

# VISON HI BUILD SYSTEM

Portland Cement Based Underlayment

# **Product Name: VISON HI BUILD SYSTEM**

Manufacturer: Vison Tech Products LLC

# **Product Description**

VISON HI BUILD SYSTEM is a professional grade, easy spread, trowelable powder and VISON M4 latex liquid additive underlayment formula. Enhanced VISON HI BUILD is ideal for surface restoration, filling depressed or uneven substrates. Use VISON HI BUILD SYSTEM powder and VISON M4 latex liquid additive to fill or raise the old floor surface to flat and smooth surface prior to ceramic tile, natural stone, resilient flooring, carpet, wood and other floor coverings. VISON HI BUILD SYSTEM is applied in spot areas or in the entire room to an application thickness of 0" to  $1^{1}/4$ " (0-38mm). Use VISON HI BUILD SYSTEM to re-smooth scarred, sloped, uneven or depressed substrates back to level. Upon screeding or spreading the underlayment patch, it will cure over-night to allow light traffic on the surface within 20-24 hours. VISON HI BUILD SYSTEM is also ideal for interior/exterior use beneath carpet, vinyl, hardwood flooring, ceramic tile and natural stone installations.

# **Packaging**

#### **COLOR: Gray**

TEXTURE: Powder consisting of Portland cement, polymer additives, mineral filler, organic and inorganic chemicals. Free-flowing liquid consisting of latex/polymer emulsion.

PACKAGING: 50 lbs. (22.7 kg) Multi-wall bags, 1 gallon (3.7 l) or 5 gallons (18.9 l) containers liquid latex additive

# **Basic Use**

VISON HI BUILD is used for floor surface correction, surface filling of uneven, tilted or wavy substrates.

# **Key Benefits and Features**

VISON HI BUILD SYSTEM is an easy underlayment, easy spread, resurfacer and leveler of various substrates. Smooths surfaces for all types of floor finishes. Floor areas can be corrected and patched with minimal down time and fast cure properties.

# **Limitations**

This product is not recommended for use over floor surfaces prone to flexing, vibration or movement. Do not apply over gypsum based surfaces, hardwood, particle board, parquet, strip wood floors, OSB board, lauan plywood, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or rubber. Not to be applied over painted, over-spray, old adhesives, curing compounds, waxes, oils, sealers or over unclean, loose or crumbling surfaces. Not recommended as a wear surface. Underlayment should be moisture tested to levels compatible to the hardwood, vinyl, rubber and carpet manufacturer's recommended levels before covering. For product installations, temperature of area to be leveled must remain above 50°F (10°C) for 72 hours.

# **Applicable Standards**

There is no industry code standard established for this product. This product contains no V.O.C (Level = 0.0 g/I)

# **General Surface Prep**

All surfaces must be dry, structurally sound. Remove all grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, and stripped of all contaminants. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond. Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. Ambient temperature should be maintained above  $50^{\circ}$  F ( $10^{\circ}$  C) or below  $100^{\circ}$  F ( $38^{\circ}$  C) for 72 hours to achieve proper bond.

# **Cementitious Substrates**

Concrete must be fully cured and must accept water penetration. Contaminants should be mechanically removed before installation. Use VISON M4 Latex Admixture liquid as a primer; applying to a porous/dry, rough or exterior surfaces will enhance bond. Allow primer coat to dry clear to touch prior to troweling product. If VISON M4 Latex Admixture liquid dries longer than 12 hours before underlayment placement it will necessary to re-prime surface.

# **Wood Substrates**

All substrates shall be rigid and non-flexing for live and dead loads. Floor structure and construction shall be conforming surfaces, interior application, properly gapped, glued and screwed. Brush or roll surface with VISON M4 Latex Admixture liquid as a primer for proper adhesion. After brushing primer to surface, allow primer coat to dry clear to touch before applying patch. Use corrosion resistant staples and attach <sup>1</sup>/<sub>4</sub>" (6mm) galvanized, expanded metal lath or corrosion resistant plastic lath to the plywood before applying VI-SON HI BUILD on applications greater than 1/4" full screed floor areas. For questions about proper subfloor installation, call VISON Tech's Technical department.

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## **Expansion Joints**

Install expansion joints around all perimeters or restraining surfaces where possible to allow for expansion movement. Expansion joints and cold joints, as described in ANSI A108.01, should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant (100% Silicone). Contact Vison Tech's Technical Services for the proper treatment of control or saw cut joints. Refer to TCNA Handbook EJ171.

#### Installation

All surfaces will have to be brushed or dampened with clean water or latex admixture before VISON HI BUILD application. The VISON M4 Latex Admixture liquid must be brushed or rolled to the surface. On dry, porous and/or hot surfaces it may be necessary to apply additional coats to thoroughly saturate the bond surface.

#### Mixing

For best results, maintain all materials, substrates, room and adhesives at 50°-70°F (10-21°C) for 24 hours before and 72 hours after installation. In a clean container, add 50 lbs. (22.7 kg) VISON HI BUILD to approximately 1gal (3.7 l) of VISON M4 Latex Admixture liquid. Blend VISON HI BUILD powder and VISON M4 Latex Admixture liquid to a soft, trowelable, screedable, paste consistency. Do not over-water or mix the patch to a fluid or pourable mix. Excess latex liquid addition or overly fluid consistency causes aggregate segregation, cracking, peeling, uneven surface discoloration and will void product warranty. Mix material to a lumpfree, uniform and non-flowable mix.

# Application

VISON HI BUILD underlayment mixture should be applied to surface with a flat edge tool in a scraping motion to force patch into the bond surface. Then additional material can be applied and built up to  $1^1/4^{"}$  (38mm) layer. For application layers greater than  $1^1/4^{""}$ , the underlayment can be modified with additional dry, clean  $1/8^{"} - 1/4^{"}$  gravel or aggregate at a rate of 16-20 lbs per bag. The additional gravel mix will allow patching up to 2.5" (64mm)

# Coverage

Per 50 lbs. (22.7 kg) bag covers: at 1/8" layer = 50 sq. ft. (4.6 m2);

# **Working Time**

Approximately 30 minutes, depending on ambient temperature.

## Cleaning

Clean tools, hands, and excess materials from face of tile, while mortar is still fresh, with warm soapy water.

## **Curing and Covering**

Ceramic tile and stone may be installed or set when the underlayment is firmly in place, typically 22 to 24 hours after installation is completed. Carpet, resilient flooring and wood floors products will be checked by moisture meter to be within levels state by those floor covering manufactures recommendations. Cold temperatures or high humidity may extend curing time.

# **Specifications: Technical Data**

Test	Require- ment	Typical Values
Working time @ 70°F	· ·	30 min.
Initial set time @70°F	•	2 hours
Final set time @ 70°F		8 hours
Bond Strength ASTM D3931	28 days	640 psi (4.412 MPa)
Compressive Strength ASTM	7 days	3800 psi (26.20 MPa)
C-109	28 days	4400 psi (30.336 MPa)
Flexural Strength ASTM C348	28 days	<b>1120 psi</b> (8.273 MPa)
Time Before Installing Floor		
Covering		
Ceramic Tile	20 hours	
Other Floor Covering	24-72	
	hours	

#### Storage Life

One year if kept dry in sealed bag.

# **KEEP OUT OF REACH OF CHILDREN**

#### Warranty

Vison Tech warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Vison Tech's sole liability under this warranty shall be limited to the replacement of the product. Some states, countries or territories do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Vison Tech's printed instructions. Vison Tech makes no other warranties either expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state or from one country/territory to another.

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