

# DIAMONDSTONE<sup>®</sup>

## DIAMONDHD ESD

Moisture tolerant primer, troweled epoxy mortar, dissipative system



TECHNIQUEx<sup>®</sup>

DIAMONDSTONE<sup>®</sup>

# DIAMONDHD ESD

DiamondHD ESD is a nominal ¼" (250mil) heavy duty, four-component troweled epoxy mortar dissipative system. This system is formulated to provide unlimited moisture tolerance, outstanding impact resistance and reliable static control. DiamondHD ESD is engineered to disperse uniformly through the system and provides consistent electrical performance for the life of the floor.



## PRODUCT ADVANTAGES

- Unlimited Moisture Tolerance
- Outstanding Impact Resistance
- Qualified LEED® Product

### DIAMONDHD ESD TYPICAL PROPERTIES

|                                   |   |
|-----------------------------------|---|
| Compressive Strength (ASTM C-579) | 10,550 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) | 0.8 gm  |
| Flammability (ASTM E-648)         | Class II  |
| Water Absorption (ASTM C-413)     | 0.2%  |
| VOC Content (ASTM D-2369)         | < 10 g/l*   |
| Surface Resistance                | >1.0 x 10 <sup>6</sup> to <1.0 x 10 <sup>9</sup> ohms |

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.

### PRODUCT FEATURES

Static Dissipative Properties for the Life of the Coating

Meets USGBC LEED Criteria for low VOC

Tests >1.0 x 10<sup>6</sup> to <1.0 x 10<sup>9</sup> ohms

BVG Below 15 volts with Conductive Footwear

Conforms With ANSI/ESD S20.20 Standard

Passes ANSI/ESD STM 97.1      Max System Resistance: 3.5x10<sup>7</sup>

Passes ANSI/ESD STM 97.2      Max Voltage Allowed: 100 volts

### 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 |

# DIAMONDHD ESD

## DIAMONDHD ESD CHEMICAL RESISTANCE

| Reagent               | Spot Test Results |
|-----------------------|-------------------|
| Isopropanol           | 1                 |
| Bleach                | 1                 |
| MEK                   | 4                 |
| Ammonia               | 1                 |
| Sodium Hydroxide 50%  | 1                 |
| Phosphoric Acid 10%   | 1                 |
| Nitric Acid 10%       | 1                 |
| Sodium Chloride 20%   | 1                 |
| Citric Acid 10%       | 1                 |
| Sulfuric Acid 10%     | 1                 |
| Sulfuric Acid 25%     | 1                 |
| Nitric Acid 10%       | 1                 |
| Hydrochloric Acid 10% | 1                 |
| Acetic Acid 10%       | 2                 |
| Sugar Solution 10%    | 1                 |
| Lactic Acid 10%       | 1                 |
| Mineral Spirits       | 1                 |
| Tincture of Iodine    | 1, S              |
| AFFF                  | 1                 |
| Water                 | 1                 |



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.

[www.techniquex.com](http://www.techniquex.com)

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# DIAMONDHD ESD

## 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° For 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.

## ENVIRONMENTAL CONDITIONS

DiamondHD ESD is only recommended and intended for use within standard environmental conditions. Standard environmental conditions are 60 F to 100 F (surface and air temperature) and 10%-95% relative humidity. Techniquex shall be notified in advance and approve in writing any use outside these standard conditions. Failure to notify and receive prior approval from Techniquex for use in non-standard environments shall void all installation and product warranties.

## 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.

In the event a defect caused by materials or workmanship appears within 5 years, 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.



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