



BARRISOL®

WORLD LEADER IN ACOUSTIC STRETCH CEILINGS



Architect : Mme CERMAKOVA



Architect : Netanel BEN IZCHAK



Architects : Daniele DELL'OVA - Nicoletta SARDI



Architect : Aydin SESIGUR

ARCHITECTURAL ACOUSTIC SOLUTIONS FOR CEILINGS AND WALLS



Architect : Plajer & Franz Studio

BARRISOL® CEILING-WALL SYSTEM

Consisting of recyclable PVC-based sheeting, **BARRISOL** is nonflammable, being classified as M1 in France, B1 in Germany, class 1 in the United States and Class 0 in the United Kingdom plus EN 13501-1 for Europe.

BARRISOL is made to measure in the factory according to measurements taken by installers using roll product joined to the exact shape of the room to be fitted, producing a perfectly fitting ceiling, whatever its shape or size.

BARRISOL sheeting can be used for standard ceilings or in a 3D form or as a luminaire for unique effects.

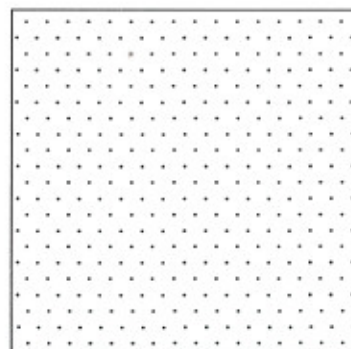
Fitting Barrisol is a clean operation without producing rubble, and does not require evacuation of the room or movement of furniture. Because of its light weight qualities, Barrisol does not overload the building framework. Stretchable and retractable, Barrisol remains taut regardless of the number of times it is disassembled and reassembled for access to the ceiling space. Barrisol is available in more than 90 colours and in seven finishes : matt, lacquer, satin, suede, metallic, translucent and perforated (the Microsorber® range is available in the matt, satin and translucent finishes).

Our products provide a great variety of acoustic solutions either with perforated sheet alone (Microsorber®, Miniperf or Microperf) or as traditional **BARRISOL** sheet or **BARRISOL** perforated with acoustical absorbent backing (as fiberglass or synthetic wool).

BARRISOL® MICROSORBER® is a special resonant type sound absorber, more precisely a micro-perforated sound absorber. The friction of the air in each single hole is amplified by resonance in the air between the micro-perforated panel and the backing and yields the impressive acoustic properties of micro-perforated sound absorbers.

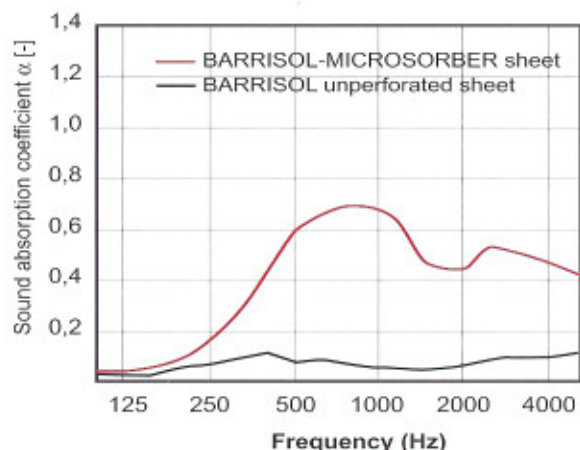
The four quantities : diameter of the holes "d" of the microperforation, distance between the holes "b", thickness of panel "t" and thickness of air space between panel and backing "D" determine the sound absorption coefficient "α" of a micro-perforated sound absorber. These four quantities allow you to tune a micro-perforated sound absorber to meet various room acoustic demands.





