

PERLIFOC HP

Gypsum based fireproof spray mortar

TECHNICAL DATA SHEET



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PRODUCT DESCRIPTION

PERLIFOC HP is a gypsum-based render with thermal insulation properties, designed for passive fire protection of structural elements. It is a high-performance mortar characterised by low density. It consists of lightweight aggregates, expanded clay, hydraulic binders, setting retarders and additives improving workability during mechanical application.

APPLICATION

PERLIFOC HP fire protection mortar is designed for passive fire protection of steel load-bearing elements and flat composite elements made of concrete and profiled steel. It provides effective fire protection for steel structures used indoors and in protected outdoor areas for up to 240 minutes. The mortar can be used for H-I sections and closed steel profiles.



AVAILABILITY

Color	Delivery form		Item number
White	Bag	17 kg	7420000170

COMPLIANCE

European Technical Assessment:

ETA-18/0672

Declaration of performance:

1219-CPR-0218

Certificate of constancy of performance:

DWU-1219-CPR-0218

TECHNICAL DATA

Color		Grey-white / White
Reaction to fire		A1
Durability		Typ Y (w tym Z ₁ , Z ₂)
Density	Powder	$\rho = 350 \pm 50 \text{ kg/m}^3$
	Mortar	$\rho = 850 \pm 100 \text{ kg/m}^3$
	Apparent	$\rho = 550 \pm 15\% \text{ kg/m}^3$
Sound absorption		$a_w = 0,20$, class E
Thermal insulation		$\Lambda = 0,087 \text{ W/(m} \cdot \text{K)}$
Water vapour diffusion resistance		$\mu \sim 9,8$ (at a thickness of 10 mm)
Consumption		$\sim 4,1 \pm 15 \text{ kg/m}^2/\text{cm thickness}$



TRANSPORT AND STORAGE

Transport and store in tightly closed containers at a temperature between +5°C and +40°C. Shelf life: 12 months from the date of manufacture.

INSTALLATION

- a) SURFACE PREPARATION.** Clean the surface of grease, dust and dirt. If the surface does not provide sufficient adhesion, use a mesh or an adhesion promoter before spraying.

The use of a mesh is necessary in the following situations:

- when the surface adhesion needs to be increased
- when the mortar is applied to girder flanges with a width ≥ 500 mm
- when the mortar is used on pillars
- when spraying is performed on only one side of the structural element
- spraying is carried out on metal profiles exposed to high deformation

The mortar is intended for wet application using mixing and pumping plastering machines.

For small areas or repairs, the product can be applied manually.

- b) APPLICATION.** Mix the mortar with water in a ratio of 0.8-1.0 to 1.0 in the machine. The mortar can be applied with a spray machine for continuous or intermittent application. Apply the mortar perpendicular to the surface from a distance of approx. 20 cm until the desired thickness is achieved.

FINISHING. Any minor repairs can be carried out manually or with a trowel. The surface finish of the product is rough, but can be smoothed with a float or other masonry tool if necessary.

FIRE CLASSIFICATION

Substrate	Product thickness	Fire resistance
• Steel	9 – 41 mm	R 15 do R 240
• Concrete wall and ceiling	10,3 mm	REI 30 do REI 240
• Concrete beams and columns	10,9 – 25,4 mm	R 30 do R 240
• Partition	48,5 mm	EI 120
• Partition between wall and ceiling, mechanically fastened	46,3 mm	EI 180
• Vertical protection of concrete blocks without load-bearing requirements	25,2	EI 240