

PRODUCT DESCRIPTION

Stonclad NM is a four-component, troweled, novolac epoxy mortar system. The system consists of an novolac epoxy resin, amine curing agent and selected, graded aggregates blended with inorganic pigments. Stonclad NM can be applied at thickness ranging from 3 mm to 6 mm depending on application requirements. Stonclad NM cures to an extremely hard, impact resistant surface which exhibits excellent abrasion, wear and chemical resistance.

SYSTEM OPTIONS

Coatings

To improve cleanability and increase the resistance to damage from abrasion and chemical spillages, a Stonchem lining system is recommended.

Waterproofing

Where the total system must be waterproof, use of Stonhard's Stonproof ME7 membrane system is required with strict adherence to application instructions.

Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 5 to 15 cm may be specified.

PACKAGING

Stonclad NM is packaged in units for easy handling. Each unit consists of:

2 cartons, each containing:
 6 foil bags of Amine
 6 poly bags of Resin

12 individual bags of C-1 aggregate

Pigment

1 cartons containing:
 12 bags of Part C-2 pigment

COVERAGE

Each unit of Stonclad NM will cover approximately 18.6 m² of surface at a nominal 6 mm thickness.

STORAGE CONDITIONS

Store all components of Stonclad NM between 16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

COLOR

Stonclad NM is available in 12 standard colors. Refer to the Stonclad Color Sheet.

USGBC LEED RATING

Stonclad NM meets the requirements of LEED;

- MR Credit 1 – Building Reuse
- MR Credit 2 – Construction Waste Management
- IEQ Credit 4 – Low Emitting Materials
- VOC content of the total system <100 g/l

SUBSTRATE

Stonclad NM, with the appropriate primer, is suitable for application over concrete, wood, brick, quarry tile, metal or Stonhard Stonclad grouts. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard representative or Technical Service.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond and system performance. The substrate must be dry and properly prepared utilizing mechanical methods. Questions regarding substrate preparation should be directed to your local Stonhard's representative or Technical Service.

PHYSICAL CHARACTERISTICS

Compressive Strength	75 N/mm ²
(ASTM C-579).....	after 7 days
Tensile Strength	15 N/mm ²
(ASTM C-307)	
Flexural Strength	32 N/mm ²
(ASTM C-580)	
Flexural Modulus of Elasticity	17 x 10 ⁴ N/mm ²
(ASTM C-580)	
Hardness	87 to 90
(ASTM D-2240, Shore D)	
Impact Resistance	> 18 Nm
(ASTM D-2794)	
Abrasion Resistance.....	0.08 gm max. weight loss*
(ASTM D-4060, CS-17)	
Thermal Coefficient of	
Linear Expansion	2.0 x 10 ⁻² mm/m°C
(ASTM C-531)	
Water Absorption	2%
(ASTM C-413)	
VOC Content	5 g/l
(ASTM D-2369)	
Cure Rate	8 hours for foot traffic
(at 25°C)	24 hours for normal operations

* Test samples finished with one coat of high solids epoxy coating

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. All sample preparation and testing is conducted in a laboratory environment, values obtained on field applied materials may vary and certain test methods can only be conducted on lab made test coupons.

PRIMING

The use of HT Primer is necessary for all applications of Stonclad NM over all substrates except Stonset grouts. Over Stonset grouts, Stonset Primer is used. The Primer must be tacky during the application of Stonclad NM. If the primer becomes tack-free, the area must be re-primed prior to continuing the application.

MIXING

- Proper mixing is critical for the product to exhibit the proper application properties, cure properties and ultimate physical properties.
- Mechanical mixing using a JB Blender (or equivalent 5 gal. pail mixer) or a larger mortar mixer (e.g., a Baugh 3 Batch Mixer) is required.
- See Stonclad NM Directions for further details.

APPLYING

- **DO NOT** attempt to install material if the temperature of Stonclad NM components and substrate are not within 16 to 30°C. The cure time and application properties of the material are severely affected at temperatures outside of this range.
- Material must be applied immediately after mixing.
- A suitable screed applicator is used to distribute the mixed Stonclad NM onto the floor.
- Steel finishing trowels are used to compact and smooth the surface of the material to the required thickness.
- Detailed application instructions can be found in the Stonclad NM Directions.

NOTES

- Procedures for maintenance of the flooring system during operations are described in the Stonkleen Floor Cleaning Procedures Brochure.
- Specific information regarding chemical resistance is available in the Stonclad Chemical Resistance Guide.
- Safety Data Sheets for Stonclad NM are available on line at www.stonhard.com under Products or upon request.
- A staff of technical service engineers is available to assist with installation or to answer questions related to Stonhard products.
- Requests for literature can be made through local sales representatives and offices, or corporate offices located worldwide.
- The appearance of all floor, wall and lining systems will change over time due to normal wear, abrasion, traffic and cleaning. Generally, high gloss coatings are subject to a reduction in gloss, while matte finish coatings can increase in gloss level under normal operating conditions.
- Surface texture of resinous flooring surfaces can change over time as a result of wear and surface contaminants. Surfaces should be cleaned regularly and deep cleaned periodically to ensure no contaminant build up occurs. Surfaces should be periodically inspected to ensure they are performing as expected and may require traction enhancing maintenance to ensure they continue to meet expectations for the particular area and conditions of use.

CE MARKING

The harmonized European Standard EN 13813 „Screed material and floor screeds- Screed materials - Properties and requirements“ specifies the requirements for screed materials for use in floor construction internally. Resinous flooring systems as well as resinous screeds fall under this specification they have to be CE-labeled as per Annex ZA., Table ZA.1.5 and 3.3 and fulfill the requirements of the given mandate of the Construction Products Regulation no. 305/2011


StonCor Europe Rue du Travail 9 1400 Nivelles, Belgium I3
DOP-2013.01.009 EN 13813 SR-AR0.5-B2.0-IR18
Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet) Release of corrosive substances:SR Wear resistance:AR0.5 Adhesion strength by pull-off test:> B2.0 Impact resistance:.....IR18 Chemical resistance:CRG*
*CRG: see Stonhard Chemical Resistance Guide

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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European Offices:

Belgium	+32 674 93 710	Spain	+34 933 623 785	Germany	+49 240 541 740
France	+33 160 064 419	Portugal	+351 227 535 642	The Netherlands	+31 165 585 200
Poland	+48 422 112 768	United Kindom	+44 125 63 36 600	Italy	+39 022 53 751
		East Europe	+48 422 112 768		