Why choose GASBETON®:

EKORU®, with its operational headquarters in Volla (Italy), covers an area of over 56,000 square metres in which it produces aerated autoclaved concrete blocks called GASBETON®. BACCHI S.p.A. distributes the GASBETON® construction system along with other eco-friendly building solutions. GASBETON® is a symbol of construction that looks to the future, leaving our children with buildings that combine savings, health and sustainability. Manufactured for the first time by architect Johan Axel Eriksson in 1923, aerated autoclaved concrete has become a construction system that is highly valued for its ease of use and high insulation capacity. Today the ever more attentive market demands environmentally friendly materials that contribute to reducing energy consumption without being a burden on the environment. GASBETON® is the right response to this need.

Proposing eco-sustainable construction systems that can reduce building energy consumption is the commitment that BACCHI spa and EKORU® srl have taken on to offer a concrete response for quality of living and environmental conservation.

GASBETON® is an aerated autoclaved concrete with excellent thermal insulation and low environmental impact. This material’s production system is the optimal response for implementation of European Union policies on energy and the environment.

Il GASBETON® is like a well-leavened cake composed of a few natural resources such as water, sand, a little lime and cement and a pinch of “yeast”.

Together these components represent 80% of the elements of the Earth’s crust.

GASBETON® blocks are easy to lift, making installation very quick.

GASBETON® blocks combine light weight with high load-bearing capacity.

GASBETON® is a non-combustible mineral material (Euroclass A1 reaction to fire), does not release toxic fumes during a fire and offers exceptional fire resistance. GASBETON® masonry that is just 8cm thick achieves a fire resistance of EI120, achieving EI240 with larger thicknesses. Its physical characteristics make it one of the most suitable materials for the construction of fire walls.

GASBETON® is a highly breathable material and therefore, thanks to its high vapour permeability, it favours migration by diffusion from heated indoor environments to the outside. This property reduces the possibility of surface condensation and mould formation, ensuring a healthy and comfortable environment. Compared to common building materials and synthetic insulation materials, GASBETON® is up to 10 times more permeable to vapour.
Choose the original!

GASBETON® is a construction material with high environmental sustainability because:
- It is produced in the EKORU® plant with low energy consumption, without harmful emissions into the atmosphere and without liquid or solid waste.
- Its light weight reduces pollution during transport.
- Plumbing and electrical systems tracking is very easy using groove-cutting and milling machines for cellular concrete.
- The thermal insulation offered by these walls contributes to the reduction of energy consumption for heating and cooling buildings.
- It is 100% recyclable in the demolition phase.
- The low density of the material entails reduced consumption of raw materials for its production.

GASBETON® blocks combine light weight with high load-bearing capacity and excellent energy dissipation capacity: two great advantages in highly seismic zones.
- Its light weight helps limit the entity of the inertial forces, while the resistance and particular cellular structure helps dampen the energy impressed by seismic action while maintaining the bearing capacity.
- Moreover, thanks to the dimensional precision of the blocks and the thin, 1 mm thick joint, this construction system offers unparalleled execution accuracy and consequently better functionality of the masonry under load.

GASBETON® walls make it possible to drastically reduce energy spending in order to maintain an optimal house temperature in all seasons and climates. Its high thermal insulation values make GASBETON® an excellent material for creating the shell of low energy consumption buildings without any need to add additional insulating materials to the walls. At the same time, thanks to the combined effects of thermal accumulation capacity and thermal resistance, it offers excellent thermal inertia values in the summer.

GASBETON® walls offer good sound insulation values, even with a low surface mass, thanks both to the porous structure of the material, which tends to dissipate the incident acoustic wave, and to the precision of the “thin joint” laying and the use of extremely calibrated blocks that reduce acoustic bridges between the different elements.

Made in Italy, guaranteed and certified.

Choose the original!
Proposing eco-sustainable construction systems that can reduce building energy consumption is the commitment that BACCHI spa and EKORU® srl have implemented to offer a concrete response for quality of living and environmental conservation. GASBETON® is an aerated autoclaved concrete with excellent thermal insulation and low environmental impact. This material’s production system is the optimal response for implementation of European Union policies on energy and the environment.

The environmental impact of a construction product is measured by the level of raw material use: GASBETON® not only uses resources that are widespread in nature but also in minimal quantities in relation to the volume produced. During production, aggregates and binders give rise to stable, durable chemical bonds that give rise to a superior performance product. The final product consists of about 30% volume of solid materials, while the remaining 70% consists of “macroporosity”, visible to the naked eye, and “microporosity”, visible under a microscope: the combination of these cells containing still air gives GASBETON® exceptional thermal properties.

1. EVOLUTION and SYSMIC ground, smooth and interlocking blocks for the construction of load-bearing masonry.
2. Thin EVOLUTION ground, smooth and interlocking blocks for the construction of internal partitions.
3. ENERGY and ACTIVE ground, smooth and interlocking blocks for the construction of external insulating infill panels.
4. IDRO blocks for reducing thermal bridges at the base of masonry and inhibiting capillary ascending moisture.
5. HOLLOW BLOCKS for vertical stiffening.
6. GROOVED BLOCKS to create large thickness and length horizontal stiffeners, kerbs and lintels.
7. Prefabricated cellular armed concrete LINTELS to create vaults on openings.
8. MULTICEM lightened water-repellent fibre-reinforced breathable plaster for exteriors and interiors.
9. Premixed breathable MULTISKIM skim coats (for interiors and exteriors) for interior and exterior finishes.
10. Premixed white BONDSKIM mortar. 2 treatments in 1 product! Reduces thickness compared to plasters and speeds up block laying.
11. IDRO ANCHORING mortar for laying of the first row of GASBETON® blocks on slabs or foundations.
12. RASOFIN, a single outdoor skim coat that is breathable, lightweight, fibre-reinforced and water-repellent.
13. MORTARGLUE M10 RS glue with high mechanical strength and high resistance to sulphates for GASBETON® laying.
15. Premixed MULTIMALT mortar for anchoring infill panels to the building structure.
A complete construction system for all needs, from civil dwellings to industrial structures.
Since 1985, GASBETON® has been anticipating regulatory developments, offering, many years in advance, the performance that today’s standards require in terms of thermal and acoustic insulation, mechanical resistance and fire resistance. 30 years of life with constantly growing market shares are a tangible sign of the company’s value in the construction world. Through its evolution, GASBETON® has been able to modulate its characteristics according to market requirements.

