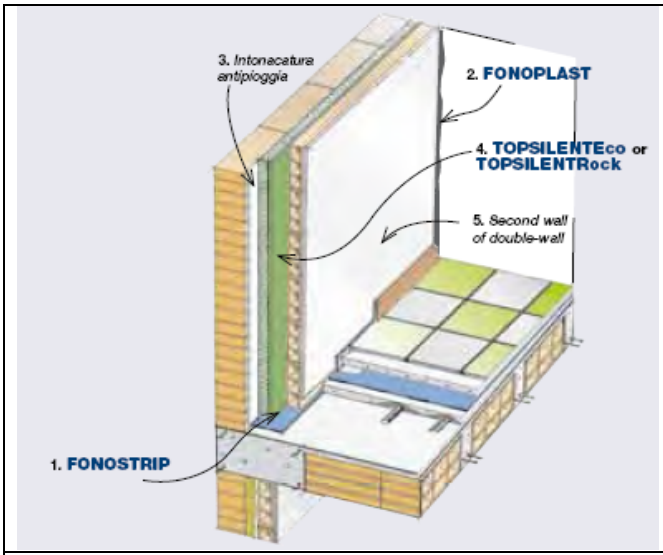
ACOUSTIC INSULATION OF EXTERNAL PERIMETER WALLS IN NEWLY CONSTRUCTED BUILDINGS

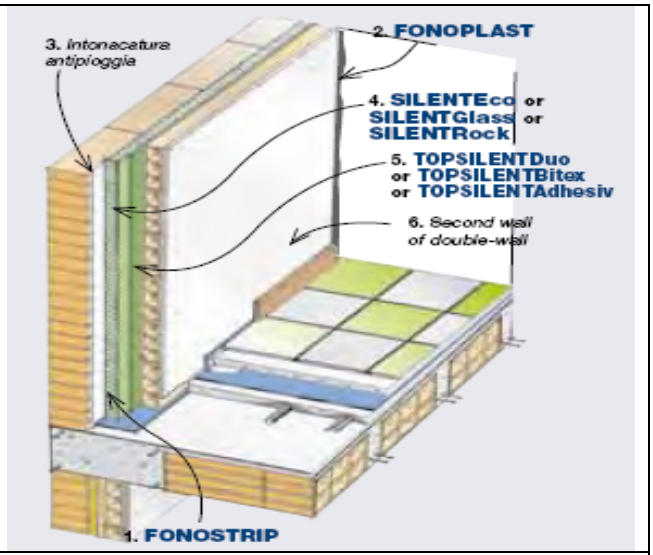


New external double-walls in masonry

The thermal-acoustic insulation of double external perimeter walls, separated by an air space (of which the internal face of the first wall is previously plastered to protect against rain and damp) will be accomplished by lining the space between the two walls with the insulation product:

• in self-bearing panels made of polyester fibre with density of 30 kg/m^3, non-toxic, heat-sealed and free from glues, airtightness r=3.90 KPa/sm^2 and thermal conductivity λ=0.037 W/m°K, coupled with a high density, air and vapour tight soundproof foil, type **TOPSILENTEco**, with thickness s=… cm.

Or alternatively:
• in self-bearing panels in polyethylene packaging, made of rock wool with density of 40 kg/m^3, airtightness r=14.9 KPa/sm^2, thermal conductivity λ=0.035 W/m°K and thickness s=… cm, coupled with a high density, air and vapour tight soundproof foil, to be turned over inwards, type **TOPSILENTRock**, with thickness s=… cm. The internal wall will be built on an elastomeric sound-damping strip with thickness s=4 mm and width at least more than 4 cm compared to the wall being erected, and dynamic rigidity under a load of 400 Kg/m^2 = 937 MN/m^3.



New external double-walls in masonry

The thermal-acoustic insulation of double external perimeter walls, separated by an air space (of which the internal face of the first wall is previously plastered to protect against rain and damp) will be accomplished by lining the space between the two walls with the insulation product:

• in panels with polyester fibre base, density of 20 kg/m^3, non-toxic, heat-sealed and free from glues, airtightness r=2.26 KPa/sm^2 and thermal conductivity λ=0.040 W/m°K, type **SILENTEco**, with thickness s=… cm.

Or alternatively:
• in self-bearing panels of rock wool with density of 40 kg/m^3, airtightness r=14.9 KPa/sm^2 and thermal conductivity λ=0.035 W/m°K, type **SILENTRock**, with thickness s=… cm.

Or alternatively:
• in panels with fibreglass base with density of 30 kg/m^3, airtightness r=19.5 KPa/sm^2 and thermal conductivity λ=0.032 W/m°K, type **SILENTGlass**, with thickness s=... cm that will be lined with plaster resistant to sound waves and water vapour, as follows:

• with a high-density phono-resistant foil with area mass of 4 Kg/m^2 based on a compound with critical frequency of over 85,000 Hz type **TOPSILENTBitex**.

	Or alternatively: • with a high-density phono-resistant foil based on a compound with critical frequency of over 85,000 Hz with dynamic rigidity (UNI EN 29052/1) s'=21 MN/m^3 and total area mass of 5 Kg/m^2 based on a compound with critical frequency of over 85,000 Hz type **TOPSILENTDuo**, laid with the face covered with the non-woven fabric directed to the wall.