Quantity of holes: 250 000 holes/m²
Diameter of a hole : ≈ 0,2 mm
Perforation rate: ≈ 0,8 %
Thickness: ≈ 0,17 mm
Reference : 036 + ref. of the colour

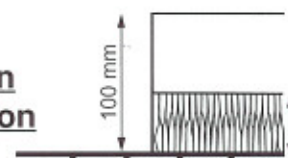
**BARRISOL unperforated sheet without insulation
and BARRISOL-MICROSORBER without insulation**



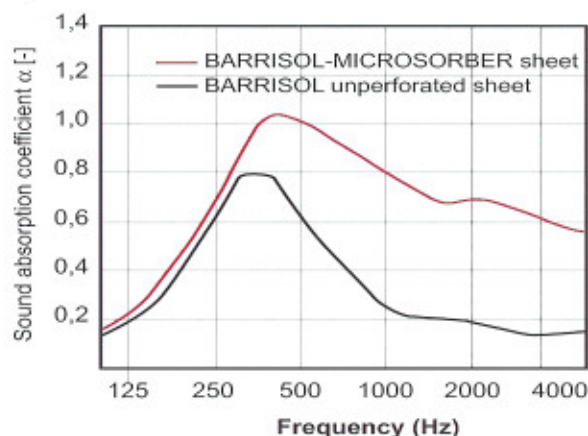
Acoustic absorption rating

Sound Absorption Average according to ASTM C 423-01	SAA = 0,07
Noise Reduction Coefficient according to ASTM C 423-1	NRC = 0,05
Weighted sound absorption coeff. according to EN ISO 11654	$\alpha_w = 0,10$
Sound Absorber class according to EN ISO 11654	not classified
Sound Absorption Average according to ASTM C 423-01	SAA = 0,45
Noise Reduction Coefficient according to ASTM C 423-01	NRC = 0,45
Weighted sound absorption coeff. according to EN ISO 11654	$\alpha_w = 0,45$
Sound absorber class according to EN ISO 11654	Class D

**BARRISOL unperforated sheet with insulation
and BARRISOL-MICROSORBER with insulation**



Rock wool : 45 mm
Weight : 0,52 kg/m²
 $r = 7,4 \text{ kNs/m}^2$ on floor



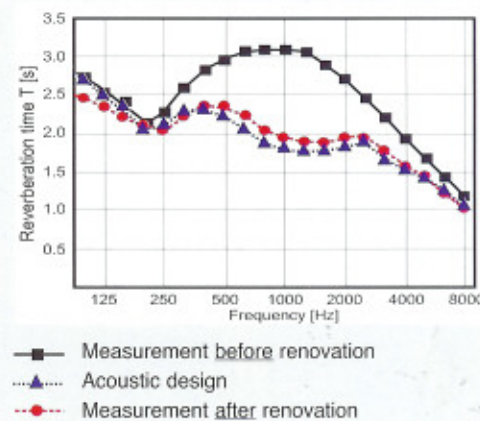
Acoustic absorption rating

Sound Absorption Average according to ASTM C 423-01	SAA = 0,42
Noise Reduction Coefficient according to ASTM C 423-1	NRC = 0,40
Weighted sound absorption coeff. according to EN ISO 11654	$\alpha_w = 0,25$
Sound Absorber class according to EN ISO 11654	Class E
Sound Absorption Average according to ASTM C 423-01	SAA = 0,78
Noise Reduction Coefficient according to ASTM C 423-01	NRC = 0,80
Weighted sound absorption coeff. according to EN ISO 11654	$\alpha_w = 0,75$
Sound Absorber class according to DIN EN 11654	Class C