By varying the density, the company was able to create highly insulating blocks (low density) and very resistant blocks (high density).

The EVOLUTION product has the longest history, as a block for use on internal partitions, for large fire-resistant masonry, or for curtain walls, even with load-bearing function in low seismic zones. EVOLUTION has a dry density of 480 kg/m³ and offers stationary thermal transmittance up to 0.24 W/m²K and sound insulation values of up to 54dB, combined with high load-bearing capacity and unparalleled fire resistance. This excellent mix of different performances makes the product versatile and suitable for all needs.

The ENERGY block was achieved by lowering the density of the mix to 350 kg/m³, while it was possible to create the new ACTIVE, currently the most insulating on the market, by pushing the density to the enviable value of 300 kg/m³. Both allow the construction of curtain walls on framed structures with thermal performance similar to insulating materials, thanks to thermal conductivity values of 0.08 and 0.07 W/mK, while maintaining the highest level acoustic insulation performance and thermal inertia, without the need for additional insulating materials. In particular, ACTIVE was created to offer a specific response to building demands, which are increasingly sensitive to the issues of eco-sustainability, energy savings and living comfort in both winter and summer months. On the other hand, raising the density of the mixture to 580 kg/m³ results in the SYSMIC block, which makes it possible to create ordinary load-bearing masonry even in highly seismic zones.

### The product range:

**ACTIVE**
- **300 Kg/m³**
- **0.07 W/mK**

**ENERGY**
- **350 Kg/m³**
- **0.08 W/mK**

**BLOCKS THAT OPTIMISE THERMAL INSULATION IN BOTH WINTER AND SUMMER, FOR PASSIVE AND NZEB BUILDING MASONRY**

**BLOCKS THAT MAXIMISE THERMAL AND ACOUSTIC INSULATION PERFORMANCE FOR SINGLE-LAYER CURTAIN WALLS**

### Technical features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Unit of measure</th>
<th>ACTIVE</th>
<th>ENERGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry density</td>
<td>kg/m³</td>
<td>300</td>
<td>350</td>
</tr>
<tr>
<td>Basic thermal conductivity A&lt;sup&gt;λ&lt;/sup&gt;</td>
<td>W/mK</td>
<td>0.070</td>
<td>0.080</td>
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<tr>
<td>Useful thermal conductivity A&lt;sup&gt;λ&lt;/sup&gt;</td>
<td>W/mK</td>
<td>0.070</td>
<td>0.080</td>
</tr>
<tr>
<td>Water vapour resistance factor μ</td>
<td>-</td>
<td>10 (in dry field)</td>
<td>10 (in dry field)</td>
</tr>
<tr>
<td>Specific heat c</td>
<td>kJ/kgK</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Thickness</td>
<td>mm</td>
<td>50&lt;sup&gt;°&lt;/sup&gt;</td>
<td>240</td>
</tr>
<tr>
<td>Stationary thermal transmittance U&lt;sup&gt;**&lt;/sup&gt;</td>
<td>W/m²K</td>
<td>1.13 0.28 0.22 0.19 0.18 0.17 0.15 0.14 0.71 0.32 0.26 0.22 0.21 0.19</td>
<td>1.13 0.28 0.22 0.19 0.18 0.17 0.15 0.14 0.71 0.32 0.26 0.22 0.21 0.19</td>
</tr>
<tr>
<td>Periodic transmittance modulus Y&lt;sub&gt;IE&lt;/sub&gt;&lt;sup&gt;**&lt;/sup&gt;</td>
<td>W/m²K</td>
<td>1.12 0.107 0.050 0.027 0.020 0.014 0.008 0.004 0.646 0.117 0.055 0.029 0.021 0.016</td>
<td>1.12 0.107 0.050 0.027 0.020 0.014 0.008 0.004 0.646 0.117 0.055 0.029 0.021 0.016</td>
</tr>
<tr>
<td>Thermal inertia Displacement S&lt;sup&gt;**&lt;/sup&gt;</td>
<td>hours</td>
<td>08h 43’ 08h 58’ 11h 49’ 14h 12’ 15h 24’ 16h 39’ 18h 58’ 21h 22’ 2h 28’ 9h 9’ 12h 3’ 14h 27’ 15h 39’ 16h 52’</td>
<td>08h 43’ 08h 58’ 11h 49’ 14h 12’ 15h 24’ 16h 39’ 18h 58’ 21h 22’ 2h 28’ 9h 9’ 12h 3’ 14h 27’ 15h 39’ 16h 52’</td>
</tr>
<tr>
<td>Mitigation f&lt;sub&gt;IE&lt;/sub&gt;&lt;sup&gt;**&lt;/sup&gt;</td>
<td></td>
<td>0.993 0.384 0.225 0.140 0.109 0.085 0.051 0.030 0.918 0.370 0.215 0.132 0.103 0.080</td>
<td>0.993 0.384 0.225 0.140 0.109 0.085 0.051 0.030 0.918 0.370 0.215 0.132 0.103 0.080</td>
</tr>
<tr>
<td>Sound insulating power R&lt;sub&gt;a&lt;/sub&gt;</td>
<td>dB</td>
<td>32 43 46 47 48 49 50 51 37 45 47 49 49 50</td>
<td>32 43 46 47 48 49 50 51 37 45 47 49 49 50</td>
</tr>
<tr>
<td>Fire resistance rating</td>
<td>-</td>
<td>EI 240</td>
<td>-</td>
</tr>
</tbody>
</table>

**Note:** * Thicknesses 50 and 100mm are to be used only for thermal bridge correction, not for masonry.

**Non-binding indicative values. It will be the designer’s task to determine all the necessary parameters (based on the performance declared in the D.o.P.) in order to assess the suitability of the product.*
BETON®

**EVOLUTION**

480 Kg/m³

0,11 W/m²K

**SYSMIC**

580 Kg/m³

0,13 W/m²K

BLOCKS SUITABLE FOR SOUND-INSULATING, FIRE-RESISTANT INTERNAL PARTITIONS AND FOR EXTERNAL LOAD-BEARING MASONRY IN NON-SEISMIC ZONES

BLOCKS WITH A LOAD-BEARING CAPACITY OF MORE THAN 50/cm² SPECIFICALLY DESIGNED FOR LOAD-BEARING WALLS IN SEISMIC ZONES

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### EVOLUTION

<table>
<thead>
<tr>
<th>Thickness (mm)</th>
<th>EI 120</th>
<th>EI 180</th>
<th>REI 180</th>
<th>REI 240</th>
<th>EI 240</th>
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<td>52</td>
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<td>50</td>
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</tbody>
</table>

### SYSMIC

<table>
<thead>
<tr>
<th>Thickness (mm)</th>
<th>EI 120</th>
<th>EI 180</th>
<th>REI 180</th>
<th>REI 240</th>
<th>EI 240</th>
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</tr>
</tbody>
</table>

Note: * Thicknesses 50 and 100mm are to be used only for thermal bridge correction, not for masonry.

