

Absorbers

Economical and Efficient



Industrial Noise Absorption
Hanging Systems

illtec

illtec is a flexible, open-cell melamine resin-based foam. The foam exhibits special qualities such as its intricate three-dimensional web structure composed of thin strands which make the material easy to form. These qualities result in a material that possesses excellent absorption characteristics for optimal noise reduction.

Product advantages

- Safety, because it is free of synthetic and natural mineral fiber, halogens, and CFCs
- Optimal noise reduction
- Excellent absorption values over a wide range of frequencies
- High degree of light reflectivity

Building material classification

B1 (hardly flammable) in accordance with DIN 4102

The material illtec FM is available to fulfill especially stringent building material classification requirements. illtec FM is a soft melamine resin-based foam that is equipped with a mineralic impregnation. The material fulfills the building material classification requirements A2 (non-flammable) in accordance with DIN 4102.

Properties

- Free of synthetic and natural mineral fiber, halogens, and CFCs
- High degree of thermal resistance
- Very low volume weight
- High degree of resistance to aging
- Open-cell

Colors

The illbruck absorber core material is white. Other color coating options are available for orders exceeding 100 units. Prior color sampling is required. Variations in color cannot be completely excluded.



illtec

Service

illbruck works in conjunction with recognized acoustic engineering offices. Upon request, acoustic measurements and calculations may be conducted to determine the recommended quantities of material to be utilized.

Disposal

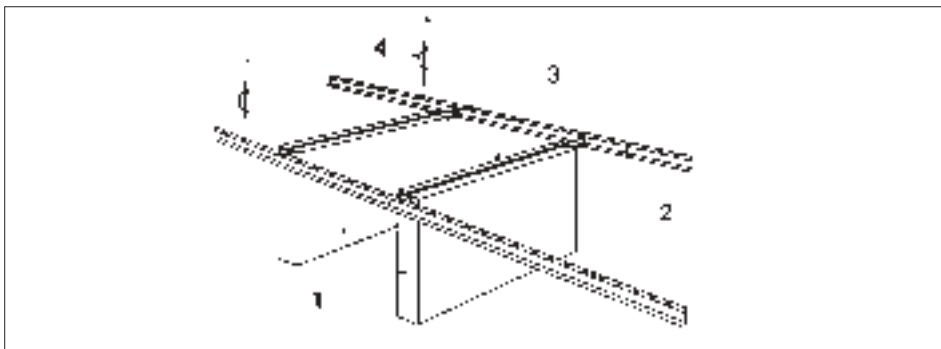
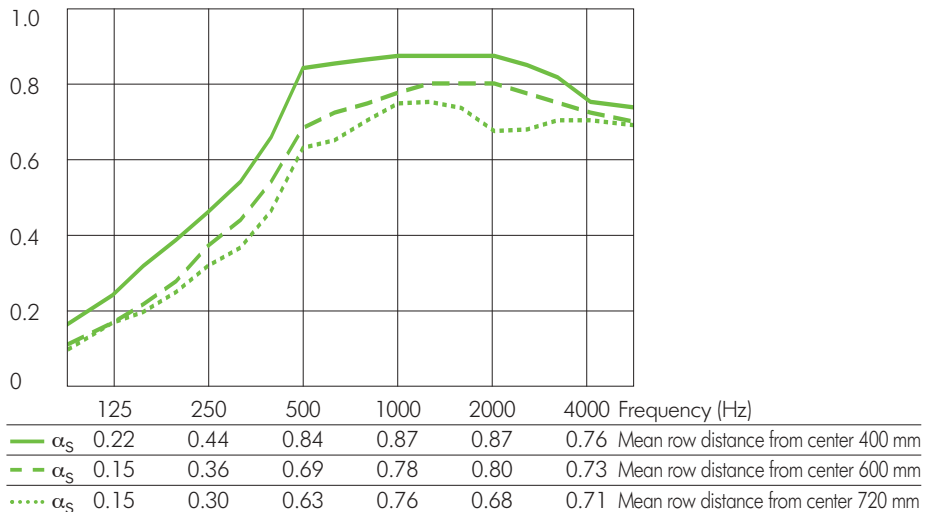
- Easy disposal (may be disposed of as household waste)
- EAK Nr. 120 105 (European waste disposal classification)
- General certificate P-NDS04-291 (Germany)





illbruck plano T absorber, shop, Germany

Noise absorption level α_s , measured according to DIN 52 212 at Accon Engineering, Munich, Germany



