



# SOTTOVOCE

## LIGHTWEIGHT SOUND-ABSORBING PLASTER

| SOTTOVOCE<br>Lightweight sound-absorbing plaster |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DESCRIPTION                                      | <p>Sottovoce is a spray-applied sound-absorbing plaster specifically designed for interior surfaces, based on hydraulic binders, lightweight components, and special additives. It provides a pleasant white, grey or anthracite finish and only requires the addition of mixing water on site to form a pumpable and machine-applicable compound. Sottovoce is ideal for new constructions, refurbishment, or renovation of existing buildings; it can be applied on plasterboard panels, concrete, and steel surfaces. It is mainly used for convention centres, schools, canteens, religious buildings and places where it's necessary to correct the internal acoustic reverberation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CHARACTERISTICS AND ADVANTAGES                   | <p>With an aesthetically pleasing and seamless surface, Sottovoce offers excellent fire reaction characteristics. Sottovoce is classified as A2-s1,d0 (UNI EN 13501-1). Sottovoce only requires the addition of water and the use of properly equipped plastering machines. It can be applied in layers starting from 13 mm thickness. Application is fast and efficient.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| SURFACE PREPARATION                              | <p><b>Brick surfaces:</b> before applying Sottovoce, an assessment must be carried out to determine whether the surfaces are suitable to receive the product. All surfaces must be clean, dry, and free from water-soluble materials, oil, or other contaminants. Surfaces must be solid, free of loose materials, well bonded to a substrate, and capable of supporting the wet weight of Sottovoce. For surfaces where plaster is present, proper adhesion of the plaster to the masonry must be verified. In addition, the following steps are required: appropriate surface scoring; wall washing to remove loose materials and/or residual dust; surface treatment with a bonding primer approved by Edilteco (Edilkronos Universal).</p> <p><b>Plasterboard panels:</b> partitions and ceilings made with gypsum board panels must be carefully treated with a suitable waterproof primer before applying Sottovoce (Edilkronos Universal by Edilteco). It is recommended to apply a layer of Sottovoce with a thickness of less than 25 mm.</p> <p><b>Concrete surfaces:</b> newly cast concrete must cure for at least 60 days before the application of Sottovoce. Any loose material and parts left after the removal of formwork must be eliminated to obtain a smooth surface. Dust and other foreign materials must be removed before applying Sottovoce. Before the application of Sottovoce, apply a bonding primer approved by Edilteco (Edilkronos Universal) over the entire surface.</p> <p><b>Galvanized steel surfaces:</b> remove any dirt and oils that may be present on the galvanized steel surface. Before the application of Sottovoce, apply a bonding primer approved by Edilteco (Edilkronos Universal) over the entire surface.</p> <p><b>All non-galvanized steel surfaces:</b> remove rust, mill scale, dirt, and oils that may be present on the steel surface. All non-galvanized steel surfaces must be coated with an approved anti-rust paint. Subsequently, and in any case before the application of Sottovoce, apply a bonding primer approved by Edilteco (Edilkronos Universal) over the entire surface.</p> |
| MIXING AND APPLICATION                           | <p><b>Sottovoce can be applied using the following equipment:</b></p> <ol style="list-style-type: none"><li>1. A continuously operating plastering machine such as the PFT G4 or similar, properly configured. The machine must be equipped with a turbo or mini-turbo, a full-blade helical mixer, a specific stator for lightweight products, a long-pitch screw with pin, and a cap or nozzle with a Ø 14 mm opening. We recommend adding a hopper extension to increase its capacity and keeping it filled during operation.</li><li>2. Sottovoce must be mixed and pumped using a plastering machine with a screw pump, powered hydraulically or electrically. Hydrate one bag of Sottovoce with 5.0 - 6.0 L of clean water. Mix for at least 3 minutes and no more than 5 minutes, then pour the mixture into the pumping hopper. Use a cap or nozzle with a Ø 14 mm opening.</li></ol> <p><b>Application:</b></p> <ol style="list-style-type: none"><li>1. For applications up to a maximum thickness <math>\leq</math> 13 mm: apply in a single coat.</li><li>2. For applications with a maximum thickness <math>\geq</math> 14 mm: apply a first layer of Sottovoce approximately 1 cm thick; wait for the setting phase (no less than 4 hours, no more than 24 hours), then apply any additional layers (maximum 2.5 - 3 cm per coat).</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| MIXING AND APPLICATION     | <b>In case of finishing Sottovoce with paint:</b><br>once fully cured, Sottovoce can be painted with breathable wall paints such as Ecap® STP Silicate Paint or Ecap® SP Silicone Paint, to be applied exclusively by spray.                                                                                                                                                                                                          |                                                     |      |      |      |                |      |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------|------|------|----------------|------|
| TEMPERATURE / VENTILATION  | <ul style="list-style-type: none"> <li>For application, the air and substrate temperature must be between +5 °C and +35 °C, and must be maintained during the application of Sottovoce and for the following 24 hours.</li> <li>To ensure proper ventilation for correct drying of the plaster after application, suitable measures must be taken: enclosed areas without air circulation and ventilation must be avoided.</li> </ul> |                                                     |      |      |      |                |      |
| DELIVERY AND STORAGE       | Sottovoce must be kept dry until the time of use. Product pallets must be stored off the ground, under cover, and away from damp surfaces. Any product that has been exposed to water prior to use must be discarded.                                                                                                                                                                                                                 |                                                     |      |      |      |                |      |
