



Diama-Joint 2.0 Polyurea Joint Sealant

Item No: DPJ2.0 – 100 – 02

1. Description

DiamaPro® Diama-Joint 2.0 is a proprietary polyurea control joint fill material formulated to withstand the abuse of forklift traffic while supporting the shoulders of control joints in concrete slabs. Once installed, it can be shaved as soon as 30 minutes and opened for heavy traffic in less than two hours. Its unique formula performs in temperatures ranging from 30°F - 130°F.

DiamaPro® Diama-Joint 2.0 is 100% solids, 2-component, moisture insensitive with a mixing ratio of 1:1. It has an application temperature range between -20°F – 130°F.

2. Features / Recommended Uses

Features

- Supports the shoulders of control joints to minimize edge spalling.
- Semi-rigid formulation to withstand vibration and slight joint movement while in service
- Moisture insensitive during and after cure
- Extended shave time window
- Meets the intent for use in USDA inspected facilities
- With a bond strength of 275 psi., it is designed to break away from the joint face, eliminating stress on the concrete shoulder, when the joint exhibits a high level of movement from traffic or concrete shrinkage.
- Excellent UV resistance.
- Moisture insensitive

Recommended Uses

- Food-related environments
- Where heavy forklift traffic is exhibited
- To seal interior control joints no matter the intended use of the floor

3. Technical Data

PHYSICAL PROPERTIES

- Appearance: Concrete gray
Custom colors available with lead time
- VOC Content – 10 g/l
- Solids Content: 100%
- Viscosity (mixed): Self-Seeking
- Pot-Life: 35 sec. 100-gr. mass @ 74°F
- Tack-free @ 74F: 5-15 minutes
- Mix Ratio: 1:1 by volume
- Application Temperatures
 - Air 35°F-95°F
 - Material 60°F-85°F
 - Substrate 35°F-95°F
- Cure Time @ 73°F
 - Pot Life 100-gram mass @ 72°F: 3-8 seconds
 - Tack-free Time: 10 minutes
 - Shave Time: 30-60 minutes
 - Foot Traffic: 1 hour
 - Full Traffic: 2 hours
- Tensile Strength: ASTM D-412 – 1640 psi
- Shore A Hardness: ASTM D-2240: 91
- Elongation %: ASTM D-412 – 242%
- Compatible with most concrete substrates (testing recommended)
- Shelf-Life: 1 year from manufacturing date stored 60°F-85°F @ 65% RH
- Packaging: 600 ml (20.3 oz.) cartridges
10-gallon units (5 gal. each)

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4. Limitations

- **DiamaPro[®] Diama-Joint 2.0** is not designed to seal moving joints/cracks or exhibit hydrostatic pressure.
- The concrete substrate must be properly cured for 28 days and/or the relative humidity of the substrate needs to be at or below 85%. If the concrete is not fully cured and continues to shrink after joint fill installation, bond release might be exhibited but the joint material will remain functional.
- Some solvents have a slight effect on the appearance of the cured material.
- Oils could discolor the surface. In either case the performance of the material will not be altered.
- Chemical resistant testing is recommended on a mock-up if there is a concern.
- For interior use only.

5. Application Procedures and Instructions

Surface Preparation: The concrete substrate must be properly cured for 28 days and/or the relative humidity of the substrate needs to be below 85%. Joints must be dry; sound and all bond inhibiting materials must be removed. If unsure if all contaminants have been removed, use a power saw attached to a HEPA filter vacuum with the appropriate blade to clean the sides of the joint. Vacuum after sawing.

When using 10-gallon units, the color pack must be added to the “B” component and power

mixed well if a color other than concrete gray is desired.

Bulk Dispensing: **DiamaPro[®] Diama-Joint 2.0** is available in 10-gallon units. With a “bulk” type pump fitted with a static mixing nozzle, set the pump to mix at a 1:1 mix ratio. Power mix both “A” and “B” components well before loading it into the pumps holding vessels. Do not allow the mixed material to set for longer than 10 seconds in any portion of the pump. If longer, the set material will obstruct further flow of material and will need to be disassembled for cleaning. Pump material into a bucket to ensure both components are blending in equal proportions. Bring the nozzle over the joint and continue pumping mixed material until the joint is slightly over filled. This might take two passes.

Cartridge Dispensing: **DiamaPro[®] Diama-Joint 2.0** is available in 600 ml cartridges. Insert the cartridge into the hand dispenser. While pointing the dispenser up, remove the safety cap from the cartridge. Connect the supplied static mixing nozzle to the side-by-side cartridge with the retainage nut and tighten. While the nozzle is in the upward position, slowly start pumping the material. Just before it reaches the end of the nozzle, place the nozzle in a downward position into a bucket. Continue slowly pumping material into the cup until both the components are dispersed at the same rate. Quickly move the nozzle over the joint and slightly over fill the joint in a steady motion. This might take two passes.

Shaving Excess Material: Once the material has set for 20 minutes, with a shaving blade, shave a small area. If it doesn’t peel from the surface



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allow the material to cure for an additional 5 minutes. Continue until the material shaves well and easily peels from the surface. The cure rate (time to shave) is temperature dependent and will slightly fluctuate on every project.

Clean Up: Wet material can be removed with a mild solvent.

Mixed and cured product can be disposed of as normal construction debris. Components “A” and “B” can be fully mixed, allowed to cure and then disposed of as normal construction debris. Plastic static mixing nozzles are not reusable and discarded when finished.

Lineal feet of joint per gallon of material

J		1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1.0"
O	1/8"	1232	821	616	411	308	205	154
I	1/4"	616	411	303	205	154	103	77
N	1/2"	308	205	154	103	77	51	39
T	3/4"	205	137	103	68	51	24	26
	1.0"	154	103	77	51	39	26	19
D	1-1/2"	103	68	51	34	26	19	13
E	2.0"	77	51	39	26	19	13	10
P	2-1/2"	62	41	31	21	15	10	7
T	3.0"	51	34	26	17	13	8	6
H	4.0"	39	26	19	13	10	7	5

WIDTH OF JOINT

22 oz. Cartridge = 5.81 cartridges per gallon

6. Availability

Diamapro® Diamapro-Joint 2.0 is only available through Diamapro® Systems Authorized Distributors. Packaged in 600 ml cartridges and

10-gallon units. For a list of Authorized Distributors please contact Diamapro® Systems.

7. Conditions of Sale / Limited Warranty

Diamapro® Systems warrants this product for one year from the date of purchase to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product’s shelf life. User determines suitability of product for intended use and assumes all risks. User’s and/or buyer’s sole remedy shall be limited to the purchase prior replacement of this product exclusive to any labor costs at the discretion of Diamapro® Systems.

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8. Technical Services

The Diamapro® Systems office aids with specifications, performance test data and field services.

9. Disclaimer

Every effort has been made to ensure the accuracy of the above information and to avoid



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infringement of any patent or copyright. The information is based on field tests by government and private agencies, as well as lab tests, and on technical data from raw material manufacturers.

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