



PLASTERS

ready to use,
with high thermal insulating power



THERMAL

Insulation & Chemicals Division

THERMAL INSULATION . REFURBISHMENT AND DEHUMIDIFICATION

Thermal Division ... what is it?

The primary aim of Edilteco is to produce building materials that promote and enable a healthy living comfort. Edilteco has, for a long time, recognised the importance of **thermal insulation** in buildings and the need to create an effective thermal barrier between internal and external environments. Edilteco has always seen in this topic an important and innovative solution of energy and cost saving.



THERMAL

A complete range of thermal insulating plasters.

ISOLTECO® RANGE

ADVANTAGES

Ready to use plasters with high thermal insulating power based on selected pre-batched binders, perfectly spherical virgin expanded polystyrene beads, mixed with special additives.

- They are suitable to meet the requirements of building regulations and standards.
- High thermal insulation properties.
- Elimination of thermal bridges.
- They have good soundproofing properties (laying without finishing coat).
- For indoor and outdoor use (once applied and dried they do not suffer from rain, moisture and high/low temperatures).
- They can be left as the finished surface when cured or as a surface ready to accept nearly all types of finishing layers.
- They significantly speed up the application of finishing coats.
- They can be used for any architectural shape.
- They are compatible with irregular façades or complicated architectural features.
- High vapour permeability.
- Health and safety: they do not contain nor release chemicals agents.
- They maintain their thermal insulation properties over time.
- They can be applied on uneven and mixed surfaces.
- They can be laid on all the surfaces.
- Few restrictions in the choice of finish.
- They can be applied manually and/or mechanically.

$\lambda_D =$
0,058
W/mK

CE

$\lambda_D =$
0,043
W/mK

$\lambda_D =$
0,063
W/mK



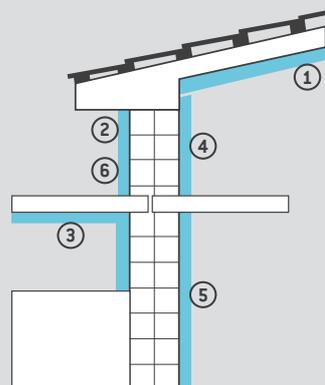
THERMAL
INSULATION

For detailed technical data
please consult the table on the following page.

MAIN APPLICATION FIELDS

Internal and external.

- 1) Thermal insulation for ceilings.
- 2) External thermal insulation and external arcades.
- 3) Elimination of thermal bridges (pillars, beams, support beams for attics, etc...).
- 4) Prevention and elimination of the interstitial and superficial condensation.
- 5) Internal wall insulation (IWI) and party walls.
- 6) Protection of walls from rain (façades, beams, pillars, etc...).



External wall insulation (EWI).



Elimination of thermal bridges. Can be formed into decorative shapes (moldings, cornices, skirtings, etc.).



See the technical data sheets and application manuals.

REFURBISH the past ... To build THE FUTURE

Old buildings are a common cultural heritage. Houses have to guarantee healthy and comfortable environmental conditions. The use of good products, properly installed, avoids the passage of cold and humidity inside of refurbished building ambient. Edilteco offers **the most complete range of products designed specifically for refurbishment, dehumidification and restoration**. Isolsan 230® is the perfect product for this aim, thanks to its thermal and hygroscopic properties.

ISOLSAN® 230 ADVANTAGES

Premixed dehumidifying plaster with high thermal insulating power based on macro-porous water binders, virgin expanded polystyrene beads, special additives.

- It is suitable to meet the performances required by building regulations and standards.
- It meets all the current regulation requirements if laid in its suitable thicknesses.
- It is a solution to rising damp.
- It is suitable also for high thickness walls.
- Fast application time.
- It can be used for any architectural shape.
- It is compatible with irregular façades or complicated architectural features.
- High vapour permeability.
- Health and safety: it does not contain nor release chemicals agents.
- It maintains its thermal insulation properties over time.
- It can be applied on uneven and mixed surfaces.
- It can be laid on all the surfaces.
- Few restrictions in the choice of finish.
- It can be applied manually and/or mechanically.



