



## ATLAS SMS 15 (1-15 mm) rapid-set, self-levelling compound

- perfect spreading
- perfectly smooth
- foot traffic just after 3 hours
- ceramic and stone cladding just after 8 hours
- PVC flooring just after 12 hours
- high compressive and flexural strength, low linear contraction



### Use

Perfectly smooth – especially recommended beneath thin-coat flooring and PVC panels.

Levels surfaces within 1 - 15 mm thickness range - levels local irregularities and slightly sloped floors.

Elevates floor level throughout the room – allows to equalize the level of two adjacent rooms.

For application in living room, corridor, hall, office, waiting room or kitchen – in residential housing, public facilities, educational and healthcare buildings. For levelling of existing floor heating – while screed is uneven and requires additional thin layer of compound before application of final coat.

Type of finishing coat – tiles, PVC flooring, carpet, panel flooring, parquet.  
Possible arrangements:

- bonded - thickness 1-15 mm - high quality concrete, cement screed (with or without floor heating), terrazzo.

### Properties

Perfect spreading - ensures perfectly smooth and levelled surfaces even in large rooms, no battens nor screeding level needed.

**Rapid-set** - rapid strength build-up enables foot traffic just after 3 hours after application.

**Compressive strength:**  $\geq 25 \text{ N/mm}^2$ .

**Flexural strength:**  $\geq 7 \text{ N/mm}^2$ .

**Suitable for manual and mechanical application** – easy and quick application manually and mechanically. High application efficiency is reached with helical pump units.

Very low linear contraction - minimum change in linear dimensions during screed drying ( $\leq 0.6 \text{ mm/m}$ ) limits the risk of cracking and loosening of weakened substrates.

### Technical data

ATLAS SMS 15 is manufactured as a dry mix based on cement.


Bulk density (of dry mix)	approx. 1,2 kg/dm <sup>3</sup>
Mixing ratio (water/dry mix)	0,2-0,21 l / 1 kg 5,0-5,25 l / 25 kg
Min./max. screed thickness	1 mm / 15 mm
Minimum screed thickness beneath parquet	3 mm
Maximum aggregate size	0,5 mm
Linear changes	$\leq 0,06 \%$
Shear strength (after 28 days)	$\geq 1,0 \text{ MPa}$
Mortar preparation temperature, substrate and ambient temperature during work	from +5 °C up to +25 °C
Pot life (between mass mixing until work end)	approx. 40 minutes*
Foot traffic	after 4 hours*
Installation of ceramic and stone tiles	after 8 hours*
Installation of carpet, PVC, linoleum flooring	- thickness up to 5 mm: after 12 hours* - thickness above 5 mm: after 24 hours*
Installation of parquet	after 24 hours**

\*The time shown in the table is recommended for the application in the temperature 20°C and humidity 55-60% (approx.).

\*\* for SMS 15 thickness minimum 3 mm and application in approx. 20 °C i 55-60% humidity.

## Technical requirements

Product compliant with PN-EN 13813.

	
ATLAS SMS 15 (2019) Declaration of Performance 162/1/CPR. EN 13813:2012 (PN-EN 13813:2003)	
Intended use: screed based on cement, for indoor use.	
Reaction to fire (in case of exposure)	A1 <sub>n</sub>
Corrosive substance release	CT
Compressive strength – class	C25
Flexural strength - class	F7

The product has been given the Radiation Hygiene Certificate.

## Screed installation

### Substrate preparation

The substrate should be stable, load-bearing and air-dry, and due the danger of mass outflow should be of a nature bathtub. Requirements for substrates:

- cement screeds - older than 28 days,
- ATLAS SAM anhydrite screeds - humidity max. 1% CM and execution of a layer of ATLAS EPO-S,
- concrete - age over 3 months.

Smooth the substrate unevenness with the mortar ATLAS ZW 330. The dry, repaired substrate should be vacuumed, carefully prime with ATLAS UNI-GRUNT or ATLAS UNI GRUNT ULTRA emulsion and let it dry.

Terrazzo substrates must be degreased and removed layers of pastes and impregnates (if the terrazzo was covered with them). Before pouring ATLAS SMS 15 on terrazzo, it should be primed 4 hours earlier with ATLAS ULTRAGRUNT.

### Expansion joints

Separate screed and walls with ATLAS EXPANSION JOINT PROFILES. Expansion joints should also be applied at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the screed layer.

### Mass preparation

Machine application – use mixing-and-pumping units with continuous flow of water. It is advisable to use pumps of efficiency 60 l/min. Pour the dry mix to the basket and set water level providing appropriate mass consistency. Proper consistency can be verified with 0.5 l or 1 l container. The prepared mix, poured from a 0.5 l container onto even, non-absorptive substrate (e.g. foil) should form approx. 35 ÷ 40 cm diameter patch (for 10 l container - 50 ÷ 55 cm).

Manual application – pour the mortar into a container with water (see Technical Data for ratio) and mix with low-speed mixer with a drill for mortars, until homogenous. Remix after 5 minutes. The mass retains its properties for about 40 minutes. Proper consistency should be verified by pouring the mass from 1 l container onto an even, non-absorptive substrate (e.g. foil). It should form a “patch” of approx. 50 ÷ 55 cm diameter.

### Screed application

Before application, the intended screed thickness should be marked (on walls and in the application area), which can be done with a spirit level and portable height benchmarks. Pour the prepared mass evenly and continuously up to the desired height, avoid gaps. The application area should be arranged in the way allowing for mass application and de-aeration within approx. 40 minutes. In case of manual application the excessive mass should be raked up towards oneself with a long metal float. Directly after each application area filling, the mass must be de-aerated with a spike roller. It is recommended to perform de-aeration in two perpendicular directions just after the mass application.

### Maintenance

Fresh screed should be protected against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for screed setting sprinkle surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. Time of drying depends on layer thickness and ambient thermal and humidity conditions. Foot traffic is possible after approx. 4 hours and full load after approx. 7 days.

## Consumption

Average consumption is 16,6 kg of mortar for 1 m<sup>2</sup> and 10 mm coat thickness.

## Packaging

Foil bags: 25 kg

## Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of screed. Moreover, the use of too much mix water (overwatering) can cause local dark discoloration. This discoloration is only surficial and disappears after grinding. Monitor the mass consistency and quality of mixing during screed application.
- Tools must be cleaned with clean water directly after use. Residues of mortar which are hard to remove should be washed with ATLAS CEMENT AWAY agent for removal of cement deposits and stains.
- Contains cement. Causes serious eye damage. May cause an allergic skin reaction. Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower. If skin irritation or a rash occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Follow the instructions in the Safety Data Sheet.
- The mortar must be transported and stored in tightly sealed bags, in dry conditions (most preferably on pallets), do not expose to direct sunshine, keep in dry, cool and well ventilated room. Protect against humidity – product gets irreversibly solid in contact with damp. Shelf life in conditions as specified is 9 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%.

*The above information constitutes basic guidelines for the application of the product and does not release the user from the obligation of carrying out works according to engineering principles and OHS regulations. At the time of publication of this product data sheet all previous ones become void.*

*Date of update: 2022-01-13*

