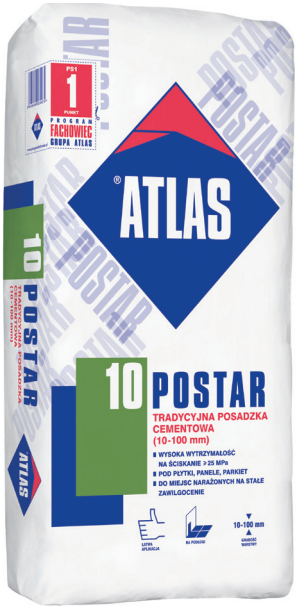

ATLAS POSTAR 10 (10-100 mm)
traditional cement floor

- high compressive strength ≥ 25.0 N/mm²
- in warehouses, production halls
- under tiles, parquet, panels
- for places exposed to permanent damp
- bonded, on separation layer or floating

Use

Forms screed or floor 10 - 100 mm thick - layer thickness depends on the expected structural arrangement (see table below).
Can form screed for top flooring layers, e.g. parquet - characterised by high cohesion and resistance to setting forces, which occur within the joint with flooring layer, e.g. during expansion and contraction of wood resulting from the changes of humidity.
Recommended for installation of screeds and floors in residential housing, warehouses, industrial premises, etc.
Enables forming a slope.
Can be installed as screed with heating system - conducts heat well.

Types of finishing layers – ceramic and stone tiles, epoxy screeds, PVC and carpet flooring, parquet, floor panels.
Types of possible arrangements:
- **bonded - thickness 10 - 100 mm** – on good quality substrates, e.g. concrete, cement screed (with or without floor heating)
- **on separation layer - thickness 35 - 100 mm** – on poor quality substrates, which do not provide appropriate bonding - dusty, cracked, oiled, dirty, very absorbable; separation layer can be made of, e.g. PE foil 0.2 mm thick
- **floating - thickness 40 - 100 mm** – applied on thermal or acoustic insulation layer made of: polystyrene boards of appropriate hardness, hardened mineral wool panels, etc.
- **heating** – the layer above the heating layer should be **min. 35 mm thick.**

Properties

Thick plasticity - mortar consistency makes it easy to spread, float and to form even surface.
Compressive strength: ≥ 25.0 N/mm².
Flexural strength: ≥ 5.0 N/mm².
Low linear shrinkage - minimum changes in linear dimensions during screed drying (approx. 0.6 mm/rm) limit the risk of cracking.
Suitable for manual application - to be spread on battens.
The mix can be prepared in flow mixers.

Technical data

ATLAS POSTAR 10 manufactured as a dry mix of Portland cement, quartz fillers and improvers.

Bulk density (of dry mix)	approx. 1.60 kg/dm³
Mass bulk density (after mixing)	approx. 2.00 kg/dm³
Dry density (after setting)	approx. 2.20 kg/dm³
Mixing ratio (water/dry mix)	0.09 ÷ 0.12 l/1 kg 2.25 ÷ 3.00 l/25 kg
Min./max. screed or floor thickness	10 mm / 100 mm
Maximum aggregate size	3.0 mm
Linear changes	≤ 0.06%
Mortar preparation temperature, substrate and ambient temperature during work	from +5°C to +25°C
Pot life	min. 1 hour*
Foot traffic	after approx. 24 hours*
Fixing the cladding	after approx. 2 weeks*

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

Technical requirements

ATLAS POSTAR 10 conforms to PN-EN 13813 standard. EC Declaration of Performance No. 173/CPR.

CE	PN-EN 13813:2003 (EN 13813:2002)
Cement based screed CT-C25-F5-A15	for indoor use
Reaction to fire – class	$A1_{fl}$
Corrosive substance release	CT
Compressive strength – class	C25 (≥ 25 N/mm²)
Flexural strength - class	F5 (≥ 5 N/mm²)
Böhme abrasion resistance - class	A15
Water permeability, vapour permeability, acoustic insulation, noise damping, heat resistance, chemical resistance	NPD
Release/content of hazardous substances	See: Safety Data Sheet

ATLAS POSTAR 10 has been given the ITB Technical Approval No. AT-15- 9621/2016. Domestic Declaration of Conformity No. 173 of 27.01.2016. The product has been given the Radiation Hygiene Certificate.

Screed or floor installation

Substrate preparation

The substrate should be stable, sound and air dry, the method of its preparation depends on actual floor structural arrangement. General requirements for substrates:

- cement floors and screeds – min. 28 days old,
- concrete – min. 3 months old.