**Non-binding indicative values. It will be the designer’s task to determine all the necessary parameters (based on the performance declared in the D.o.P.) in order to assess the suitability of the product according to its use.*
System components: **Blocks**

**Blocks for internal curtain walls and external walls, smooth or with tongue and groove joints**

- **ACTIVE**
  - Standard thick.: from 5 to 50 cm

- **ENERGY**
  - Standard thick.: from 10 to 40 cm

- **EVOLUTION**
  - Standard thick.: from 5 to 40 cm

- **SYSMIC**
  - Standard thick.: from 24 to 37,5 cm

**Special blocks**

- **IDRO** for the correction of thermal bridges and ascending moisture
  - Standard thick.: from 5 to 50 cm
  - Standard thick.: from 24 to 40 cm
  - Also available upon request in height 12.5 cm

- **Hollow blocks for vertical stiffening**
  - Standard thick.: from 20 a 45 cm
  - Standard thick.: from 24 to 37,5 cm

- **Grooved blocks for horizontal stiffening and vaults made in situ**
  - Standard thick.: from 20 to 50 cm

- **NON-load-bearing reinforced lintels**
  - Thin thicknesses from 7.5 to 10 cm
  - Lowered h 12,4 cm
  - Thickness from 11,5 to 15 cm
  - Load-bearing reinforced lintels
  - Thickness from 20 to 24 cm

**External insulation of thermal bridges**

- **TERMO**
  - Standard thick.: from 5 to 20 cm

- **Bonding and skim coating with MYKOLL**
Mortars

The GASBETON® range of mortars and relative laying cycles have been specially developed for cellular concrete masonry. The specific formulations of the products guarantee excellent adhesion to the substrate, high resistance and durability over time. The attention paid to breathability features helps maximise the healthiness offered by GASBETON® masonry.

**INCOLLARASA M5**
GASBETON® glue and skim coat for laying and smoothing reinforced masonry
Premixed powder mortar for indoor and outdoor use, with calibrated water retention, hydraulic binder-based, specific for the thin joint bonding of GASBETON® blocks and for their subsequent internal reinforced skim coating, to be applied by hand with a notched trowel. Indoors, it is the base for finishing with INTERIOR MULTISKIM or for decoration (breathable paints or tiles). Finished skim coating thick.: min. 3 mm, max. 6 mm. Grain size: 0 - 0.6 mm. - Colour: white

**MALTACOLLA M10 RS**
Glue with high mechanical strength and high resistance to sulphates for the laying of GASBETON® blocks.
Premixed powder mortar for internal and external masonry, with calibrated water retention, hydraulic binder-based with special additives that provide superior sulphate resistance, specific for the thin joint bonding of GASBETON® blocks, to be applied by hand with a notched trowel. Joint thick.: 1-3 mm Grain size: 0 - 0.6 mm – Colour: white

**MULTIRASO INTERNI**
Skim coat for MULTICEM or BONDSKIM internal finishing.
Premixed powder mortar for indoor skim coating, with improved workability, aerial binder-based, specific for finishing base coats (MULTICEM plaster or BONDSKIM reinforced skim coat) of GASBETON® masonry, to be applied by hand. The ideal primer for subsequent application of breathable paints. Thick. per coat: min. 1 mm, max. 2 mm. Thick. finished skim coating max. 3 mm. Grain size: 0 – 90 µ. Colour: white.

**MULTIRASO ESTERNI**
Reinforced skim coat for exterior MULTICEM base plaster
Premixed powder mortar for outdoor skim coating, fibre-reinforced, water-repellent, hydrated lime and hydraulic binder-based, specific for finishing the base layer (MULTICEM plaster) of GASBETON® masonry. The ideal base for subsequent decorating using plaster finish or silicate or siloxane-based paints. Max. thick.: 2 mm per coat, 5 mm finished skim coating Grain size: 0 – 1.3 mm. Colour: light grey.

**RASOFIN**
A unique outdoor skim coat that is breathable, lightweight, fibre-reinforced and water-repellent.
A unique outdoor skim coat that is breathable, lightweight, fibre-reinforced and water-repellent. Premixed powder mortar for outdoor skim coating, breathable, lightweight, fibre-reinforced, water-repellent, hydrated lime and hydraulic binder-based, specific for GASBETON® reinforced masonry skim coating without a base primer, to be applied by hand or with plastering machine. A base for subsequent decorating using plaster finish or silicate or siloxane-based paints. Skim coating thick.: 6-8 mm (minimum 5 mm). Grain size: 0 – 0.6 mm. Colour: white.

**MULTICEM**
Lightweight plaster for the base plastering of GASBETON® masonry.
Premixed powder mortar for base plasters, suitable for indoor and outdoor use, water-retaining, fibre-reinforced, water-repellent, low specific weight, hydrated lime-based, special hydraulic binders and light aggregates, specifically for application on GASBETON® masonry. Min. thick.: 1 cm internal, 1.5 cm external. Grain size: 0 – 1.3 mm. Colour: grey.

**IDRO ANCHORING MORTAR**
Water-repellent anchoring mortar for laying the first course of GASBETON® blocks.
M10, strongly water-repellent, pre-dosed mortar in two-compartment bags for indoor and outdoor use, siliceous sand-based with specific ARS binders and special additives, suitable for bedding the first course of load-bearing and non-load-bearing masonry, useful for limiting capillary ascending moisture without the use of waterproofing sheaths. Joint thick.: 20 mm.