Order no.	Installation distance	400 mm	600 mm	720 mm	800 mm	1000 mm
1	illbruck plano T absorber	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
2	Main support track* (Length 3600 mm)	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²
3	Cross section track* (Length 1200 mm)	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
4	Easy to adjust suspension brackets*	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²

*not included

illbruck plano T absorber

Noise absorber elements made of illtec featuring T groove cut for hanging from a 24 mm T track (not included). Because of its simple hanging installation, the illbruck plano T absorber can be installed in a variety of ways and in a variety of application areas where, due to structural considerations, it is not possible to adhere absorber material directly to ceilings and walls.

Product advantages

- Cost savings due to easy handling and low weight
- Improvement in architectural acoustics and optimal noise reduction due to exceptionally high level of noise absorption over a wide range of frequencies
- Negligible structural influence due to low weight

Dimensions

1150 x 625 x 50 mm

Installation

- The sub-construction consists of the main support tracks which are hung from the ceiling using, for example, easy to adjust suspension brackets. The tracks are configured parallel to each other at an axial distance of 1200 mm.
- Commercially available cross section T track profiles (length 1200 mm) are inserted into the absorber T groove. The assembled units are then snapped into the main support track and are hung at the desired distance from each other (depending on the configuration and number of absorbers to be installed). This results in a system characterized by uniform rows of absorber panels running parallel to each other.

Should especially stringent building material requirements need to be fulfilled, the illbruck FM absorber is also available. This material fulfills building material specification A2 (non flammable) in accordance with DIN 4102.

illbruck rondo absorber

The well-rounded solution for noise absorption. illbruck rondo can be hung both vertically and horizontally using commercially available hanging supports. Due to its low weight, illbruck rondo units can easily be dismantled and re-mounted when maintenance work is being conducted.

Product advantages

- Cost savings due to easy handling and low weight
- Vertical and horizontal installation options available
- Improvement in architectural acoustics and optimal noise reduction due to exceptionally high level of noise absorption over a wide range of frequencies

Versions

(Kindly indicate when ordering)

- Featuring T groove cut for horizontal hanging from 24 mm T track (not included) for horizontal installation.
- The illbruck rondo absorber comes complete with integrated aluminum tube (1200 x 8 x 1 mm) for vertical installation.

