TECHNICAL DATA SHEET



TERRAMARE QUARZIT

SILOSSANIC MASONRY EXTERIOR PAINT Eco-Sustainable Paint Product made from Natural Materials

FIELDS OF APPLICATION

TerraMare Quarzit is ideal finish masonry paint, highly hydro-repellent and permeable, high exterior performance in all weather conditions, with excellent UV resistance. TerraMare Quarzit can be applied on virgin Portland cement stuccos, painted cement stuccos, reinforced concrete and plastic resin stuccos. TerraMare Quarzit can also be applied over concrete block or brick, painted and non-painted. Silossanic paints have a high performance with exposure to sun, rain and inclement weather conditions. Silossanic Paints are particularly suited in urban environments where carbon pollution, dirt, and chemicals are prevalent because of silossanic's ability to self-clean during rain cycles.

TerraMare Quarzit can be used on aging cement stuccos and cement block where water penetration has become a destabilizing agent and stucco or block that is being effected by efflorescence or salt nitrate discoloration. TerraMare Quarzit is a fine aggregate paint, and dries to a flat mineral paint like sheen, so that colors and effect is similar to historical lime wash or potassium silicate paint. Product can also be painted on new or old cement stuccos where high scrub-ability is desired, and is ideal for surfaces where unusual wet conditions exist.

PRODUCT FEATURES

This silossanic paint has very low VOC content and is completely permeable, breathable, hydro-repellent, self-cleaning and washable. Product has excellent anchorage to all new masonry surfaces, is a non-yellowing, non-thermoplastic, with high resistance to aging and UV damage. Paint sheen is flat/opaque, and when applied by brush creates very subtle chromatic variations. Product can be applied with brush, roller or sprayer, with full coverage achieved in two (2)-coats. Because of the hydro-repellent properties this paint has self-cleaning properties and does not permit the accumulation of dirt or pollution to deposit in the stucco pores of the surface, easily washing off by rain or with a light rinsing.

Silossanic paint is based on a silicone rubber water based formula, being made from silica (sand), and is environmental low impact paint as described in the Eco Category description.

TYPE OF PRODUCT

Silossanic coating according to DIN 4108, based on silicone rubber with organic stabilizers. No acrylic binders used.

SHEEN FINISH

Very Flat

COLOR

White Base. Color tint up to 8% max with approved tints. Custom color tint matching are available.



TECHNICAL DATA

CRITERIA	INT. STANDARD	VALUE	UNIT
TVOC & VOC (including tint pigments)	2004/42/CE High Performance Paint Max. Value 40g/lt 2010	8	g/lt
Water Absorption Coefficient	EN 1062-3 – DIN 52617	> 0.10	kg/(m²• √h)
Vapor Permeability	EN 1062-1/UNI 10795	< 15m S _d 1.4 low	g/m² (24 h)
Whiteness	CIE	80	%
Surface Retention Smog/Dirt	EN 10795	Very Low	> 3
Drying Time at Low Temperature	UNI 10793	> 5	°C
Application New Cement	UNI EN 13300	Ideal	_
Exterior Silossanic Paint	DIN 18363 paragraph 2.4.1	Yes	-
Application Quality	UNI 10794	Excellent	_
Hide and Cover Capacity	ISO 6504-3 M.U. 1631 (RC 100 μm Humid)	Class 1	-
pH Value	DIN 19266	7.5 – 8	_
Resistance to Mold	DIN 19266	Product ideal to mold and algae resistance for exterior application	Aspergillus Niger, Penicillum ochrochloron Pullularia pullulans
Alkaline Resistance	UNI 10795	Excellent	mm
Specific Weight (23°C)	EN ISO 2811-2	1.27	Kg/lt
Granulation	DIN 19643 – EN 21524	0.005	mm
Gloss Level	UNI EN ISO 2813	< 40	Satin
Reaction to Fire	EN 13501-1:2002	A 1	_
Environmental Toxicity	EN 13501-1:2002	Toxic	See Safety Data Sheet
APEO (Alkyl Phenol Ethoxylates)	-	0%	_
PEG (Polyethylene Glycol)	-	0%	-
PG (Propylene Glycol)	_	0%	_
Biocides	-	0%	-

Does not contain chemicals that can aggravate or cause asthma, see NIH Asthma Report 2012.