**MULTIMALT**
Mortar for anchoring GASBETON® masonry to load-bearing structures.
Premixed mortar for indoor and outdoor use. grey colour, with calibrated water retention, hydraulic binder-based with siliceous sands, synthetic resins and special additives, designed for anchoring GASBETON® infill panels to the vertical load-bearing structures of buildings where there are no movement joints between masonry and pillars. Joint thick.: 10-20 mm.

**BIOKOLL LIGHT**
GASBETON® ecological glue and skim coat for mineral insulation panels and GASBETON® skim coat for internal walls.
Premixed powder NHL natural hydraulic lime-based, selected light aggregates, reinforcement fibres and additives to improve workability and adhesion to the substrate. Suitable for carrying out reinforced internal skim coating on Gasbeton masonry with a particularly ecological, breathable and healthy product. Skim coating thick.: 5mm. Grain size < 1.25 mm. Colour: beige.

**MYKOLL**
Glue and skim coat for the application of B/ THERMO mineral insulating panels at thermal bridges.
Premixed powder composed of cement, limestone aggregates, additives, resins and cellulose, suitable for bonding B/THERMO Insulating panels made of calcium hydrate on reinforced concrete load-bearing structures and for carrying out rustic reinforced skim coating prior to the external plastering cycle. Bonding-skim coating thick.: 3mm-4mm. Grain size < 0.8 mm. Colour: white.
4 solutions for interior finishes

**PLASTER ➔ GYPSUM FINISH**

Traditional thick solution with smooth gypsum finish

**SKIM COATING ➔ CLADDING**

Thin solution for tiled kitchens and bathrooms

**MULTICEM** base plaster thick. 1÷1,5 cm

**INCOLLARASA** base skim coat thick. 2 mm

Finishing layer (2/3 days after base plaster)

Decoration (20/22 days after finishing layer)
Breathable paint (washable in kitchen and bathrooms).
Avoid quartz or resin finish.

Decoration (30 days after smoothing)
Tile cladding.

**SKIM COATING ➔ GYPSUM FINISH**

Fast, thin solution with very smooth finish

**SKIM COATING ➔ SMOOTH FLOAT FINISH**

Fast, thin solution with coarse finish

**INCOLLARASA** base reinforced skim coat with glass-fibre mesh min 75 g/m² thick. 5 mm

**INCOLLARASA** base reinforced skim coat with glass-fibre mesh min 75 g/m² thick. 5 mm

Finishing layer (same day)

Decoration (20/22 days after finishing layer)
Breathable paint (washable in kitchen and bathrooms).
Avoid quartz or resin finish.
2 solutions for **exterior** finishes

**PLASTER ➔ SKIM COAT**

Solution with painting or plaster finish decoration

**SKIM COATING ➔ FINISH**

2 solutions for **exterior** finishes

**PLASTER ➔ SKIM COAT**

Solution with painting or plaster finish decoration

**SKIM COATING ➔ FINISH**

Decoration (20/22 days after finishing layer)
Siloxane, acryl-siloxane, silicate-based plaster finish.

Decoration (20/22 days after finishing layer)
Siloxane, acryl-siloxane, silicate-based plaster finish.

**Products for **block assembly** and restoration**

**Reduced mirroring masonry-pillar joint in low seismic zone sealed with MULTIMALT**

**Bonding of blocks with INCOLLARASA**

**GASBETON® PRIMER**
Acrylic primer for indoor and outdoor use to be diluted according to the different uses

**Bedding of 1st course MALTA ANCORANTE IDRO**

**Bedding of 1st course MALTA ANCORANTE IDRO**

Restorations using INCOLLARASA mixed with GASBETON® powder

* MULTIMALT facilitates anchoring but does not allow thermal expansion of the masonry. Alternatively, it is advisable to insert the GASBETON® Shock Absorbing Band, anchor the infill to the frame with metal pins and seal the joint with GASBETON® Adhesive.
Laying recommendations

Finish the masonry once it has completed the initial settling and disposed of the production moisture.
Do not apply the products at too low (<5 °C) or high (>30 °C) temperatures, in the blazing sun, in strong wind or driving rain.
Once laid, the products must be protected from rain, frost and rapid drying due to high temperatures or excessive wind.
Do not wet the masonry under normal conditions, moisten it only in very hot or windy climates. Prepare the substrate, levelling out any irregularities with a special trowel, removing excess (protruding) joint sealing glue and inconsistent parts with a hard sorghum broom or spatula. Remove dust with a broom or compressed air.
Remove oils and greases with suitable degreasers.

Preparing the substrate

PREPARING UNEVEN SUBSTRATES
Pre-treat concrete surfaces “flush to the wall” with GASBETON® PRIMER or by applying an elastic skim coat with a notched trowel, creating cross-coated surface notching. For surfaces that are particularly absorbent or have a different degree of absorption, apply an open (non-covering) rendering mortar with products suitable for the type of substrate or apply GASBETON® PRIMER.

RESTORATION AND SEALING
Restoring technical installation tracks (after light wetting and dust removal) and any gaps left between adjacent blocks with INCOLLARASA mixed with GASBETON® powder. Along perimeter joints or large gaps, fill with GASBETON® polyurethane adhesive up to the level of the masonry, then seal on the surface with INCOLLARASA.

REINFORCING MESH
Around joints between uneven materials, technical installation tracks, technical boxes, at the corners of openings and balconies, reinforce the MULTICEM plaster by laying an alkali-resistant glass-fibre mesh in the centre of its thickness, 4x4 mm and weight min. 150 gr/sqm, overlapping the masonry by 20/30 cm.

PRE-SKIM COATING OF INSULATION ON THERMAL BRIDGES
In the case of thermal bridge insulation with calcium hydrate panels (B/THERMO), EPS or cork, carry out a skim coat reinforced with elastic skim coat (Mykoll) before the plaster cycle, interposing an alkali-resistant glass-fibre mesh, mesh 4x4 mm and weight min. 150 gr/sqm, overlapping the masonry by 20/30 cm.

