



ACOUSTICS

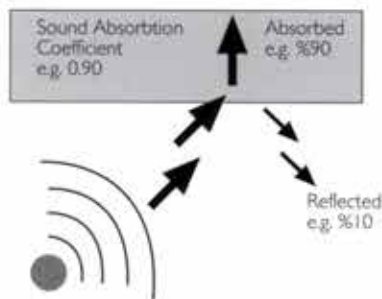
Acoustics, is the examination of sound behaviors in all aspects. The acoustic quality of a building is generally described in terms of good or bad, referring to the level of easy/difficult speaking is heard. Bad acoustics is characterized by confused hearing and syllables overlapping. This can be attributed to large smooth surfaces on the wall, floors or ceilings that reflect the speaker's voice in a way that they are received by the listeners with the waves sent out previously. In general terms good acoustic is defined as a balance between good sound insulation, reverberation time, background sound and speech intelligibility.

Sound, generated in any indoor areas, reaches the ear or the microphone which converts it to electrical signal to record it by reflecting from the walls that surround the space in different angles as well as traveling straight ahead. So, these endless sounds get together at the destination point, adding the acoustic features of the room to themselves.

Noise, due to its characteristics, is an unintended sound that is unwanted or that obstructs other sounds. High sound and vibration levels in work environment will make adverse affects on operations and equipment as well as the safety and health of the workers. Therefore, the acoustic quality of a room is improved by breaking up the smooth surfaces. The positions of these sound absorbers greatly affect the quality of the sound absorption and hearing quality. An effective, cost efficient solution for dealing with this problem is to install a wall-to-wall ceiling cover that improves the hearing by providing high sound absorption.



Basket Hastanesi - Adana



velum

parmephon[®] velum

Product Description

Front and back surface of the high density glass wool panel is covered with glass wool tissue. The exposed surface and vertical canalled edges are covered with resistant fabric. Various colours of fabric are available.

Core Material

With 95 kg/m³ high density, semi-rigid fiberglass

Sizes

600x600 mm, 600x1200 mm, 600x1800 mm, 600x2400 mm, 600x2700 mm, 600x3000 mm

Thickness

40 mm

Edges

Canalled and strengthened

Acoustic

NRC value is between 0.95 – 1.00

Fire Resistance

Class B s2 d0 according to UNE-EN 13501-1:2007

Installation

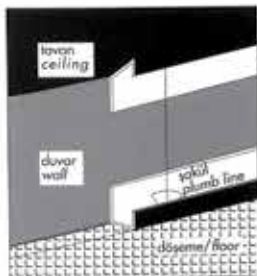
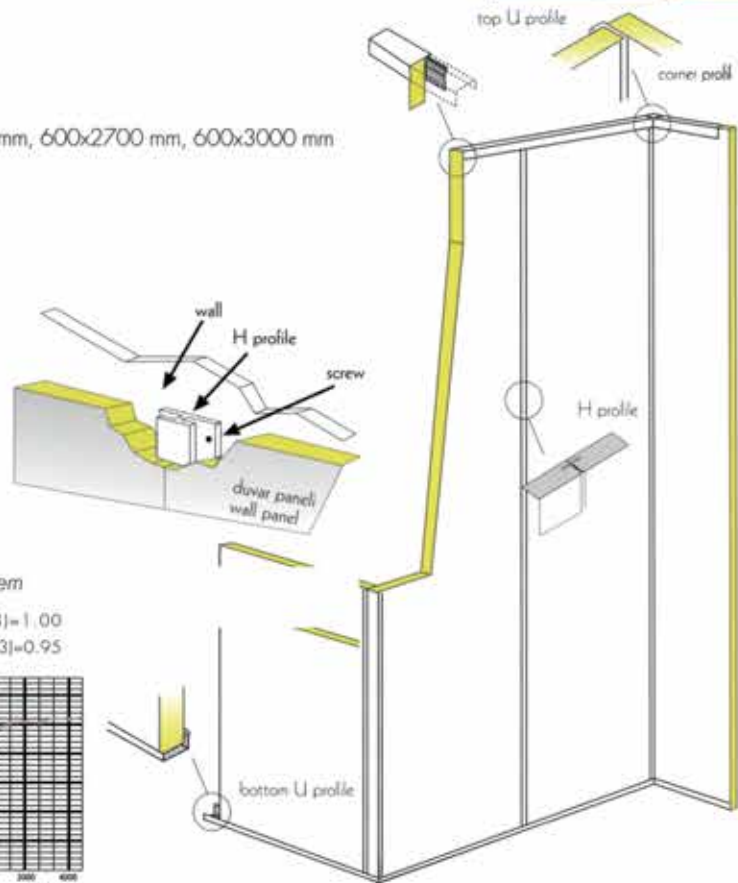
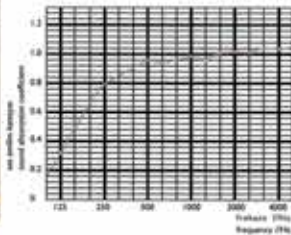
Vertical profile in canals in accordance with concealed system