Dimensions

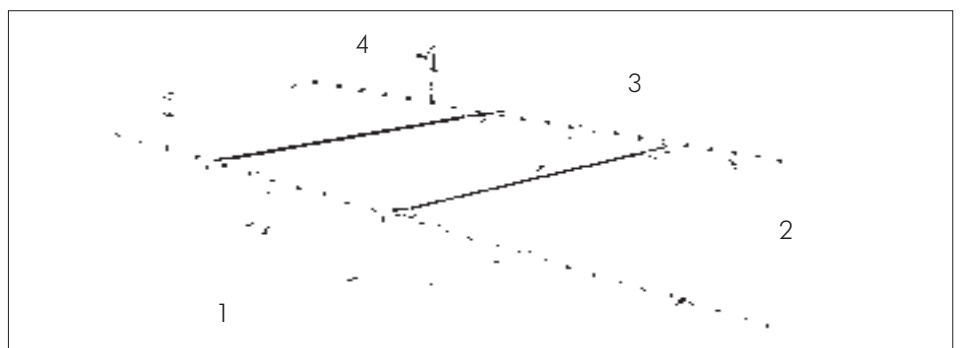
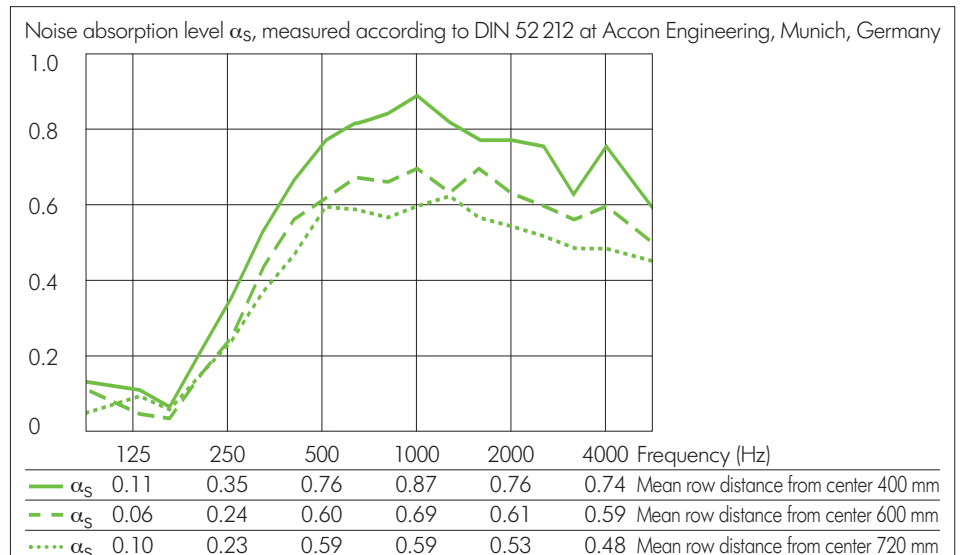
1150 x Ø 150 mm

Installation

- When installed vertically, the illbruck rondo absorber with the integrated aluminum tube is hung from the ceiling by means of hook and eyelet.
- When installed horizontally, the sub-construction consists of the main support tracks which are hung from the ceiling parallel to each other at an axial distance of 1200 mm. using easy to adjust suspension brackets.
- Commercially available cross section T track profiles (length 1200 mm) are inserted into the absorber T groove. The assembled units are then snapped into the main support track and hung at the desired distance from each other (depending on the configuration and number of absorbers to be installed). This results in a system characterized by uniform rows of absorber panels running parallel to each other.



illbruck rondo absorber, St. Jacob Sports Facility, Basil, Switzerland



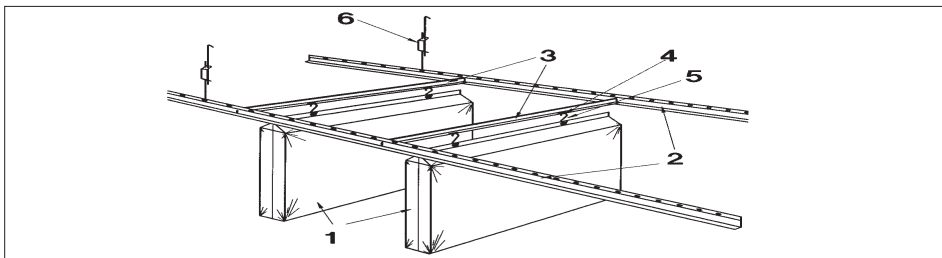
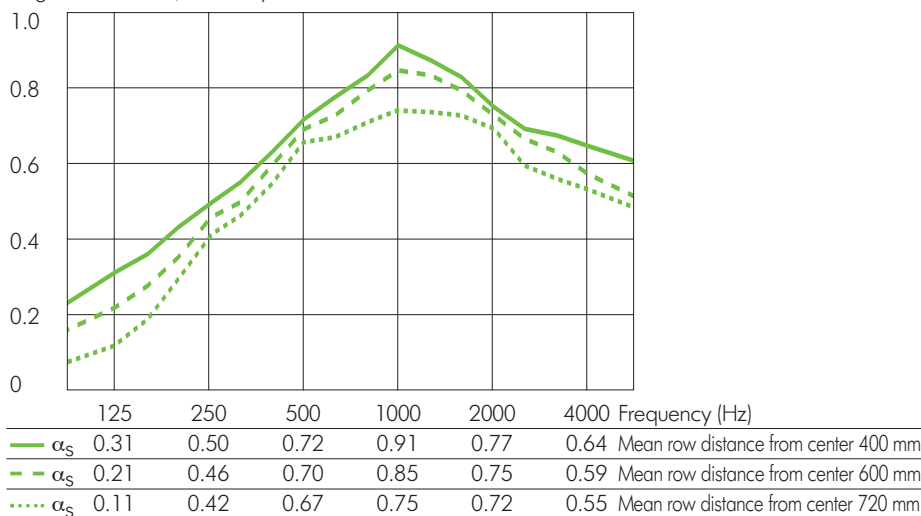
Order no.	Installation distance	400 mm	600 mm	720 mm	800 mm	1000 mm
1	illbruck rondo absorber	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
2	Main support track* (Length 3600 mm)	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²	0.83 rm/m ²
3	Cross section track* (Length 1200 mm)	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
4	Easy to adjust suspension brackets*	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²

