

# designrainer

## **Acoustic Panels**

Technical manual 2017

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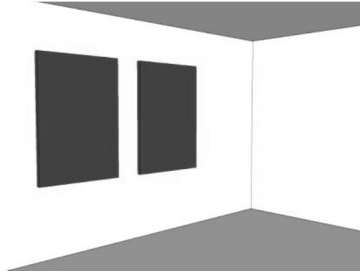
# Index

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## One Side OS

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Sound absorbing panel for wall and ceiling appliance.

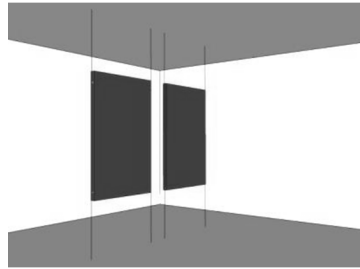


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## Double Side DS

Pag. 7

Sound absorbing & sound insulating panel for ceiling appliance and used as a room divider.

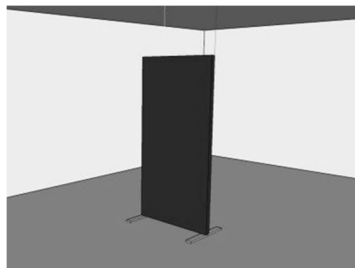


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## Free Standing FS

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Self-supporting sound absorbing & sound insulating panel, used as a room divider.



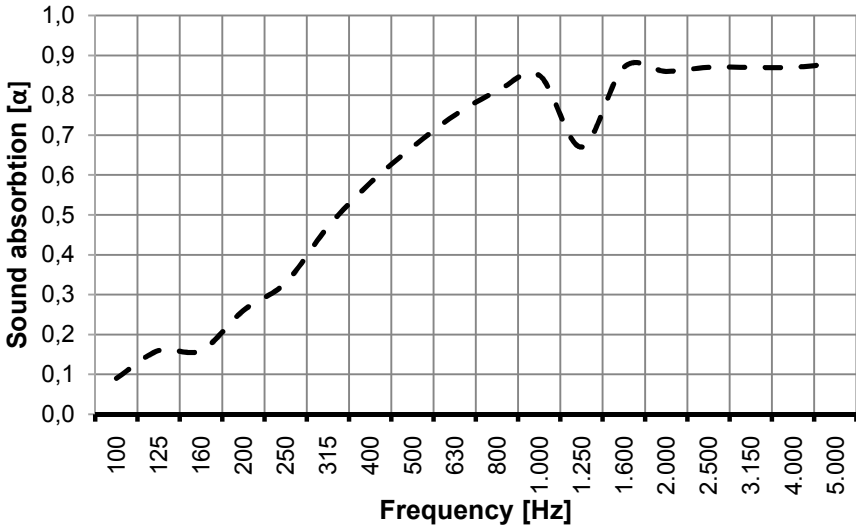
# One Side - OS

One Side “OS” panels are sound absorbing, composed by metal structures, and coated with textile on one side only; They are made for wall and ceiling mounting.

## I. Sound absorption coefficient

The sound absorption coefficient ( $\alpha$ ) indicates the amount of the sound energy absorbed by a material. Its value varies depending of the frequency with a range between 0 and 1. A material with a sound absorption coefficient  $\alpha = 0.65$ , is equivalent to say that it is absorbing 65% of the sound energy at a certain frequency. In other words, only 35% of the sound energy is reflected.

