



ATLAS SMS 15

fast-performing, self-levelling screed

- pedestrian traffic after just 3 hours
- tiling after just 8 hours
- under tiles, panels, carpets, parquet, epoxy resin flooring
- low linear shrinkage
- for levelling heating underlays



FOR INDOOR USE
FOR FLOORS



EXCELLENT
FLOWABILITY



MANUAL AND MACHINE
APPLICATION



1-15 mm

LAYER
THICKNESS

Properties

It has excellent spread - allowing a level surface to be achieved even in large rooms, without the need for guide strips or the need to strip the compound with patches.

Fast-setting - rapid strength build-up allows foot traffic as early as 3 hours after screed application.

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

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

It has very low linear shrinkage - minimal linear changes in the screed during setting ($\leq 0.6 \text{ mm/m}$) reduce the possibility of cracking and separation from weak substrates (low cohesiveness).

It is adapted for manual and machine application- it can be made easily and quickly both by hand and with machines equipped with auger pumps, thus achieving high efficiency.

Purpose

Levels surfaces within 1 - 15 mm thickness range - both when the substrate has only local irregularities and when the entire substrate is made with a slight slope.

Raises the floor level throughout the room - for example, when it is necessary to level two adjacent rooms.

It can be used in rooms, hallways, lobbies, living rooms, offices, corridors, waiting rooms, kitchens - in residential buildings, public buildings, education and health care facilities. In rooms where the floors are subject to frequent washing or are otherwise exposed to intensive contact with water, sub-tile waterproofing should be installed.

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

Recommended for levelling the surface of existing cement and anhydrite heated floors - in cases where the unevenness of the screed prevents the final cladding and an additional thin layer of material needs to be applied.

When completed, it provides a very smooth surface - it is particularly recommended as the finishing layer for screeds made under thin-layered and PVC panels.

Types of finishes - tiles, PVC, carpet, panels, parquet, epoxy flooring.

Recommended for filling chases in existing chased underlay for the installation of underfloor heating systems.

Types of arrangements that can be created:

- **bonded to the substrate** - **thickness 1-15 mm** - good quality concrete, cement screed (with or without underfloor heating), terrazzo.

Technical data

Bulk density (dry mix)	approx. 1.2 kg/dm ³
Mixing ratio water/dry mix	0.2-0.21 l / 1 kg 5.0-5.25 l / 25 kg
Min./max. thickness of screed	1 mm / 15 mm
Minimum thickness of screed under parquet	3 mm
Maximum diameter of aggregate	0.5 mm
Linear changes	≤ 0,06 %
Resistance to shear forces (after 28 days)	≥ 1,0 MPa
Preparation temperature of the compound, substrate and ambient temperature during the work	from +5 °C to +25 °C
Consumption time (from mixing to completion of work)	approx. 40 minutes*
Stepping on the screed	after 3 hours*

times shown in the table recommended for normal application conditions:- temperature of approx. 20 °C and humidity of 55-60%.

Technical requirements

The product complies with EN 13813:2012.

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}
Release of corrosive substances	CT
Compressive strength - class	C25
Bending strength - class	F7

Making the screed

Substrate preparation

The substrate should be stable, load-bearing and air-dry, and should be bathtub-like due to the danger of the mass flowing out.

Substrate requirements:

- cementitious screeds - more than 28 days old,
- ATLAS SAM anhydrite screeds - moisture content max. 1 % CM and the execution of a layer with ATLAS EPO-S,
- concrete - age over 3 months.

Unevenness of the substrate (depressions and cavities) should be levelled with ATLAS ZW 330 mortar. Dry, repaired substrate should be vacuumed, carefully primed, e.g.:

- ATLAS NKP (ready to use - without dilution),
- ATLAS UNI-GRUNT ,
- ATLAS UNI-GRUNT ULTRA .

Terrazzo substrates should be degreased without fail and layers of pastes and impregnates (if terrazzo was covered with them) should be removed. Before pouring ATLAS SMS 15 onto terrazzo, it should be primed with ATLAS ULTRAGRUNT 4 hours earlier. ATLAS ULTRAGRUNT should be applied 4 hours beforehand.

Expansion joints

The screed should be separated from the walls by an expansion joint profile. The size of the working areas should not exceed 36 m² and the side dimension should not be greater than 6 m. Expansion joints must also be made in the thresholds of the rooms and around the columns. Existing expansion joints of the substrate should be transferred to the surface of the executed screed.

Preparation of the mass

Machine execution - use mixing and pumping units with constant flow water dosing. A pump with a capacity of 60 l/min is recommended. Pour the material from the bag into the hopper and set a constant level of dosed water to achieve the correct consistency. A 0.5 litre or 1.0 litre vessel can be used to determine the consistency. The prepared mixture poured from the 0.5 l container onto a levelling non-absorbent surface (e.g. foil) should form a "cake" of 35-40 cm in diameter (50±55 cm for the 1.0 l container respectively).

Manual application - pour the bagged material into a container with a measured amount of water (see Technical Data) and mix until homogeneous, preferably using a slow speed mixer with a mortar mixer. Stir again after 5 minutes. The mix retains its properties for approximately 40 minutes. A 0.5 litre or 1.0 litre vessel can be used to determine the consistency. The prepared mixture poured from a 0.5 l container onto a levelling non-absorbent surface (e.g. foil) should form a "cake" of 35-40 cm in diameter (in the case of a 1.0 l container - 50±55 cm, respectively).

