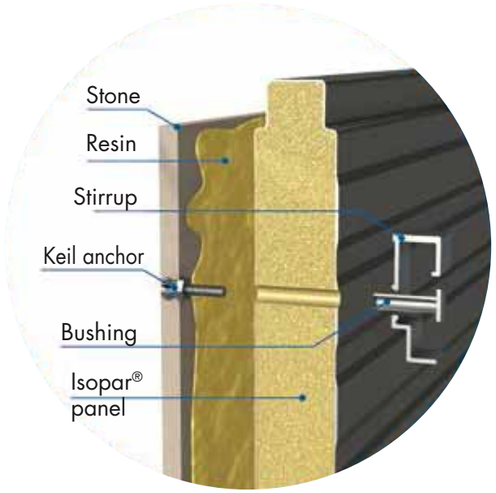
ISOPARSTONE®

THE CREATION OF A PANEL COVERED IN NATURAL STONE

All stones are usable, reduced to the thickness of 8 to 10 mm and fixed to the insulating panels that may have a thickness from 25 to 200 mm according to insulation and structure requirements. The panels manufactured in our plant may have the following dimensions for a maximum width of 1 m for a length of 3 m. The stone, in addition to being pasted to the panel will be firmly welded by a mechanic nail that, inserted in the stone, makes it solidly anchored to the panel and to the wall anchor plate. The Lattonedil® plant is able to offer to the most demanding customers the best solution to achieve their final result. We are able to offer to the buyer the technical study of the project for the construction of any kind of façade application, then help the customer with the choice of materials, up to the installation of the product.



ISOPARSTONE®

THE CREATION OF A PANEL COVERED IN NATURAL STONE

The technology allows obtaining 8 to 10 mm thin slabs from the stone block that can be reduced to 10 mm, which are then processed with special epoxy resins and glass wool fabric.
This process makes the stone resistant to breakage.
The stone thickness is determined by the type of the used stone, by the type of application and by the fact that an anchor nail is inserted.
In the Lattonedil plant, the stone is superficially manufactured as required by the client and cut to size as specified.
The maximum feasible dimensions of the sheets are 3 x 1 with calibrated thickness of 8 to 10 mm. This panel was created to dress and isolate any kind of facade.
The stone's fastening technology with expansion nail guarantees the perfect adherence with the fastening systems of the structure, using different galvanised steel plates.

The best solution with thermal and sound insulation to dress facades:
- With thermal insulation wall cladding systems
- Micro-Ventilated
- Ventilated
- Continued

Advantages:
- Executive quality,
- Excellent mechanical resistance compared to traditional solutions that have to use higher thicknesses
- Lightness, insulation, integrated and resolving system
- Easy and quick installation
- Maintenance free

Disadvantages:
- Major project rigidity due to the modularity of the insulating panel.

Tensile strength between fixing element and stone pull-off

Mechanical characteristics of the sample	ABSOLUTE BLACK sample dimension 30 x 30 x 6.6-6.8 mm.		KASHMIR WHITE sample dimension 30 x 30 x 6.8-7 mm.		CARRARA WHITE sample dimension 30 x 30 x 7-8 mm.	
Volumetric weight Kg./m³	3.015		2.690		2.698	
Compressive strength Kg./cm²	2.485		2.075		1.303	
Bending strength Kg./cm²	253		135		198	
Imbibition % per weight	0.130		0.430		0.103	
Thermal expansion coefficient mm./m. °C	–		0.0067		0.00590	
	MIN. Value	**MAX. Value**	**MIN. Value**	**MAX. Value**	**MIN. Value**	**MAX. Value**
Load of tensile failure limit in Kg.	**120**	**151**	**83**	**95**	**86**	**95**
Diameter of the failure limit cone in mm.	**38**	**41**	**32**	**38**	**49**	**54**

U transmittance	**25**	**30**	**35**	**40**	**50**	**60**	**70**	**80**	**100**	**120**	**150**	**180**	**200**
W/sq.m. K	0.84	0.71	0.62	0.55	0.44	0.37	0.32	0.28	0.22	0.19	0.15	0.12	0.11
Kcal/sq.m. h °C	0.73	0.61	0.53	0.47	0.38	0.32	0.27	0.24	0.19	0.16	0.13	0.11	0.10

Traction Kg.

Fixing system:
keil-Undercut-Facade anchor insertion

Minimum distance of holes
from the edge: 85x100 mm

Drilling tool:
keil Diamond Facade Drill Bit 0.8 b7.515.010.022

Depth: hS=4 mm

Hole dimension: Cylindrical of ø 7 mm

Undercut: ø 9 mm

Type of traction for the test:
cylindrical central support of ø 105 mm