The Average sound absorption coefficient OS panel  $\alpha_w = 0.65$



Hz	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.600	2k	2.5 k	3,15k	4 k	5 k
$\alpha$	0.09	0.16	0.16	0.26	0.33	0.47	0.58	0.67	0.75	0.81	0.85	0.67	0.87	0.86	0.87	0.87	0.87	0.88

## II. Dimensions:

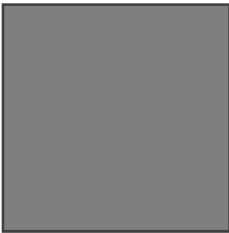
Standard dimensions



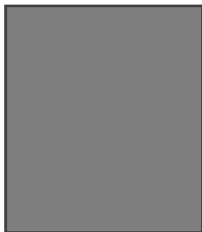
205 x 105 x 6 cm



145 x 105 x 6 cm



105 x 105 x 6 cm



85 x 105 x 6 cm

Panels can be used both vertically and horizontally

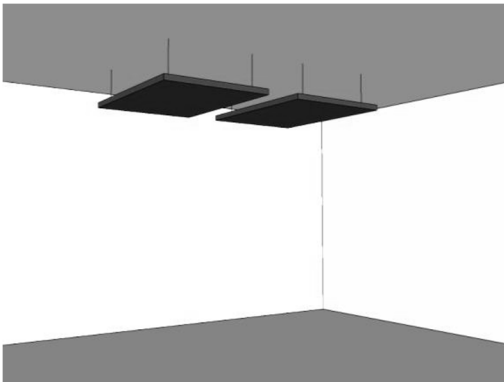
Custom sizes are available upon request.

### III. Applications

One Side panels have various applications:

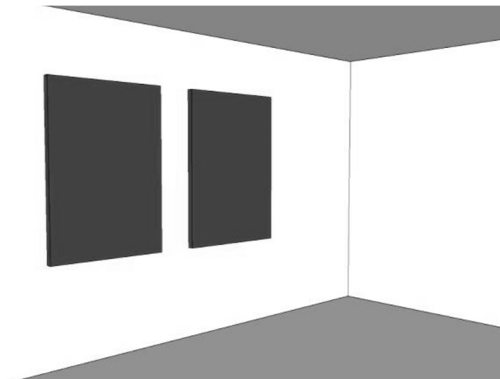
- **Ceiling installation (horizontally)**

Dangling hooks with 10 cm distance from ceiling, can be adjusted up to 155 cm (4 hooks per panel).



- **Wall installation (in adherence)**

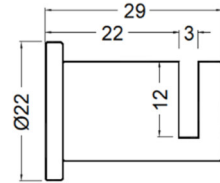
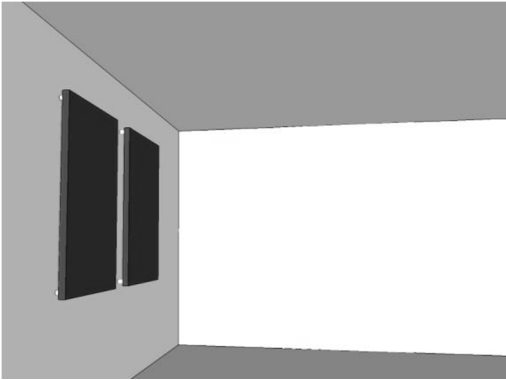
Hooks Kit for adherence wall mounting.  
(2 hooks per panel)



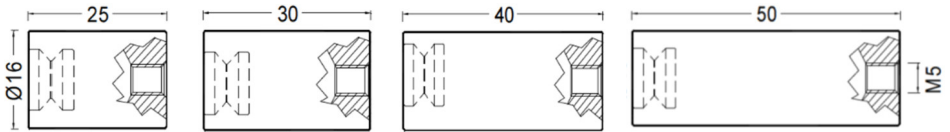
**SB 12/10** - Con gancio piatto regolabile con vite

- **Wall installation (with spacer)**

Spacer hooks kit from 22 to 72 mm  
(4 hooks per panel)



