



ATLAS TEN-10

fast setting cement mortar (5–30 mm)

- for execution of floors exposed to high loads
- for repairs of concrete substrates
- foot traffic already after 3 hours
- rapid strength build-up, limited contraction
- strong bonding to ceilings



FROST- AND
WATERPROOF



INDOORS AND
OUTDOORS

5-30 mm

LAYER THICKNESS



FOOT TRAFFIC
AFTER 3 H

Properties

ATLAS TEN-10 is manufactured as a dry mix of high quality cement binder, quartz fillers and improvers.

Rapid initial strength build-up – already after 24 h, the mortar reaches compressive strength of at least 20 N/mm² and flexural strength of at least 3.5 N/mm².

Fixing tiles possible already after 24 hours.

During application, perfectly bonds to ceilings and bottom side of balcony slabs – owing to molecular cohesion strength active when the mortar is semiliquid

Enables forming a slope - owing to properly selected, dense working consistency, the mortar enables forming slopes on surfaces exposed to water load.

Use

For repairs of concrete and ferroconcrete elements – corrects local irregularities as well as whole surfaces of balconies, terraces, posts, binding joists, stairs, ramps, etc.

For filling cavities and cracks in mineral substrates – plasters, screeds, etc.

Forms floor characterized by high compressive strength and abrasion resistance – can be used on ramps and loading driveways, in storage and production halls

Foot traffic already after 3 h – enables fast execution of work in passageways, corridors, on driveways, ramps, etc.

Enables forming and exact reconstruction of the original shape and form of the repaired element – e.g. edge of balcony or terrace slab, curbs, stairs and landings.

Types of repaired surfaces – concrete and ferroconcrete, cement-based plasters and screeds.

Types of top finishes – can work as substrate for tiles, parquet, floor panels; can also form the top finish itself.

Technical data

| | |
|---|---|
| Bulk density (of dry mix) | approx. 1,5 kg/dm ³ |
| Mixing ratio (water/dry mix) | 0,12÷0,15 l / 1 kg 3,0÷3,75 l / 25 kg |
| Contact coat ratio | 1 kg of dry mix + 0,1 l of water + 0,2 kg of ATLAS ELASTIC EMULSION ATLAS |
| Min./max. mortar thickness | 5 mm / 30 mm |
| Maximum aggregate grain size | 3 mm |
| Mortar preparation temperature, substrate and ambient temperature during work | from +5 °C to +30 °C |
| Pot life | approx. 40 minutes |
| Foot traffic | after approx. 3 hours |
| Fixing the tiles | after approx. 24 hours |

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

Technical requirements

The product conforms to PN-EN 13813:2003 and PN-EN 1504-3:2005 standards.

| ATLAS TEN 10 (2019) Declaration of Performance no 034/1/CPR EN 13813:2002 EN 1504-3:2005 | |
|---|-----------|
| Intended use: EN 13813:2002 cement-based screed, for indoor use | |
| Corrosive substances release | CT |
| Compressive strength | C40 |
| Flexural strength - class | F7 |
| Abrasion resistance for surfaces subject to abrasion | AR6 |
| Intended use: EN 1504-3:2005 in buildings and construction sites | |
| Compressive strength | class R1 |
| Chloride ions content | ≤ 0,05% |
| Adhesion | ≥ 0,8 MPa |

Substrate repairs

Substrate preparation

The substrate should be dry and structurally sound, i.e. strong enough and free from layers which would impair mortar adhesion, in particular dust, dirt, lime, oil, grease, wax, bitumen substances and paint residues. Remove loose pieces and weak substrate elements mechanically, e.g. hack them off. The substrate should be rough and porous. Any substrate scratches and defects must be widened mechanically up to min. 5 mm of width. Smooth substrates should be hammered in order to form rough surface. Immediately before the application of the main mortar layer, the substrate should be moistened with water and contact coat made:
- using ATLAS ADHER S,
- of 10 kg of ATLAS TEN-10, 1.8 l of water and 0.9 l of ATLAS ELASTIC EMULSION, applied.

It is sufficient to coat approx. 10 m².

Expansion joints

When installing screeds or floors, walls and other elements within the range of application should be separated (with expansion joints) from the compound with, e.g. ATLAS EXPANSION JOINT PROFILES or thin polystyrene strips. Additionally, mark on walls the location of existing substrate expansion joints, in order to transfer them over the screed layer.

Mass preparation

Pour the mortar from the bag into a clean container the suitable amount of water (see Technical Data for ratio) and mix using a mixer with a drill until homogenous. The mortar is ready to use directly after mixing and should be used up within approx. 40 minutes.

Contact coat application

Contact coat is liquid and can be applied with a brush. Rub it well into the substrate. When the contact coat dries, apply another one before the application of the main repair layer (wet on wet method).

Mass application

While the contact coat is still wet, apply the main repair layer of ATLAS TEN-10 using a steel float and carefully fill (by pressing) the existing scores and cracks. Join successive mortar batches before the material starts to set. Depending on temperature and humidity conditions, the mortar starts setting already after approx. 1 hour. Within this time, the initially set surface can be smoothed or floated, if required. When applying ATLAS TEN-10 as screed or floor, carry out the installation according to flooring technology, keeping in mind the shorter setting time of the mortar and execution of appropriate expansion joints. Floor usage – foot traffic is possible already after approx. 3 hours since the application.

Coverage

The average coverage is: 1 m²/1 cm/20 kg of dry mix.

Packaging

Paper 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 12 months from the production date shown on the packaging.

Important additional information

Adjust the ratio of added water experimentally, following the desired consistency of the mortar, type of substrate and weather conditions. Inappropriate amount of mix water results in deterioration of strength parameters of the mortar

During application and directly after, the surface should be protected against precipitation and excessive drying (moist with water or cover with foil, if required).

Tools must be cleaned with clean water directly after use. Difficult to remove residues of the set mortar can be removed with the 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.

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