



nC ProTherm ISO-X thermal insulating coating

Description

nC ProTherm is a series of sprayable and brushable thermal insulating coatings. With additional properties as acoustic insulation in dB-X, safe-touch in ST, fire retardancy in Fire-X and corrosion passivation in CUI-X, you can always find the suitable solution for your situation.

Based on sol-gel nanotechnology, these coatings are designed for long lasting lifetime cycles of more than 15 years outdoors, and life-long expectancy indoors. Because of the ability to insulate with a very thin layer of coating, the nC ProTherm coatings offer space saving and cost reducing at a high degree of insulation with an U-value at 4,2 W/(m²K) at 6 mm, and a lambda (λ)-value at 0,040 W/(mK). It is moist repelling and UV-resistant. It keeps heat and cold in place.

nC ProTherm ISO-X is a thermal insulating coating addressing both cold and heat issues. It can be applied on brick, stone, wood and concrete. Before application, the dry component A must be mixed together with resin component B. Use a mixer to prepare a 1:4 ratio powder/resin mixture. ISO-X is applied by brush, roller or spraygun. It shows a stucco-like, relief finish. nC ProTherm ISO-X can be applied in one layer, between 3mm up to 18 mm. nC ProTherm ISO-X is available in all colours.

Benefits

TECHNICAL

- ✓ Thermal insulation U-value 4,2 W/(m²K) at 6 mm
- ✓ Lambda (λ)-value at 0,040 W/(mK)
- ✓ Acoustic insulating
- ✓ Low weight 0,35 gr/m³
- ✓ Bonds into and with surface chemically, not mechanically
- ✓ Low consumption 175 gr/m² to 350 gr/m²
- ✓ Performs in temperatures of -90°C up to 120°C
- ✓ Low VOC
- ✓ No hazardous fumes

OPERATIONAL

- ✓ Can be applied by brush, roller or spraygun
- ✓ One layer application between 3mm up to 18mm
- ✓ For indoor and outdoor use
- ✓ No spray mist or overspray
- ✓ Fast drying
- ✓ Suits all materials
- ✓ Space saving
- ✓ Chemical resistant
- ✓ Breathes, no vapour barrier
- ✓ +15 y of service outdoors
- ✓ All colours available
- ✓ Can be painted over

FINANCIAL

- ✓ 25% up to 35% less energy cost
- ✓ 40% up to 60% less application/project cost
- ✓ Low cost per m²
- ✓ First-time-right product, fast application, low impact
- ✓ Very long service time



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Application instructions

- ✓ Use safety glasses. Protect hands and skin from exposure using gloves and appropriate clothing.
- ✓ Ensure adequate ventilation.
- ✓ Substrate must be free from grease, dirt or dust.
- ✓ Ambient temperature must be between 4° C and 35° C.
- ✓ Do not apply when ambient humidity exceeds 90%.
- ✓ Mix dry component A 25% weight to resin component B 75% weight. Use (industrial) mixer.
- ✓ Mix for at least 3 minutes.
- ✓ Do NOT use any thinner.
- ✓ Use brush, roller or airgun/spraygun for application.
- ✓ Film thicknesses can be varied from between 3mm to 18mm WFT.
- ✓ Cross layer-application is recommended, wet-in-wet.
- ✓ Measure WFT during application. Product expands up from between 5% to 15% during application.
- ✓ nC ProTherm ISO-X will decrease 10% in thickness during curing time.

Table for curing times, at ambient temperature of 20° C and 60% humidity:

Surface	Curing time
Sandstone, brick, gypsum, natural wood	12 hrs
Concrete, pressed wood, synthetics, glass	24 hrs / 48 hrs
Product can be exposed to full rain after 12 hours	

- ✓ Let surface dry in for at least 6 hours before forced drying by means of blower or heater at 55° C max.
- ✓ Surface can be painted over.
- ✓ Clean brushes, rollers, nozzles with water immediately after any stop.
- ✓ Wash hands and face after every stop.

Limitations

- ✓ Do not use as a final floor covering.
- ✓ In case of long-term submersion, only install in combination with nC ProTherm H2O finish.
- ✓ Do not install over poor surfaces, such as those with flaking paint, grease or other contaminates.
- ✓ Do not allow application during freezing temperatures.
- ✓ Do not rely on visual measurement for coating thickness. Always use a wet film thickness (WFT) and/or dry film thickness (DFT) gauge in several areas to ensure proper application thickness.

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Logistic info

- ✓ Never use pressure to empty drums.
- ✓ Dispose of contents/container in accordance with local/regional/national/international regulations.
- ✓ nC ProTherm ISO-X has a shelf life of 6 months.
- ✓ Store nC ProTherm ISO-X between temperatures of 5° Celsius and 35° Celsius.
- ✓ nC ProTherm ISO-X is available in 5 kg, 20 kg, 65 kg or 350 kg packaging.
- ✓ Delivery time 1 to 3 weeks
- ✓ UN number: None assigned.
- ✓ UN proper shipping name: None assigned.
- ✓ Transport hazard class(es): None assigned. Product is suitable for air transport.
- ✓ Packing group: None assigned.
- ✓ Environmental hazards: No known environmental hazards.
- ✓ Special precautions for user(s): No known precautions for transport.
- ✓ **It is advised to avoid freezing product.**
- ✓ Guidance on transport in bulk: Transport in bulk according to Annex II of MARPOL 73/78 and the International Bulk Chemical Code (IBC code).

Typical properties

- ✓ Appearance after mixing: White yoghurt
- ✓ Odour: Acrylic
- ✓ % Solids: 79%
- ✓ Density 0,35 g/cm³
- ✓ pH-Value 8,35 – 8,45
- ✓ Shore Hardness A = 45 - 55