Example of installation

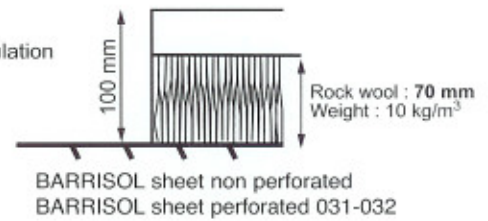
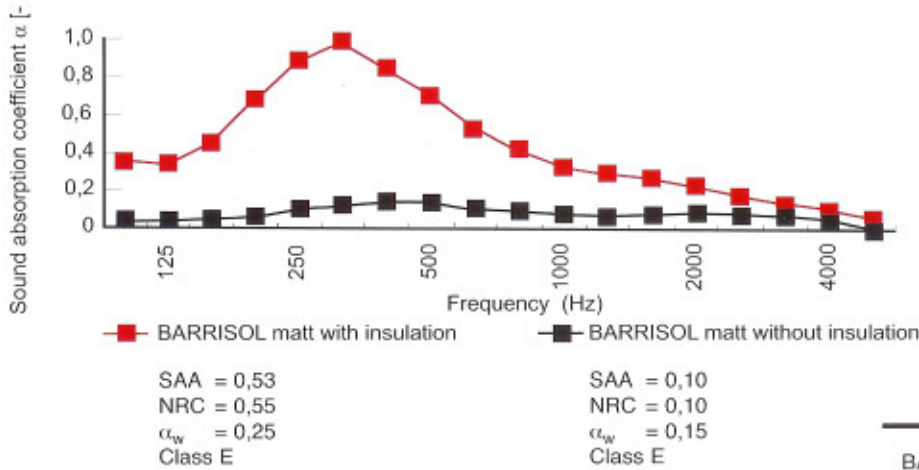


In its original condition, the "Herrensaal" in the nave of St. Petri's Church composed mainly of resounding surfaces such as plaster, glass and wood. Experience has shown that an absorbing effect can only be expected in the deep frequency range with glass façades and wooden surfaces. The aim of the acoustic concept was thus a significant reduction in the reverberation time as well as a smoothing-out of its frequency dependence. The particular advantage of Barrisol[®] - Microsorber[®] sheeting lies in the fact that the degree of absorption can be adjusted precisely to the requirements of the respective room through the choice of distance between the sheeting and the rear wall. In this project, this gap was chosen to be 70 mm. So three panels of 12sqm have been used.

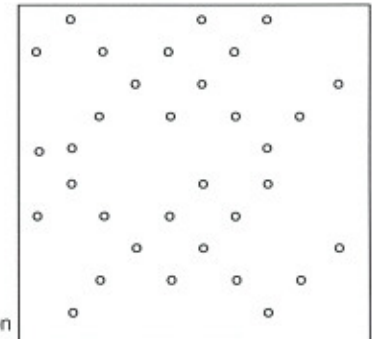
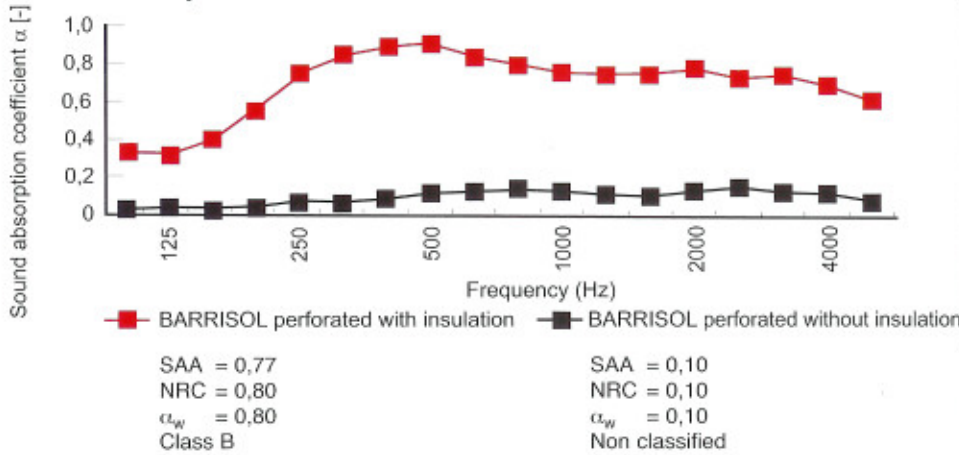