Execution procedures: plaster and skim coating cycles for interiors

1ST STEP – BASE LAYER

SIMPLE PLASTERING WITH MULTICEM

Arrange adjustment bands and corner guards all over the wall. Apply by hand or spray with a plastering machine a 1 - 1.5 cm thick layer of MULTICEM, moving from the bottom to the top. Within 40 minutes, level with an aluminium levelling bar with alternating right-left movements. To make thicker layers, apply the subsequent layers (max. single layer thickness 1.5 cm) using the “wet-on-wet” technique, having about 2 hours to pass between coats. On the same day or at the latest on the following day, depending on the weather conditions, perform levelling “scratching”, then make a surface lamination with a large American trowel and re-compact the surface broken up by the “scratching”. MULTICEM can also be finished rustic in interiors. In this case, pass a wet sponge trowel to eliminate small irregularities, even out the surface and apply paint directly. Min. thick. finished plaster: 1 cm.

SIMPLE SKIM COATING WITH INCOLLARASA

Thin skim coating with INCOLLARASA. Alternatively, the entire surface to be tiled can be treated with a suitable primer or plastered with MULTICEM. In areas subject to waster splashes, skim coat with waterproofing cement mortar.

REINFORCED SKIM COATING WITH INCOLLARASA

Apply a first coat of INCOLLARASA on the substrate with a notched trowel. Position the alkali-resistant glass-fibre mesh (mesh 4x4 mm, weight from 75 g/sqm to 160 g/sqm) and apply the second (final) coat of INCOLLARASA “wet-on-wet” with a smooth trowel, passing horizontally and vertically until you achieve a flat surface and total coverage of the mesh, which must be in the upper third of the overall thickness of the skim coating. Recommended final thick.: 5 mm.

2nd STEP – FINISHING LAYER

SIMPLE SKIM COATING WITH INTERIOR MULTIRASO

After the initial hardening and drying of MULTICEM and INCOLLARASA (2/3 days depending on climatic conditions), skim coat with INTERIOR MULTIRASO.

It is best to dampen surfaces beforehand. Apply the product on the substrate with a large smooth American trowel, coating it with horizontal and vertical motions until the surface is flat. Depending on the desired thickness and finish, apply two or more coats in the same day, using the “wet-on-wet” technique, leaving at least one hour between coats. To obtain a particularly smooth effect, dampen the surface slightly and smooth with a small American trowel. Max. thick.: 2 mm per single coat, 5 mm for the finished layer.

SMOOTHING WITH INCOLLARASA

By the end of the day that the base layer was laid with INCOLLARASA, perform smoothing with a sponge trowel, again with INCOLLARASA, in order to obtain a perfectly flat surface.

3rd STEP – DECORATION

DECORATING WITH PAINT

Decoration must be carried out when the substrate is fully cured and matured (at least 20/22 days after skim coating with INTERIOR MULTIRASO or smoothing with INCOLLARASA). Decorate with breathable paint (washable in the kitchen and bathrooms) or low elastic modulus decoration materials. Avoid quartz or resin finish.

DECORATING WITH TILES

Indoor coatings can be applied on GABETON® masonry after treating the substrate with GABETON® PRIMER diluted with water 1:5 or after applying a thin skim coating layer with INCOLLARASA. Bond the tiles with a low elastic modulus glue and seal the joints with waterproof products.
Execution procedures: plaster and smoothing cycles for **exteriors**

**1ST STEP – BASE LAYER**

Arrange adjustment bands and corner guards all over the wall. MULTICEM can be applied by hand or sprayed with a plastering machine.

**SIMPLE PLASTERING WITH MULTICEM**

Apply a 1 - 1.5 cm thick layer of MULTICEM, moving from the bottom to the top. Within 40 minutes, level with an aluminium levelling bar with alternating right-left movements. To make thicker layers, apply the subsequent layers (max. single layer thickness 1.5 cm) using the “wet-on-wet” technique, having about 2 hours to pass between coats. On the same day or at the latest on the following day, depending on the weather conditions, perform levelling “scratching”, then make a surface lamination with a large American trowel and re-compact the surface broken up by the “scratching”. Min. thick. finished plaster: 1.5 cm.

**REINFORCED PLASTERING WITH MULTICEM or MALTACOLLA**

When finishing with external cladding, MULTICEM must be applied reinforced in 2 - 2.5 cm thickness, laying electro-welded galvanised steel mesh Ø 4 mm mesh 5 x 5 cm with special spacers and fixing it to the blocks by means of dowels (Fischer GB10 type for Evolution and Symic, GB14 for Active and Energy or SXR10x80T) in no. min. 6/sqm (no. of dowels depending on the type of block and the weight of the cladding).

Alternatively: mix MALTACOLLA M10 RS with GASBETON® PRIMER diluted with water in ratio 1:3, spread the first coat on the masonry with a trowel, apply an alkali-resistant glass-fibre mesh, mesh 10x10 mm, weight about 125 g/m², and anchor it to the masonry with specific GASBETON® dowels. After 2-6h, spread the second coat of MALTACOLLA M10 RS “wet-on-wet” with a smooth trowel until you obtain a flat surface to completely cover the dowels and the mesh, which must be in the upper third of the overall thickness of the skim coating (7-8mm).

**2nd STEP – FINISHING LAYER**

**REINFORCED SMOOTHING WITH EXTERIOR MULTIRASO**

After the initial hardening and drying of MULTICEM and (6/7 days depending on climatic conditions), skim coat with EXTERIOR MULTIRASO (grain size < 1.3 mm) or INCOLLARASA (grain size < 0.6 mm). It is best to dampen surfaces. Apply the product on the substrate with a large American notched trowel, coating in a vertical direction. Place an alkali-resistant glass-fibre mesh (mesh 4x4 mm, 150-160 g/sqm) in the upper third of the total thickness of the skim coating and apply the second coat “wet-on-wet”. Finish with a sponge trowel, moistening with water if necessary, until a uniform, even surface is obtained.

In case of subsequent application of thick coloured plaster finish, you do not have to sponge the surface but you may simply scratch it with a large American trowel.

EXTERIOR MULTIRASO is a water-repellent and fibre-reinforced product so, for outdoor applications, it is to be considered the most precautionary solution compared to the use of INCOLLARASA.

Max. thick.: 2 mm per single coat, 5 mm for the finished layer.

