

# CONTOPP®

## ACCELERATOR 10 HD-RS

Article n°: 20.251

### Function

- Quick to dry sand/cement screeds within 14 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

### PROPERTIES

### 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 green
Form:	liquid
Density (20 °C):	1.14 ± 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 Poly-drum: 240 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 <sup>1)</sup>		310	310	kg
Accelerator 10 HD-RS		-	1.3 <sup>2)</sup>	ltr.
w/c-ratio		0.70 - 0.80	0.53 – 0.55	

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

Floor Finish	Criteria	Standard	CONTOPP®	Unit
	Foot traffic	72	24	hours
	Receive final floor finish	≥ 28	14	days

<sup>1)</sup>according to BS EN 13139

<sup>2)</sup> 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 %.

### Basic materials

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

### PROCESSING INFORMATION

### Recipe

- **Stir the CONTOPP® ACCELERATOR 10 HD-RS 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 < 0.55
- 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>
7 N/mm <sup>2</sup>	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

<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>	8 days	10 days	12 days	14 days	16 days	20 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 after laying	4 <sup>th</sup> day	5 <sup>th</sup> day	6 <sup>th</sup> day	7 <sup>th</sup> day	8 <sup>th</sup> day	9 <sup>th</sup> day	10 <sup>th</sup> day	11 <sup>th</sup> day	12 <sup>th</sup> day
Temperature	25°C	35°C	45°C	55°C	55°C	55°C	45°C	35°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 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 01.01.2020

## SPECIAL INFORMATION

## Technical Data Sheet

## GENERAL INFORMATION