Spacer of 25, 30, 40 e 50 mm



#### **IV. Accessories**

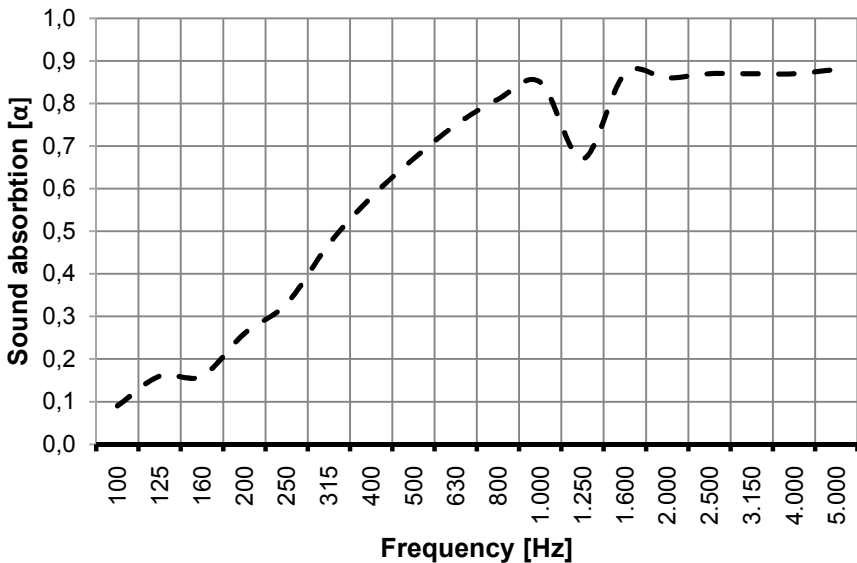
- Rail for wall application
- Joining hooks

## Double Side - DS

The Double Side “DS” panels are sound absorbing panels composed by metal structures and coated with textile on both sides; they are made for ceiling application (vertically) and as a room divider. On request an insulating sheath can be added inside the panel.

### I. Sound absorption

Average sound absorption coefficient DS panel  $\alpha_w = 0.65$



Hz	100	125	160	200	250	315	400	500	630	800	1k	1.25k	1.600	2k	2.5 k	3.15k	4 k	5 k
$\alpha$	0.09	0.16	0.16	0.26	0.33	0.47	0.58	0.67	0.75	0.81	0.85	0.67	0.87	0.86	0.87	0.87	0.87	0.88



## I. Dimensions

Standard dimensions



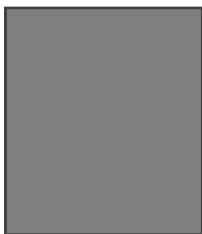
205 x 105 x 6 cm



145 x 105 x 6 cm



105 x 105 x 6 cm



85 x 105 x 6 cm

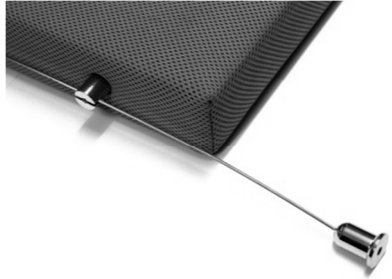
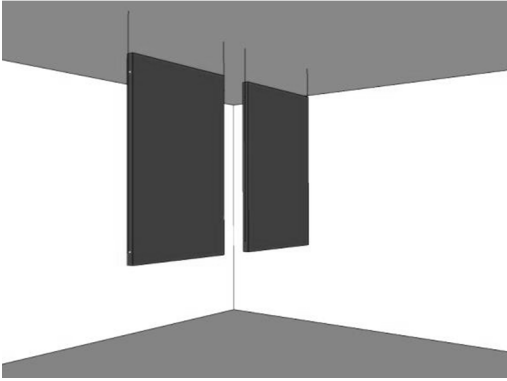
The panels can be used both vertically and orizzintale

Custom sizes are available on request

## II. Applications

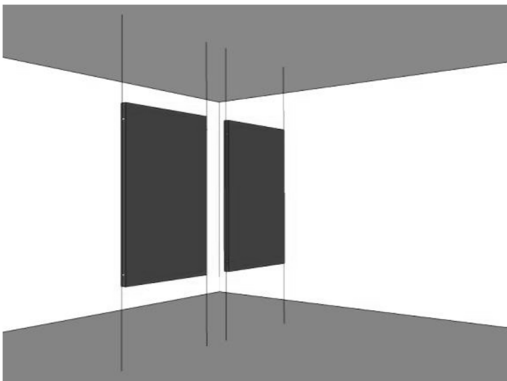
### ▪ Ceiling installation (vertically)

Hooks kit for vertical ceiling installation (2 hooks and 4 hangs per panel).



