

DIAMONDSTONE®

DIAMONDHD

Moisture tolerant primer, troweled epoxy mortar base, grout coat, and topcoat of aliphatic polyester urethane



TECHNIQUEx®

DIAMONDSTONE®

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DiamondHD is a nominal ¼ inch (250mil) heavy duty, three-component troweled epoxy mortar system. This system exhibits unlimited moisture tolerance, outstanding impact resistance, excellent abrasion, chemical and UV resistance. DiamondHD can be finished with a topcoat of Eco-Top Supreme chemical-resistant aliphatic urethane or High-Traffic urethane topcoat for the same properties as Eco-Top Supreme, in a satin finish. DiamondHD also offers urethane protection without the solvent by utilizing Polyaspartic 100 topcoat.



DIAMONDHD FEATURES

- Moisture Tolerant
- Abrasion Resistant
- UV Resistant
- Chemical Resistant
- Impact Resistant
- Qualified LEED® Product

DIAMONDHD TYPICAL PROPERTIES

Compressive Strength @ 3/16" (ASTM C-579)	13,500 psi
Compressive Strength @ 1/4" to 5/8" (ASTM C-579)	15,280 psi
Tensile Strength (ASTM C-307)	1,800 psi
Flexural Strength (ASTM C-580)	4,275 psi
Hardness (Shore D) (ASTM D-2240)	85-94
Bond Strength (ASTM D-4541)	425 psi
Impact Resistance (ASTM D-2794)	> 180lbs/in
Abrasion Resistance (ASTM D-4060 CS-17)	0.1 gm or 100 mg
Flammability (ASTM E-648)	Class I
Coefficient of Expansion (ASTM C-531)	1.45-10 ⁻⁵ in/in °F
Water Absorption (ASTM C-413)	0.2%
VOC Content (ASTM D-2369)	< 10 g/l*
Cure Rate at 75°F	24 hrs

DIAMOND-VJF JOINT FILLER TYPICAL PROPERTIES

Compressive Strength (ASTM D-695)	12,000 psi
Tensile Strength (ASTM D-638)	6,500 psi
Elongation at Break (ASTM D-638)	15%
Hardness (Shore D) (ASTM D-2240)	55
Bond Strength (ASTM D-4541)	Concrete Failure

The data shown in this document reflect typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

DIAMONDHD

ECO-TOP SUPREME TYPICAL PROPERTIES

Volume Solids	59%
VOC's	2 gm/ltr
Gloss Rating at 60°	90
Abrasion Resistance (ASTM D-4060)	4.9 mg/Loss
Pencil Hardness (ASTM D-3363)	5H

POLYASPARTIC 100 TYPICAL PROPERTIES

Hardness (Shore D) (ASTM D-2240)	76
Bond Strength (ASTM D-4541)	Concrete Failure
Abrasion Resistance (ASTM D-4060)	23 mg/Loss
Volume Solids	100%
VOC's	50 gm/ltr

HIGH-TRAFFIC TOPCOAT TYPICAL PROPERTIES

Volume Solids	90%
VOC's	2 gm/ltr
Abrasion Resistance (ASTM D-4060)	4.5 mg/loss
Coefficient of Friction (ASTM D-4518)	0.70

CHEMICAL RESISTANCE

See DiamondStone Chemical Resistance Guide.

CLEANING & MAINTENANCE

See DiamondStone Cleaning Instructions.

SURFACE PREPARATION

Apply only to clean and sound concrete substrates that are free of all coatings, sealers, curing compounds, oils, greases or any other contaminants. New concrete should be cured a minimum of 28 days. Concrete that has been contaminated with chemicals or other foreign matter must be neutralized or removed. Remove any laitance or weak surface layers. Prepare surface by mechanical means to achieve a profile equal to industry standards. All surface irregularities, cracks, expansion joints and control joints should be properly addressed prior to application.

PRECAUTIONS & LIMITATIONS

DiamondStone, LLC recommends the use of slip-resistant with this product. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard. Refer to Material Safety Data Sheet for detailed safety precautions. Do not apply when concrete temperature is less than 50° F or greater than 100° F. (Material cures slower at cooler temperatures, and working time will be substantially reduced at higher temperatures.) All components should be stored in a dry place at temperatures between 65° F and 85° F. Confirm product performance in specific chemical environment prior to use. Substrate temperature must be at least 5° F above the dew point.

EXCEPTIONS

If DiamondStone resinous systems is specified, the system incorporates unlimited moisture control. If DiamondStone is not specified, the system will meet the basis of design on moisture limitations.

NO-NONSENSE WARRANTY

TECHNIQUEx warrants materials & labor to be free from defects for a period of 5 years from the date of substantial completion of the work, unless otherwise stated in the construction documents.

In the event a defect caused by materials or workmanship appears within the warranty period, Techniquex's liability shall be limited to repair or replacement of the work in the defective area only, or at Techniquex's sole election, refund of a pro-rata portion of the contract price for the defective areas. This is the exclusive remedy against Techniquex for the work performed. Notification of a defect must be given to Techniquex in writing during the warranty period.

This limited warranty is exclusive and in lieu of all other warranties of any kind of nature whatsoever, including but not limited to implied warranties of merchantability and fitness for particular purpose, which are specifically excluded and disclaimed. Any and all remedies against Techniquex for defects are limited by this warranty, and in no event shall Techniquex be liable to owner or others for incidental or consequential damages.

TECHNIQUEx®

Techniquex sets the standard for resinous flooring for all industries that demand a world-class image & unsurpassed performance with floors that last. Techniquex developed the DiamondStone product line to establish the benchmark for quality, finish, and installation excellence.

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