

BASIC THERMOACOUSTIC INDEPENDENT WALL



Acoustic insulation:

High-density membrane/ Cross-linked polyethylene with acoustic membrane



NOISE PROTECTION
M.A.D.® PRO 100

NOISE PROTECTION
FONODAN® 50

ADVANTAGES

- Shifts the system's resonance frequencies to less audible frequencies.
- The acoustic membrane improves low-frequency insulation in the plasterboard system.
- Absorptive for mid and high frequencies.
- The membrane is fixed to the back of the plasterboard.
- Acoustic membrane functions as a vapor barrier.
- Its thermal and acoustic insulation capacity can be increased by increasing the thickness of the structure and mineral wool.
- Lightweight system with good planarity, thinner profile, and faster installation.

LEGEND

Partition:

- ① Partition
- ② Acoustic insulation with mineral wool
- ③ Acoustic insulation FONODAN® 50
- ④ Gypsum board structure
- ⑤ Acoustic insulation M.A.D.® PRO 100
- ⑥ 15 mm gypsum board

APPLICATION AREAS

- Rehabilitation of existing vertical partitions.
- Lightweight backing with minimal thickness.
- Thermoacoustic improvement of vertical partitions



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TECHNICAL PRESCRIPTIONS

Function	Product	Description
Anti-resonant and damping acoustic insulation	FONODAN® 50	Cross-linked polyethylene foam and high-density membrane.
Anti-resonant acoustic insulation	M.A.D.® PRO 100	High-density aluminized bituminous sheet.

APPLICATION METHOD

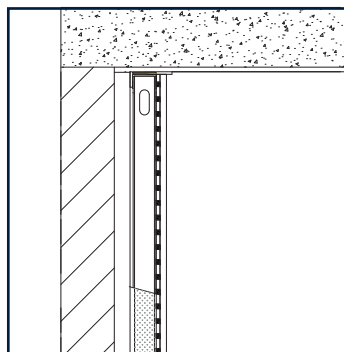
Thermoacoustic backing system consisting of:

Metal structure on a double-layer anti-resonant band FONODAN® 50, arranged peripherally on the metal structure of the backing. Absorbent material placed inside made of

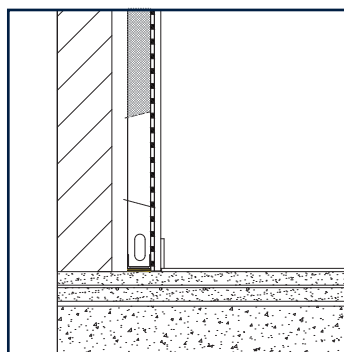
mineral wool with a density of 70 kg/m³, a 15 mm thick gypsum board over an acoustic membrane finished with a 10 kg/m² aluminized film and 5 mm thick M.A.D.® PRO 100, fixed to the structure with self-tapping screws.

Mass	ΔR_A
Partition of 100 < m ≤ 140 kg/m ²	21 dBA
Partition of 140 < m ≤ 160 kg/m ²	20 dBA
Partition of 160 < m ≤ 180 kg/m ²	19 dBA
Partition of 180 < m ≤ 200 kg/m ²	17 dBA
Partition of 200 < m ≤ 250 kg/m ²	15 dBA
Partition of 250 < m ≤ 300 kg/m ²	14 dBA

CONSTRUCTION DETAILS



Junction of wall with ceiling



Junction of wall with floor