Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

WINTER CONCRETE TB S 30 C30/37



Product description

Winter Concrete TB S 30 C30/37 is a CE-marked, industrially manufactured, ready-to-use dry concrete designed for winter use and meeting quality and strength requirements. The product meets the requirements of the concrete standard SFS EN 206-1 for strength class C 30/37 and has a maximum aggregate size of 4 mm. The product is used in winter conditions within the temperature range of -15°C...+5°C.

- Strength class C 30/37
- Frost-resistant
- Meets the requirements of SFS-EN 1504-3, class R3

Applications

- As bedding mortar for precast concrete elements
- Repair of concrete structures and casting defects
- Subsequent concrete casting
- Concrete casting requiring weather and frost resistance
- Layer thickness 10–70 mm

The product is listed in the portal for building products that can be used in Nordic Swan Ecolabelled buildings.

Instructions

Base

- The temperature of the underlying structure must be -15°C…+5°C.
- The underlying structure must be free from standing water, snow and ice.
- Any reinforcement must be installed in accordance with the structural plans.
- Concrete casting must be carried out as a floating, reinforced structure if the substrate consists of weak concrete (substrate tensile strength < 0.5 MPa) or insulation boards. The floating structure must be separated from the subfloor and vertical structures.

Priming

- The concrete substrate must be moistened to a matt-damp condition before applying the product. No standing water must be present.
- Liquid bonding primers must not be used with the product.

Mixing and application

- Strong winds, direct sunlight and rain should be avoided during application.
- During application, the temperature must be -15°C…+5°C. The combined effect of wind and frost must be taken into account.

Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

- Mix one bag (25 kg) of dry powder with 2.4–3.0 litres of clean water. We recommend initially using the minimum amount of water and adding more as needed. The specified amount of water must not be exceeded, as this reduces the strength properties of the product, increases the risk of segregation and extends the drying time.
- Mix the product into a homogeneous consistency using a mortar mixer, concrete mixer or pan mixer. The mixing time is approximately 2 minutes with a mortar mixer or pan mixer and approximately 5 minutes with a concrete mixer.
- After mixing, allow the mixture to stand for approximately 10 minutes, then briefly remix.
- The working time is approximately 2 hours after mixing.
- Clean tools with water immediately after completing the work.

Curing

- Ensure that the applied product is kept sufficiently moist during curing to allow the curing reaction to proceed correctly and achieve the required strength. This also prevents possible plastic shrinkage cracking and detachment of the surface from the substrate.
- Keep the surface of the applied product moist for 2–5 days. Depending on the conditions and application site, curing can be carried out by water spraying, covering with plastic sheeting or using Fescon curing compound.
- Particularly in spring, curing must begin immediately and be carried out carefully, as the relative humidity of the air is often below 40% RH. Low relative humidity combined with sunlight and wind causes the surface to dry extremely quickly.

Other considerations

- Formwork, reinforcement and concrete casting work must be carried out in accordance with standard working methods for the respective operations and the designers' instructions.
- Winter products will be available in the winter season, from 15 September to 1 March. At other times, the products must be ordered separately.

Waste handling

Storage and handling of waste
See the separate storage and disposal instructions https://www.fescon.fi/en/material-bank

Hämeenkatu 9
05800 HYVINKÄÄ
Tel. 020 789 5900
www.fescon.fi

Technical information

Material usage	Approx. 2.0 kg/m^2/mm
Water requirement	2.4 - 3.0 l / 25 kg
Finished compound	11 - 12 l / 25 kg sack
Type	Powder
Binder	Cement
Colour	Grey
Maximum grain size	4 mm (the shape of natural stones may vary)
Package size	25 kg and 1000 kg
Storage	Shelf life approx. 8 months when stored in a dry place
Density	Approx. 2100 kg / m3
Layer thickness	10–70 mm (minimum 50 mm for floating and reinforced structures)
Fibre	Not fibre-reinforced
Additives	Additives that improve weather resistance and workability
Usage temperature	-15°C...+5°C
Workability time	Approx. 2 h
Strength class	C 30/37
Reaction to fire	A1
Exposure class	XF1, XC4, XD2 (50 years). XF1, XC4 (100 years)
Chloride content	≤ 0,05 %
Frost resistance	Frost-resistant
Waterproofness	Water-resistant

Limitation of liability, product use notes and restrictions: Please familiarize yourself with Fescon Oy's general terms of delivery and the design and work instructions related to the product.