Technical datasheet

CONTOPP®

RS 20 HD

Article n°: 20.260

KNOPP
Adolf-Oesterheld-Str. 1
D-97337 Dettelbach
Tel: +49(0)9324/9199-0
Fax: +49(0)9324/9199-66
info@knopp-chemie.com
www.knopp-chemie.com

PROPERTIES

Function

- Quick to dry semi-dry sand/cement screeds within 4 days
- Increase in strength through synthetic hardening
- Load-dependent reduction of the screed thickness down to 30 mm
- Contains tracer for a subsequent half-quantitative analysis in sand/cement screeds
- Rehydration protection

Application area

- For producing bonded screeds and floating screeds in accordance with BS 8204
- For producing of non-standard thin-layered screeds
- For producing screeds on underfloor heating
- For damp or outside areas

TECHNICAL DATA

Data

Colour:	Milky blue
Colour tracer-pigment:	red
Form:	blue
Density (20 °C):	1.24 ± 0.01 g/ml
Processing temperature:	above + 5 °C
Shelf life	ca. 12 months – protect from frost and direct sunlight
Supply form:	PE-HD-can: 20 kg netto
	Container: 1.100 kg netto

Mix

1 : 5 mix by weight	Standard	CONTOPP®	Unit
Cement	63	63	kg
Sand 0/4 [1)]	310	310	kg
RS 20 HD	-	1.3[2)]	ltr.
w/c-ratio	0.70 - 0.80	0.46 – 0.48	

Strength

Criteria	Standard	CONTOPP®	Unit
Flexural strength (28 days)	F5	F7	N/mm²
Comp. strength (28 days)	C25	C40	N/mm²
BRE test (impact resistance)	Category B	Category A	

Floor Finish

Criteria	Standard	CONTOPP®	Unit
Foot traffic	72	24	hours
Receive final floor finish	≥ 28	4	days

[1)] according to BS EN 13139

[2)] corresponds to 2.0 V-% of the cement weight

This ideal screed mortar can only be manufactured whilst adhering to the processing information listed below. The details refer to 50 mm screed thickness, normal climatic conditions at + 20 °C and a relative humidity of 65 %.

PROCESSING INFORMATION

Basic materials

- OPC oder blends following BS EN 197.
- Aggregates following BS EN 13139.

Recipe

- **Stir the CONTOPP® RS 20 HD before use and regularly during use in order to prevent segregation!**
- Stick to the dosage (2.0 V-% of cement weight); ingredients should be added to the moistened mix. W/c-ratio < 0.48
- Mix for at least 2 minutes after adding all the components

Construction site conditions

- Protect from draughts and direct sunlight during setting.

Technical datasheet

- Remove surplus moisture by means of draught-free ventilation (natural ventilation).
- Nature of construction and construction site preparation following BS 8204-1 and 8000.

SPECIAL INFORMATION

Minimum screed thickness [1)]

Flexural strength	Bonded	Unbonded	Floating	on underfloor heating [2)]
7 N/mm²	Standard: 20 mm Heavy duty: 20 mm	Standard: 35 mm Heavy duty: 35 mm	Standard: 35 mm Heavy duty: 50 mm	Standard: 35 mm Heavy duty: 50 mm

[1)] Working load: Standard ≤ 2.0 kN/m²; Heavy duty: ≤ 3.5 kN/m²
[2)] In the case of screeds on underfloor heating thickness above the pipes

Drying time [1) 2)]

Screed thickness	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm
≤ 3.0 % residual humidity [2)]	36 hours	48 days	60 hours	72 hours	5 days	7 days

[1)] Normal climatic conditions at + 20 °C and a relative humidity of 65 %
[2)] Following BS 8024 residual moisture content must be tested prior to the application of the final floor finish.

Screed on underfloor heating - start-up heating protocol [1) 2)]

Heating process	24 hours after laying	48 hours after laying	72 hours after laying	96 hours after laying
Temperature	35°C	55°C	45°C	25°C

[1)] It can be useful to lengthen the heating procedure for screed thicknesses of > 50 mm above the pipes to achieve sufficient drying.
[2)] During the heating phase do not carry out any finishing work and do not cover or block the screed surface.

Measuring residual moisture content

- Prior to laying the top flooring, the residual moisture of the screed must be measured by the person laying the floor.
- Whilst adhering to all the manufacturer's details, BS 8203 recommends laying the screed under 75 % relative humidity.
- According to the KNOPP's manufacturers advice all floor coverings must be laid under a residual moisture content of 3.0 % using the carbide bomb measuring device (corresponds to approx. 4.5 Tramex reading – to be used only as indicator test).

GENERAL INFORMATION

Health & Safety

- Always observe general work hygiene when using our products.
- CONTOPP® accelerator systems are solvent-free and chloride-free.
- Our products do not deteriorate when stored properly (see data). Therefore, the stability and reactivity are not affected by storage.
- You can find out more information on handling CONTOPP® accelerators from our safety data sheets.

Standards and testing regulations

- BS 8204: In-situ floorings – bases and screeds
- BS 8000: Code of practice for cement/sand floor screeds and concrete floor toppings
- BS EN 197: Cement

Comments

The raw materials we process and the products we produce are subject to strict factory inspections. Do not use products from other manufacturers when using this product. It is stressed that our products and the procedure must be tested for suitability for the expected construction site conditions. The quality of screeds is essentially influenced by the quality of sand and cement, the mixing rates and the processing in accordance with approved screeding technology. Upon the publication all other previous copies shall become invalid.

Stand 01.01.2024