Seyhan Oteli - Adana



ستوديوهات كلية الإعلام - جامعة النجاح الوطنية

α_w (ISO 11654)=1.00
NRC (ASTM - C423)=0.95



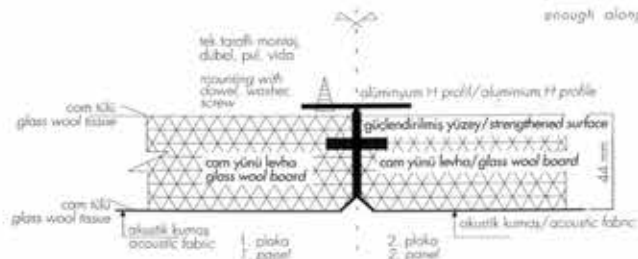
Duvar paneli kaplanacak yüzey çirpi ipisoka/tezat yardim ile düzlemeye ve tavara paraleli.

Wall panel area is signed to floor and ceiling by a balance with rope and plumb line



Duvardaki tezati bozuklukları ve siva hatalarını gidermek için duvar yatay profilleri ile teziye alınır. Duvar yüksekliği boyunca iki yatay profil yeterlidir.

To remove cracks and plaster defects, wall gaps in balance with horizontal profiles. Two horizontal profiles are enough along with wall length.





parmephon[®] orfe



Product Description

Front and back surface of the high density glass wool panel is covered with glass wool tissue. The exposed surface framed with Aluminium all edges are covered with resistant fabric. Various colours of fabric are available. The edge folding proceeds 3-5cm on the back surface.

Core Material

With 95 kg/m³ high density, semi-rigid fiberglass

Sizes

1200x1200 mm, 1200x1800 mm, 1200x2400 mm, 1200x2700 mm, 1200x3000 mm

Thickness

20 - 40 mm

Edges

Aluminium framed flat edges

Acoustic

NRC value is between 0,90 and 0,95

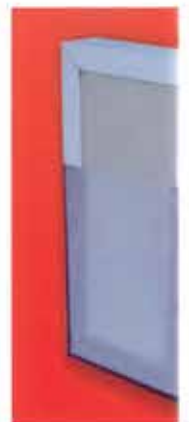
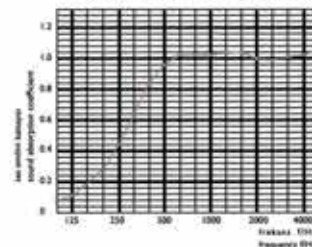
Fire Resistance

Class B s2 d0 according to UNE-EN 13501-1:2007

Installation:

Hook / Z Clip

α_w (ISO 11654)=0.75
NRC (ASTM - C423)=0.90



1/3 oct.	0.09	0.27	0.83	1.01	1.02	1.01
	0.10	0.43	0.96	1.01	1.00	1.02
	0.19	0.64	1.01	1.02	0.99	1.06
1/1 oct.	0.13	0.45	0.93	1.01	1.00	1.03

parmephon[®] solo

Product Description

Front and back surface of the high density glass wool panel is covered with glass wool tissue. The exposed surface and strengthened all edges are covered with resistant fabric. Various colours of fabric are available. The edge folding proceeds 3-5 cm. on the back surface.

