

THERMOACOUSTIC 44

certifying prefabricated shutter box with high thermoacoustic insulation

TECHNICAL DOCUMENT ISSUE

Certifying prefabricated shutter box with “U” transverse section, with bottom inspection, made of expanded synthesized self-extinguishing polystyrene EPS200 (EN13163), class E of fire reaction, white coloured, with density of 30 kg/m³.

Shutter boxes are dressed with an alkaline resistant web glas fiber, alcaloresistente, externally pre-daubed with cement. The down edges of the box are strengthened by aluminium profiles to be as a reference for flush in the mortar (internal and external).

Two plasterboard panels are added to the internal side together with one minerals enriched elastomeric blend mm 2 thick to make one single composite mass with excellent performances of acoustic insulation.



EXPANDED SYNTHESIZED POLYSTYRENE bars

- ◇ self-extinguishing
- ◇ thermal conductivity coefficient: 0,033 W/mK
- ◇ compression resistance at 10% of crushing pressure: CS(10) ≥ 200 kPa
- ◇ water absorption nearly absent: 3% of volume change after 1 year of immersion
- ◇ costant everlasting technical properties



Models - Raw wall thickness	Finished wall thickness	Internal box side thickness PSE+acoustic board	Internal box side thermal resistance	Pre-daubed with cement box internal side thermal transmittance*
CLASS 30 TA44	33,2 cm	3,00+3,75 cm	1,090 m ² K/W	0,787 W/m ² K
CLASS 36 TA44	38,6 cm	2,75+3,75 cm	1,014 m ² K/W	0,836 W/m ² K
CLASS var. TA44	variable	3,00+3,75 cm	1,090 m ² K/W	0,787 W/m ² K

* Values in the table consider an internal adduction of 0,125 m²K/W, an external adduction of 0,04 m²K/W and the presence of internal room daub of 15 mm thick and λ of 0,9 W/mK.

ACOUSTIC INSULATION POWER: **D 2m,nT,w = 44 dB**

(Tests done on firm lab by the acoustic engineer Paolo Giacomini, vice-president of UNI acoustic commission)

PATENTED