

# alfakel

TECHNOLOGY FOR SOUNDPROOFING



ALUMINUM AND STEEL ACOUSTIC BARRIERS **ALFA**

TM/ALL - TM/ACC



### **Description Alfa TM/ALL**

Sound insulating and sound absorbing panel made of two coupled sheets of aluminum alloy profiles, one perforated and pretreated with a dip cycle and then finished with a polyester polymerized powder baked at up to 200 degrees Celsius for weather resistance.

At the center the box-like panels is inserted one tile made of mineral fiber 60 mm thick and density of 90 Kg/mc.

The side of the tile facing the perforations is coated with resin glass fiber; it is water repellent, and treated with silicon for weather and UV rays resistance.

The side of the panel placed against the noise source is perforated and the empty/full ratio is no less than 30%. The perforations are appropriately placed to enhance the noise absorbing power, and the rear

side is made of solid aluminum sheet, which is the soundproofing component of the panel. The sides are fastened with heads specifically designed to ensure maximum sealing between the panel and its supporting frame.

## ALFA TM/ACC

This sound insulating and sound absorbing panel is made of two steel profiles, one perforated and pretreated with immersion cycle then painted with polymerized polyester powder baked at 200 degrees Celsius as weather coating.

At the center the box-like panels is inserted one tile made of mineral fiber 60 mm thick and density of 90 Kg/mc.

The side of the tile facing the perforations is coated with resin glass fiber; it is water repellent, and treated with silicon for weather and UV rays resistance.

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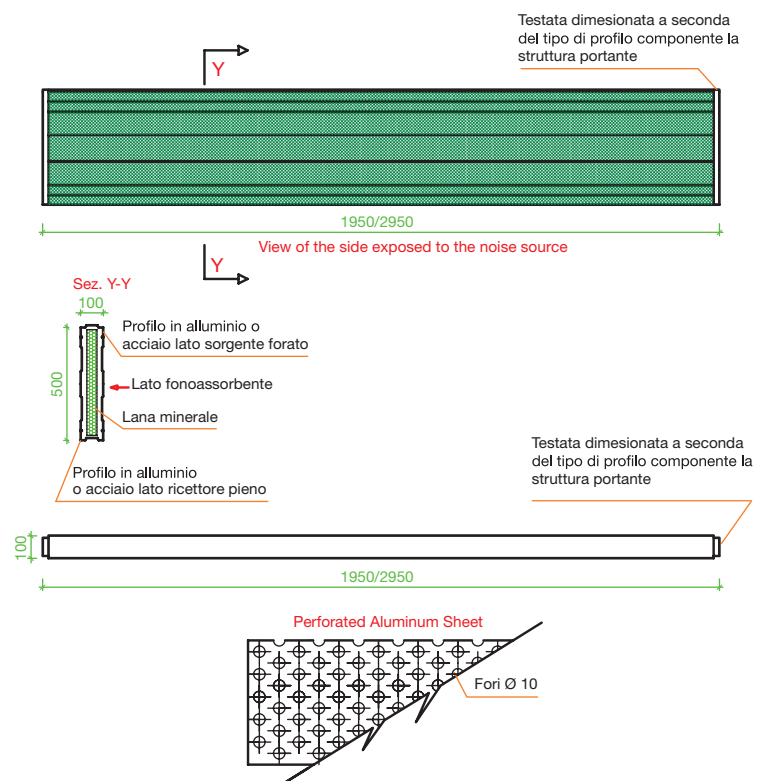
The sides are fastened with heads specifically designed to ensure maximum sealing between the panel and its supporting frame.

## Applications

Noise remediation for:

- Road and railway traffic
- Industrial sites
- Entertainment and recreational venues
- Air conditioning or treatment units

## Sound Insulating and Sound Absorbing Panel Series Alfa TM/ALL and Series Alfa TM/ACC





## Technical Data

### Dimensions:

- Length: mm. 1950/2950 (nominally mm. 2000/3000)
- Height: mm. 500 stacked
- Thickness: mm. 105
- Heads available for fitting in beams HEA/B 140, 160, 180

## Acoustic Power

### ALFA TM/ALL Category A5/B3

- Certification per norm UNI EN-ISO 717-1:1999  
Rw = 31 dB
- Certification per norm UNI EN 1793-2:1999  
Sound insulation  $DL_R = 25$  dB      Cat. B3
- Certification per norm UNI EN 1793-1:1999  
Sound absorption  $DL_\alpha = 16$  dB      Cat. A5

### ALFA TM/ACC Category A5/B3

- Certification per norm UNI EN-ISO 717-1:1999  
Rw = 35 dB
- Certification per norm UNI EN 1793-2:1999  
Sound insulation  $DL_R = 29$  dB      Cat. B3
- Certification per norm UNI EN 1793-1:1999  
Sound absorption  $DL_\alpha = 16$  dB      Cat. A5

## Further Certifications:

- |                             |                    |     |
|-----------------------------|--------------------|-----|
| • Wind load and static load | UNI EN 1794-1:2004 | 5.1 |
| • Self weight               | UNI EN 1794-1:2004 | 5.2 |
| • Snow Removal              | UNI EN 1794-1:2004 | 5.5 |
| • Falling debris E= 0,5Kj   | UNI EN 1794-2:2004 | 4.2 |

• Light reflection	UNI EN 1794-2:2004	4.5
• Stones impact	UNI EN 1794-1:2004	5.3
• Brush fire resistance	UNI EN 1794-2:2004	4.1

### Benefits

- Fits well with existing structures
- Select your colors between many standard RAL colors
- No maintenance required
- Recyclable
- Easy to position over plinths, edge beams or existing low walls

### Accessories

- *These accessories are available for the barriers:*
- Transparent PMMA inserts, white or colored with aluminum, wood or metal frame
- Overhung flashing in galvanized sheet or pre-painted
- Entrance doors or gates for pedestrians or vehicles
- Upper cylindrical attenuator (diffraction effect)



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