification. Pour at least 18 inches from QuicDiamond™ System.
7. Consolidate the concrete around the QuicDiamond™ System, vibrate & finish concrete.
8. After concrete cures, remove formwork with base & bend nails away from plate.
9. For subsequent adjoining slabs repeat steps 1-5.



10. Place plate into sleeve.
11. Repeat steps 6-8.

DOWEL SIZE AND SPACING FOR CONSTRUCTION JOINTS						
Slab Depth	Dowel Dimensions*			On-Center Dowel Spacing		
	Round	Square	QuicDiamond™**	Round	Square	QuicDiamond™
5" to 6" 130 - 150 mm	3/4" x 14" 19 x 360 mm	3/4" x 14" 19 x 360 mm	1/4" x 4-1/2" x 4-1/2" 6 x 110 x 110 mm	12" 300 mm	14" 360 mm	18" - 24" 460 - 610mm
7" to 8" 180 - 200 mm	1" x 16" 25 x 410 mm	1" x 16" 25 x 410 mm	3/8" x 4-1/2" x 4-1/2" 9 x 110 x 110 mm	12" 300 mm	14" 360 mm	18" - 24" 460 - 610mm
9" to 11" 230 - 280 mm	1-1/4" x 18" 32 x 460 mm	1-1/4" x 18" 32 x 460 mm	3/4" x 4-1/2" x 4-1/2" 19 x 110 x 110 mm	12" 300 mm	12" 300 mm	20" - 24" 510 - 610mm

Source Material: ACI 360R-10, *Design of Slabs-on-Ground*, Table 6.1; ACI 302.IR-04, *Guide for Concrete Floor and Slab Construction*, Table 3.2 PCA 4th Edition, Table 6.2

\* Total dowel length includes allowance made for joint opening and minor errors in positioning dowels.

\*\* Construction tolerances required make it impractical to use diamond-shaped load plates in saw-cut contraction joints. Note: Table values based on maximum opening of .2 in. (5 mm). Dowels must be carefully aligned and supported during concrete operations. Misaligned dowels may lead to cracking.

Carrollton, GA Manufacturing Facility  
141 Hammond Street  
Carrollton, GA 30117

Phone 770-832-2000 • 800-862-4835 • FAX 770-832-2095  
Visit our website @ [www.bometals.com](http://www.bometals.com)  
Address email to [info@bometals.com](mailto:info@bometals.com)

*Founded in 1989, BoMetals has become an industry leader in the design and manufacture of concrete and masonry accessories.*