

LANGUAGE  
EN

# ISOCAPPOTTO

WALL CLADDING SOLUTIONS

M

PART OF  
MANNI  
GROUP



**ISOPAN**

INSULATING DESIGN



**Isocappotto**

**Wall cladding solutions**



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# Isocappotto solution

The ISOCAPPOTTO technological system for walls is exclusive to Isopan.

Thanks to this solution, Isopan can provide its customers with a system which is quick and easy to install and provides the insulating capacity typical of sandwich panels, together with the high levels of performance and appearance offered by traditional exterior insulation and finish systems.

## DESCRIPTION

The ISOCAPPOTTO system can be described as a kind of false cladding, in that it is different to other traditional systems for standard walls in its use of a double metal skin sandwich panel coated in different materials. In this way it is possible to hide the presence of the sandwich panel, imitating the aesthetic appearance of plastered walls.

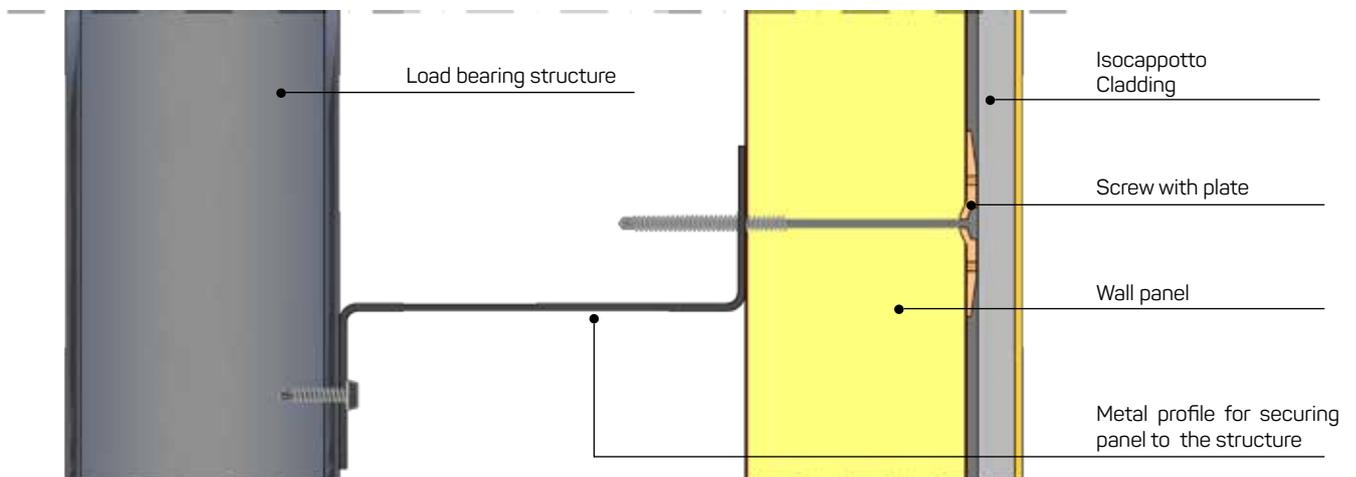
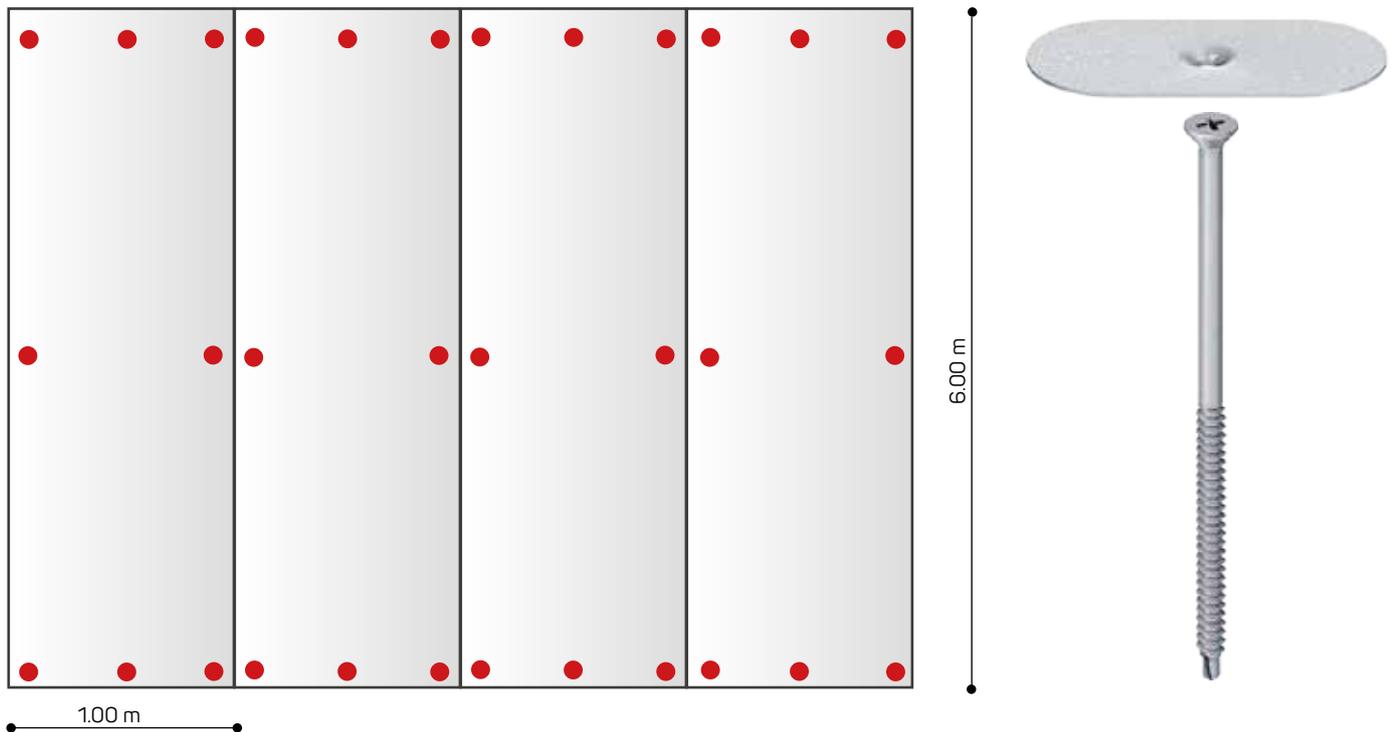
ISOCAPPOTTO is a system which can be applied to any type of building work, from the construction of new buildings in the manufacturing or industrial sectors (office blocks, factories, warehouses), as well as for residential buildings, such as houses and condominiums. Furthermore, the system represents a valid solution in the renovation and refurbishment of existing buildings.