BARRISOL matt sheet unperforated with and without insulation

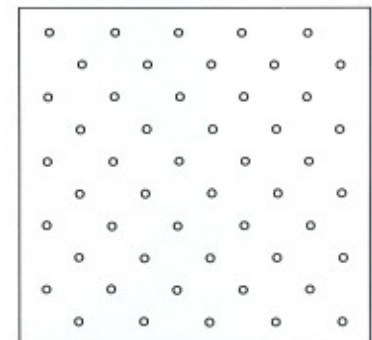
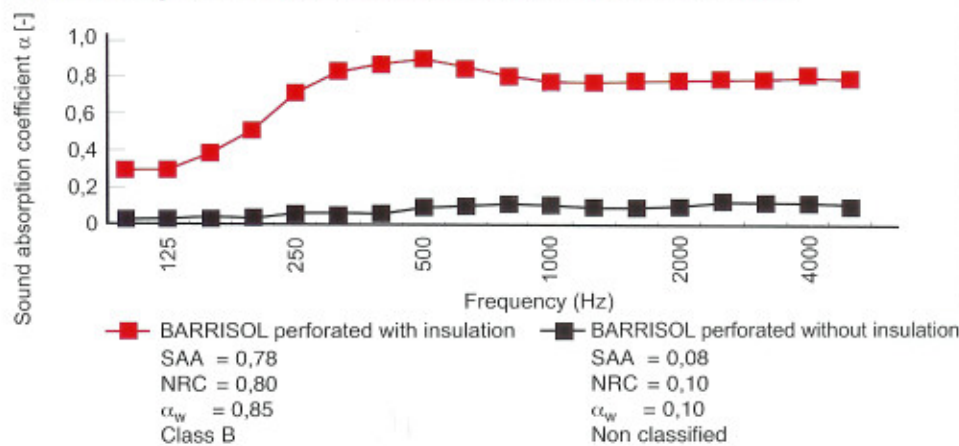


BARRISOL perforated sheet 031 with and without insulation



Quantity of holes : 10 000/m²
 Diameter of a hole : ≈ 1 mm
 Perforation rate : ≈ 4 %
 Thickness : ≈ 0,17 mm
 Reference : 031 + ref. of the colour

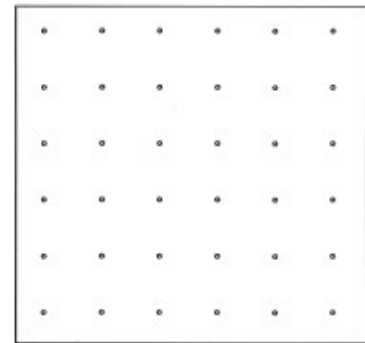
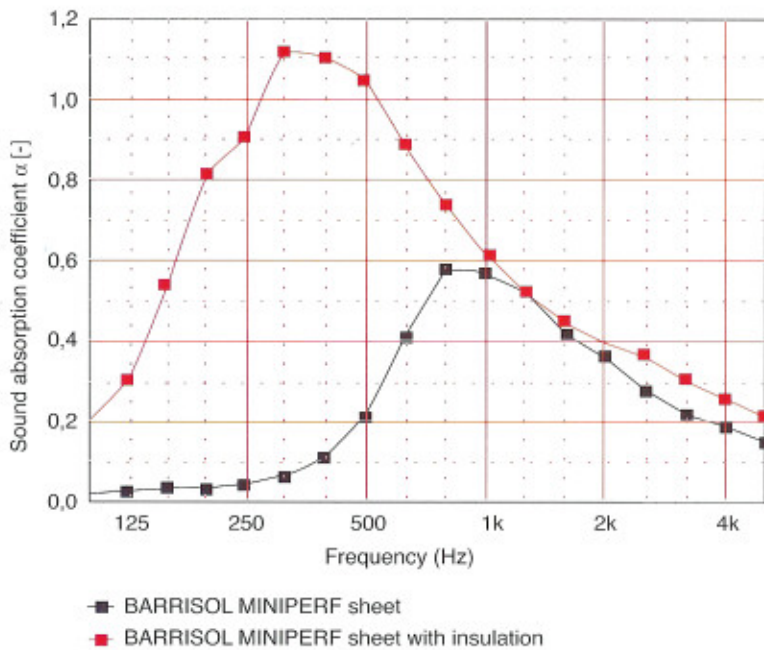
BARRISOL perforated sheet 032 with and without insulation



