Hypertectum AF FC

All-weather, rapid-curing, one-component polyurethane liquid membrane for waterproofing and protection, single coat on a single day

MINIMUM TOTAL CONSUMPTION	SERVICE TEMPERATURE	ELONGATION AT BREAK	COLOUR
1.8–2.6 kg/m²	−40 to +90 °C	> 400 %	White, grey

01 DESCRIPTION

Hypertectum AF FC is a one-component polyurethane liquid membrane based on Humidity-Activated-Accelerator technology. The accelerator is built into the product in a blocked form: on contact with humidity it is released and accelerates the curing of the material. As a result, it cures rapidly, whatever the weather, to form a completely bubble-free and defect-free membrane with excellent mechanical and elastomeric properties. The full consumption can be applied in a single coat, which reduces labour cost. Ideal for use in winter or in climates with relatively low humidity. Apply with brush, roller or airless spray. Minimum total consumption: 1.8–2.6 kg/m².

02 COLOUR

White

Grey

03 LIMITATIONS

Not recommended for:

- Unsound substrates
- Swimming pools in contact with chemically treated water

A primer is always required. Select it from the Hypertectum primer range or contact ETS Europe.

04 MAIN FEATURES

- Balanced curing with fast skin formation (2 hours)
- Bubble-free and defect-free membrane
- Full consumption in one coat
- No thinning required
- Excellent weather and UV resistance. The white colour reflects much of the solar energy and considerably reduces the internal temperature of buildings
- Excellent heat resistance; never turns soft. Max service temperature 90 °C, max shock temperature 200 °C
- Remains elastic down to −40 °C
- Excellent mechanical properties: high tensile and tear strength, high abrasion resistance
- Good chemical resistance
- Water-vapour permeable: the membrane breathes, so no humidity builds up underneath

05 RECOMMENDED FOR

Waterproofing and protection of:

- Roofs
- Verandas and balconies
- Gypsum and cement boards
- Polyurethane insulation foams
- Light roofing made of metal or fibre-cement
- Bituminous membranes
- EPDM membranes

06 SUITABLE SUBSTRATES

Concrete (reinforced or not), fibre-cement, mosaic, cement roof tiles, old but well-adhered acrylic and bituminous coatings, wood. For other substrates, contact ETS Europe.

Standard conditions for a concrete substrate:

Compressive strength (R28)	Moisture	Temperature	Relative humidity
≥ 15 MPa	< 10 %	5–35 °C	< 85 %

07 SYSTEM BUILD-UP

01	→ 02	→ 03
Substrate	Primer from the Hypertectum primer range	Hypertectum AF FC, one or two coats

08 APPLICATION PROCEDURE

Surface preparation	Clean the surface with a high-pressure washer where possible. Remove oil, grease and wax. Remove cement laitance, loose particles, mould-release agents and old cured membranes. Fill surface irregularities with a suitable product.
Priming	Apply the required primer from the Hypertectum primer range, following its data sheet.
Mixing	Use a low-speed mixer (300 rpm). For spray application, add 5–10 % of a suitable solvent.
Application	Roller, brush or airless spray, in one or two coats. Do not exceed 48 hours between coats. If more time has passed (e.g. more than 4 days), or if interlayer adhesion is uncertain, contact ETS Europe.

09 CONSUMPTION

Minimum total	**1.8–2.6 kg/m²**

10 CLEANING

Wipe tools with paper towels, then clean with a suitable solvent. Rollers cannot be re-used.

11 PACKAGING

1 kg, 6 kg, 15 kg, 25 kg

12 STORAGE

At least 9 months in the original unopened pails, in a dry place at 5–25 °C. Once opened, use as soon as possible.

13 SAFETY

Contains volatile, flammable solvents. Apply in well-ventilated, no-smoking areas, away from naked flames. In enclosed spaces, use ventilators and activated-carbon masks. Solvent vapours are heavier than air and collect at floor level. See the Safety Data Sheet.

14 TECHNICAL DATA — LIQUID (BEFORE APPLICATION)

PROPERTY	UNIT	METHOD	VALUE
Viscosity (Brookfield)	cP	ASTM D4287, 25 °C	2,000–5,000
Density	g/cm³	ASTM D1475 / ISO 2811, 20 °C	1.35–1.45
Flash point	°C	ASTM D93, closed cup	35
Tack-free time (25 °C, 55 % RH)	h	–	2–3
Recoat time	h	–	6–48

15 TECHNICAL DATA — CURED MEMBRANE

PROPERTY	UNIT	METHOD	VALUE
Service temperature	°C	–	−40 to +90
Max. short-term (shock) temperature	°C	–	200
Hardness	Shore A	ASTM D2240 / ISO 868	70
Tensile strength at 23 °C	kg/cm² (N/mm²)	ASTM D412 / EN ISO 527-3	65 (6.5)
Elongation at break at 23 °C	%	ASTM D412 / EN ISO 527-3	> 400
Water-vapour transmission	g/m²·h	ASTM E96 (water method)	0.8
Tensile set (after 300 % elongation)	%	ASTM D412	< 3
QUV accelerated weathering (4 h UV at 60 °C, UVB lamps + 4 h condensation at 50 °C)	–	ASTM G53	Passed (2,000 h)

The information in this data sheet reflects current techniques and our best knowledge. Because the use of the product is beyond our control, neither the manufacturer nor the distributor can be held responsible for results. Instructions not covered by this data sheet require written confirmation from head office. Our general terms and conditions apply. This data sheet cancels and replaces all previous versions.