

THERMOMAX BIT 45+5 mm



ADVANTAGES

Ideal in the plasterboard sector
It is not afraid of water
Also applicable on the roof

DESCRIPTION

Thermo-acoustic panel composed of a polyester fiber panel coupled to an elastomeric membrane for a total thickness of 50 mm.

The product has excellent soundproofing performance for plasterboard walls and counter-walls, but it can also be used for acoustic reclamation of industrial roofs.

Correct installation is guaranteed by sealing the joints with Rotocell AD adhesive band.

SIZE

| | | |
|-----------|-------------------|-----------------------|
| Thickness | mm | 45+5 mm |
| Format | Panel | 1,20 x 1,42 m |
| Packaging | Pallet | 42,6 m ² |
| Weight | Kg/m ² | 7,0 Kg/m ² |

TECHNICAL DATA

| | | | |
|----------------------|----------------|-------------|--------------------------------------|
| Noise reduction | R _w | 28 dB | UNI EN ISO 140/3 UNI EN ISO 717/1 |
| Thermal conductivity | λ | 0,0369 W/mK | |

SIZE

| | | |
|----------------------------|----------------|---------------------------------------|
| Thickness | D | 45,0*10 ⁻³ m |
| Side 1 temperature | t ₁ | 0,01 °C |
| Side 2 temperature | t ₂ | 20,01 °C |
| Medium temperature | t _m | 10,01 °C |
| Cold side heat flow | q ₁ | 17,4 W/m ² |
| Hot side heat flow | q ₂ | 17,2 W/m ² |
| Heat resistance | R | 1,157 m ² KW ⁻¹ |

SPECIFICATION ITEM

The acoustic insulation of the airborne noise of the vertical dividing partitions between different properties will be carried out by interposing the THERMOMAX BIT 45 + 5 panel in the cavity of the two bricks, a self-supporting thermo-acoustic panel with good acoustic and thermal performance composed of a special elastomeric membrane of 5 kg / m² coupled with a 45 mm thick polyester fiber sheet.

This product is supplied in sheets of 1.20 x 1.42 m and must be positioned taking care to perfectly match the edges and seal all the joints with the special ROTOCELLAD adhesive strip.

The soundproofing power of this product is equal to $R_w = 28$ dB (UNI EN ISO 140/3 and UNI EN ISO 717/1) and has a thermal conductivity $\lambda = 0.0369$ W / mK.

To obtain an effective acoustic result it is necessary that this product is laid taking care to arrive with the panel perfectly against the intrados of the floor, that the desolidarizing strip "STRISCIA POLYPRILL" has been laid at the base of the masonry and that the realization of the both horizontal and vertical mortar between one brick and another is executed in such a way as not to leave empty spaces that can become "acoustic bridges".

PAGES EXTRACTED FROM ORIGINAL CERTIFICATES

RAPPORTO DI PROVA
(Test Report)

CSI
Certificazione e Testing

N° **0035/DC/ACU/10_1**

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Data: **22/03/2010**
Date:

RAPPORTO DI PROVA
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N° **0010/DC/TTS/10**

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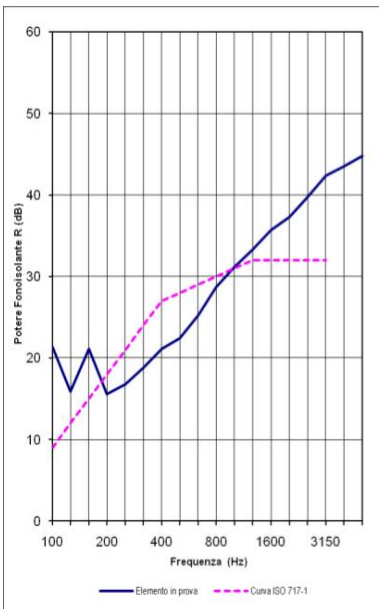
RISULTATI SPERIMENTALI / TEST RESULTS

