



PROTHERM LIGHT

Lightweight plaster for fire protection

+ Product:	➤ Lightweight premixed thermal insulating plaster for fire protection (REI) of masonry, reinforced concrete, concrete and steel structures.
+ Packaging and Storage	<ul style="list-style-type: none"> ➤ Bags of 16 Kg. ➤ Pallet (protected by thermo-wrapping film) of 40 bags = 720Kg. ➤ Store in a dry place and use by 6 months.
+ Composition:	Based on virgin EPS beads (2 mm Ø), water bindings and special additives. To mix with water during the application.
+ Fields of application:	<ul style="list-style-type: none"> ➤ Fireproofing protective system, specific to improve fire resistance of structural elements made of steel, brick, normal and pre-stressed reinforced concrete, in building for civil and industrial utilization. ➤ Mechanical and manual application. ➤ For indoor and outdoor use.
+ Consumption/yield:	~ 3,0 kg/m ² per 1 cm of thickness. One bag yields ~ 6 m ² per 1 cm of thickness.
+ Support preparation:	<p>Application on concrete, reinforced concrete or masonry:</p> <ul style="list-style-type: none"> ➤ Clean the support to be protected; in case of surfaces with old plastering, we suggest to make pressure hydro-washing or with a strong mechanical brushing, then make a deep cleaning of support to eliminate completely all the layer of incoherent material. We recommend to wash accurately the support removing completely every trace of incoherent material. <p>Application on steel:</p> <ul style="list-style-type: none"> ➤ Clean the support to be protected. In case of surfaces that have layers of old varnish, we suggest performing a hydro-washing or with a strong mechanical brushing, then to make a deep cleaning of support to eliminate completely all the layer of incoherent material. After sanding or strong mechanical brushing, we recommend to use an anticorrosive base, (there are no technical and qualitative limits). Important: in case the steel elements to be treated would have been strongly warmed by sunlight or by any other causes, before apply Protherm Light the surfaces must be cooled using clean water (and then dry) or it would be necessary to wait the natural cooling of surfaces. <p>Important: before the application or fireproofing coating, the applicator must always check if the support to protect needs of a primer, controlling the efficiency with preliminary application tests. In case of doubt or cases not specifically mentioned: consult our Technical Service.</p>
+ Application:	<ul style="list-style-type: none"> ➤ Mechanical application, using a sprayer, with suitable plastering machine (type PFTG4, G5 or similar, always opportunely equipped), with one or more stages in base of the coating thickness to make. The surfaces to be treated must be coated without interruption of continuity, so to avoid the presence of thermal bridges. To improve the coating drying, we recommend to work in well-ventilated places and with ambient and support temperatures of at least 5°C and not over 35°C. for thicknesses less than 20 mm, the product application can be realized with an unique application; for thicknesses over to 20 mm, are necessary two or more applications, in base of the total thickness. For more detailed instructions,

consult the *Manual of Application* or consult our Technical Department.

- **Finishing operations:** the aesthetical characteristics of the applied coating depending to the kind of surface and to the support geometry to be treated. There are different technical solutions to optimize the superficial finishing of the applied fireproofing coating. Protherm Light is suggested for the treatment of indoor and outdoor building structures. Once applied, Protherm Light can stay to the rough estate without suffer any aggression by atmospheric agents, however, it can be polished with trowel or float, and so, smoothed and finished on the surface with different kind of mortar (cement, lime or silicate based), as to improve the mechanical characteristics and the final aesthetic of the applied layer. For more detailed information, consult the *Manual of Application* or consult our Technical Department.

+ **Warning:**

- Do not apply under the direct sunlight action and rain.
- Apply with temperatures between +5°C and +35°C.
- Do not apply if there is risk of frost.
- Do not mix with any other products.
- Equipments cleaning: with water, immediately after use.

+ **Technical characteristics:**

- Density: ~300 kg/m³.
- Drying: depending on air' temperature and moisture; at 20°C with natural ventilation: 24 hours on surface.
- Chemical characteristics: Not putrescible inert material, very good breathability and water-repellent properties, very good resistance to weather agents.
- Physical characteristics: very good characteristics of mechanical resistance, very good thermal insulating and acoustic properties.
- Fire reactivity: incombustible material (according to EN ISO 1182).
- REI: Depending on supports and thickness (i.e. REI 180 with thickness 3 cm on perforated brick)
- Compressive strength (28 days): 1,05 N/mm² (ELOT EN 1015-11)
- Flexural strength (28 days): 0,40 N/mm² (ELOT EN 1015-11)
- Thermal conductivity λ : 0,080 W/(m.K). (ELOT EN 1745/2002)

All the indications provided in this technical data sheet are purely approximate and not binding for legal purposes. The data listed has been gathered from laboratory tests and it hence follows that in practical applications on building sites the final characteristics of the product may be subjected to substantial variations depending on the meteorological conditions and the installation. The user must always check suitability of the product for its specific use, undertaking all liability implicit in and deriving from use of the product, as well as comply with all methods and instructions for use generally referable to "workmanlike" execution. Tekto Hellas S.a. reserves the right to change the contents of this technical data sheet on its final judgement. The spreading of this data sheet, through any media, supersedes and cancels the validity of any other technical data sheets previously published.