SS

One-component, liquid-applied, silane-based roof coating which cures with atmospheric humidity to form a strong, elastic, watertight membrane

MINIMUM TOTAL CONSUMPTION	SERVICE TEMPERATURE	ELONGATION AT BREAK	COLOUR
1.98–2.60 kg/m²	-40 to +90 °C	350 %	White

01 DESCRIPTION

SS is a one-component, silane-based coating that cures with the humidity of the atmosphere. It forms a seamless membrane without joints, 100 % bonded to the substrate. If the membrane is damaged, water does not spread across the substrate and the membrane can be repaired locally. Because of the high hydrophobic performance of the cured membrane, it is highly resistant to standing water. SS is 100 % UV- and colour-stable, with zero chalking. In white, it reflects solar energy and reduces the temperature inside the building in summer. Apply by brush, roller or airless spray in two to three coats.

02 COLOUR

- White (standard)
- Grey (special order)
- Red (special order)

03 LIMITATIONS

Not recommended for:

- Directly exposed layers in swimming pools
- Wet substrates, or application in rainy weather

The membrane can be slippery when wet. Broadcast quartz of a suitable grain size into the fresh coating where slip resistance is needed.

04 MAIN FEATURES

- One-component, moisture-curing
- Easy to apply and repair
- Seamless, fully bonded to the substrate
- Highly resistant to standing water; does not peel off
- Elastic down to -40 °C; good crack-bridging
- Does not soften or turn tacky at +80 °C
- Water-vapour permeable: no moisture build-up on the ceiling
- Resistant to rain, frost and UV
- UV- and colour-stable; zero chalking
- High solar reflection (white only)
- Good adhesion to many substrates without primer
- Good resistance to chemicals and detergents
- Releases no dangerous substances once fully cured
- Cost-efficient

05 RECOMMENDED FOR

Waterproofing and protection of:

- Roofs, including roofs with standing water
- Roofs with polyurethane insulation foam
- Terraces
- Tanks
- Planters
- Topcoat over polyurethane membranes, for colour stability

06 SUITABLE SUBSTRATES

Concrete, cementitious screeds, bitumen-based coatings and bitumen felts, ceramic tiles, metal, polyurethane foam and polyurethane membranes. For other substrates, contact ETS Europe.

Standard conditions for a concrete substrate:

Condition	Moisture	Old coatings
Dry and sound	< 5 %	Removed

Suitable primers: Universal Primer 1K on concrete, Aqua Primer on moist concrete, Universal Primer 2K on bitumen. No primer is needed on non-absorbent surfaces such as ceramic tiles or metal. Contact ETS Europe for primer selection advice.

07 SYSTEM BUILD-UP

01	→ 02	→ 03	→ 04
Substrate	Primer from the Hypertectum primer range (where required)	SS, 1st coat with geotextile (optional)	SS, 2nd and 3rd coat

08 APPLICATION PROCEDURE

Surface preparation	Remove loose particles, dust and oil. Remove old coatings. Do not wash the substrate with water before application. Seal joints and cracks with Tectflex-PU.
Priming	Apply the recommended primer according to its data sheet. Apply the 1st coat of SS no earlier than 1 h and no later than 48 h after priming.
Reinforcement	For better mechanical and crack-bridging properties, embed a non-woven, needle-punched polyester geotextile (110 g/m²) in the fresh 1st coat. Recommended over joints and cracks, at wall-to-floor corners, around chimneys and solar-panel bases, and on cementitious screeds prone to cracking.
Dilution	For airless spray, dilute with up to 10 % white spirit. Never dilute with water.
Application	Brush, roller or airless spray, in two to three coats. Leave at least 3 h and no more than 48 h between coats. Drying time depends strongly on temperature and humidity.

09 CONSUMPTION

Minimum total consumption	**1.6–2.1 l/m²**
Equivalent to	1.98–2.60 kg/m²

Depends on the roughness of the surface and the project requirements.

10 CLEANING

Clean tools and equipment with white spirit while the coating is fresh. Cured material can only be removed mechanically.

11 PACKAGING

Pails of 0.7 l, 3.6 l and 18 l

12 STORAGE

At least 12 months in the original sealed pails, in a dry, cool place. Once opened, use all at once. A cured layer forms on top of a part-used pail; remove it and the remaining liquid can be used.

13 SAFETY

See the Safety Data Sheet.

14 TECHNICAL DATA — LIQUID (BEFORE APPLICATION)

PROPERTY	UNIT	METHOD	VALUE
Dynamic viscosity (shear rate 100 s^{-1})	mPa·s	EN ISO 3219, 23 °C	2,350
Density	g/cm³	DIN EN ISO 2811-1, 21 °C	1.30
Skin formation time (23 °C, 50 % RH)	h	–	2.5
Curing time	h	–	12–24

15 TECHNICAL DATA — CURED MEMBRANE

PROPERTY	UNIT	METHOD	VALUE
Service temperature	°C	–	-40 to +90
Hardness	Shore A	DIN 53505	55
Tensile strength	N/mm²	DIN 53504	2.20
Elongation at break	%	DIN 53504	350
Water-vapour permeability (23 °C, 0/75 % RH)	g/m²·day	DIN EN 1931	12.7
Watertightness (1 m water column, 24 h)	–	DIN EN 1928	Watertight
Adhesion to concrete (with primer)	N/mm²	–	> 2
Accelerated weathering, UV and water (1,000 MJ/m², 4,000 h)	–	EOTA TR-010	Passed
Thermal ageing (200 days at 80 °C)	–	EOTA TR-011	Passed
Fatigue resistance (-10 °C, 1 mm crack, 1 mm movement, 1,000 cycles)	–	EOTA TR-008	No cracks

16 CLASSIFICATION — ETAG 005

PROPERTY	CLASS
Expected working life	W3 (25 years)
Climatic zone	S (severe climate)
User load	P4 (special)
Roof slopes	S1 to S4
Minimum surface temperature	TL4 (-30 °C)
Maximum surface temperature	TH3 (+80 °C)
Reaction to fire (EN 13501-1)	Class E

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