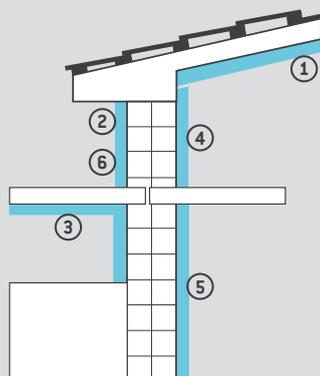
$\lambda_D =$
0,063
W/mK

For detailed technical data
please consult the table on the following page.

MAIN APPLICATION FIELDS

Internal and external.

- 1) Thermal insulation for ceilings.
- 2) Dehumidification / Refurbishment and external arcades.
- 3) Elimination of thermal bridges (pillars, beams, support beams for attics, etc.).
- 4) Prevention and elimination of the interstitial and superficial condensation.
- 5) Dehumidification / Refurbishment and internal wall insulation (IWI) and party walls.
- 6) Protection of walls from rain (façades, beams, pillar, etc.).



Application phases of Isolteco® range and Isolsan® 230.

ISOLTECO® RANGE and ISOLSAN® 230

TECHNICAL CHARACTERISTICS / PALLETIZATION / CONSUMPTION AND YIELD

ISOLTECO® RANGE / ISOLSAN® 230 Ready to use thermal insulating plasters

TECHNICAL CHARACTERISTICS	STANDARD	ISOLTECO LIGHT® 110 ^(a)	ISOLTECO® 150 ^(b)	ISOLTECO® 230 ^(c)	ISOLSAN® 230 ^(d)
Dry density	n.d.	110 kg/m ³	150 kg/m ³	230 kg/m ³	230 kg/m ³
Specific weight (dry mortar)	(UNI EN 1015-10)	approx. 130 kg/m ³	approx. 165 kg/m ³	approx. 245 kg/m ³	approx. 245 kg/m ³
Fire reactivity	(EN 13501-1)	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0
Adhesion	(UNI EN 1015-12)	0,1 N/mm ²	0,1 N/mm ²	0,1 N/mm ²	0,1 N/mm ²
Water absorption by capillarity	(UNI EN 1015-18) (UNI EN 998-1)	0,1 kg/m ² s ^{0,5} W1			
Resistance to water vapour diffusion μ	{(UNI EN ISO 12572) ^(a) (UNI EN 1015-19) ^(b/c/d) }	4,6	9	9	9
Thermal conductivity λ_0	(UNI EN 12667)	0,043 W/mK	0,058 W/mK	0,063 W/mK	0,063 W/mK
Compressive strength	{(UNI EN 826) ^(a) (UNI 6132) ^(b/c/d) }	0,528 N/mm ²	1,16 N/mm ²	1,28 N/mm ²	1,28 N/mm ²
Flexural strength	{(UNI EN 1015-11) ^(a) (UNI 6133) ^(b/c/d) }	0,120 N/mm ²	0,42 N/mm ²	0,38 N/mm ²	0,38 N/mm ²
Sound insulation on wall R_w	(UNI EN ISO 140-3)	n.d.	n.d.	42 dB [*]	42 dB [*]
Increase of sound insulating power ΔR_w	(UNI EN ISO 140-16)	n.d.	n.d.	7 dB [*]	7 dB [*]
Specific heat	(UNI EN 1745)	1000 J/kgK [**]	1000 J/kgK [**]	1000 J/kgK [**]	1000 J/kgK [**]
Durability (frost / thaw)	(UNI EN 998-1)	Evaluated	Evaluated	Evaluated	Evaluated

[*] 6 cm thickness applied on 8 cm thickness holed blocks wall with 1,5 cm layer of cement plaster on the opposite side. / [**] 1000 J/kgK = 0,24 kcal/kgK

PALLETIZATION

Isolteco® Light 110: N° 40 bags of 70 L yield each corresp. to ~ 2,80 m³
Isolteco® 150 / Isolteco® 230 / Isolsan® 230: N° 40 bags of 60 L yield each corresp. to ~ 2,40 m³



CONSUMPTION AND YIELD

They can be applied up to 10 - 12 cm. Put a mesh into the smoothing mortar layer of Isolteco® Light 110 and Isolteco® 150.

