Thermally insulating plaster

SPECIFICATION



PROPERTIES AND WAYS OF USE: Plastering of all kinds of walling, especially of the brick backing, porous concrete and cement bricks, in case of renovation and additional external insulation it can be applied directly to coarse-grain plastering with roughcast finish, reduction of heat dissipation from a building owing to heat transmission resistance of the structure $\lambda = 0.060$ W/m.K, it does not prevent reduction of heat dissipation from a building due to thermal bridges in the walls, it does not prevent dehumidification of the masonry due to diffusion resistance of water vapour $\mu = 5.5$, mechanical and manual plastering in the external environment.

COMPOSITION: Polyurethane, mineral binders, additives

TECHNICAL PARAMETERS: Thermally insulating plaster (T) according to EN 998-1:2003, categories CSI, W1, T1

	applied manually	applied mechanically
compression strength (CS I category)	> 0,4 MPa	>0,4 MPa
gripping – a method of separation (B)	> 0,04 MPa	>0,04 MPa
factor of diffusion resistance of water vapour μ	5,5	5,5
reaction of fire	class B, s2, d0	class B, s2, d0
volume density of hardened mortar	450 - 650 kg/m°	350 - 550 kg/m [°]
coefficient of thermal conductivity	0,081 W/m·K	0,060 W/m·K
spreadable time	60 min.	60 min.
INFORMATIVE		
grain size	0,125 - 1 mm	0,125 - 1 mm
amount of mixing water	0,5-0,7 l/kg	0,6-0,9 l/kg
spread with a layer of 10 mm	5 kg/m²	3,5 kg/m ⁴
maximum thickness of application of a layer	40 mm	40 mm
maximum thickness of the plaster	80 mm	80 mm
minimum temperature of the backing, air and plaster	5 °C	5 °C

NOTE: Technical parameters are defined under normal conditions (20 ± 2) °C and (65 ± 5) °C.

BACKING PREPARATION: The backing should be strong and supporting without any dust, paint remnants, lime and fats. It must not be water-repellent. If the existing backing was rendered with overcoating in the past, it must be removed mechanically down to the original plaster or to back-up masonry. Roughing machines are suitable for such removal, e. g. ROKAMAT with appropriate application disks. A strengthening lime-cement or cement layer and bonding primer should be applied to disturbed, spalling backings. The masonry should be mature enough without any changes in volume. Except for applications to existing roughcast finish, the backing must be rendered with cement, fully covering pre-spray with a thickness of 3 to 4 mm. Excessively absorbent backings should be moistened before the application. As flatness of the façade should be kept the plaster should be applied always between staffs.

TREATMENT:

Manual application – Plaster is mixed in a specified amount of mixing water in a free-fall concrete mixer or pan concrete mixer for at least two minutes. If manual mixers are used, minimum mixing time is one minute.

Mechanical application – The following adjustment should be used for application of insulating polyurethane plasters when plastering machines having an integrated mixing zone are used: Jet No. 16. Water column height: 400 – 500 In case of unfilled joints and with plasters thicker than 40 mm, the plaster is applied in two layers. The second layer is applied to the languished backing after 12 hours. The applied upper layer should be levelled using a rule. Possible unevenness on the levelled plaster can be ground using a grinding trowel after 24 hours.

Finish: Mature thermally insulating plaster (average mature period is 5 mm/24 h) is rendered with strengthening bonding primer. Primers based on vinyl acetate, e. g. Duvilax BD thinned 1:10 to 1:15 are recommended. The bonding primer must not form a film on the plaster surface. The strengthening backfilling with a thickness of 1 to 2 mm, which will fill possible pores, should be applied as a final backing under the final surface plaster. Conventional mineral stucco, mineral structured plaster or silicone plaster are recommended as the final facework plaster. The thermal insulating plaster surface must not remain in any case untreated for a long time (especially in winter and rainy periods).

Standard EN 13914-1 should be used for designing, preparing and performing the outside finish. Further addition of binders, fillers and other admixtures is not allowed. The mixture can be treated only when temperature of air and the backing is +5 °C!! Do not use it if frost is expected. Only drinking water or water meeting requirements of EN 1008 can be used for mixing. Disposal - put used plastic packings to a legal refuse dump. Let the unused material harden and put it to a municipal waste dump. The preparation itself – waste code 101311. Waste from other compos not included in Nos. 101309 and 101310. Cured material – waste code 170904. Mixed building and demolition rubbish not included in Nos. 170901, 170902 and 170903.

FIRST AID:

In case of any health troubles or if you are in doubt, see a doctor. In case of inhalation take the afflicted person out to fresh air, with breath problems see a doctor. If the skin was affected, wash it with clean soap water. Treat the affected spots with a reparation cream. After the eyes were affected, wash them immediately with eyelids open using stream of pure water for 15 minutes and then see a doctor. In case of ingestion, wash the mouth with water, drink 0.5 I water and see a doctor. Do not invoke vomiting. The preparation can cause an allergic reaction when it touches the skin. If symptoms of any affliction (irritation) caused by the contact with the product do not disappear after he/she was given the first aid, see a doctor. Store within reach of children.

SAFETY AND HYGIENIC REGULATIONS R37/38 It irritates respiratory organs. R41 There is a danger of serious eye damage. It can produce sensitization of the skin. R43 S2 Store without reach of children. S22 Do not inhale dust. S24 Eliminate contact with the skin. S25 Eliminate contact with eyes. S26 If the eye was affected, wash out the eye immediately thoroughly with waterand see a doctor \$36/37/39 Use suitable protective clothing, protective gloves and goggles or a face shield In case of ingestion see a doctor immediately and show him/her this packing or marking. S46



STORING: Store the product dry in the original packing – protect against any damage, water and high relative humidity of air. If the above conditions are followed, storage life is six months since the date shown on the packing.

DELIVERY: The dry mixture is delivered in paper bags on pallets covered with a foil, in a big bag or bulk in silos.

QUALITY: Quality is permanently checked in our laboratories. The conformity of the product is carried out by TZÚS Prague, Ostrava branch office. Production management system is used as well as the certified quality control system according to ISO 9001.

MANUFACTURER: ZOD Slezská Hořina, 747 71 Brumovice, Czech Republic.

VALIDITY: Since February 22, 2010.

As we have no direct influence on usage and treatment of the product we are not liable for any damage due to its faulty use. We reserve the right to perform changes resulting from technical developments.