



ISOLCAP XX

premixed fine-bead lightweight thermal insulating substrate
fine-bead, reinforced with polypropylene fibres

packaging and storage:

- bags of 70 l yield.
- pallets of 40 bags.
- storable for at least 6 months in a cool and dry place away from frost and water.

composition:

special water binders and selected aggregates prebatched for 500 kg/m³ - perfectly spherical virgin expanded polystyrene beads with high thermal insulation power (2 mm Ø), mixed with special E.I.A. additive which allows a perfect mix, excellent pumping and homogeneous distribution of the beads in the mix - polypropylene fibres - special additives.

fields of application:

- **single-layer** lightweight thermal insulating screeds for floor coverings laid with glue (see notes on Page 2). **Not** suitable for direct laying of resilient floor coverings.
- lightweight thermal insulating substrates (with or without gradient formation),
- lightening and filling castings,
- roof thermal insulation (pitched or flat roofs with or without gradient formation). Suitable for direct laying of prefabricated waterproofing mantles (hot bituminous, cold bituminous, cold synthetic) or solvent-free liquid sheaths.

consumption/yield:

1 m³ of lightweight thermal insulating mortar is obtained with 13-14 bags (depending on the equipment used and the accuracy of the mix).

surface preparation:

thoroughly clean the laying surface removing any fragments and vacuuming the dust.
lay **Piano Zero** Guides (single-layer screeds) or prepare the level points (intermediate levelling substrates).
moisten the laying surface (if absorbent) taking care not to create puddles.

application:

can be mixed with:

drill with whisk,
cement mixer,
mixer type "turbomalt".

can be mixed and pumped on site with:

- **Politerm Machine** (see Edilteco equipment),
- **Isolcap Machine** (see Edilteco equipment),
- plaster sprayer (see notes on Page 2),
- truck mixer and concrete pump,
- pump type "turbosol".

hydrate with clean water in a proportion of 10 l per bag.

mix for at least 5 minutes and not more than 10 minutes (except when using a plaster sprayer).

warnings:

- do not apply with temperatures inferior than +5°C or under the direct light of the sun or with temperatures higher than +35°C. if the application is made under the direct light of the sun, necessary precautions must be taken (e.g. net or similar that covers the scaffolding).
- it is recommended to lay edge strips of acoustic insulation wider than the floor covering.
- in the case of direct laying of floor coverings (**single-layer**): see notes on Page 2. for the detailed methods of use and application consult the "**Application Manual**",

(available on request) or contact the Edilteco Engineering Department.

technical characteristics:

dry density: 500 kg/m³
 specific weight (dry mortar): about 515 kg/m³
 moisture resistance: rotproof.
 impact-sound insulation to 500 Hz: 17 dB (thickness 5 cm)
 compressive strength (28 days' curing UNI EN 1015-11:2007): 2,24 N/mm²
 flexural strength (UNI EN 1015-11:2007): 0,78 N/mm²
 resistance to water vapour diffusion μ : 21,04
 thermal conductivity λ : 0.104 W/mK
 residual moisture after 28 days (5 cm thickness): <2%
drying time for direct laying of floor coverings (depending on the ambient and meteorological conditions):
 ceramic tiles- stoneware tiles - clinker tiles: after 48 hours,
 floating parquet: after 5 days.

SPECIAL PROCESSING and APPLICATIONS:

mixing and pumping with plaster sprayer:

1. fit the plaster sprayer with an expansion tank, screw and mixer specifically for premixed products based on polystyrene beads.
2. **do not** use a compressor.
3. detach the end nozzle from the material delivery tube.
4. adjust the flow meter to obtain a mortar with a creamy and homogeneous consistency.

single-layer screed for direct laying of floor coverings (specific operations):

operation	Laying with glue of: ceramic, stoneware, clinker and terracotta tiles(*)	Laying with glue of: parquet (*) (**)
	Floating laying of: parquet (*)	
5. Piano Zero guide laying:	yes	yes
6. floating with "blade" float:	yes	yes
7. surface sanding with electrical brush fitted with sandpaper disks:	recommended	recommended
8. thin-bed surface smoothing with mix based on cement and glue:	recommended when there is heavy foot traffic before laying the floor covering	no
9. surface smoothing with RS Malta L - minimum thickness 5 mm and in any case	no	yes

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 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 the methods and instructions for use generally referable to "workmanlike" execution.

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The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.

depending on
the type of
wood and
dimensions of
the wooden
strips :

(*): **minimum thickness of screed in Isolcap XX: 5 cm**, also between the extrados of any technological systems and the intrados of the floor covering.

(**): **always respect** the detailed methods of use and application given in the "**Application Manual**", (available on request) or **contact** the Edilteco Engineering Department.

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