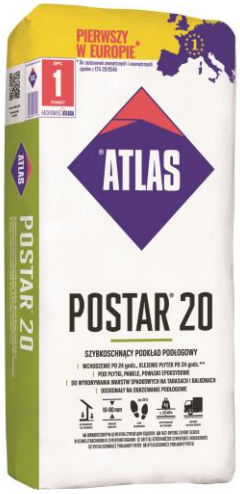

ATLAS POSTAR 20

quick-drying screed (10-80 mm)

- Foot traffic and tilling after just 24 hours
- under tiles, panels, epoxy coatings
- for making sloping layers on terraces and balconies
- perfect for underfloor heating

Properties

ATLAS POSTAR 20 is produced as a dry mixture of Portland cement, quartz fillers and modifying additives.

Thick-plastic - the working consistency of the mortar allows easy spreading of the mix, blending in and achieving an even surface (horizontal or with a slope).

Compressive strength: ≥ 20.0 N/mm².

Flexural strength: ≥ 4.0 N/mm².

It has very low linear shrinkage - minimal linear changes in the screed during drying (on the order of 0.6 mm/mb) reduce the possibility of cracking.

Purpose

Forms a floor subfloor with a thickness of 10-80 mm - layer thickness depends on the construction layout adopted (table below).

It is recommended for use in residential and public buildings.

Suitable for use as a subfloor with underfloor heating - no elasticising additives required, good thermal conductivity.

Allows for slopes and repairs to concrete surfaces, stairs, slabs, screeds.

Types of finishes - ceramic and stone tiles, PVC and carpet flooring, panels, epoxy coatings.
Types of arrangements that can be created: **- bonded to substrate - thickness 10-80 mm - substrate** is good quality concrete, cement base (with or without underfloor heating) **- on a separating layer - 35-80 mm thick -** when the substrate is of poor quality, not guaranteeing proper adhesion - dusty, cracked, oily, dirty, highly absorbent; the separating layer may be, for example, PE foil with a thickness of 0.2 mm thick. **- Floating - 40-80 mm thick -** laid on thermal or sound insulation made of: polystyrene boards of the appropriate hardness, underfloor hardened mineral wool boards, etc. **- heating** installation - the thickness of the screed over the heating installation should be **at least 35 mm**

Technical data

Bulk density (dry mix)	approx. 1.7 kg/dm³
Mixing ratio water/mortar	0.07÷0.11 l / 1 kg 1.75÷2.75 l / 25 kg
Min./max. thickness of screed	10 mm / 80 mm
Maximum diameter of aggregate	3.0 mm
Linear changes	≤ 0,06%
Temperature of the compound preparation and of the substrate and surroundings during the work	from +5 °C to +30 °C
Consumption time	minimum 30 minutes*
Stepping on the pad	after approx. 24 hours*

* Times recommended for normal application conditions at approx. 20 °C and 55-60% humidity.

Technical requirements

ATLAS POSTAR 20 (2020) Declaration of Performance E107/CPR EAD 190019-00-0502: December 2019 European Technical Assessment ETA-20/0548 dated 30/06/2020	
Intended use: Cement-based floor screed for indoor and outdoor use. Layers of the floor screed may include an underfloor heating system. Floor screed, can be used as an abradable surface (floor) or covered with a finishing layer (e.g. ceramic or stone tiles, epoxy flooring, carpet or PVC flooring, parquet, floor panels).	
Reaction to fire	$A1_{fl}$
Compressive strength - class	C20 (≥ 20 MPa)
Bending strength - class	F4 (≥ 4 MPa)
Abrasion resistance	A9 (≤ 9 cm^3 / 50 cm)^2
Flexural and compressive strength after freeze-thaw cycles, MPa: - compressive strength - bending strength	 ≥ 20 ≥ 4

Preparatory work

Substrate preparation

The substrate should be stable, clean, load-bearing and air-dry, while the method of preparation depends on the structural layout of the floor. General requirements for substrates:
- screeds or cement floors (more than 28 days old),
- concrete (age over 3 months),

Screed bonded to the substrate. The substrate should be free of layers and elements that could weaken the adhesion, especially dust, lime, oil, grease, bituminous substances, paints, weak and detaching fragments of old screeds.

Immediately prior to application of the screed, the substrate should be moistened with water and a contact layer made from ATLAS ADHER S mortar should be applied.

The contact layer has a liquid consistency and can be applied with a brush. It should be rubbed vigorously into the previously moistened substrate. When the contact layer dries before the application of the main screed, a second application is required.

Screed on the separating layer. The layer of separating material, e.g. PE foil, should be laid tightly, without folds and turned up against the walls (on the expansion strips) at least to the height of the screed.

Floating screed. The insulation boards should be laid tightly, on a level base, with the edges staggered. A separation layer should be made over the boards and turned up against the walls.

Screed in underfloor heating system. The heating system should be checked and fixed and, in the case of water heating, the pipes should be filled with water. The screed is recommended to be made in a single layer (with the stable system fixing of the heating system ensured). During the work, the data contained in the technical design and the recommendations of the heating system manufacturers must be observed.

The first start-up of the underfloor heating (so-called warm-up) can be started 7 days after the screed has been poured. The warm-up should be carried out as follows. The heating temperature must be systematically increased by a maximum of 2 °C/24 hours until the highest operating temperature is reached. Then reduce the temperature as required until the heating is switched off.