**3rd STEP – DECORATION**

**DECORATING WITH PAINT OR PLASTER FINISH**

Decoration must be carried out when the substrate is fully cured and matured (20/22 days after skim coating with EXTERIOR MULTISKIM or BONDSKIM). Decorate with breathable, water-repellent coloured paints or with siloxane, acryl-siloxane, silicate-based plaster finishes. The use of dark colours on façades increases surface tension and consequently the risk of cracking.

We do not recommend the application of resins, quartzes or other similar finishes that create excessive tension on the substrate during drying.

**DECORATING WITH TILES ON EXTERIORS**

Once the MULTICEM or reinforced MORTARGLUE M10 has completely matured (30 days), glue the external cladding with an elastic adhesive suitable for the type of cladding, using the double-spread technique. We recommend the use of slabs/tiles of limited thickness and size and the utilisation of a suitable safety restraint system for the individual slabs (i.e. retractable steel hooks fixed to the support with dowels). The cladding must be laid with 5 - 6 mm joints treated with special elastic sealants that are as vapour-permeable as possible. Insert expansion joints, approximately every 3 m vertically and 6 m horizontally.

A dry solution with a ventilation system capable of removing moisture to the glued cladding is preferable. (See sol. below)

In this case, apply MULTICEM or non-reinforced INCOLLARASA before anchoring the substructure to the façade. Use suitable dowels (i.e. Fischer SXRL or FIS V), fix the chosen restraint system (metal substructure, point system, mixed system) to the building structure and masonry, then lay the cladding slabs.
IDRO block

From the functional need to reduce thermal bridges at the base of traditional masonry and, at the same time, the transmission of any ascending moisture comes the new IDRO Block. In addition to its excellent thermal insulation power and high compressive strength, this product offers much lower absorption values compared to standard blocks, thanks to the use of special waterproofing agents evenly distributed throughout the entire volume of the block.

**Fields of application:** IDRO blocks are ideal for the construction of the first course of bricks at the base of traditional masonry and in GASBETON® in order to inhibit moisture and, at the same time, reduce linear thermal bridges. It is suitable both for internal partitions and external walls, including load-bearing in seismic zones. It is useful in basements, ground floors and in all areas where there are balconies or terraces with a danger of water stagnation.

**Product preparation:** IDRO blocks are delivered ready-to-use on pallets. They do not lose their protection even if cut.

<table>
<thead>
<tr>
<th>Performance:</th>
<th>EVOLUTION IDRO</th>
<th>SYSMIC IDRO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density p dry Kg/m³</td>
<td>480</td>
<td>580</td>
</tr>
<tr>
<td>Compressive strength f_{ck} N/mm²</td>
<td>2.8</td>
<td>≤ 5</td>
</tr>
<tr>
<td>Shear strength f_{vk} N/mm²</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Thermal conductivity λ_{dry} W/mK</td>
<td>0.110</td>
<td>0.130</td>
</tr>
<tr>
<td>Dimensions L x H cm</td>
<td>60 x 12.5 o 25</td>
<td>60 x 12.5 o 25</td>
</tr>
</tbody>
</table>

**Available thickness:**

<table>
<thead>
<tr>
<th>Length</th>
<th>Height</th>
<th>IDRO EVOLUTION</th>
<th>IDRO SYSMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>8 cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>10 cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>12 cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>15 cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>20 cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>24 cm</td>
<td>24 cm</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>30 cm</td>
<td>30 cm</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>35 cm</td>
<td>35 cm</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>37.5 cm</td>
<td>37.5 cm</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>40 cm</td>
<td>40* cm</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>45* cm</td>
<td>-</td>
</tr>
<tr>
<td>60 cm</td>
<td>12.5* cm</td>
<td>50* cm</td>
<td>-</td>
</tr>
</tbody>
</table>

* Upon request

**Application:**
The IDRO block must be placed on a suitable layer of MALTA ANCORANTE IDRO.
To lay subsequent GASBETON® blocks, use the specific Incasarasa GASBETON®.
In the case of bricks, use cement mortar for traditional walls.
If several vertical courses of IDRO Block are foreseen, it is necessary to glue them with INCOLLARASA GASBETON® using a special notched trowel, taking care to offset the vertical joints.
**GASBETON® adhesive**

**FAST**
- 15 minutes Initial hardening

**BENEFITS**
- 40-60 metre edge

**STRONG**
- 500 Kg/dm² adhesion to concrete

**EFFECTIVE**
- up to 12 sqm with one canister

For the laying of aerated autoclaved concrete blocks

Based on a special low-expanding single-component polyurethane foam formulated for thin-jointed masonry. Ideal for laying GASBETON® blocks, its low-pressure formulation ensures stability and prevents the deformation of masonry during and after work.

**Features:**
- Extremely fast laying
- High site cleanliness
- Reduction of thermal bridges in joints
- Less site equipment
- Constant thickness of joints between blocks
- Quick grip in just 15 minutes
- Does not require any construction site equipment

**Fields of application:**
- GASBETON® block laying
- Joint sealing between masonry and structures

**Adhesion values on different substrates:**
- Aerated autoclaved concrete blocks: max* (with 1 mm joint)
- Plasterboard Sheets: max* (with 1.5 mm joint)
- Insulating polystyrene and mineral wool panels: max* (with 3 mm joint)
- Concrete: 500KPa (with 1 mm joint)
- Wood: 260KPa (with 1.5 mm joint)
- Steel: 130KPa (with 1.5 mm joint)

* bonding resistance greater than the tear resistance of the substrate.

**Available in 2 versions**

**Version with spout**
- (already supplied)

**Version with gun**
- (can be purchased separately)

**New notched trowel for the correct laying of the blocks**
- A single trowel for all thicknesses

**Accessories and equipment**

- Notched scoop trowel from 5 to 40 cm
- Rubber mallet
- Trowel for sanding and flattening
- Manual cutting saw
- Flat pre-drilled connector for wall anchoring
- Shock-absorbing band
  - Length = 300 cm
  - Width = 10 cm
  - Thick. = 1 x 2 cm
- MURFOR EFS/Z truss for joint reinforcement
  - Spess. = 190 mm
- MURFOR COMPACT wire mesh tape for joint reinforcement
  - A40 (thick. 40 mm)
  - A80 (thick. 80 mm)
- Electric band saw
- Handles for lifting blocks
- Electric cutter groove-cutting machine

**GASBETON® block laying**

**Thin vertical/horizontal joint sealing**

**FISCHER fixing systems.** On GASBETON® masonry, it is possible to fix any type of lead using suitable dowels. For details and capacity values, visit [http://www.fischeritalia.it/famiglie/fissaggi-su-calcestruzzo-cellulare/](http://www.fischeritalia.it/famiglie/fissaggi-su-calcestruzzo-cellulare/)
Preparing the laying glue:
INCOLLARASA and MALTA ANCORANTE IDRO must be mixed evenly with the mixing water until optimal plasticity is achieved.