THICKNESS	YIELD PER 1 BAG	
	ISOLTECO® LIGHT 110	ISOLTECO® 150 and 230 ISOLSAN® 230
2 cm	3,50 m ²	3,00 m ²
3 cm	2,30 m ²	2,00 m ²
4 cm	1,75 m ²	1,50 m ²
5 cm	1,40 m ²	1,20 m ²
6 cm	1,15 m ²	1,00 m ²
7 cm	1,00 m ²	0,86 m ²
8 cm	0,87 m ²	0,75 m ²
10 cm	0,70 m ²	0,60 m ²
12 cm	0,58 m ²	0,50 m ²

A WIDE RANGE OF PRODUCTS FOR: SMOOTHING AND FINISHING

- ISOLTECO® RASATURA MONOCAP** Premixed single-layer levelling smoothing mortar.
- ECAP® F Fixative** Ready to use universal fixative, also in fibre-reinforced version.
- ECAP® FS Silicate Fixative** Fibre-reinforced potassium-based fixative.
- ECAP® AC Acrylic Colour** Acrylic finishing in paste.
- ECAP® AP Acrylic Paint** Ready to use resin wall paint.
- ECAP® STC Silicate Colour** Mineral finishing in paste, composed of potassium silicates.
- ECAP® STP Silicate Paint** Ready to use wall paint, composed of potassium silicates.
- ECAP® SC Silicone Colour** Silicon finishing in paste.
- ECAP® SP Silicone Paint** Silicon wall paint.
- ECAP® EP Elastomeric Paint** Ready to use elastomeric wall paint.
- ECAP® SCLP Selfcleaning Paint** Self-cleaning wall paint.
- ECAP® PSCL Selfcleaning Primer** Self-cleaning primer for wall paint.

Consult price lists and catalogue for accessories.

ECAP® RANGE



BENEFITS

LOW ENVIRONMENTAL IMPACT

- Better thermal insulation.
- Lower fuel consumption during the transport due to its low weight.
- Higher thermal insulation value: lower volumes at equal thermal performances.

LOW DENSITY

- Less weight and load on structures.

DUCTILITY

- Less water required during the preparation.
- Less water absorbed during the mixing.
- Easy to mix and pump.
- Easy and fast application.
- Easy transportation (lightweight).

SAFE HOME

- It improves the structural resistance of the building in case of earthquakes.
- Fire resistance: A2-s1,d0.



- Low environmental impact
- Low density
- Ductility
- Better attitude in case of earthquake



EDILTECO and the environment

The concept of sustainability when applied to buildings can be evaluated from two converging points of view. From one side, it is possible to evaluate the impact that the construction and management of a building will have on its whole environment, while from the other side it is possible to analyze specifically all the technologies that have been used during construction, studying the individual environmental impact of each component and every material type that has been used. The evaluation of sustainability of an individual product is extremely complex. It is not measurable according to just one or more “eco” characteristic, but it is also related to all the factors that interact with the product and the environment during its lifecycle. This issue is further complicated if we say that the product sustainability evaluation is measured across its whole lifecycle, from the raw material to the finished product. Depending on the actual stage in its lifecycle it can have different environmental impacts. The certification of environmental sustainability is the instrument that allows the declaration of the performances and the environmental impacts that a building has on its territory including its energy consumption. Edilteco's products meet the criteria of the environmental sustainability protocols that are used to calculate scores and Leed credits.



Ask for the sustainability sheet with LEED scores of the product you are interested in: info@edilteco.com

OUR READY TO USE THERMAL-INSULATING PLASTERS HAVE BEEN CHOSEN FOR

REFERENCES



ARA PACIS MUSEUM
ROME - ITALY



WATERPARK ATLANTICA
CESENATICO (FC) - ITALY



EURODISNEY
PARIS



SAN GIOVANNI BATTISTA CHURCH
CASTELMAGGIORE (BO) - ITALY



UNIVERSITY OF FLORENCE - ITALY



HOTEL KRASNAYA - ODESSA - UKRAINE

EDILTECO, AN INTERNATIONAL SUCCESS

italy . france . benelux



LEGEND

- Edilteco Group
- Partners
- Distributors



360° Insulation

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You Tube Consult our technical and application videos on the Edilteco YouTube Channel . www.youtube.com/user/EDILTECOvideo



Edilteco is associated with:



COMPANY WITH
 QUALITY SYSTEM
 CERTIFIED BY DNV GL
 = ISO 9001 =