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APPLICATION CYCLE INSTRUCTIONS

BRUSH. ROLLER. AND SPRAY APPLICATIONS

1ST COAT Apply TerraMare Sealer without dilution, to all new masonry surfaces prior to

> applying TerraMare Grip. Allow Sealer to dry for at least 8 – 12 hours. Apply TerraMare Grip diluted according to instructions and allow to dry for at least 8 – 12 hours. Apply TerraMare Quarzit without dilution to surface with brush,

roller or sprayer. Allow to dry for at least 8 – 12 hours between coats.

2ND COAT Apply TerraMare Quarzit without dilution using application tools as

described above.

SPRAY TIP USAGE TerraMare Quarzit contains aggregate and can create difficulties using an

> airless sprayer unless the sprayer is a high compression sprayer, using no filters, applying product with a # 0.023 – 0.025 mm size Titanium spray tip. Consult paint sprayer manufacturer always before spraying aggregate paints.

GRAIN SIZE $0.02 - 0.03 \, \text{mm}$

MIXING PAINT & WATER

Most our paint formulas are concentrated and require water to be added to them for proper use. This process means we can sell more coverage in an economical package that decreases the cost for transport, reduces the carbon footprint, helping the your pocket book and the environment.

Mix paint and water with an electric drill and paint paddle, or mix well by hand! If water is sitting on the top of your mixture, the paint is not properly mixed!

TOOLS

Apply with brush, roller or with an appropriate sprayer.

DRYING TIME

Allow a drying time of at least eight (8) – twelve (12)-hours before applying TerraMare I. With lower temperature and humidity more time may be needed.

Do not apply TerraMare Sealer, TerraMare Grip, TerraMare I or TerraMare Quarzit on the exterior if there is a risk of thunderstorms or showers during the 12 hour drying time needed for product to dry correctly, or at late day with risk of dew formation.

CONSUMPTION/COVERAGE

Approximately 1,000 ft² / 93 mt² per 15 liters bucket. On rough or porous surfaces predict higher consumption. Determine exact consumption by performing a test on the surface to be treated.

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PACKAGING

Plastic buckets of 1, 5 and 15 liters.

APPLICATION CYCLES ON DIFFERENT TYPES OF BASES

Make sure base is solid, dry and well cleaned, prepared with skill. It is recommended to observe the rule VOB DIN 18 363, Part C, paragraph 3.

NEW CEMENT STUCCOS

New cement should not be painted for about 28 days to ensure proper anchoring and drying. Apply 1 coat of TerraMare Sealer non-diluted and allow to dry for at least 8 – 12 hours. Application of TerraMare Grip is not a requirement as a primer for walls unless surface area is subject to excessive moisture and sunlight, nevertheless, for maximum durability and performance it is highly suggested to TerraMare Grip. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

EXTERIOR PAINTED WALLS

Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or by mechanical means, i.e., with a high-pressure washer. Apply 1 coat of EcoDis on dried surface and allow to dry for at least 12 hours where algae or mold has been present. TerraMare Sealer is not required for application on acrylic enamel surfaces. If the exterior paint is porous or powdered TerraMare Sealer must be applied as well as TerraMare Grip. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

If the acrylic enamel surface is intact and in excellent to good condition then TerraMare Quarzit can be applied without the need of sealer or grip as a primer. Tests should be performed for verification for durability and adhesion prior to eliminating the use of grip or primer.

SYNTHETIC STUCCO

Dirty and/or contaminated surfaces should be cleaned and any attached algae or mold removed manually or by mechanical means, i.e., with a high-pressure washer. Apply 1 coat of EcoDis on dried surface and allow to dry for at least 12 hours where algae or mold has been present. TerraMare Sealer is not required for application on acrylic surfaces. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

REINFORCED CONCRETE SURFACES

New cement should not be painted for about 28 days to ensure proper anchoring and drying. Apply 1 coat of EcoForte Consolidator (diluted 50% with water, or 2:1), allow to dry for at least 12 hours.

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Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

DECAYING OR CRUMBLING STUCCOS OR POWDERY SURFACES

Chalking surfaces, which could prevent the proper anchoring of the base coating must be removed and pressure washed. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

COATINGS WITH EFFLORESCENCE

Cement surfaces showing efflorescence should be removed with acid and thoroughly rinsed with water. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

AGED CEMENT STUCCOS

When new stucco repairs are performed on older cement stuccos, apply Potassium Silicate Concentrate diluted 100% with water (1:1), to older surfaces prior to applying new cement stucco. Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high-pressure washer. Stucco damaged by algae or mold should be treated with EcoDis prior to application of Potassium Silicate Concentrate. Apply 1 coat of EcoForte Consolidator diluted 100% with water (1:1) on all surfaces and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer and allow to dry for at least 8 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

STUCCO REPAIRS

See Aged Cement Stuccos above.