Laying the first course:
Apply a layer of MALTA ANCORANTE IDRO onto slab or foundation. Now, lay the IDRO block, ensuring maximum planarity both longitudinally and transversally. In this way, masonry work above is protected, thanks to a considerable reduction in rising damp.

Alignment and levelling:
Use the notched trowel to lay GLUESKIM on the vertical (if smooth block) and horizontal side of each block. The thickness of the joints is about 1.5 mm thanks to the trowel notching, which regulates adhesive application. To ensure suitable grip, the vertical joints must be staggered at a distance of between 1/3 and 1/2 of the length of the blocks.

Creating vertical stiffening:
it is possible to make pillars in reinforced concrete thanks to the hollow blocks, suitably armed and filled with concrete. These stiffening systems are essential in many situations, such as in large masonry or in the presence of heavy frames such as REI or reinforced doors.

Creating horizontal stiffening:
with the grooved blocks, it is possible to create horizontal stiffening kerbs for large masonry and lintels in situ, filled with concrete and suitably dimensioned reinforcement rods. These stiffeners are required, for example, at the top of walls with a height of ≥ 4 m or at the base in the case of yielding support structures or to realize lintels in situ as an alternative to the use of GASBETON® REINFORCED LINTELS.

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Creating internal partitions:
GASBETON® blocks can be used to effortlessly create internal partitions between all types of rooms. Particular care must be taken to connect the partitioning to the main walls in order to make it more stable; this connection can be achieved, for example, by burying suitable metal connectors in the joints between blocks. As an alternative to using GLUESKIM, such masonry can be built by using the special polyurethane GASBETON® ADHESIVE to stick blocks together in a faster, more effective and cleaner way.

System housing:
The commissioning of electrical and plumbing systems is aided by easily being able to create suitably-sized compartments for them in walls, using electrical or manual groove-cutting machines, thus minimising masonry assistance times. Compartments for electrical boxes, pipes and any clamps are easily created using special milling cutters or a simple jig saw for wood. It is advisable to restore the chases with GLUESKIM mixed with water and swarf (preventing cracks due to shrinkage). When restoring large scale breakages, it is necessary to provide surface protection with fibreglass mesh reinforced pre-skim coating compounds.

Anchors and fixings:
The installation of door and window frames is also very simple. They are fixed directly to the walls with suitable wall plugs, without the need for gripping with clamps or cement mortar. Even any loads such as furniture, toilets, systems, etc. applied to the walls can be easily fixed with suitable dowels accompanied by corresponding metal screws.

Finishes and plaster:
After cleaning the surface to be plastered with a sorghum broom and removing any glue residues, proceed with the application of MULTICEM plaster specific for GASBETON®. On the external surface of the infill panels, apply a MULTISKIM reinforced skim coat over the MULTICEM primer plaster before proceeding with the finishing, using breathable products with low elastic modulus (and that are also water-repellent, on external areas).

Alternatively, it is possible to carry out a reinforced skin coating directly on the masonry using RASOFIN on exteriors or INCOLLARASA on interiors.

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Technical features

Thermal insulation

GASBETON® masonry offers excellent thermal insulation properties thanks to the material’s characteristic cellular structure. In accordance with the harmonised standard UNI EN 771-4, the thermal conductivity of the product \( \lambda_{10\,\text{dry}} \) (at a temperature of 10°C in the dry state) is declared both on the basis of direct measurement tests carried out according to standards ISO 8302 and UNI EN 12667 at the Politechnic University of Bari and according to standard UNI EN 1745 (depending on the gross dry mass).

To calculate the thermal transmittance \( U \) of the masonry (according to UNI EN ISO 6946), it is necessary to use the design thermal conductivity \( \lambda \) (useful) obtained by multiplying the basic thermal conductivity \( \lambda_{10\,\text{dry}} \) dry by a greater coefficient \( F_m \) that takes into account the moisture present in the masonry under operating conditions.

It is the designer’s task to determine all the necessary parameters (based on the performance declared in the D.o.P.) in order to assess the suitability of the product according to its use.

Fire resistance

The special physical and chemical characteristics of aerated autoclaved concrete make GASBETON® one of the most suitable products for creating fire-resistant walls. The materials making up the GASBETON® mixture are of mineral, inorganic and incombustible origin and do not release toxic fumes in case of fire. Furthermore, the cellular structure, rich in air cells, gives GASBETON® high thermal insulation performance, useful for containing the temperature of the compartments.

Reaction to fire

Aerated autoclaved concrete elements and premixed mortars bearing the GASBETON® trademark are considered Euroclass A1 (ex class 0, non-combustible), without having to be tested, since they are included in the list in Annex C to Ministerial Decree 25/10/07. No type approval is therefore required and, as regards the forms to be submitted to the Provincial Fire Brigade Commands, the EC declaration of conformity (which accompanies the supply of each product) can simply be attached to the application for the fire prevention certificate.

Note: * 50 mm thicknesses are to be used only for thermal bridge correction, not for masonry.

Fire resistance

The fire resistance of GASBETON® EVOLUTION non-load-bearing walls is declared on the basis of tests carried out at the CSI recognised laboratory in Bollate in accordance with the procedures established by standard UNI EN 13501-2:2008 on unplastered walls in blocks assembled with GASBETON® glue.

Evolution, Energy and Sysmic non-load-bearing masonry with thickness >=24cm can be classified EI240 on the basis of the values shown in table D.4.3 of Annex D of Ministerial Decree 16/02/07 (Tabular Method).