Elemento in prova / Tested element **THERMOMAX BIT 45+5**
Caratteristiche / Characteristics

Area del campione / Sample surface area $S = 1,3 \text{ m}^2$
Volume della camera ricevente / Receiving room volume $V = 69,6 \text{ m}^3$
Volume della camera emittente / Source room volume 86 m^3

| FREQ. Hz | R dB |
|-------------|---------|
| 100 | 21,4 |
| 125 | 15,9 |
| 160 | 21,1 |
| 200 | 15,6 |
| 250 | 16,8 |
| 315 | 18,8 |
| 400 | 21,1 |
| 500 | 22,4 |
| 630 | 25,2 |
| 800 | 28,7 |
| 1000 | 31,2 |
| 1250 | 33,3 |
| 1600 | 35,7 |
| 2000 | 37,3 |
| 2500 | 39,7 |
| 3150 | 42,4 |
| 4000 | 43,5 |
| 5000 | 44,8 |

$R_w (C_2; C_1) = 28 (-1; -4) \text{ dB}$



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Division Head

Paolo Mele
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Managing Director

Pasqualino Cau
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RISULTATI SPERIMENTALI / EXPERIMENTAL RESULTS

| Campione / Specimen | d | ρ_b | t_1 | t_2 | t_m | q_1 | q_2 | R | \mathcal{F} |
|-----------------------|---------------------|-----------------|--------------------|--------------------|--------------------|----------------|----------------|------------------------------|---------------------------------|
| | 10^{-3} m | kg/m^3 | $^{\circ}\text{C}$ | $^{\circ}\text{C}$ | $^{\circ}\text{C}$ | W/m^2 | W/m^2 | $\text{m}^2 \text{K W}^{-1}$ | $\text{W m}^{-1} \text{K}^{-1}$ |
| THERMOMAX BIT 45+5 | 45,0 | - | 0,01 | 20,01 | 10,01 | 17,4 | 17,2 | 1,157 | 0,0389 |

Legenda

$d =$ Spessore del provino (impostato) / Specimen thickness (imposed)
 $\rho_b =$ Densità del provino / Specimen density
 $t_1 =$ Temperatura media lato freddo / Average temperature cold side
 $t_2 =$ Temperatura media lato caldo / Average temperature hot side
 $t_m = (t_1 + t_2) / 2 =$ Temperatura media / Average temperature
 $q_1 =$ Flusso di calore lato freddo / Heat flux cold side
 $q_2 =$ Flusso di calore lato caldo / Heat flux hot side
 $q_m = (q_1 + q_2) / 2 =$ Flusso di calore medio / Average heat flux
 $R = (t_2 - t_1) / q_m =$ Resistenza termica / Thermal resistance
 $\mathcal{F} = d / R =$ Fattore di trasferimento del campione / Transfer factor of specimen

Nota / Note

Il fattore di trasferimento viene spesso definito *conduttività termica apparente del provino* nelle specifiche condizioni di prova.
The transfer factor is often referred to elsewhere as apparent thermal conductivity of specimen in the specific test conditions.

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EXAMPLE OF LAYING



1

Brick wall made with blocks sp. 12 cm, plastered on the visible side

2

Render with cement mortar to close any imperfections

3

THERMOMAX BIT acoustic panel 45 + 5 mm

4

ROTOCELL band to close the joints, to be used also for installation

5

Perforated brick sp. 8 cm

6

Plaster

ACCESSORIES FOR CORRECT INSTALLATION



ROTOCELL AD

for sealing the joints of the various acoustic products, in order to obtain product continuity



POLYPRILL STRIP

for the correct separation of the wall from the floor

ATTENZIONE: Questo documento non costituisce specifica. Sarà cura dell'utilizzatore stabilire se il prodotto è adatto all'impiego previsto.

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Emanuele Bonifazi

Responsabile Direzione Tecnica

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