Core Material

With 95 kg/m³ high density, semi-rigid fiberglass

Sizes

1200x1200 mm, 1200x1800 mm, 1200x2400 mm,
1200x2700 mm, 1200x3000 mm

Thickness

20 - 40 mm

Edges

Flat and strengthened

Acoustic

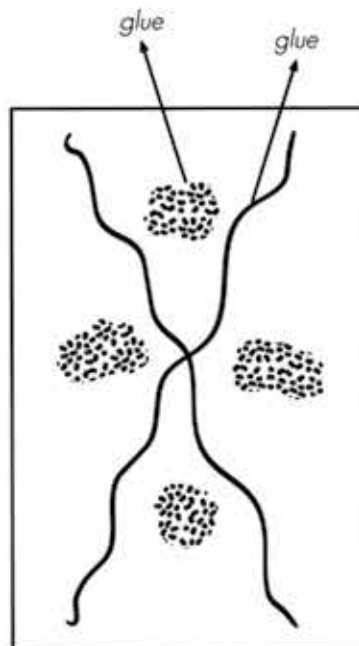
NRC value is between 0,95 and 1,00

Fire Resistance

Class B s2 d0 according to UNE-EN 13501-1:2007

Installation

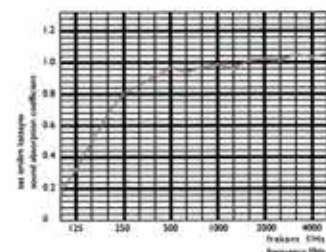
Adhesive / Visible profile



Court of Justice - Iraq

	0.16	0.61	0.90	0.98	1.01	1.04
1/3 oct.	0.31	0.79	0.97	0.99	1.02	1.03
	0.48	0.84	0.96	0.97	1.01	1.04
1/1 oct.	0.32	0.75	0.94	0.98	1.01	1.04

α_w (ISO 11654)=1.00
NRC (ASTM - C423)=0.95





parmephon[®]

advance

Application & Appearance

Esthetic and practical, Advance meets all standard installation / removal requirements while meeting the basic functional demand for acoustical ceilings.

Product Description

Advance comprises a high density glass wool panel covered with painted glass wool tissue for decorative ceiling effect and glass wool tissue on the reverse side. Available with sealed edges.

Size

Advance available in 15 and 20 mm thickness in the following dimensions 600 x600 mm, 600x1200 mm, 610x610 mm, 610x1220 mm

Weight

Total weight, approximately 3.0 kg/m², including the suspension system.

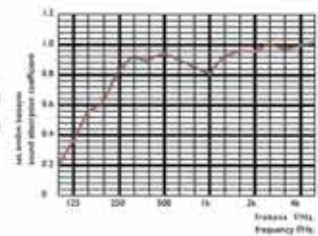
Installation

Perform installation of Parmephon Advance ceiling tiles as late as possible during the building stage. They are installed on 15 mm or 24 mm grid system (see diagram). To minimize contamination, use clean cotton gloves during installation or any handling of the tiles.



	0.24	0.63	0.90	0.84	0.94	0.99
1/3 oct.	0.35	0.81	0.95	0.80	0.94	0.99
	0.59	0.92	0.89	0.91	0.99	1.01
1/1 oct.	0.39	0.79	0.91	0.85	0.96	1.00

α_w [ISO 11654]=0.90
NRC [ASTM - C423]=0.90



NRC range 0.85-0.90 as per EN ISO 354 room method testing.



Removable, quick and easy access.



Withstand a vacuum cleaning. (according to the Manufacturer's instructions)



Up to 95% at 30 °C according to ISO-4611.



Easy to handle and have standard mechanical strength.