# Installation

## SANDWICH PANEL FASTENING

The sandwich panels are attached to the underlying structure by special screws of varying length depending on the thickness of the panel selected. These are supplied with special panel securing plates.



**ATTENTION:** for correct use of the components mentioned in the description of the installation stages, please refer to the following pages in this document or contact the Isopan Technical Department. The arrangement of the fasteners may vary depending on the characteristics of the individual project. The values provided in the diagram are purely indicative and are not to be considered a universally applied method.

# Installation



## STEP 1

Give the wall to be plastered a uniform coat of PRIMER. Then, before the primer has dried, position strip mesh reinforcement along the wall panel joins.



## STEP 2

Once the strip mesh reinforcement has been positioned cover with a coat of PRIMER. This ensures immediate fixing of the strip mesh reinforcement mesh and stops it from moving around during the following steps.



## STEP 3

Once the PRIMER has been given, apply a uniform and even layer of ISOPAN INTONACO.

This product must be applied in various coats, one after the other until the ideal plaster thickness has been achieved.



## STEP 4

Before the INTONACO product has set, smooth it out so as to achieve an even and uniform finish.



## STEP 5

Once the plaster has been applied and has set, apply the finishing coating using ISOPAN FINITURA. The finish must be applied using a smooth plastic trowel.

Before the FINITURA has set, we recommend to use ISOPAN AGGRAPPANTE for improve the adherence to the surface. For further informations about the installation, please contact Isopan.

# Choosing the right panel

## POLYURETHANE WALL PANEL



### CHARACTERISTICS

Double sheet, self-supporting, polyurethane insulated metal panel. The joint is interlocking and visible. The number and position of fasteners must guarantee resistance to the stress and deformation induced by thermal dilation.

**PANEL SPAN: 1000 mm**

### WEIGHT

SHEET THICKNESS mm	kg/m <sup>2</sup>	PANEL NOMINAL THICKNESS mm							
		30	35	40	50	60	80	100	120
0,4 / 0,4	kg/m <sup>2</sup>	7,5	7,7	7,9	8,3	8,7	9,5	10,3	11,1
0,5 / 0,5	kg/m <sup>2</sup>	9,2	9,4	9,6	10,0	10,4	11,2	12,0	12,8
0,6 / 0,6	kg/m <sup>2</sup>	10,9	11,6	11,3	11,7	12,1	12,9	13,7	14,5

## MINERAL WOOL WALL PANEL



### CHARACTERISTICS

Double sheet, self-supporting, mineral wool insulated panel made using a layer of exclusive insulating material made up of strips offset in a longitudinal direction, the fibres of which are laid at 90° in relation to the surface of the two skins. In the event of a fire, this panel contains fire propagation thanks to the thickness of the mineral wool.