### ▪ Room divider

Hooks kit for room divider installation (2 hooks on ceiling, 4 hangs on the panel, and 2 hooks on the floor).



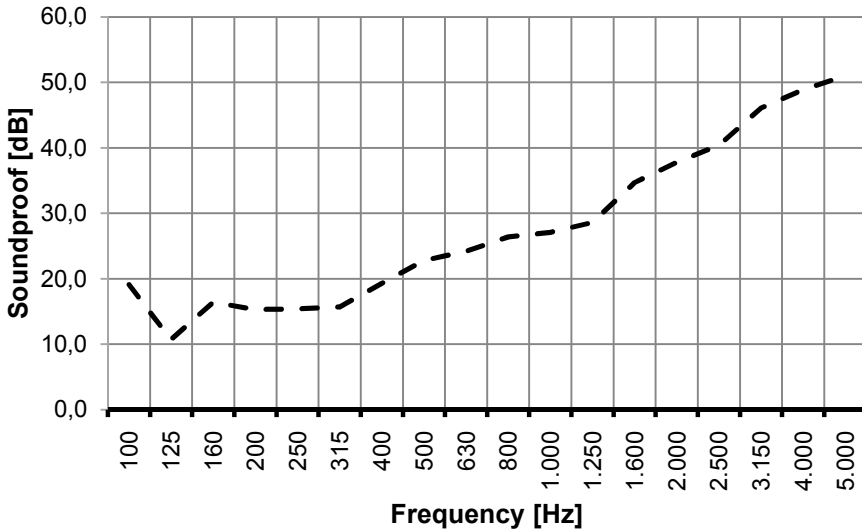
# Free Standing - FS

The Free Standing “FS” panels are sound absorbing and soundproofing; they are made as acoustical room dividers and improve rooms’ acoustics. The FS panels are coated with textile on both sides, and self-supported with chromed metal feet.

## I. Soundproof

Soundproofing is the capacity of an element to stop the sound. Soundproof varies depending on the frequency.

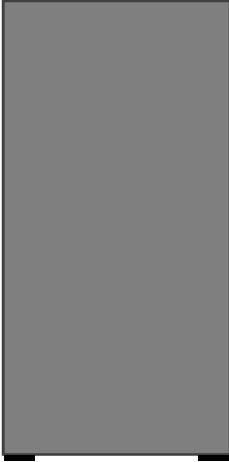
Average soundproof FS panel  $R_w = 26$  dB



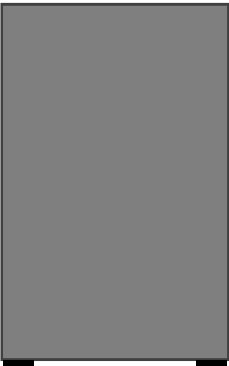
*The soundproof value of the Free Standing panels is indicative due to a non soundproofing connection with other elements such as, wall and/or other panels.*

## **II. Dimensions**

Standard dimensions



205 x 105 x 6 cm



145 x 105 x 6 cm

Custom sizes are available upon request

### III. Accessories

Wheels to facilitate the movement of panels.





## Main features

	<b>OS</b> One Side	<b>DS</b> Double side	<b>FS</b> Free Standing
Sound absorbtion	X	X	X
Soundproof		X	X
Room divider		X	X
Ceiling application	X	X	
Wall application	X		
Custom sizes	X	X	X
Printing (monochrome)	X	X	X

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