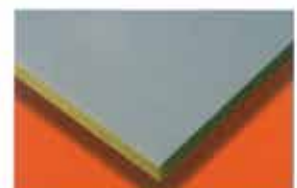
98% RL
Up to 85% light reflection.



Class B s1 d0 according to UNEEN 13501-1:2007



Ecology friendly, conform to international environmental standards and totally recyclable.



parmophon[®]



Sophia Balo Saloru - Istanbul

SNOW

Application & Appearance

Snow is a fine-textured ceiling available in popular colours offering endless solutions. The perfect choice for areas where individual tiles must be easily demountable. Parmophon Snow meets general office acoustical requirements for sound absorption.

Product Description

Parmophon Snow comprises a high density glass wool panel covered with special painted glass wool tissue called "parmetex" for decorative ceiling effect and glass wool tissue on the reverse side. Available with sealed edges.

Size

Snow available in 15 and 20 mm thickness in the following dimensions
600 x600 mm, 600x1200 mm, 610x610 mm, 610x1220 mm

Weight

Total weight, approximately 3.0 kg/m², including the suspension system.

Installation

Perform installation of Parmophon Snow ceiling tiles as late as possible during the building stage. They are installed on 15 mm or 24 mm grid system (see diagram). To minimize contamination, use clean cotton gloves during installation or any handling of the tiles.



NRC range 0.85-0.90 as per EN ISO 354 room method testing.



Removable, quick and easy access.



Withstand a vacuum cleaning (according to the Manufacturer's instructions)



Up to 95% at 30 °C according to ISO-4611.



Easy to handle and have standard mechanical strength.



≥85 RL
Up to 85% light reflection.



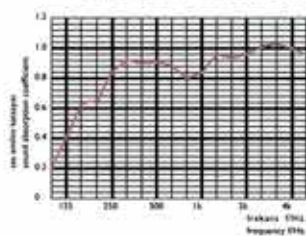
Class B s1 d0 according to UNE-EN 13501-1:2007



Ecology friendly, conform to international environmental standards and totally recyclable.



α_w (ISO 11654)=0.90
NRC (ASTM - C423)=0.90



	0.24	0.63	0.90	0.84	0.94	0.99
1/3 oct.	0.35	0.81	0.95	0.80	0.94	0.99
	0.59	0.92	0.89	0.91	0.99	1.01
1/1 oct.	0.39	0.79	0.91	0.85	0.96	1.00





parmephon[®] hygiene

Application & Appearance

Parmephon Hygiene is suitable for use in areas of sterile working environment such as; food, pharmaceuticals and electronics locations, Where small amount of dust exists and wash down is allowed during the year. Parmephon Hygiene has a clean room classification in accordance with US Federal Standard 209E and match to class M 3.5/100 (particle emission 100 per cubic foot). Parmephon Hygiene is mounted in a an exposed grid system and meets individual tile mount/de-mount requirements.

Product Description

Hygiene consists of a high-density glass wool panel with special glass fiber coating. The back side of the panel covered with glass wool tissue. Edges are sealed.

Size

Hygiene available in 15 and 20 mm thickness in the following dimensions

*600x600 mm, 610x610 mm, 600x1200 mm,
610x1220 mm*

Weight

Total weight, approximately 3.0 kg/m², including the suspension system.



SQUARE
GRID 15/24



NRC range 0.70-0.75 as per EN ISO 354 room method testing.



Removable, quick and easy access.



Withstand a vacuum cleaning. (according to the Manufacturer's instructions).



Up to 95% at 30 °C according to ISO-4611



Easy to handle and have standard mechanical strength.



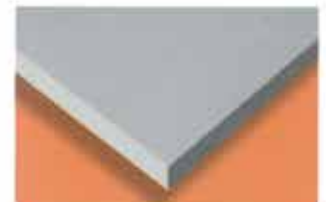
%85 RL
Up to 85% light reflection.