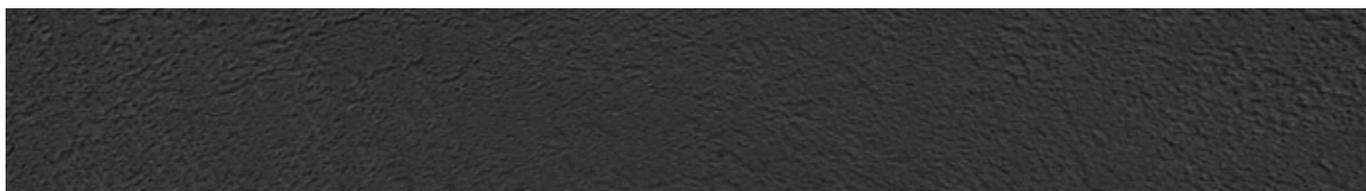
**PANEL SPAN: 1000 mm**

### WEIGHT

SHEET THICKNESS mm	kg/m <sup>2</sup>	PANEL NOMINAL THICKNESS mm							
		50	60	80	100	120	150	170	200
0,5 / 0,5	kg/m <sup>2</sup>	13,2	14,2	16,2	18,2	20,2	23,2	25,2	28,2
0,6 / 0,6	kg/m <sup>2</sup>	14,9	15,9	17,9	19,9	21,9	24,9	26,9	28,8

# Components: Primer

Primer made from a blend of synthetic resins, special bitumen and quartz filler. The paste thus obtained, once dry, is characterized by optimum elasticity, adhesion to the substrate and waterproofing.



## HOW TO USE

The surface of the wall panels to be coated with the ISOCAPPOTTO system must be thoroughly cleaned before the product is applied, to ensure there are no elements of non-adhesion (dust, oil, etc.).

The product is ready to use and only needs mixing. It is applied as it comes, with no dilution. Take care to create a smooth, uniform finish.

It can be applied with a fine or large brush, roller, spatula or spray using the relative equipment, both horizontally and vertically.

## ADVANTAGES

- Water-based non-toxic product
- Excellent adhesion to various substrates
- Excellent water resistance
- Excellent elasticity
- Can be coated with cement mortar

## TECHNICAL DATA

Specific weight	1,5±0,5 kg/l
Adhesion to steel	>2,00 N/m
Elongation at break (23°C - U.R. 50%)	240 ± 40%
Tensile strength (23°C - U.R. 50%)	1,4 ± 0,3 MPa
Watertightness	>500 KPa
Water vapour diffusion resistance	$\mu > 5000$

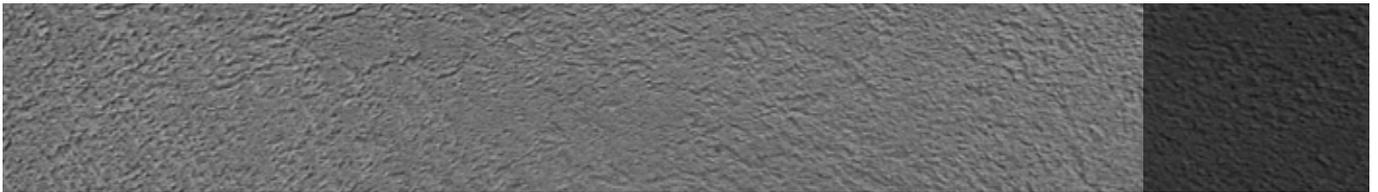
## WARNINGS

- Do not expose the product to freezing temperatures: if the product freezes it can no longer be used.
- Avoid extreme heat and cold temperatures when applying the product
- Do not proceed with application in adverse weather conditions as the wet coat can be washed away by rain or ruined by frost and humidity
- The minimum application and storage temperature must never be below 5°C.
- Not suitable for application on potable water tanks.
- Can also be applied to slightly damp surfaces (humidity < 5%).

# Components: Intonaco

Premixed plaster made with lime, cement, selected aggregates and additives which ensure excellent workability and breathability.

A smooth and uniform application of the product is essential for obtaining a quality finish.



## HOW TO USE

Remove any flaking or non-solid material, oil, dust and dirt in general. ISOPAN INTONACO plaster is a ready to use product, simply add 18% clean water (4.5 litres of water per 25 kg bag of product). It must be applied within one hour of being mixed in one or more coats, until the best thickness has been achieved. Plastering operations do not require any special precautions other than those usually taken for this kind of work.

