

alfakel

TECHNOLOGY FOR SOUNDPROOFING



MOBILE SOUND INSULATING AND SOUND ABSORBING SCREENS **RW 23 DB**

V1000

cert



Description

The Alfakel Series **V1000 cert** sound insulating and sound absorbing screens are, in their standard configuration, stackable modular elements made of 2 heat-sealed PVC layers, one of which with micro perforations, with an internal layer of special sound absorbing and sound insulating materials.

Each modular element comes with 2 rollers on the upper side, Velcro strips on the sides for easy fastening and un-fastening between modules and a transparent PVC skirting on the bottom side.

Upon special requests we can provide various customizations: such as steel grommets, press buttons, mobile frames either manual or mechanical.

Applications

For their flexibility of use and easy assembly the Alfakel Series **V1000 cert** mobile screens represent the ideal solution for creating acoustic enclosures for indoors or outdoors production sites, machinery, loading/un-loading docks, commercial activities and recreation venues, etc. The Alfakel Series V1000 cert mobile screens can be easily opened and closed in any location and stack-folded partially or completely. This characteristic makes them ideal for providing free and easy access to specific areas without causing clutter, even in limited space conditions.

Acoustic Properties

Due to the composition of the inner acoustic materials and the accurate empty/full ratio the Alfakel **V1000 cert** panels are accredited with a sound **insulating performance index of $R_w=23$ dB**, in accordance with regulations UNI EN ISO 10140-1:2010, UNI EN ISO 10140-2:2010, and UNI EN ISO 717-1:2007 (Certificate CSI 0094/DC/ACU/11).

The diagrams in Figures 1 and 2 show the values of total insulation and the sound absorption coefficient for various frequencies.

In practical terms, however, the acoustic insulation varies in function of the size of the screens and the sound characteristics of the space.

In many cases, the "jump over" effect of the sound waves can be eliminated with excellent results by applying to the surfaces the sound absorbing tiles B 208/2 hung as ceiling baffles.

General Properties

Weight:

10 Kg./sq.m approximately

Module dimensions:

900 mm. x (h) 4000 max

Temperatures of usage:

— $10 + 80^{\circ}$ C

Colors:

blue, grey, green

Fire reaction:

self-extinguishing,

low flammability

Mechanical strength:

good



Absolute Insulation

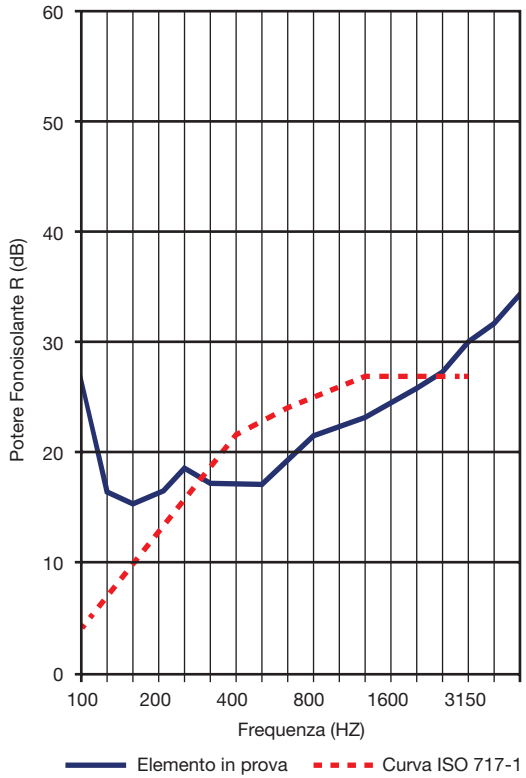
RISULTATI SPERIMENTALI / TEST RESULTS

Elemento in prova / Tested element **Alfakel V1000 cert**
Area campione / Sample surface area $S = 1,50 \text{ m}^2$
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	26,6
125	16,6
160	15,5
200	16,4
250	18,6
315	17,4
400	17,3
500	17,1
630	19,0
800	21,4
1000	22,5
1250	23,3
1600	24,6
2000	25,8
2500	27,4
3150	30,2
4000	31,7
5000	34,5