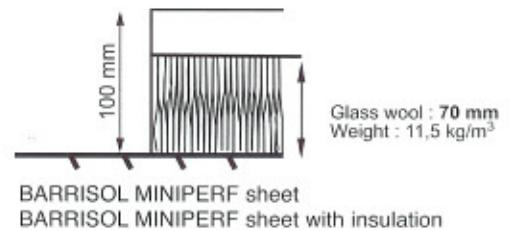
Quantity of holes : 50 000/m²
 Diameter of a hole : ≈ 1 mm
 Perforation rate : ≈ 20 %
 Thickness : ≈ 0,17 mm
 Reference : 032 + ref. of the colour



BARRISOL MINIPERF sheet with and without insulation



Quantity of holes 4 000 hole/m²
 Diameter of a hole : ≈ 0,5 mm
 Perforation rate : ≈ 0,5 %
 Thickness - 0,30 mm
 Reference 037 + ref. of the colour



Acoustic absorption rating

Sound Absorption Average according to ASTM C 423-01 SAA = 0,30
 Noise Reduction Coefficient according to ASTM C 423-01 NRC = 0,30
 Weighted sound absorption coeff. according to DIN EN ISO 11654 α_w = 0,30
 Sound absorber class according to DIN EN ISO 11654 Class D

Sound Absorption Average according to ASTM C 423-01 SAA = 0,75
 Noise Reduction Coefficient according to ASTM C 423-01 NRC = 0,75
 Weighted sound absorption coeff. according to EN ISO 11654 α_w = 0,40
 Sound absorber class according to EN ISO 11654 Class D

Example of installation

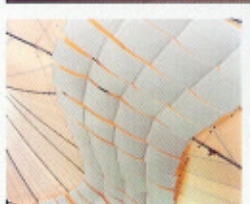
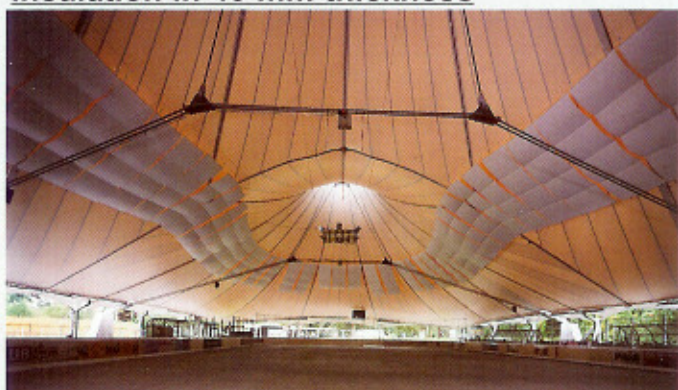


The custom made solutions of BARRISOL lumiere ceilings offer a great aesthetic value and an optimal translucency. The ceilings, formulated with an intelligent integrated technology to spread the light, ensure that the art exhibits at the Art Museum of Vaduz in Lichtenstein are shown to their best advantage. Under a glass roof equipped with a sophisticated lighting technology, the BARRISOL LUMIERE ceiling reveals all of its qualities, whether acoustic or aesthetic.

In fact, another advantage of the BARRISOL LUMIERE ceiling is the acoustic properties which improve in larger rooms, through a special procedure of micro-perforation, the rooms with high ceilings, such as the rooms of the Art Museum in Vaduz, enjoy particularly good acoustics.