Expansion joints

The subfloor should be separated from the walls and other elements in the working area by an expansion joint profile. The size of the working fields should not exceed:
- in rooms of 36 m² and the side dimension should not be greater than 6 m
- outside 5 m^2 , and the side dimension should not be greater than 3 m. Expansion joints should also be made in the thresholds of the rooms and around the supporting columns. Existing structural expansion joints of the subfloor should be transferred to the subfloor layer.

Making a screed

Application of the mass

All work must be carried out in accordance with the flooring technology. The use of directional guides is helpful in achieving even subfloor or floor surfaces. The slats should be set in such a way that the thickness of the subfloor corresponds to the assumed size and at no point is lower than the minimum value adopted for the given construction system (bonded to the subfloor, on a separating layer, floating). Patch vibration or trowel tamping should be used to compact the mix and distribute it more thoroughly. Excess mortar is pulled down over the battens with a zigzag motion. The set technological field should be filled and levelled in approx. 30 minutes. After approx. 3 hours the surfaces should be trowelled and smoothed.

Drying and care of the foundation

The freshly made screed 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. Proper care leads to an increase in the strength of the product, but also prolongs the drying process. The drying time of the screed depends on the thickness of the layer and the heat and humidity conditions in the surroundings. The substrate can be used (walked on) after approx. 24 hours and can be loaded after approx. 14 days.

Making successive layers

For details of how to season ATLAS POSTAR 20 screed before applying subsequent coats, please refer to the table at the end of the Technical Data Sheet.

Consumption

On average, 20 kg of mortar is used per 1 m² and for every 10 mm of layer thickness.

Packaging

25 kg paper 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 12 months from the production date on the packaging.

Important additional information

Using the wrong amount of water for the preparation of the mix leads to a reduction in the strength parameters of the screed. When carrying out the work, the mixing degree and consistency of the compound.

Low temperatures and high humidity in the room can prolong the drying time of the screed.

Before installing PVC flooring, a smoothing layer of ATLAS SMS 15 or ATLAS SMS 30 should be made on the ATLAS POSTAR 20.

Tools should be cleaned with clean water, immediately after use. Dirt from the mortar can be removed with ATLAS CEMENT AWAY.

The information contained in this Technical Data Sheet is a basic guideline for the use of the product and does not relieve the user of the obligation to carry out the work in accordance with the rules of the art of construction 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.

Update date: 2022-11-15

Detailed information on the seasoning of ATLAS POSTAR 20 screed before subsequent coats are applied.

Type another layer on top of the screed	Seasoning of the substrate before application of the layer in question*	Preparation of the screed before the layer in question is applied
Alignment/bottom-up by means of ATLAS POSTAR 20	after approx. 24 hours	ATLAS ADHER S
Alignment/bottom-up by means of ATLAS SMS	after approx. 48 hours	- ATLAS GRUNT NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT COLOUR - ATLAS UNI-GRUNT ULTRA
ceramic cladding	**Moisture content of the screed 4.0** - after approx. 1 day for a thickness of 1.0-3.0 cm - after approx. 2 days for a thickness of 3.1-5.0 cm - after approx. 5 days for a thickness of 5.1-8.0 cm	- ATLAS GRUNT NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT COLOUR - ATLAS UNI-GRUNT ULTRA
waterproofing	**Option 1**	
	ATLAS WODER DUO **ATLAS WODER DUO EXPRESS** **ATLAS WODER SX** **Moisture content of the screed 4.0** - after approx. 1 day for a thickness of 1.0-3.0 cm - after approx. 2 days for a thickness of 3.1-5.0 cm - after approx. 5 days for a thickness of 5.1-8.0 cm	moistening to a dull wet state
	Option 2	
	Implementation of waterproofing **ATLAS WODER E** **ATLAS WODER W** **ATLAS QUICK-DRYING LIQUID FILM** **Moisture content of the screed 2.0** - after approx. 3 days for a thickness of 1.0-3.0 cm - after approx. 4 days for a thickness of 3.1-5.0 cm - after approx. 12 days for a thickness of 5.1-8.0 cm	- ATLAS GRUNT NKP (ready to use) - ATLAS UNI-GRUNT - ATLAS UNI-GRUNT COLOUR - ATLAS UNI-GRUNT ULTRA
PVC lining carpeting panels	**Moisture content of the screed 2.0** - after approx. 3 days for a thickness of 1.0-3.0 cm - after approx. 4 days for a thickness of 3.1-5.0 cm - after approx. 12 days for a thickness of 5.1-8.0 cm	as recommended by the finishing coat manufacturer
epoxy coating	**Moisture content of the screed 4.0** - after approx. 1 day for a thickness of 1.0-3.0 cm - after approx. 2 days for a thickness of 3.1-5.0 cm - after approx. 5 days for a thickness of 5.1-8.0 cm	as recommended by the finishing coat manufacturer

* times recommended for normal application conditions:
- temperature approx. 20 °C
- humidity of 55-60%.

Attention. In the case of a subfloor made with underfloor heating, the floor layers can only be laid after the subfloor has been warmed up. The rules for the warming up of the ATLAS POSTAR 20 screed can be found above in the paragraph "Making a screed".