

ISOLTECO® 230

PRE-MIXED PLASTER, WITH HIGH THERMAL INSULATION CAPACITY

ISOLTECO® 230 Pre-mixed plaster, with high thermal insulation capacity						
PRODUCT	Pre-mixed plaster based on pre-dosed selected hydraulic binders, virgin expanded polystyrene beads perfectly spherical with consistent granulometry, enriched with a special E.I.A. additive and special additives.					
PACKAGING AND STORAGE	 Bag of 60 L yield. Pallet of 44 bags. It is recommended the use within 6 months from the packaging. The product maintains the technical characteristics for over 12 months if conveniently stored (in a dry and fresh place, protected from frozen, water and direct sunlight). It is recommended to use suitable protection devices. 					
FIELDS OF APPLICATION	Thermal insulation of external walls. Thermal insulation of internal walls. Thermal insulation of ceilings. Elimination of thermal bridges. Protection of the walls from rain.					
PREROGATIVES	 For internal and external use (once applied and "cured" does not have problems in case of rain, moisture and low / high temperatures). The surface can be left rough or be finished with smoothing or finishing mortars. It strongly speeds up the application time of the final smoothing. It guarantees a high thermal insulation. 					
CONSUMPTION / YIELD	THICKNESS cm		YIELD OF 1 BAG m²			
	2 cm	3,00 m ²	7 cm	0,86 m²		
	3 cm	2,00 m ²	8 cm	0,75 m ²		
	4 cm	1,50 m ²	10 cm	0,60 m ²		
	5 cm	1,20 m ²	12 cm	0,50 m ²		
	6 cm	1,00 m ²	-	-		
SUPPORT PREPARATION *	 The substrate must be clean, absorbent, sufficiently solid, and free of loose parts, dust, and residues of insulating materials. Before applying Isolteco® 230, moisten the substrate using methods suitable for the specific type of substrate. For substrates with low absorption capacity, apply an adhesion promoter, such as Edilstik, over the entire surface, then apply Isolteco® 230 on the treated surface while still wet ("wet-on-wet"). For substrates with very low absorption capacity or high absorption, apply a scratch coat made of cement slurry and sand mixed with Edilstik over the entire surface, or use a ready-to-use scratch coat product before proceeding with the application of Isolteco® 230. Intermediate leveling strips must be created exclusively using Isolteco® 230. Alternatively, wooden battens or chamfered metal strips may be used, provided that after the subsequent application of Isolteco® 230, these are removed and the resulting voids are filled and leveled with Isolteco® 230. The leveling strips should be placed no more than 2 m apart. Corners and openings (doors, windows, etc.) must be prepared by installing appropriate metal corner protectors, fixed with cement markers or thermal mortar. Additionally, corners can be created during the application of Isolteco® 230 using wooden boards; however, this method results in reduced impact resistance of the finished corners. 					





Application using a plastering machine (recommended): it is essential to equip the plastering machine with a helical mixer featuring a solid helix, a specific tank for lightweight products, and a cap or nozzle with

Manual application: mix using a concrete mixer or horizontal mixer, hydrating the contents of one bag with approximately 9 - 10 liters of clean water. Mix for at least 5 minutes but no more than 10 minutes.

- Apply an initial layer of approximately 1 cm of Isolteco® 230. Once the first layer has set (no less than 4 hours, no more than 24 hours), apply the second layer (maximum 2.5 - 3 cm). If additional layers are required, repeat the same procedure. Permitted total thickness: minimum 2 cm - maximum 20 cm.
- After 24 96 hours from the application of Isolteco® 230 (depending on environmental conditions and applied thickness), proceed with surface scraping using a float or a leveling rod.
- Wait no less than 7 days after applying Isolteco® 230, and once it has dried based on the applied thickness, proceed with the application of a skim coat using Ecap® ADP.
- · To increase resistance to concentrated impacts, embed a fiberglass mesh (minimum 140 gr/m²) in the skim coat. The application thickness of the skim coat must be 4 - 5 mm.

Finishes for painting: once the base plaster has cured, apply Ecap® ADP. Once matured, apply breathable paint such as Ecap® STP Silicate Paint or Ecap® SP Silicone Paint, after treating the surface with Ecap® F primer. Lime-based breathable paints are also compatible.

Colored finishes: it can be finished with breathable colored finishes, such as Ecap® SC Silicone Colour or Ecap® STC Silicate Colour, applied directly to the base plaster after treating it with Ecap® F primer.

· Do not apply under direct sunlight or at temperatures above +35 °C. If plastering is carried out under direct sunlight, appropriate precautions must be taken (e.g., scaffolding nets).

- Do not apply under rain, at temperatures below +5 °C, or when there is a risk of frost. In any case, never add antifreeze products.
- Apply at a relative humidity between 45% and 80%. Do not apply when the relative humidity is too low.
- For detailed application and execution instructions, consult the relevant "Installation Manual Isolteco®" or contact the Edilteco Technical Office.

APPLICATION *

WARNINGS

TECHNICAL CHARACTERISTICS

Dry density:	230 kg/m³	
Specific weight (dry mortar):	approx. 245 kg/m³	UNI EN 1015-10
Fire reaction class:	A2-s1,d0	EN 13501-1
Adherence:	0,1 N/mm ²	UNI EN 1015-12
Water absorption by capillarity:	0,1 kg/m²s ^{0,5} W1	UNI EN 1015-18 UNI EN 998-1
Coefficient of water vapour permeability $\boldsymbol{\mu}:$	9	UNI EN 1015-19
Thermal conductivity $\lambda_{_{0}}$:	0,063 W/mK	UNI EN 12667
Compressive strength:	1,28 N/mm ²	UNI 6132
Flexural strength:	0,38 N/mm ²	UNI 6133
Sound insulation capacity on wall $R_{_{\rm w}}$:	42 dB **	UNI EN ISO 140-3
Increase of sound insulating power $\Delta R_{_{\!\!\!w}}\!\!:$	7 dB **	UNI EN ISO 140-16
Specific heat kJ/kgK:	1,0	UNI EN 1745
Durability (frost / thaw):	valued	UNI EN 998-1

hence follows that in practical applications on building sites the final characteristics of the products may be subject 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. Edilteco S.p.A. reserves the right to change the contents of this mechanical data sheet on its final judgements. The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.

*For more detailed information consult the "Isolteco® - Application Manual" or contact Edilteco Technical Department. ** Isolteco® 230, thickness 6 cm, applied on cellular blocks wall 8 cm with a layer of cement plaster thickness 1,5 cm on the opposite side.





LEED CRITERIA					
SECTIONS	CREDITS	TECHNICAL DESCRIPTIONS			
Francisco de Administração (FA)	Prerequisite 2	Minimum energetic performances			
Energy and Atmosphere (EA)	Credit 1	Optimization of the energy performances			
Materials and Resources (MR)	Credit 5	Extracted, processed and produced at a limited distance materials (regional materials)			