Making a screed

Before starting the work, the future thickness of the screed (on the walls and in the execution field) must be determined indoors. This can be done, for example, by using a spirit level and portable height markers. The prepared compound is poured evenly up to the set heights, avoiding gaps. The laying area should be prepared in such a way that it can be completed and ventilated in approx. 40 minutes.

When pouring by hand, the excess material should be compacted to itself with a long metal trowel. Ventilate the material immediately after each field, e.g. with a plastic roller, so-called "spike". It is recommended to vent in 2 perpendicular directions immediately after pouring.

Filling chases in the chased underlay in the underfloor heating system (in existing underlay)

The existing chases with a depth of approx. 2 cm should be cleaned and primed. Place the heating pipes in the chases. Start filling the chases with the prepared SMS 15 underlay. First fill the chases, gently moving the pipes several times to ensure that the product flows into the space under the pipes. Top up the missing underlay to the surface of the existing underlay. Where necessary, you can also pour a new underlay using ATLAS MMS 60 or SMS30.

Note: the final effect depends on the condition of the existing substrate.

Before making chases in the underlay assess its strength and homogeneity.

Maintenance

The freshly made primer should be protected from too rapid drying, direct sunlight, low humidity or draughts. In order to ensure favourable setting conditions for the mortar, the freshly made surface should be sprinkled with water or covered with foil as required. Appropriate care prolongs the drying process, but leads to an increase in the strength of the product. The drying time of the primer depends on the thickness of the layer and the heat and humidity conditions in the surroundings. The screed can be walked on after approx. 3 hours and fully loaded after approx. 7 days.

When using the underlay to fill chases in the underfloor heating system, you can start heating the underlay 14 days after it is applied. When putting the heating system into operation, please observe the following rules:

- for the first two days the maximum water temperature in the system should not be higher than 5°C above the room temperature and should not exceed 20°C,
- at intervals of 2 days the water temperature can be increased by 5°C until the maximum water temperature is reached, but not to more than 50°C,
- do not maintain the maximum water temperature in the heating system for more than 4 days; then, start cooling the underlay down until the temperature of the heating medium reaches 20°C, reducing the temperature by 5°C at 2-day intervals.

Finishing works

If the surface of the poured subfloor is milky due to excess amount of water or if unevenness has appeared due to compaction errors when making the screed (inaccurate dappling), the screed should

be sanded and dusted off before making finishing coats or adding another coat of ATLAS SMS 15. **Detailed information concerning seasoning of ATLAS SMS 15 undercoat before application of further layers is provided on the last page of the Technical Data Sheet.**

Consumption

On average, 1.66 kg of mortar is used per 1 m² and for every 1 mm of layer thickness.

Packaging

25 kg plastic bags.

Safety information

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

The shelf life of the product (best before use) is 9 months from the production date on the packaging.

Important additional information

Using the wrong amount of water to prepare the compound leads to a reduction in the strength parameters of the primer. In addition, adding too much water (overflowing) can result in localised dark discolorations. These are superficial and disappear after sanding. When carrying out the work, the degree of mixing and the consistency of the compound must be controlled.

Clean the tools with clean water, directly after use. Wash away difficult to remove residues of the set mortar with ATLAS SZOP.

The information contained in the Technical Data Sheet is a basic guide to the use of the product and does not release the user from the obligation to the obligation to carry out the work in accordance with the rules of the trade and in compliance with health and safety regulations. With the issue of this Technical Data Sheet, all previous ones are no longer valid. The documents accompanying the product are available at www.atlas.com.pl.

The contents of the Technical Data Sheet and the designations and trade names used therein are the property of Atlas Ltd. Their unauthorised use will be sanctioned.

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Detailed information on the seasoning of ATLAS SMS 15 primer prior to application of subsequent coats.

Type another layer on top of the primer	Seasoning of the substrate before application of the layer in question*	Priming the substrate before the layer in question is applied**
Alignment/bottom-up by means of ATLAS SMS 15	after approx. 24 hours	- ATLAS NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
ceramic cladding*** (without waterproofing layer)	Moisture content of the primer 4.0 - after approx. 8 hours for thicknesses of 1- 15 mm	- ATLAS NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
Waterproofing - ATLAS WODER DUO - ATLAS WODER SX	Moisture content of the primer 4.0 - after approx. 8 hours for thicknesses of 1- 15 mm	moistening to a dull wet state
Waterproofing - ATLAS FAST DRYING LIQUID FOIL WODER E - ATLAS LIQUID FOIL WODER W	Moisture content of the screed 2.0 - after approx. 12 hours for thicknesses of 1-5 mm - after approx. 24 hours for thicknesses of 6-15 mm	- ATLAS NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT ULTRA
parquet PVC lining carpeting panels	Moisture content of the screed 2.0 - after approx. 12 hours for thicknesses of 1-5 mm - after approx. 24 hours for thicknesses of 6-15 mm	as recommended by the finishing coat manufacturer
epoxy coating/flooring	Moisture content of the primer 4.0 - after approx. 8 hours for thicknesses of 1- 15 mm	as recommended by the finishing coat manufacturer

* times recommended for normal application conditions:

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

** refer to the Technical Data Sheet of the product selected for priming

*** as for Geoflex adhesives line refer to the respective Technical Data Sheets