

### PRODUCT DESCRIPTION

Stonshield Xpress is a nominal 1/8 in./3 mm broadcast flooring system that combines a decorative appearance with excellent chemical, stain and wear resistance. Its slip resistant surface remains stain resistant and easy to clean. It is comprised of:

#### *Xpress Primer*

A two-component, low viscosity, acrylic resin primer

#### *Xpress Undercoat*

A two-component, low viscosity acrylic resin

#### *Stonshield Aggregate*

Brightly coloured, quartz broadcast aggregate

#### *Xpress Sealer*

A two-component, low viscosity, UV resistant, acrylic sealer

### USES, APPLICATIONS

Stonshield Xpress is a seamless, broadcast, methyl methacrylate flooring system engineered with a textured surface for slip resistance in commercial and industrial applications. It is ideally suited for light manufacturing areas such as food and pharmaceutical processing, laboratories, arenas, stadiums, hallways, offices and holding areas in healthcare, educational and correctional facilities. Stonshield Xpress can be installed at low temperatures (coolers, freezers, exterior applications, etc.) with minimal impact to cure times and schedule.

### SUBSTRATE

Stonshield Xpress, in conjunction with its appropriate primer, is suitable for application over properly prepared concrete. Not recommended for use over asphalt, mastic, gypsum-based products, brick, wood or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to priming and overlayment.

### OPTIONS

#### *Cove Base*

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 2 to 6 in./5 to 15 cm are available.

#### *Smooth Finish*

Additional layers of Xpress Sealer may be added to produce a very smooth finish for additional cleanability.

**Note:** Adding an additional layers of sealer will lower the coefficient of friction and slip resistance index values listed above.

#### *Thickness*

For areas requiring increased thickness, a 1/8 to 3/16 in./3 to 5 mm of mortar may be added.

### PHYSICAL CHARACTERISTICS

<b>Tensile Strength</b> .....	.5,900 psi
(ASTM D-638)	
<b>Hardness</b> .....	.80, Shore D
(ASTM D-2240)	
<b>Bond Strength</b> .....	>300 psi
(ASTM D-7234)	(100% concrete failure)
<b>Impact Resistance</b> .....	>160 in./lbs.
(ASTM D-4226))	
<b>Abrasion Resistance</b> .....	.006 gm max. weight loss
(ASTM D-4060, CS-17)	(sealed)
<b>Cure Rate</b> .....	One hour for
(@ 77°F/25°C)	normal operations
<b>Coefficient of Friction (Dry)</b> .....	.099
(ASTM F-1679)	
<b>Slip Resistance Index (Wet)</b> .....	.098
(ASTM F-1679)	
<b>Flexural Strength</b> .....	.2,000 psi
(ASTM D-790)	
<b>Flexural Modulus of Elasticity</b> .....	1.7x10 <sup>6</sup> psi
(ASTM D-790)	
<b>Linear Coefficient of Thermal Expansion</b> .....	.33x10 <sup>-6</sup> in./in. °F
(ASTM C-531)	

**Note:** The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

### PACKAGING

Stonshield Xpress is packaged in units for easy handling.

Each unit consists of:

#### *Stontec Xpress Primer*

(0.5) 5 gallon pail of acrylic resin

#### *Stonshield Aggregate*

15 individual bags of coloured quartz aggregate

#### *Stontec Xpress Undercoat*

(1.5) 5 gallon pail of acrylic resin

#### *Stontec Xpress Sealer*

(1) 5 gallon pail of acrylic resin

#### *Xpress Catalyst*

(0.3) 2 gallon pail of catalyst

## Xpress Solvent

(0.2) 5 gallon bucket of solvent

### COVERAGE

Each unit of Stonshield Xpress will cover approximately 250 sq. ft./23.2 sq. m of surface at 3 mm nominal thickness.

### STORAGE CONDITIONS

Store all components between 60 to 77°F/16 to 25°C in a dry area. Keep out of direct sunlight. Avoid excessive heat and do not freeze.

### COLOUR

Stonshield Xpress is available in twelve standard colours. Refer to the Stonshield Colour Sheet. Custom colours are available upon request.

### SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen TD9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

**Note:** For applying over a MMA floor; the surface must be sanded and Xpress solvent wiped.

### PRIMING

The use of Xpress Primer is necessary for all applications of Stonshield Xpress over all substrates. The Xpress Primer must be fully cured and concrete must be completely sealed off prior to the application of the Undercoat.

### POT LIFE

After mixing, the Stonshield Xpress components will have a working time of approximately 10 minutes. The working time varies greatly depending upon temperature and catalyst load.

### APPLYING

Application of the Stonshield Xpress system is accomplished as follows:

1. Xpress primer is mixed and applied immediately to the floor. The material is distributed using nap rollers. Stonshield Aggregate is sparsely hand broadcasted into the wet primer. Allow one hour to cure.
2. Stontec Xpress Undercoat is mixed and poured onto the substrate and distributed with a 18 in. roller.

3. After 5 minutes, begin broadcasting the Stonshield Aggregate into the wet undercoat until a complete and even layer is bound to undercoat. Let cure for 60 minutes and remove excess aggregate.
4. Apply two more layers of Xpress undercoat and Stonshield Aggregate in the same manner to achieve the proper thickness.
5. Xpress sealer is mixed and applied to the floor using 18in. rollers to distribute the material.
6. Apply the second coat of Xpress sealer in the same manner of the first.

Refer to the Stonshield Xpress Directions for further detail.

### RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of the Stonshield Xpress components are not within 60 to 77°F/16 to 25°C.
- DO NOT use water or steam in the vicinity of the application.
- The use of suitable protective clothing, gloves and safety glasses must be worn during mixing and application of the product. NIOSH/MSHA approved respirators are required.
- **Avoid Contact!** In case of contact with eyes, rinse immediately with copious amounts of water and seek medical attention. In case of contact with skin, clean immediately with water and soap.
- **Product is highly flammable, keep away from heat and all sources of ignition. DO NOT SMOKE!** Use only with adequate ventilation.
- Explosion safe ventilation must be used during the application to minimize vapour collection in the installation area and to improve overall air quality for the crew. A fresh air exchange should be set up, if possible, in the installation area during application. A safety installation plan is available upon request.
- **Avoid storing this material near any other Stonhard products. The MMA based products will react violently if exposed to amine hardeners.**

### NOTES

- Procedures for cleaning of the flooring system during operations can be found in the Stonhard Floor Maintenance Guide.
- Specific information regarding chemical resistance is available in the Stonshield Chemical Resistance Guide.
- Material Safety Data Sheets for Stonshield Xpress are available on line at [www.stonhard.com](http://www.stonhard.com) under Tech Info or upon request.
- A staff of technical service engineers is available to assist with installation or to answer questions related to Stonhard flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices or corporate offices located worldwide.

#### IMPORTANT:

Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.

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#### Worldwide Offices:

Canada 800.263.3112  
USA 800.257.7953

Mexico (52)55.9140.4500  
South America (54-3327)44.2222

Europe (32)2.720.8982  
Middle East (971)4.3470460

Africa (27)11.254.5500  
Asia (86)21.5466.5118



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[www.stonhard.ca](http://www.stonhard.ca)

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