### FIELD OF APPLICATION:

Specialist white cement adhesive for gluing linings made of granite, marble, natural stones, light limestones and other coarse-grained rocks and for ceramic, stoneware, facade, clinker tiles and all types of mosaic, e.g. glass and ceramic mosaic. The adhesive can be used inside and outside buildings as well as on floor heating. It is characterised by enhanced adhesion, reduced sagging from vertical surfaces and extended open time which allows the tiles to be glued even after up to 30 minutes from the moment of application of the adhesive on the substrate. GRANLEP is a deformable (S1), cement-based dry set mortar (C) with enhanced parameters (2), without the sagging effect (T), and with extended open drying time (E), class C2TES1.

### TYPES OF SUBSTRATE

Appropriately seasoned and prepared cement plasters, cement-lime plasters (age above 28 days), gypsum plasters, concrete substrates (age above 3 months), cement and anhydrite floors, masonry made of bricks, ceramic hollow bricks, silicate and cellular concrete blocks, old glaze, terracotta, stoneware and plasterboards. It may also be used for fixing decorative elements in historical and sacred buildings.

# SUBSTRATE PREPARATION:

The substrate should be solid and even, cleaned of dirt, lime, oils, greases, wax, residues of oil and emulsion paints, etc. The substrate unevenness up to 5 mm may be previously filled with dry set mortar. Old, fragile and peeling layers characterised by poor adhesion should be removed. New plasters and concrete should be set and seasoned. Laying linings on an excessively moistened substrate is one of the most serious errors related to execution of floors, very often leading to complete destruction of the floor layer. The substrates with reduced adhesion should be primed by means of MAJSTERGRUNT UNIVERSAL PRIMER and the substrates which are very absorptive - with the MAJSTERGRUNT DEEP PENETRATING PRIMER. In case of the necessity to glue tiles on poor substrates which are difficult to clean, it is recommended to perform an adhesion test which consists in gluing the tile and checking the joint after 48 hours.

# **DIRECTIONS FOR USE:**

Mix the content of the packaging mechanically or by hand using the specified amount of clean and cool water to obtain homogenous mixture and desirable consistency. Stir again after 5 minutes. Apply the adhesive with the use of a trovel or spatula and spread it by means of a notched trovel with appropriate teeth size. Do not moisten the tiles before gluing. Apply the tiles by pressing them to the substrate so that the dry set mortar could adjoin at least 70% of the tile surface. Large tiles, bigger than 30x30 cm, should be applied in such a way that the mortar adheres to at least 90% of the tile surface. All tiles applied outside and in permanently humid places, as well as on floors which are used intensly, should be applied in such a way that the mortar adheres to the whole tile surface. In order to fulfill such requirements, a layer of the mortar of equal thickness should also be applied to the whole surface of the reverse side of the tile to cover all profiled elements. It is possible to adjust the position of tiles

Manufacturer:



within 10 minutes. Gluing should be performed within 30 minutes from spreading adhesive on the substrate. The adhesive should be used within 2 hours from the moment of its mixing with water. In case the adhesive thickens during that time, mix it again intensly without adding any water. Adding water will worsen all parameters of the adhesive, including adhesion and sagging, and will extend the setting time. Unused dry set mortar is not fit for mixing with water and must be thrown away.

### COMPOSITION:

Mixture of Portland cement, sand, adequately selected modifying additives and fibres.

Store in dry premises. The product in the original and undamaged packaging may be stored for a period of 9 months.

Packaging: ventilated multi-layer paper bag, 25 kg

# APPLICATION RECOMMENDATIONS:

Technical data and directions for use are given for temperature +23 ± 2°C and relative humidity 50± 5%. In unfavourable temperature and humidity conditions, the consumption time may be subject to changes. Information provided on the packaging is to ensure an optimal use of the product, however, it does not constitute grounds for the Producer to assume legal responsibility as the conditions of workmanship are beyond the Producer's control. Any interference in the product composition is inadmissible, it can significantly degrade its quality. The product becomes alkaline after mixing with water. Accurately emptied paper packaging may be recycled. Warning!!! The tiles should not be soaked before application!!!

# **TECHNICAL DATA:**

white Proper water quantity: 6.0 - 6.5 litres per 25 kg bag Substrate temperature: +5 °C to + 25 °C Ambient temperature: +5 °C to + 25 °C



Early adhesion:	≥ 1.4 MPa
Adhesion after water immersion:	≥ 1.0 MPa
Adhesion after freeze/thaw cycles:	≥ 1.0 MPa
Open time – adhesion after t ≥30 min:	≥ 0.5 MPa
Sagging:	≤ 0.5 mm
Adjustment time:	≤ 10 minutes
Consumption time:	about 2h
Pointing:	after 24 h
Load by walking:	after 24 h
Total load:	after 21 days
Cross deformation:	class S1
Reaction to fire:	Class F
Chromium (VI) content:	< 2 ppm

# CONSUMPTION:

About 1.3 kg per 1 mm of mortar thickness layer.

Trowel teeth size - Consumption\*

6 mm - 2.4 kg/m2 8 mm - 2.8 kg/m2 10 mm - 3.8 kg/m2

\* while applying the dry set mortar also on tiles, consumption increases by about  $0.5\ \mathrm{kg/m^2}$ 

# FORMAL AND LEGAL DOCUMENTS:

 $EN\ 12004:2008+A1:2012$  Adhesives for tiles. Requirements, evaluations of compliance, classification and marking.

Declaration of performance No. MP/013/2013

Hygienic Certificate of the National Institute of Hygiene No. PZH HK/B/0514/01/2014

Radiation hygiene certification No. HR/B/24/2013

Upon release of this Technical Data Sheet all previous technical data sheets expire.