*not included



illbruck wetroom absorber, bottling plant, Pfaffenhofen/Ilm, Germany

Noise absorption level α_s , measured according to DIN 52 212 at Graner + Partner Engineering, Bergisch Gladbach, Germany



Order no.	Installation distance	400 mm	600 mm	720 mm	800 mm	1000 mm
1	illbruck wetroom absorber	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
2	Main support track* (Length 3600 mm)	0.83 units/m ²	0.83 units/m ²	0.83 units/m ²	0.83 units/m ²	0.83 units/m ²
3	Cross section track* (Length 1200 mm)	2.08 units/m ²	1.38 units/m ²	1.16 units/m ²	1.04 units/m ²	0.83 units/m ²
4	Caddy clip*	4.00 units/m ²	2.66 units/m ²	2.22 units/m ²	2.00 units/m ²	1.60 units/m ²
5	S hook*	4.00 units/m ²	2.66 units/m ²	2.22 units/m ²	2.00 units/m ²	1.60 units/m ²
6	Easy to adjust suspension brackets*	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²	0.69 units/m ²

*not included

illbruck wetroom absorber

This top of the line noise absorption product is specially designed to fulfill the stringent hygienic requirements set out by the beverage, foodstuff and pharmaceutical industries. The illbruck wetroom absorbers are resistant to bacteria and are fiber free. Due to its low weight and easy installation, the absorber can be utilized in a wide variety of situations and can be adapted to suit various construction requirements. Cleaning of the absorbers may be conducted using high-pressure water jet. In tests performed by DOEMENS, the beverage industry's inspection and monitoring unit, it was demonstrated that the illbruck wetroom absorber is excellently suited for application in the beverage industry.

Product advantages

- Negligible structural influence due to low weight
- Easy to clean using high pressure water jet
- Demonstrated safety for use in the beverage and foodstuff industries: DOEMENS certified
- Improvement in architectural acoustics and optimal noise reduction due to exceptionally high level of noise absorption over a wide range of frequencies

Dimensions

1150 x 600 x 50 mm

Installation

- The sub-construction consists of the main support tracks which are hung from the ceiling parallel to each other at an axial distance of 1200 mm, using easy to adjust suspension brackets.
- The cross section T track profiles (length 1200 mm) are snapped into the main support tracks at the desired distance from each other (depending on the configuration and number of absorbers to be installed).
- The illbruck wetroom absorbers can be hung from the cross section tracks using conventional caddy clips or S hooks.

illbruck absorber ECO

illbruck's innovative ECO hanging system absorber represents a revolution in industrial noise absorption.

The illbruck ECO absorbers are hung in rows by means of steel cables which are suspended horizontally between two walls. The absorbers are strung onto the steel cables from the wall outwards, so there is no need anymore for scaffolding during installation.