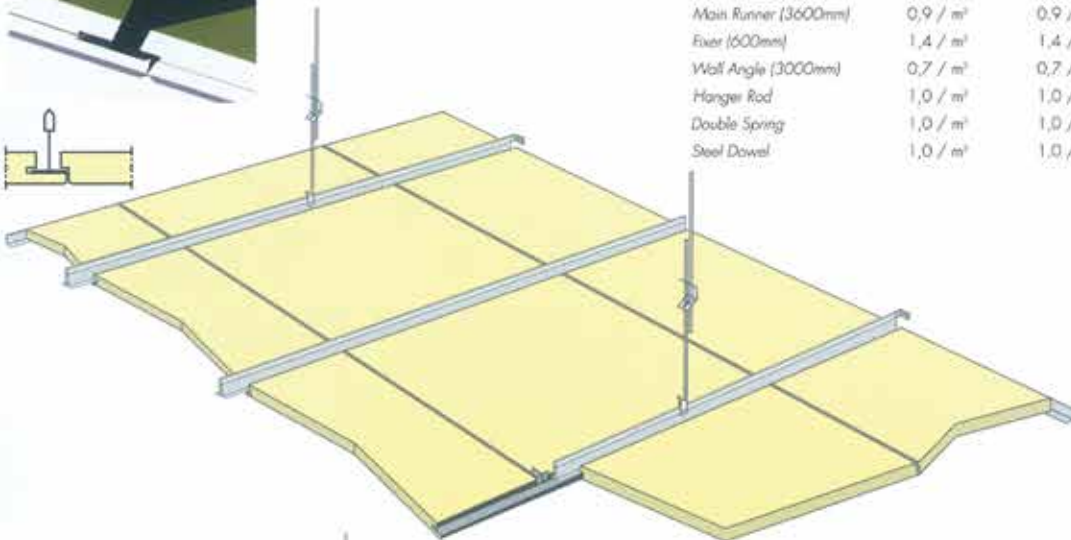
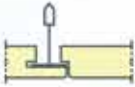
Class B s1 d0 according to UNE-EN 13501-1:2007



Ecology friendly, conform to international environmental standards and totally recyclable.

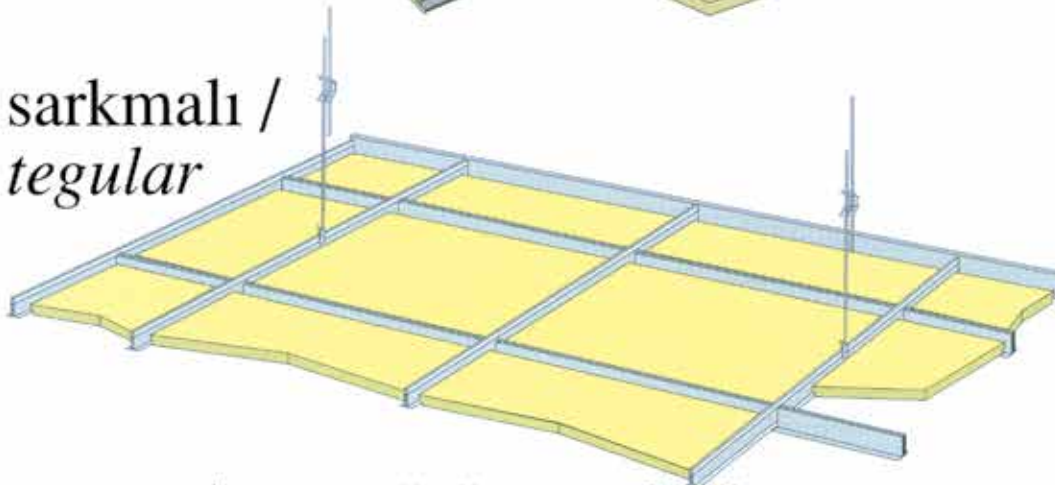


semi-concealed

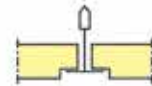


Semi-Concealed System	600 x 600 mm	600 x 1200 mm
Tile	2,8 / m ²	1,4 / m ²
Main Runner (3600mm)	0,9 / m ²	0,9 / m ²
Fixer (600mm)	1,4 / m ²	1,4 / m ²
Wall Angle (3000mm)	0,7 / m ²	0,7 / m ²
Hanger Rod	1,0 / m ²	1,0 / m ²
Double Spring	1,0 / m ²	1,0 / m ²
Steel Dowel	1,0 / m ²	1,0 / m ²