$Rw(C;Ctr)=23(-1;-2)dB$

Fig. 1



Acoustic Absorption

Measured according to ISO R354

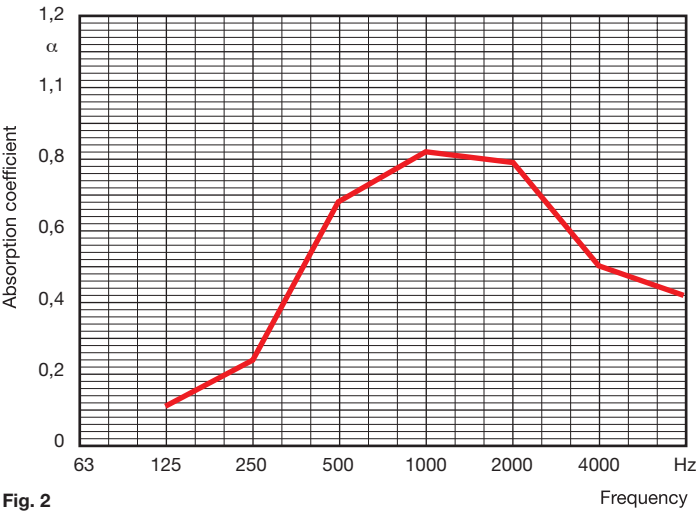
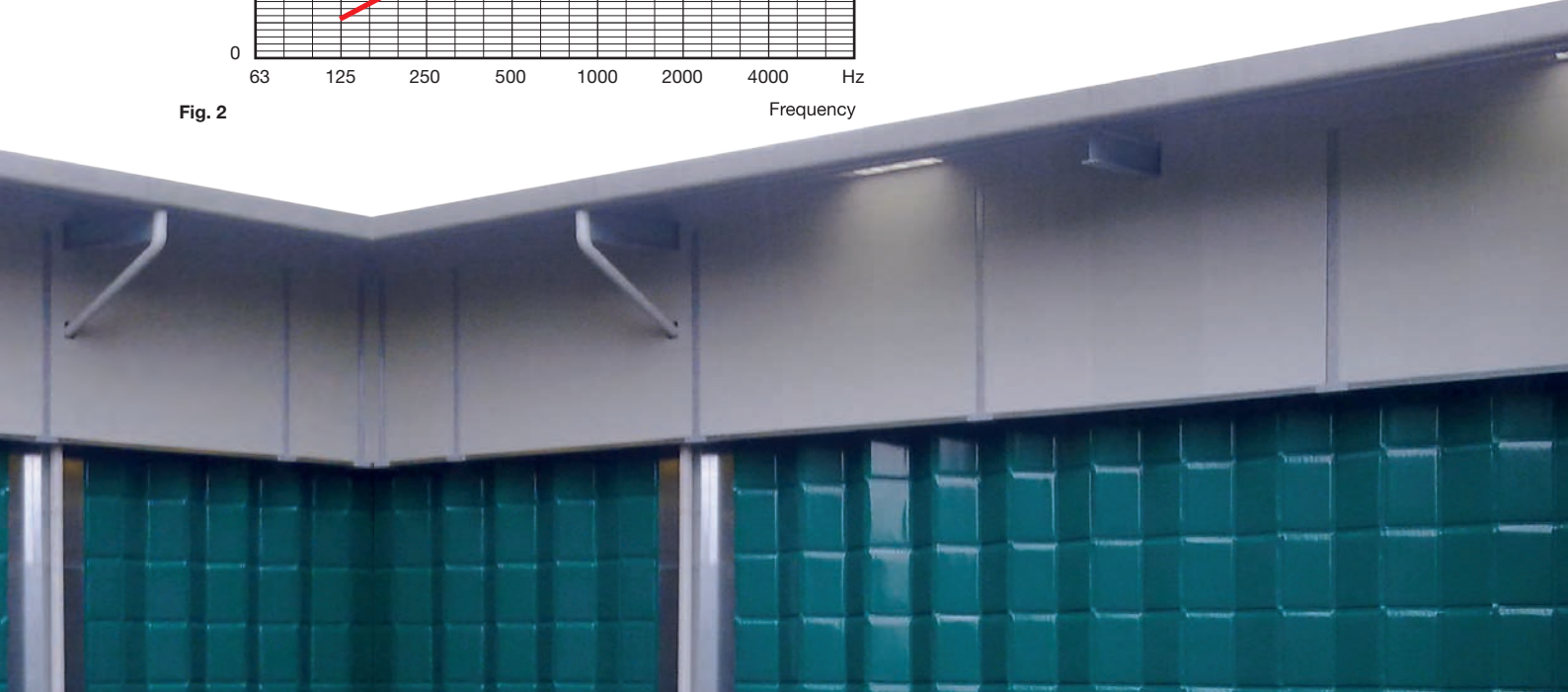


Fig. 2





Benefits

- Easy to assemble
- Interchangeable elements
- Easy access to various points of the shielded area
- Good cost vs. acoustic benefits ratio
- Esthetically pleasing

Installation

The **Alfakel V1000 cert** sound insulating and sound absorbing panels are equipped with pivoting rollers on the top side which fit onto their sliding guides.

Each modular element is fitted with Velcro strips on the sides to fasten and unfasten the individual modules and also to attach or detach them from the supporting structure.

Upon request visual inserts in transparent polyvinyl are available

According to the use intended for the screens, they can be mounted on existing structures or on structures created specifically, either fixed or mobile.

*Per riconoscersi tra altri prodotti simili con prestazioni diverse, gli schermi Alfakel **V1000 cert** originali sono marcati Alfakel su tutte le saldature orizzontali dei moduli.*



Alfakel s.r.l.

Via G. Galilei 39/D

42027 Montecchio Emilia (RE)

Tel. 0522 86.35.23

Fax 0522 86.60.08

E-mail: info@alfakel.it

www.alfakel.it

The descriptions of Alfakel's products are merely indicative. Alfakel retains the rights to apply further modifications.