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MINERAL PAINTS OR LIME WASH

Potassium Silicate Concentrate or EcoForte Consolidator can be applied on existing Mineral Paints or Lime Washes to consolidate worn or powdery bases prior to applying TerraMare Sealer. Apply EcoForte Consolidator product, diluted 100% with water (1:1), and allow to dry at least 12 hours. Apply 1 coat of TerraMare Sealer non diluted, and allow to dry for at least 12 hours. Apply one (1)coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

BRICK SURFACES

For consolidation of old brick and mortars: Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high-pressure washer. Apply 1 coat of EcoDis on dried surface and allow to dry for at least 12 hours. Apply Potassium Silicate Concentrate, diluted 100% with water (1:1) on all damaged surfaces, applying 2 – 3 coats in rapid succession and allow to dry for at least 12 hours. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush, roller or sprayer and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit according to instructions indicated above.

TILE ROOFS

Dirty and/or contaminated surfaces should be cleaned and any attached algae removed manually or by mechanical means, i.e., with a high-pressure washer. Surfaces damaged by algae or mold should be treated with EcoDis. Apply one (1)-coat of TerraMare Sealer non-diluted, with brush or roller only, and allow to dry for at least 8 – 12 hours. Apply one (1)-coat of TerraMare Grip diluted according to instructions using brush or roller only and allow to dry for at least 8 hours. Apply two (2)-coats of TerraMare Quarzit as per the instructions for the final finish.

STORAGE

Store in a cool, dry and protected from frost. Close the open containers with care. Store liquids only in plastic.

WARNING!

Do not apply any products in direct exposure to strong/hot sunlight, rain, mist, high humidity (> 80%), at dew-point formation, or in the presence of strong wind. Do not apply on damp or wet surfaces. Beware of the danger of frost overnight. If applied by roller or sprayer, protect surrounding surfaces as necessary. Protect eyes and skin from splashes of paint. Cover glass, ceramic, natural stone, brick, metal, wood, painted surfaces and glazed tiles. Clean affected areas immediately with water. Prominent elements of the building (cornices, parapets, etc.,) should be treated with skill, covering flashings, gutters, copper coatings, etc. ...

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Do not work in air temperature lower than 8°C / 46°F and not above 31°C / 88°F. Clean work tools with water immediately after use. Keep out of reach of children. In case of contact with eyes and skin, wash immediately with plenty of water. In cases of consumption, consult a Doctor or call the CDC Poison Center (see Safety Data Sheet).

WATER CONTAMINATION HAZARD

CLASS 1

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of information required by the CPR, and it is classified as a non-hazardous material.

PRODUCT CONTAMINATION HAZARD

CODE CER / NORMATIVE EAC / Decision commuted by the Commission n. 2000/532/CE

NOT DANGEROUS The directive 75/442/CEE, 08 01 production, disposal, formulation, supply, use and removal of paints and varnishes: 10 13 04 for removal of paints and varnishes; 10 13 04 disposal of lime and hydrated lime products.

DISPOSAL

Do not enter product in its original concentration into drains or open waters. Do not store at public waste disposal sites. In case of conduction into adapted biological purification plants no disturbances need be expected. The preparation has been estimated by conventional method (Calculated-procedure of EG directive 1999/45/EG) and is classified as non-hazardous for the environment.

Dispose according to local regulations. Empty cans should be disposed of according to local regulations; plastic buckets are 100% PBS, NO. 5, approved for food storage; 100% recyclable if cleaned thoroughly prior to recycling.

ADDITIONAL INFORMATION

Warning: This Technical Sheet lists data collected on the basis of technique and experience. Given the multiplicity of use of the product they cannot be binding and the user can not refrain from using common sense and experience for the individual case. This information shall not constitute any legal obligation and no obligation from the seller or point of purchase, or any agreements inferred by employees who sale this product. Insurance or quarantees issued by our employees or employees should always be confirmed separately in writing. Any information about product adaptability and use of the product, must be verified by user prior to purchase. Check the exact consumption of product for the surface where product may be applied to determine amount of products needed. The color matching must be verified by the user before starting work.

MANUFACTURER

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