Bonded screed or floor. The substrate must be free from layers which would impair bonding, particularly dust, lime, oils, grease, bitumen substances, paints, weak and loosening pieces of old substrates. Any substrate surface cracks should be widened and dusted. Just before the application of the main mortar layer, the substrate should be moistened with water and contact coat applied.

The contact coat can be prepared with one of the following methods:

- with ATLAS POSTAR 10 modified with ATLAS ELASTIC EMULSION in ratio: 1 kg of dry mix + 0.12 l of water + 0.06 l of ATLAS ELASTIC EMULSION,
- with ATLAS ADHER mortar.

The contact coat has liquid consistency and can be applied with a brush. Rub it well into previously moistened substrate. When the contact coat dries, apply another one before the application of the main screed layer.

Screed or floor on separation layer. The separation layer, e.g. PE foil, must be spread tightly, without wrinkles and folded onto the walls (upon the expansion joint strips) at least to the height of the screed.

Floating floor or screed. The insulation boards must be placed tightly with offset edges upon even surface. Place the separation layer upon the boards and fold it onto the wall.

Screed with heating system. The heating installation must be checked and fixed, fill up the pipes of water heating system with water. The screed should be installed with one layer (when the heating installation is firmly fixed). Follow guidelines listed in the project documentation and recommendations of the heating system manufacturer.

Expansion joints

Separate floor or screed from walls and other elements within the application area with ATLAS EXPANSION JOINT PROFILES. The size of application area should not exceed:

- 36 m^2 with sides length up to 6 m indoors,
- 5 m^2 with sides length up to 3 m outdoors.

The expansions joints should also be executed at room thresholds and around load-bearing posts. The existing structural expansion joints should be transferred onto the floor or screed layer.

Mortar preparation

Pour the mortar from the bag into a container with the suitable amount of water (see Technical Data for ratio) and mix until homogenous. Mix mechanically with a low speed mixer with a drill for mortars, a flow mixer or a cement mixer. The mortar is ready to use directly after mixing and keeps properties within approx. 1 hour.

Mass application

Carry the works out according to flooring technology. Use wooden or metal battens to keep floor or screed surface even. Place the battens so the floor or screed layer thickness corresponds to the expected one and is in no place lower than the minimum thickness assumed for a chosen structural arrangement (bonded, on separation layer, floating). In order to compact the mass and spread it more precisely, one can vibrate it with a darby or compact with a float. Collect the excessive mortar along the battens with zigzag moves. The application area should be filled and leveled within approx. 1 hour. The surface can be floated and smoothed after approx. 3 hours (if needed).

Screed drying and maintenance

During application and directly after, protect the installed layer against excessive drying, direct sunlight, low air humidity or draughts. In order to ensure favourable conditions for mortar setting, depending on needs, sprinkle the freshly applied surface with water or cover it with foil. Proper maintenance leads to increase of strength of product but also extends the time of drying. Reduce heating in a room where screed or floor has been installed. The time of drying depends on the layer thickness and ambient thermal and humidity conditions. The use of screed or floor (foot traffic) can start after approx. 24 hours and full load after approx. 14 days.

Finishing works

The time of finishing works execution depends on the type of top finish and should start when screed parameters stabilize (after approx. 2 weeks), and in case of PVC flooring or parquet – after full drying. Prime the surface with ATLAS UNI-GRUNT before fixing the cladding.

Consumption

The average consumption is 20 kg of mortar for 1 m^2 for each 10 mm of layer thickness.

Important additional information

- Inappropriate amount of mix water results in deterioration of strength parameters of floor or screed.
- Until the floor heating is fully turned on, temperature should be increased every 24 hours by maximum 2°C till the maximum operation temperature is achieved. The temperature should then be lowered at the same rate until the heating is turned off.
- Before the application of PCV flooring apply a smoothing layer made of ATLAS SMS 15 or ATLAS SMS 30.
- Tools must be cleaned with clean water directly after use.
- Contains cement. May cause respiratory irritation. Causes skin irritation. 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). Protect against humidity. Shelf life in conditions as specified is 12 months from the production date shown on the packaging. Content of soluble chromium (VI) in ready-to-use mix - ≤ 0.0002%..

Packaging

Paper bags: 25 kg
Pallet: 1,050 kg in 25 kg bags

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 building principles and OHS regulations.
At the time of publication of this product data sheet all previous ones become void.
Date of update: 2016-04-01