Dimensions

illbruck plano absorber ECO

1250 x 625 x 50 mm

1250 x 410 x 50 mm

illbruck wetroom absorber ECO

1200 x 600 x 50 mm

illbruck rondo absorber ECO

1200 x Ø 150 mm

References

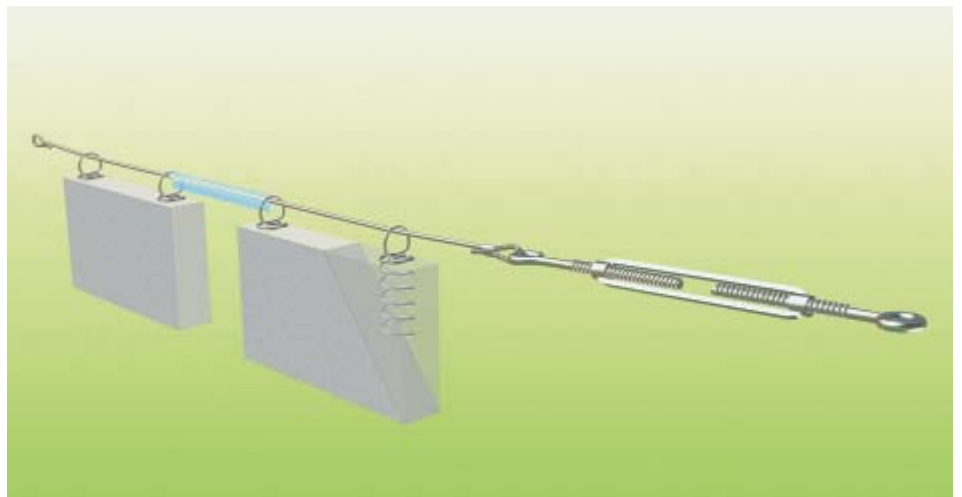
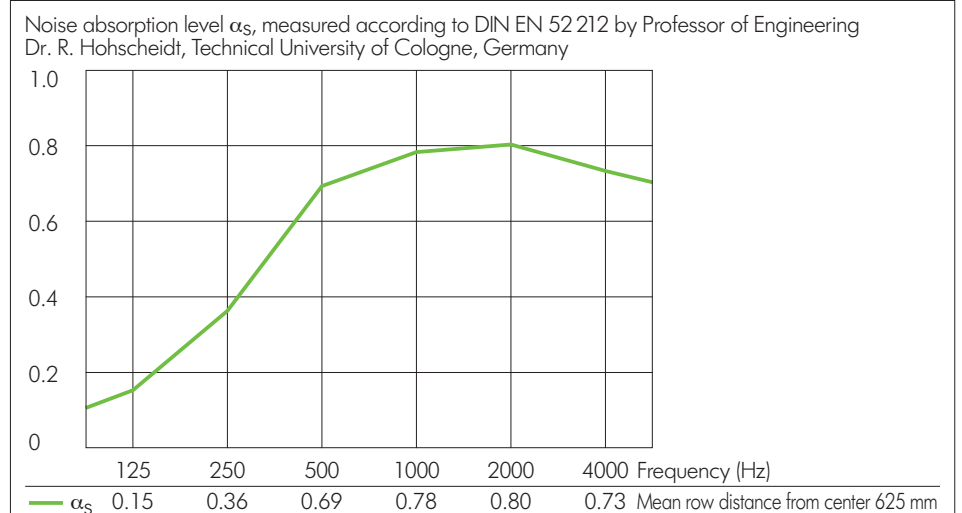
- KTD in Calw (Germany)
- Ottakringer Brewery in Vienna (Austria)
- Hipp Baby Food Processing Facilities in Gmunden (Austria)
- Renault Plant in Sandouville (France)

