



# CONTOPP®

## Compound 20

Article n°: 20.221

Technical  
datasheet

## PROPERTIES

### Function

- Quick to dry sand/cement screeds within 4 days
- Crack reduction on account of fibre reinforcement
- Rehydration protection
- Reduced shrinkage
- Contains tracer for a subsequent half-quantitative analysis in sand/cement screeds

### Application area

- For producing bonded screeds and floating screeds in accordance with BS 8204
- For producing screeds on underfloor heating.
- For damp or outside areas.
- EMICODE EC1 plus



### Data

Colour:	Yellowish - bluish
Colour tracer-pigment:	blue
Form:	pasty
Processing temperature:	above + 5 °C
Shelf life	ca. 9 to 12 months – protect from draft and direct sunlight
Supply form:	Clamp ring drum – 30 kg net

## TECHNICAL DATA

### Mix

	1 : 6 mix by weight	Standard	CONTOPP®	Unit
Cement		50	50	kg
Sand 0/4 <sup>1)</sup>		320	320	kg
Compound 20		-	1.0 <sup>2)</sup>	ltr.
w/c-ratio		0.70 - 0.80	0.48 – 0.46	

### Strength

Criteria	Standard	CONTOPP®	Unit
Flexural strength (28 days)	F4	F5	N/mm <sup>2</sup>
Comp. strength (28 days)	C20	C25	N/mm <sup>2</sup>
BRE test (impact resistance)	Category B	Category A	

### Floor Finish

- <sup>1)</sup>according to BS EN 13139  
<sup>2)</sup> corresponds to 2.0 V-% of the cement weight  
<sup>3)</sup> according to BS 8204-1

Criteria	Standard	CONTOPP®	Unit
Foot traffic	72	24	hours
Receive final floor finish <sup>3)</sup>	≥ 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

- 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.



### Minimum screed thickness <sup>1)</sup>

Flexural strength	Bonded	Unbonded	Floating	On underfloor heating <sup>2)</sup>
5 N/mm <sup>2</sup>	Standard: 20 mm Heavy duty: 20 mm	Standard: 40 mm Heavy duty: 40 mm	Standard: 40 mm Heavy duty: 65 mm	Standard: 50 mm Heavy duty: 65 mm

<sup>1)</sup> Working load: Standard ≤ 2.0 kN/m<sup>2</sup>; Heavy duty: ≤ 3.5 kN/m<sup>2</sup>  
<sup>2)</sup> In the case of screeds on underfloor heating thickness above the pipes

### Drying time <sup>1) 2)</sup>

Screed thickness	20 mm	30 mm	40 mm	50 mm	60 mm	70 mm
≤ 3.0 % residual humidity <sup>2)</sup>	36 hours	48 days	60 hours	72 hours	5 days	7 days

<sup>1)</sup> Normal climatic conditions at + 20 °C and a relative humidity of 65 %  
<sup>2)</sup> 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 <sup>1) 2)</sup>

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

<sup>1)</sup> It can be useful to lengthen the heating procedure for screed thicknesses of > 50 mm above the pipes to achieve sufficient drying.  
<sup>2)</sup> 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).

### 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 is not affected by storage.
- You can find out more information on handling CONTOPP® accelerators from our safety data sheets.

### Standards and testing regulations

- BS 8203: Installation of resilient floor coverings
- BS 8204: In-situ floorings – bases and screeds
- BS 8000: Code of practice for cement/sand floor screeds and concrete floor toppings
- BS EN 13139: Aggregates for mortar
- BS EN 197: Cement – Part 1: Composition, specifications and conformity criteria for common cements

### 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

## SPECIAL INFORMATION

## GENERAL INFORMATION