Evolution and Sysmic load-bearing walls are instead classified REI180 for thickness 24cm and REI 240 starting from thickness 30cm in ref. to Circ. of Min. Int. prot.1968 of 15/02/08 with limitations H<8m and H/th<=20. In both cases, reference should be made to the material defined as “light concrete solid blocks” according to the indications given in the letter of the Ministry of the Interior prot. 585 sent to Assobeton on 14/01/10. For thick. >=15cm and walls H>4m, it is necessary to provide a kerb at an height of less than 4m that offers a constraint function equal to that offered by the inter-storey floors (limitation reported in Tab. D.4.3 of Min. Decree 16/02/07).

GASBETON® EVOLUTION

<table>
<thead>
<tr>
<th>Fire resistance</th>
<th>ACTIVE</th>
<th>ENERGY</th>
<th>EVOLUTION</th>
<th>SYSMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-load-bearing wall</td>
<td>50* 240</td>
<td>EI 240</td>
<td>EI 180</td>
<td>REI 180</td>
</tr>
<tr>
<td>Fire resistance</td>
<td>Note: * 50 mm thicknesses are to be used only for thermal bridge correction, not for masonry.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-load-bearing wall</td>
<td>100* 240</td>
<td>300 350 375 400</td>
<td>EI 240</td>
<td></td>
</tr>
<tr>
<td>Fire resistance</td>
<td>Note: * 100 mm thicknesses are to be used only for thermal bridge correction, not for masonry.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-load-bearing wall</td>
<td>50 80* 100* 120 150** 200 240 300 350 375 400</td>
<td>EI 120 EI 180 EI 240 REI 180 REI 240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load-bearing wall</td>
<td>- - - - - -</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire resistance</td>
<td>Note: * Fire resistance certificates were obtained by testing smooth 8 and 10 thickness blocks with vertical joint glued. If interlocking blocks are used, it is possible to obtain the same result gluing the vertical joint anyway. The classification ratio can be extended to all thicknesses greater than 10. ** For thick. 15cm, consider EI180 for walls H&lt;4 in application extension of the classification ratio of thickness 10. EI120 according to the tabular method for H walls between 4 and 4.5 with a reinforced concrete kerb at a height of less than 4m.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-load-bearing wall</td>
<td>240 300 350 375</td>
<td>EI 240</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load-bearing wall</td>
<td>REI 180</td>
<td>REI 240</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUMMERWINTER
Mechanical strength

GASBETON® solid and ground element blocks (characterised by millimetric dimensional tolerances) comply with UNI EN 771-4 (Specification for masonry units - Part 4: aerated autoclaved concrete masonry units) and bear the CE marking in category I, according to the 2+ conformity certification system. The rigour of the GASBETON® production process makes it possible to declare a compressive strength value lower than the actual resistance of the blocks in 95% of cases.

GASBETON® INCOLLARASA and MORTACOLLA RS are premixed thin-layer masonry mortars from category M5 and M10, respectively, with guaranteed performance for the assembly of GASBETON® blocks and are CE marked in accordance with UNI EN 998-2, according to the 2+ certification system.

### Physical and mechanical properties

<table>
<thead>
<tr>
<th></th>
<th>EVOLUTION</th>
<th>SYSMIC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical and mechanical properties</strong></td>
<td><strong>Average val.</strong></td>
<td><strong>Char. val.</strong></td>
</tr>
<tr>
<td>Average masonry density (including GASBETON® glue and moisture balance) ( G_0 )</td>
<td>600 ±60 Kg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Characteristic compressive strength in the direction of vertical loads on cubic specimen ( f_{cv} )</td>
<td>-</td>
<td>≥ 3.2 N/mm²</td>
</tr>
<tr>
<td>Characteristic initial shear strength of masonry ( f_{sv0} )</td>
<td>-</td>
<td>0.1 N/mm²</td>
</tr>
<tr>
<td>Normal secant modulus of elasticity of masonry ( E )</td>
<td>1726 N/mm²</td>
<td>-</td>
</tr>
<tr>
<td>Secant tangential modulus of elasticity of masonry ( G )</td>
<td>690 N/mm²</td>
<td>-</td>
</tr>
<tr>
<td>Dimensional stability for moisture ( e_{cs,ref} )</td>
<td>≤ 0.06</td>
<td>-</td>
</tr>
</tbody>
</table>

Acoustic insulation

Despite their light weight, GASBETON® walls offer good sound insulation values thanks to both the porosity of the material and the precision of the installation obtained with a “thin joint,” which prevents the formation of acoustic bridges that are typical of traditional structures such as hollow blocks that require a thicker mortar joint. Moreover, it has been possible to verify from experimental tests carried out that the presence of technical installation tracks, carried out with a suitable electric groove-cutting machine, has no influence on the final performance of the wall.

The soundproofing power values of GASBETON® walls shown in the following table refer to walls plastered with 1.5 cm of MULTIGIEM plaster on both sides.

### Performance Table

<table>
<thead>
<tr>
<th>Thickness</th>
<th>Active</th>
<th>Reflected</th>
<th>Sound Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 mm</td>
<td>240</td>
<td>375</td>
<td>-</td>
</tr>
<tr>
<td>300 mm</td>
<td>350</td>
<td>400</td>
<td>-</td>
</tr>
<tr>
<td>350 mm</td>
<td>400</td>
<td>450</td>
<td>-</td>
</tr>
<tr>
<td>400 mm</td>
<td>450</td>
<td>500</td>
<td>-</td>
</tr>
</tbody>
</table>

In order to obtain high soundproofing power values with a limited wall thickness, it is possible to create a double wall with 8, 10 or 12 cm thickness Gasbeton Evolution blocks, interposing suitable acoustic insulators. Some stratigraphic layouts are given here by way of example.

- Rw 56dB: Multicem + Evolution 12cm + Incollarasa + Mineral wool 6cm + Evolution thick.8 + Multicem
- Rw 56dB: Multicem + Evolution 12cm + Incollarasa + Mineral wool 4cm + Evolution thick.6 + Multicem
- Rw 65dB: Multicem + Evolution 8cm + Incollarasa + Rubber SBR 2cm + Air 2cm + Evolution thick.10 + Multicem
- Rw 65dB: Plasterboard + Mineral wool 3.5cm + Evolution 15cm + Mineral wool 3.5cm + Plasterboard

Specifications

Available at [www.gasbeton.it](http://www.gasbeton.it) in the DOWNLOAD section