



CONTOPP®

RS 20 HD

Article n°: 20.260

Technical
datasheet

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

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 |

TECHNICAL DATA

Mix

| | 1 : 5 mix by weight | Standard | CONTOPP® | Unit |
|------------------------|---------------------|--------------------|-------------------------|------|
| Cement | | 63 | 63 | kg |
| Sand 0/4 ¹⁾ | | 310 | 310 | kg |
| RS 20 HD | | - | 1.3²⁾ | ltr. |
| w/c-ratio | | 0.70 - 0.80 | 0.46 – 0.48 | |

Strength

| Criteria | Standard | CONTOPP® | Unit |
|------------------------------|-------------------|-------------------|-------------------|
| Flexural strength (28 days) | F5 | F7 | N/mm ² |
| Comp. strength (28 days) | C25 | C40 | N/mm ² |
| BRE test (impact resistance) | Category B | Category A | |

Floor Finish

- ¹⁾according to BS EN 13139
²⁾ corresponds to 2.0 V-% of the cement weight

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

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 %.

Basic materials

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

PROCESSING INFORMATION

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.



- 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/mm ² | Standard: 20 mm Heavy duty: 20 mm | Standard: 35 mm Heavy duty: 35 mm | Standard: 35 mm Heavy duty: 40 mm | Standard: 35 mm Heavy duty: 40 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.

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