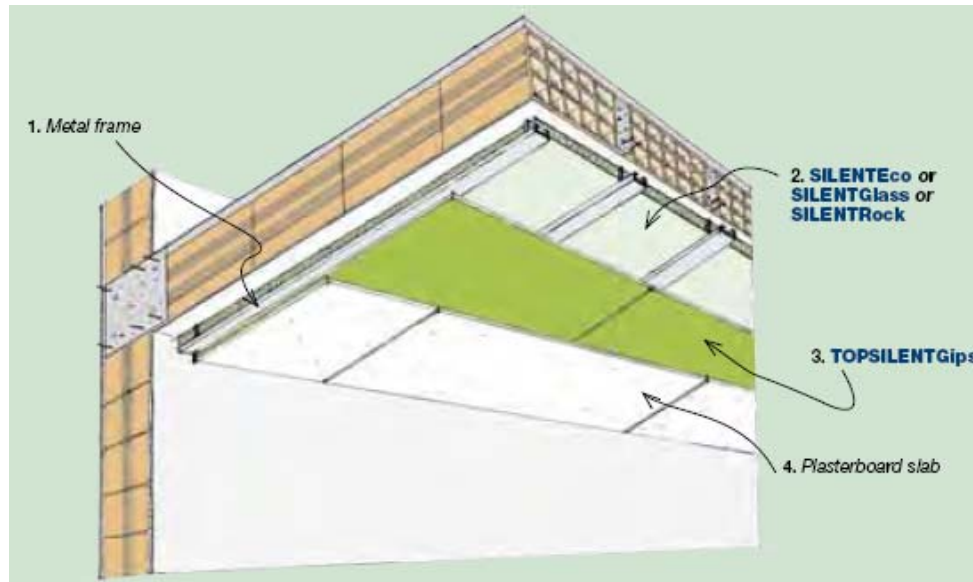


ACOUSTIC INSULATION OF CEILINGS AGAINST AIRBORNE AND FOOT TRAFFIC NOISE ON FIXED METAL FRAMEWORK



Existing floor with false-ceilings on adhering metal frame

The acoustic insulation against foot-traffic noise of the existing floors above dwelling will be obtained by a ... cm thick false-ceiling, in lined plaster, which delimits an interspace filled as follows:

- in panels with polyester fibre base, density of 20 kg/m^3 , non-toxic, heat-sealed and free from glues, airtightness $r=2.26 \text{ KPa/sm}^2$ and thermal conductivity $\lambda=0.040 \text{ W/m}^\circ\text{K}$, type **SILENTEco**, with thickness $s=... \text{ cm}$.

Or alternatively:

- in panels with fibreglass base with density of 30 kg/m^3 , airtightness $r=19.5 \text{ KPa/sm}^2$ and thermal conductivity $\lambda=0.032 \text{ W/m}^\circ\text{K}$, type **SILENTGlass**, with thickness $s=... \text{ cm}$.

Or alternatively:

- in self-bearing panels of rock wool with density of 40 kg/m^3 , airtightness $r=14.9 \text{ KPa/sm}^2$ and thermal conductivity $\lambda=0.035 \text{ W/m}^\circ\text{K}$, type **SILENTRock**, with thickness $s=... \text{ cm}$.

The ceiling will be cladded with a double layer of plasterboard panels with damping layer in-between screwed onto metal profiles of a frame next to the ceiling but insulated from the same with an adhesive extruded polymer gasket.

- The cladding will be made up of a first plasterboard panel pre-coupled with a high density and very high critical frequency soundproof foil, with thickness $s=16.5 \text{ mm}$ and mass per unit area of 15 kg/m^2 , type **TOPSILENTGips**, followed by laying a second plasterboard panel, thickness $>12\text{mm}$.

Joint-covering mesh tape, type **NASTROGIPS**, will be laid over the joining lines of the panels to reinforce the seal of the joints made with **STUCCOJOINT** sealing filler.