



ATLAS SMS 15

rapid-set, self-levelling compound

- foot traffic just after 3 hours
- tiling just after 8 hours
- for tiles, panels, floor coverings, parquet, epoxy floors
- low linear contraction
- for leveling heating screeds



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

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

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

Use

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.

It can be used in rooms with high humidity, such as home bathrooms.

For levelling of existing cement and anhydrite floor heating – while screed is uneven and requires additional thin layer of compound before application of final coat.

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

Types of finishing coats - tiles, PVC, carpet, panels, parquet, epoxy floors.

Possible arrangements:

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

Dane techniczne

Bulk density (of dry mix)	approx. $1,2 \text{ kg/dm}^3$
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	od $+5 \text{ }^\circ\text{C}$ do $+25 \text{ }^\circ\text{C}$
Pot life (between mass mixing until work end)	approx. 40 minutes*
Foot traffic	approx. 3 hours*

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

Technical requirements

The product conforms to PN-EN 13813:2003 standard.

ATLAS SMS 15 (2019) Declaration of Performance no 162/1/CPR EN 13813:2012 (PN-EN 13813:2003)	
Intended use: EN 13813 CT-C25-F7 Cement-based screed, for interior use.	
Reaction to fire (in case of exposure)	A1 _{fl}
Corrosive substance release	CT
Compressive strength – class	C25
Flexural strength - class	F7

Screed installation

Substrate preparation

The substrate should be stable, sound and air dry, due to the risk of mass outflow, should keep bath-like shape. General requirements for substrates:

- cement screeds – min. 28 days old,
- ATLAS SAM anhydrite screeds - humidity max. 1% CM and execution of the layer with ATLAS EPO-S,
- concrete – min. 3 months old.

Substrate irregularities (cracks and gaps) should be levelled with ATLAS ZW 330 or ATLAS TEN-10 mortars. Dry, repaired substrate should be dedusted and thoroughly primed with ATLAS UNI-GRUNT or ATLAS UNI-GRUNT ULTRA emulsion and left to dry.

Terrazzo or similar substrates should be degreased and all coats of paste or impregnating sealers should be removed. Terrazzo should be primed with ATLAS ULTRAGRUNT 4 hours before application of SMS 15.

Expansion joints

Separate screed and walls with ATLAS EXPANSION JOINT PROFILES. The size of the working fields should not exceed 36 m², and the side dimension should not exceed 6 m. 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 1,0 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. 3 hours and full load after approx. 7 days.

Finishing works

Before making finishing layers, such as tiles, waterproofing, panels, parquet, epoxy floors and PVC and carpet flooring, the underlay should be sanded and dusted. The same steps should be performed before adding another layer of ATLAS SMS 15. **Detailed information on seasoning the ATLAS SMS 15 primer before making the next layers can be found on the last page of the Technical Data Sheet.**

Consumption

Average consumption is 16,6 kg of mortar for 1 m²/10 mm layer thickness.

Packaging

Foil bags 25 kg.

Safety information

Safety information is provided on the product packaging and in the Safety Data Sheet available at www.atlas.com.pl.

Storage and transport

Information on storage and transport is provided on the product packaging and in the Material Safety Data Sheet available at www.atlas.com.pl.

Shelf life is 9 months from the production date shown on the packaging.

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 discolouration. This discolouration 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. Difficult to remove remains of set mortar can be washed with ATLAS CEMENT AWAY agent.

The information included in the Product Data Sheet constitutes basic guidelines concerning the use of the product and does not release from the obligation to conduct work according to the best construction practices and health and safety at work regulations. On the date of issue of this Product Data Sheet, all previous Product Data Sheets become invalid. The accompanying documents for the product are available at www.atlas.com.pl.

The content of the Product Data Sheet as well as the symbols and trade names used in it are the property of Atlas sp. z o. o. Their unauthorized use will be sanctioned.

Updated: 2022-09-01

Detailed information on the curing process of the screed ATLAS SMS 15 before applying subsequent coats

Type of the next covering on the screed	Curing of the screed before laying the respective covering *	Priming of the screed before laying the respective covering
Levelling/filling with ATLAS SMS 15	after approx. 24 hours	ATLAS UNI-GRUNT ULTRA diluted with water 1:3
ceramic tiles (without waterproofing)	Moisture content of the screed 4,0 % - after approx. 8 hours for thicknesses between 1-15 mm	ATLAS UNI-GRUNT, ATLAS UNI-GRUNT ULTRA - the substrate has excessive or non-uniform absorbency
Waterproofing - ATLAS WODER DUO - ATLAS WODER DUO EXPRESS	Moisture content of the screed 4,0 % - after approx. 8 hours for thicknesses between 1-15 mm	wet until matt damp
waterproofing - ATLAS WODER E - ATLAS WODER W - ATLAS SZYBKOSCHNAĆCA FOLIA W PŁYNIE	Moisture content of the screed 2,0 % - after approx. 12 hours for thicknesses between 1-5 mm - after approx. 24 hours for thicknesses between 6-15 mm	ATLAS UNI-GRUNT, ATLAS UNI-GRUNT ULTRA – the substrate has excessive or non-uniform absorbency
parquet PVC flooring carpet flooring panels	Moisture content of the screed 2,0 % - after approx. 12 hours for thicknesses between 1-5 mm - after approx. 24 hours for thicknesses between 6-15 mm	according to the instructions of the flooring manufacturer
epoxy flooring	Moisture content of the screed 4,0 % - after approx. 8 hours for thicknesses between 1-15 mm	according to the instructions of the flooring manufacturer

* the times apply to normal application conditions:

- temperature approx. 20 °C
- humidity 55-60%.