Product advantages

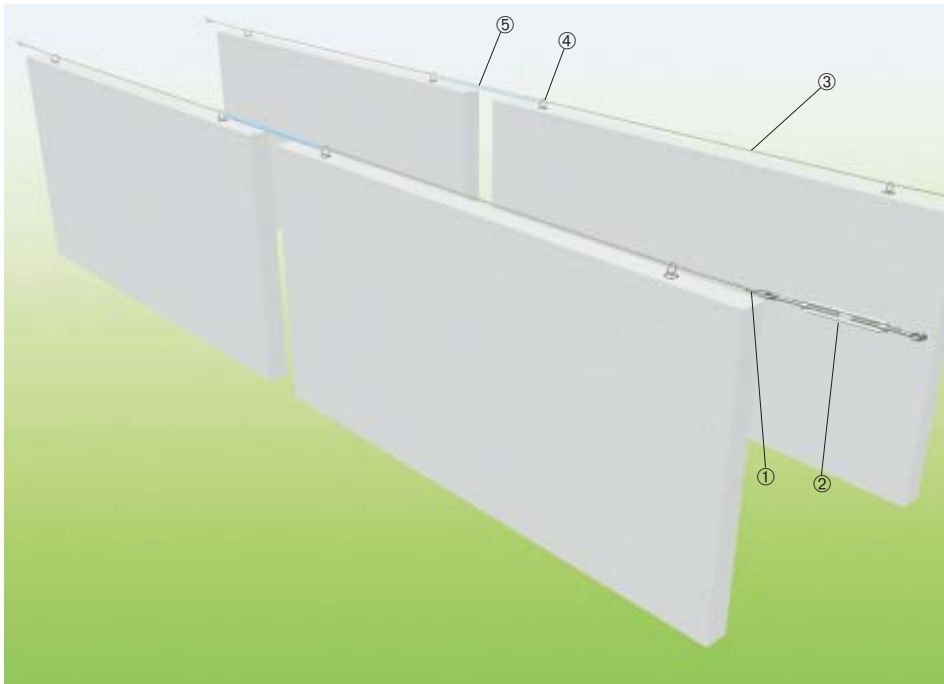
- Saves money through reduced weight in shipping and installation
- Elimination of the need for scaffolding
- Cost saving solution because of efficient installation system
- Reduced replacement costs due to easy dismantling



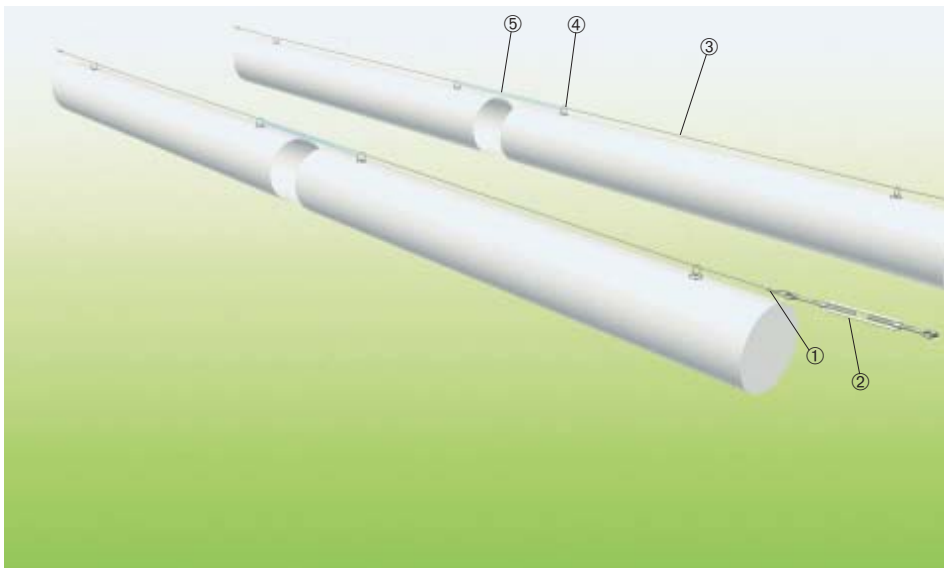
illbruck plano absorber ECO, KTD, Calw, Germany