| ACOUSTIC ABSORPTION VALUES | Tested in situ at a thickness of 25 mm, Sottovoce achieved a weighted sound absorption coefficient $\alpha_w$ of 0.35, corresponding to the following set of practical sound absorption coefficients (ref. UNI EN ISO 11654).                                                                                                                                                                                                         |                                                     |      |      |      |                |      |
|                            | Frequency (Hz):                                                                                                                                                                                                                                                                                                                                                                                                                       | 125                                                 | 250  | 500  | 1000 | 2000           | 4000 |
|                            | $\alpha_p$ :                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.10                                                | 0.15 | 0.30 | 0.45 | 0.40           | 0.40 |
| TECHNICAL CHARACTERISTICS  | CHARACTERISTIC                                                                                                                                                                                                                                                                                                                                                                                                                        | VALUE                                               |      |      |      | REGULATION     |      |
|                            | Colour:                                                                                                                                                                                                                                                                                                                                                                                                                               | White / Grey / Anthracite grey                      |      |      |      | -              |      |
|                            | Packaged in:                                                                                                                                                                                                                                                                                                                                                                                                                          | Bags of 47 L<br>Pallet of n° 52 bags                |      |      |      | -              |      |
|                            | Typical dry density:                                                                                                                                                                                                                                                                                                                                                                                                                  | 200 kg/m <sup>3</sup>                               |      |      |      | EN 998-1       |      |
|                            | Thermal conductivity coeff.:                                                                                                                                                                                                                                                                                                                                                                                                          | 0.058 W/mK                                          |      |      |      | UNI EN 12667   |      |
|                            | Flexural strength:                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.1 MPa                                             |      |      |      | EN 998-1       |      |
|                            | Compressive strength:                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.2 N/mm <sup>2</sup>                               |      |      |      | EN 998-1       |      |
|                            | Fire reaction class:                                                                                                                                                                                                                                                                                                                                                                                                                  | A2-s1,d0                                            |      |      |      | UNI EN 13501-1 |      |
|                            | Water absorption:                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.1 kg/(m <sup>2</sup> min <sup>0.5</sup> )         |      |      |      | EN 998-1       |      |
|                            | Permeability to water vapour $\mu$ :                                                                                                                                                                                                                                                                                                                                                                                                  | 9                                                   |      |      |      | EN 998-1       |      |
|                            | Consumption:                                                                                                                                                                                                                                                                                                                                                                                                                          | $\approx 2.0$ kg/m <sup>2</sup> per cm of thickness |      |      |      | -              |      |

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 buildings sites the final characteristics of the products may be subject to substantial variations depending on the meteorological conditions and the installations. 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. Edilteco S.p.A. reserves the right to change the contents of this technical data sheets on its final judgements. The spreading of this data sheet through any media, supersedes and cancels the validity of any other technical data sheet previously published.