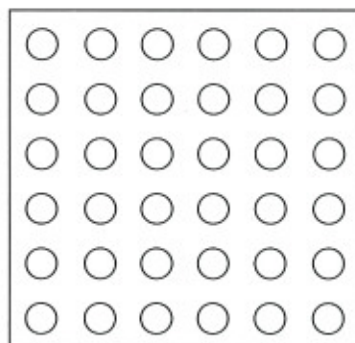


Example of installation of BARRISOL perforated sheet in 034 with synthetic insulation in 40 mm thickness



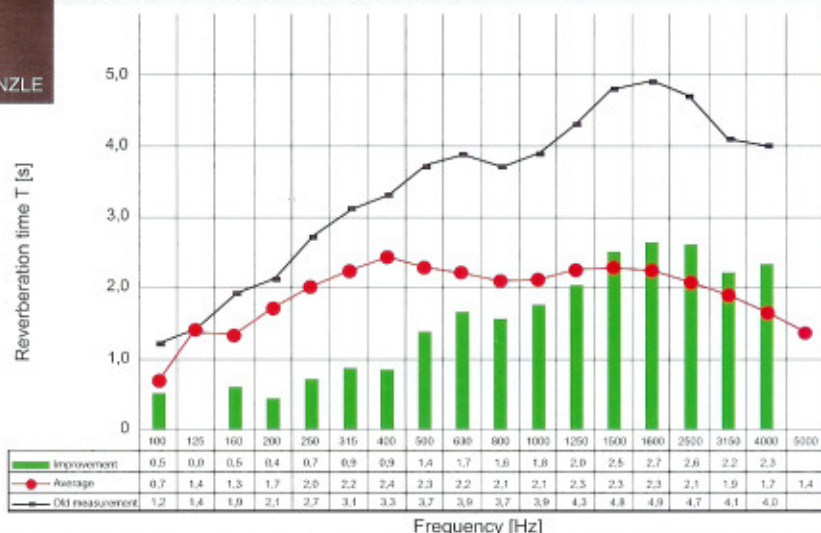
Architect : ZANAHL & KÜNZLE

Those acoustic panels have been installed in this ice rink in Schruns in Austria, in order to improve the acoustics of this site. The use of BARRISOL products in panels has permitted the required integration with the existing structure.



Quantity of holes : 20 000/m²
 Diameter of a hole : ≈ 4 mm
 Perforation rate : ≈ 30 %
 Thickness : ≈ 0,18 mm
 Reference : 034 + ref. of the colour

Results obtained in the ice rink.



S-T-R-E-T-C-H YOUR IMAGINATION

Please contact :



tendu stretch ceiling group
 778 883 2256 - www.tendu.ca



2002 AT Innovation prize BARRISOL-MICROSORBER Düsseldorf - Germany	2002 AT Innovation prize BARRISOL-LIBERTE Paris - Allemagne	2001 FIR ARCH 2001 Product of the year Poil - Czech Republic	2001 CONSTRUCT 2001 Médaille d'or Buisson - Roumanie	2001 Médaille d'Or Plus de 100 médailles Distan - Pologne	2000 Innovation of Quality Venise - Pologne	2000 Hochschule FARB Innovation + Technik Berlin - Allemagne	1999 The Excellence Habitat-Innovation Canada	1998 Diplôme d'Excellence USA	1997 Performance of Quality Canada	1997 Médaille d'Honneur Saragosa - Chili	1996 Médaille d'Or Chine
1996 Prix de l'Innovation Melbourne - Australie	1995 Médaille d'Or du produit Chine	1995 Médaille d'Or du produit Czech Republic	1993 Progus - IT	1991 Médaille de bronze Innovation	1991 Céleste d'Innovation BARRISOL STAR	1990 L'Exceptionnel Genève	1990 THERMALL BARRISOL Prix spécial du jury Grenoble	1985 Spectacle Médaille des Architectes d'Intérieur	1984 Coupe du produit d'avant garde	1983 Label français d'entreprise industrielle	1975 Médaille d'argent Bâle

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