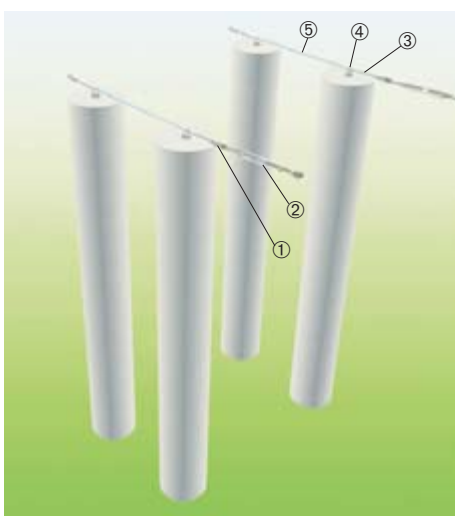
Detail: Illustration of hanging



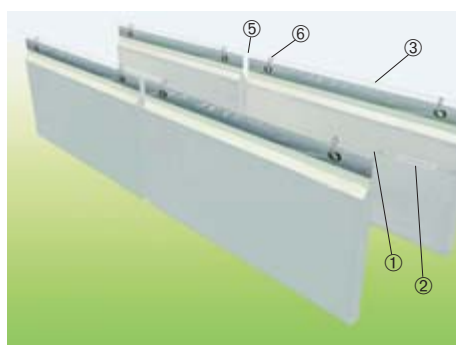
illbruck plano absorber ECO



illbruck rondo absorber ECO

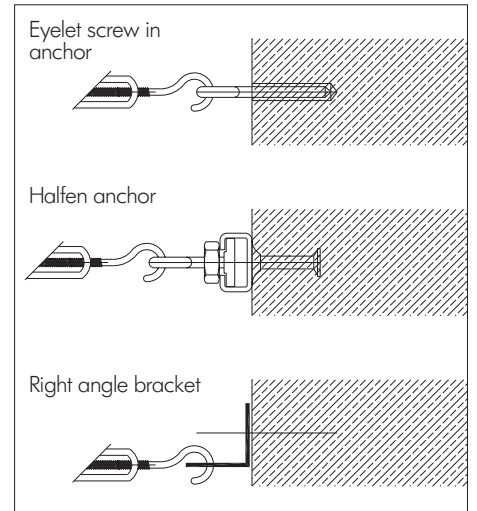


illbruck rondo absorber ECO



illbruck wetroom absorber ECO

- ① illbruck cable eye stiffener, galvanized, with illbruck cable leading, aluminum, galvanized
- ② illbruck suspension bolt, galvanized
- ③ illbruck steel cable, galvanized, \varnothing 2.5 mm
- ④ illbruck corkscrew-type anchor, galvanized
- ⑤ illbruck spacer, 300 mm standard length
- ⑥ illbruck "s" hook



Anchoring to wall

Installation

- The anchoring hooks on both ends of the cables are attached to the desired anchoring system (right angle bracket, eyelet screw, Halfen anchor) at the calculated row spacing position and height.
- The steel cable is attached to one side complete with the illbruck cable eye stiffener and cable leading using the illbruck lead-sealing pliers. An additional suspension bolt is recommended for cable lengths exceeding 10 meters. The cables are suspended at the calculated mean center distance between the rows.
- The unattached ends of the steel cable are then equipped with the illbruck suspension bolt and the cable eye stiffener and the cable leading is attached, as described in step 2. The suspension bolt is then attached to the wall mount and tightened.
- The ECO absorbers, with factory mounted corkscrew-type anchor, are hung from the cable. The illbruck spacer units are clipped onto the cable between the absorbers. The absorbers and spacers are then manually slid down the cable. This procedure is repeated until the calculated number of absorbers per cable has been strung.
- The suspension bolt is then retightened to minimize sagging in the cable.
- In some cases where the cable length requires, an additional support anchor may be required. We recommend using an easy to adjust suspension brace with hook.



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