

PVC "T" profile 0 mm 45 mm 8/9 STANDAR H profile **PIZ** is an innovative cladding system for civil and industrial omega aluminium buildings. profile The structure is installed by securing 15 mm joint light alloy guides on the surface to be covered and then fixing the insulating Piz panels on these guides. The panel is made up of a modified fibrereinforced cement mortar layer coupled with a slab of insulating material. The and lower edges of the cement element serve the purpose of housing the assembly 0 mm joint ightarrowsections. PIZ was developed to satisfy the growing needs of the construction market in terms of energy savings and architectural improve-9 ment. The system is de-9 signed for covering all types of buildings, both new and under restructuring. mm 57 mm 8/9 **Panel** 15 mm joint The panel is 54/66/89 mm thick and comprises a 9 mm external cement H PLUS mortar bonded to a profile 45/57/80 mm expanded polystyrene insulating layer. mm 1: **Aluminium section** The anodised aluminium support rails are available in black or silver (also available on demand in RAL colours). Anchoring systems The screw or expansion fixings are determined at design stage according to support surface. Panels are available in standard sizes (see table) with a \pm /- 25 mm variation 0 mm ← 15 mm joint joint → mm 80 mm 8/9 H 82 profile

ADVANTAGES

Appearance Maximum freedom of design, configuration and expression, combinations of shapes, colours and joints, amazing improvements of existing

buildings.

Performance Resistance to ness atmospheric Reasonable cost, agents: water, energy-saving wind, heat, cold. performance, Good fire beno maintenance haviour of the expenses, direct system: standinstallation on ard PIZ with EPS all surfaces withinsulation layer out preliminary Euroclass B-s1works (no need d0, PIZ Metabio for plastering or with Rockwool replastering). insulation layer Euroclass A1, impact and abrasion resistance, breathability, condensation and

Cost-effective-

Duration **Ease** Metal structure of installation with anticorrosion coating, high quality cement surface, certified anchoring systems, anti-deterioration insulating layer.

Easy and safe installation on all surfaces, also of irregular kind. Any preliminary works are often unnecessary. Installation does not require any special equipment or particularly skilled workers. Easyto-inspect configuration. Quick and easy panel replacement, if required.

Versatility Façade covering for civil, industrial, and commercial buildings, both new and under renovation or restructuring.

PERFORMANCES INSTALLATION

mildew preven-

tion, increase in living confort

Specific thermal conductance of the panel: standard $54 = 0.68 \text{ W/m}^2\text{K}$ plus $66 = 0.54 \text{ W/m}^2\text{K}$ $H89 = 0.38 \text{ W/m}^2\text{K}$ Rock-Metabio standard 54 = 0,75 W/ m2K

Rock-Metabio H89 = 0.45 W/m2KWater vapour permeability:

transpiring system with open joints. Water Vapour Permeability: µ=86

Water Absorption:

less than 0,03 Kg/m² Steam permeability: breathable system with open joint

under full water immersion after one hour

breathability of the panel μ =86 Panel weight:

20 Kg/m² (average weight) Rock-Metabio standard 54 = 22 Kg/ m2 Rock-Metabio H89 = 26 Kg/m2Resistance under wind suction test: variable from 3300 N/m² (min) to 8300 N/m²

Impact Resistance: in compliance with category I e III ETAG 17. The system passes the impact soft test (400 Joule) and hard impact test (10 Joule).

(max) depending on panel size and type of joint.

All the Piz System with insulation layer done by EPS graphite loaded are certified Euroclass B-s1-d0. All the Piz Rock-Metabio System are classify Euroclass A1.

Airborne sound insulation: All Piz Systems done with EPS graphite loaded delta R = 7 dBPiz System Rock-Metabio type Standard 54 and H89 delta R = 13 dB The PIZ system can be mounted on any surface (reinforced cement, brick, metal structure, etc.). In case of renovation work, no preliminary activity or cleaning of the support surface is required. Panels are fixed on the surface by means of an anchoring system and of special section bars. Installation requires simple mechanical operations; no skilled workers or special components other than those provided with the system are

Panels are mounted in a horizontal direction. Vertically, the installation is performed from bottom to top.

Standard arrangements can be accomplished with both heights of insulating Piz panel; carefully designed alternate patterns of height and width can also be realised.

All Piz System are certified for installation in seismic area as well as with an extra insulation layer till thickness 100 mm. install on the support wall previous the installation of the cladding system, of course in that case the fixing device will be adapt properly to the longer thickness

PANEL SIZES

The PIZ panel is available in the following sizes with 0 mm or 15 mm joint. is always possible combine installation with horizontal joint "15" with vertical joint "0"

Is always possible supply panels in wide or high measure variable +/- 25 mm. adaptable mm. by mm. for perfect fit the specific facade



450x450 mm.