ISOPAN INTONACO has a workable time which makes it possible to use on any architectural solution.

## ADVANTAGES

- High workability
- Excellent breathability

## TECHNICAL DATA

Thermal conductivity	0,76 W/mK
Reaction to fire	Classe A1
Vapour permeability	$\mu = 12$
Flexural strength	2,8 N/mm <sup>2</sup>
Compressive strength	5,0 N/mm <sup>2</sup>
Apparent volume V.	1,500 kg/l (powder) 1,800 kg/l (mortar)

## WARNINGS

- Minimum application temperature not below +5°C
- Do not mix other substances into the INTONACO.

# Components: Finitura

Ready to use decorative coating made from synthetic resins in a water-based emulsion, coloured oxides, top quality quartz aggregates and additives which improve the workability of the product. The adoption of light- and alkali-resistant pigments guarantees colour stability even when exposed to weather and solar radiation. The coating is also characterized by high elasticity and adhesion to substrates.



## HOW TO USE

The product is ready to use. It must be mixed carefully to obtain a homogenous mass. It must be applied in a single coat with a spatula. For finishing, use a smooth plastic trowel, without wetting the product. Usually, a standard application of the product means a consumption of 2 - 2.5 kg/m<sup>2</sup>. It is available in different colours to meet the user's needs. Also supplied in standard 25-kg buckets.

## ADVANTAGES

- High adherence and flexibility
- High workability
- Colouring with oxides with optimum light resistance
- Excellent waterproofing

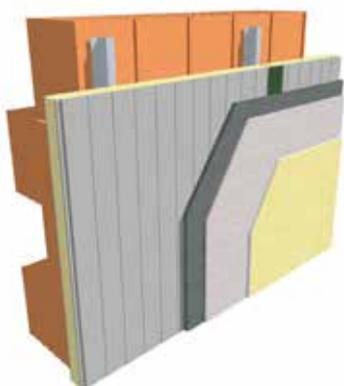
## TECHNICAL DATA

Specific weight	1,86 ± 0,05 kg/l
Colour	15 colori
pH	9
Application temperature	da +5°C a +30°C
Time to wait between coat application	24 ore

## WARNINGS

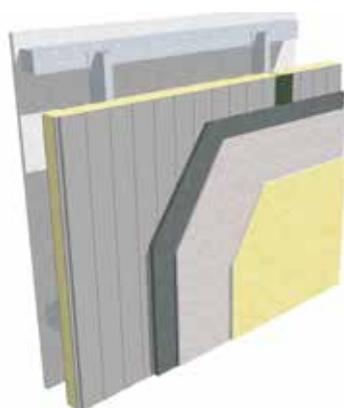
- Do not expose the product to freezing temperatures: if the product freezes it can no longer be used.
- Avoid extreme heat and cold temperatures when applying the product
- Do not proceed with application in adverse weather conditions as the wet coat can be washed away by rain or ruined by frost and humidity.
- The minimum application and storage temperature must never be below 5°C.
- After drying, surfaces must be protected from pouring rain for at least 24 hours.

# Technical solutions Comparison



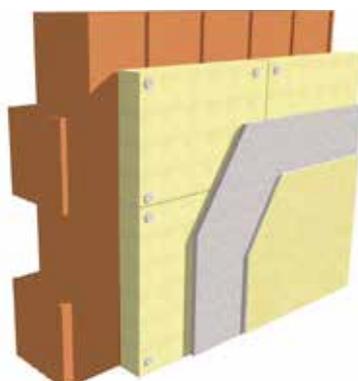
## STANDARD WALL WITH ISOCAPPOTTO 60 mm

Thickness	0,420 m
Surface weight	305 kg/m <sup>2</sup>
Surface weight, plaster not included	201,3 kg/m <sup>2</sup>
Resistance	3,96 m <sup>2</sup> K/W
Transmittance	0,206 W/m <sup>2</sup> K



## DRY WALL WITH ISOCAPPOTTO 80 mm

Thickness	0,350 m
Surface weight	98,20 kg/m <sup>2</sup>
Surface weight, plaster not included	30,20 kg/m <sup>2</sup>
Resistance	4,10 m <sup>2</sup> K/W
Transmittance	0,239 W/m <sup>2</sup> K



## STANDARD WALL WITH CLADDING 60 mm

Thickness	0,420 m
Surface weight	313,5 kg/m <sup>2</sup>
Surface weight, plaster not included	29,5 kg/m <sup>2</sup>
Resistance	2,72 m <sup>2</sup> K/W
Transmittance	0,368 W/m <sup>2</sup> K

### WARNING:

The values provided are purely indicative and are obtained thanks to software calculation using standard elements and values.



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