450x675 mm.

450x900 mm.



600x600 mm.

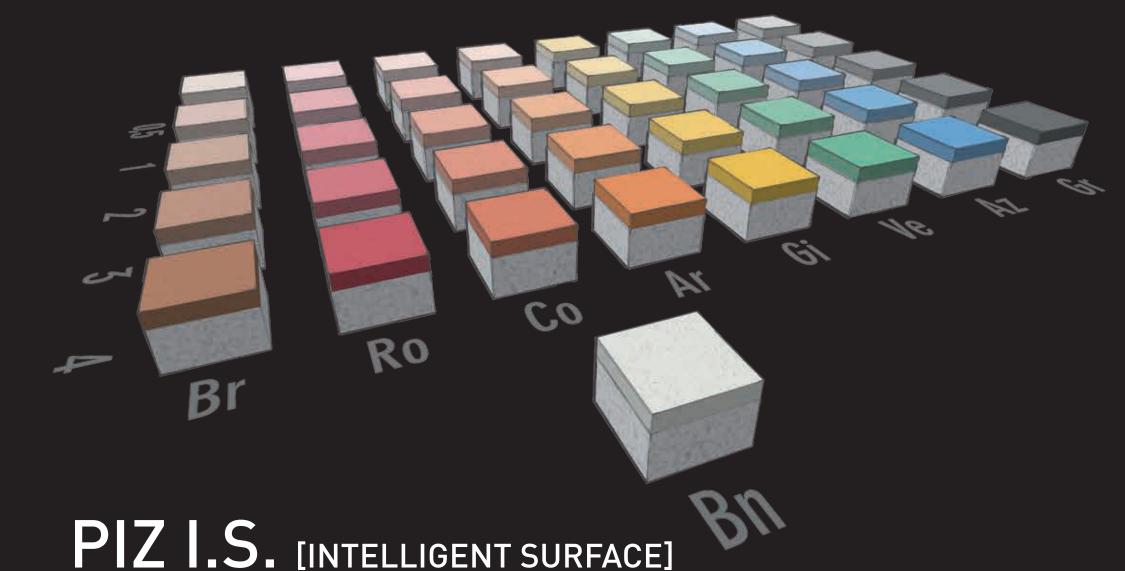
600x900 mm.

600x1200 mm.

600x1350 mm.

COLOURS AND FINISHES

Thanks to the wide range of colours and finishes, it is always possible to identify the best solution for a building to meet the customer's specific needs. Eight basic colours (plus white) are available in 5 shades, generating a palette of 40 colours. Four finishes are provided: smooth, rough, granular, materique with the grooved surface applicable to all finishes (pitch of groove based on client request).



PIZ and photocatalysis

In cooperation with the "Politecnico di Milano" Technical University, Piz srl has developed PIZ I.S., a cladding system obtained using titanium dioxide to alter the material's surface characteristics, generating photocatalysis and superhydrophilicity.

Self-cleaning properties

Thanks to its special dirt-resistant characteristics, PIZ I.S. enables to contain cleaning and maintenance costs, exploiting the chemical reaction following light absorption by a catalyst, also known as superhydrophilicity. This phenomenon enables the water to spread evenly on the surface without generating drops. Thus, PIZ I.S. cladded walls are permanently covered by an invisible film generated by dampness in the air, which prevents the dirt from adhering to the wall. Any dirt may easily be removed with water.

Reduction of air pollution and anti-bacterial properties

A photocatalyst is a substance which uses sunlight to improve a chemical reaction without undergoing changes. During photosynthesis, for example, chlorophyll is a photocatalyst. When a photocatalyst absorbs natural or artificial UV rays, it produces couples of electrons and holes in the valence band. These holes have a strong oxidizing power, whereas electrons have a strong reducing power. When these couples of holes and electrons react with the dampness on the surface, the oxidizing power leads to the production of hydrogen radicals, which in turn react with pollutants and bacteria in the atmosphere. These are then decomposed into non-polluting substances which are easily washed away by the rain.

GUARANTEES AND CERTIFICATIONS

PIZ has been awarded the following certifications: CSTB AVIS TECHNIQUE N° 2/12-1492), ETA 06/0135 (European Technical Approval).

An additional guarantee is the Reale Mutua insurance policy n°12854 covering the expenses for replacing defective products. Raw materials, end-products and components are always

tested in laboratory to ensure optimal performance and duration. The mechanical fixing system guarantees excellent resistance to thermal shocks. The fibre-reinforced cement layer,

coloured in series with mineral oxides, ensures maximum chromatic stability