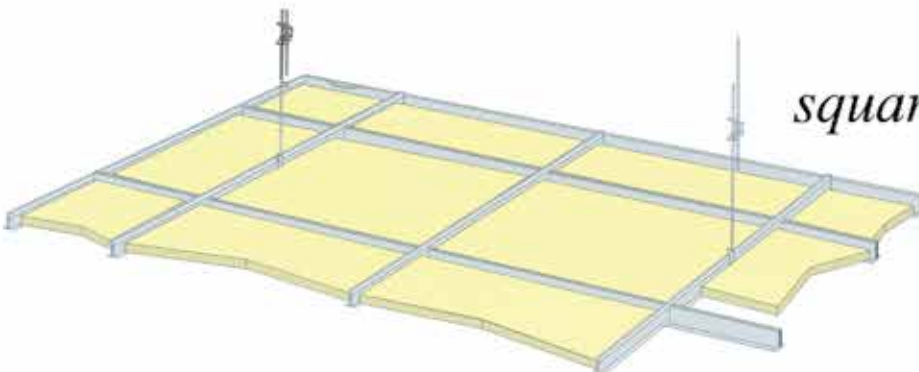
sarkmalı / tegular



Tegular System	600 x 600 mm	600 x 1200 mm
Tile	2,8 / m ²	1,4 / m ²
Main Runner (3600mm)	0,9 / m ²	0,9 / m ²
Cross Tee (1200mm)	1,7 / m ²	1,7 / m ²
Cross Tee (600mm)	0,9 / m ²	-
Wall Angle Z (3000mm)	0,7 / m ²	0,7 / m ²
Hanger Rod	1,0 / m ²	1,0 / m ²
Double Spring	1,0 / m ²	1,0 / m ²
Steel Dowel	1,0 / m ²	1,0 / m ²



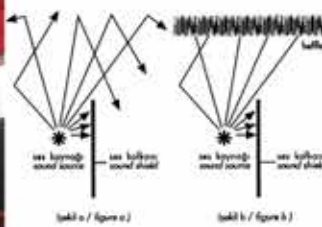
square



Square System	600 x 600 mm	600 x 1200 mm
Tile	2,8 / m ²	1,4 / m ²
Main Runner (3600mm)	0,9 / m ²	0,9 / m ²
Cross Tee (1200mm)	1,7 / m ²	1,7 / m ²
Cross Tee (600mm)	0,9 / m ²	-
Wall Angle L (3000mm)	0,7 / m ²	0,7 / m ²
Hanger Rod	1,0 / m ²	1,0 / m ²
Double Spring	1,0 / m ²	1,0 / m ²
Steel Dowel	1,0 / m ²	1,0 / m ²



Acoustical Ceiling baffles



Baffle, thanks to its special glass wool structure, it absorbs the high noise generated by machines at the worksite and provides a healthy working environment. The energy hitting the surface of the sound blocking panel, is converted into heat energy due to the friction in the pores of the panel and the sound energy reflected from the surface decreases.

As seen in Figure a, the shield that is net to the sound source can not block the high frequency sound that spreads into the environment. The sound hitting the ceiling spreads into the environment as noise. But the upward spreading sound from the source is absorbed by the blocking panels and noise is prevented. (Figure b)

Size : 600 x 1200 mm

Thickness : 40 mm and 50 mm



table separator

Core Material : 10 mm fiberboard between 2 acoustic glass wool panels with 95 kg/m³ high density and 20 mm thickness or only 1 glass wool panel of 20 mm thickness.

Product Description: Both surfaces and vertical edges are covered with resistant fabric.

Sizes Custom sizes can be manufactured.

Thickness 20 - 50 mm

Edges
Aluminium profile / Strengthened edges

Acoustic
NRC value is between 0,90 and 0,95



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Fabric Colors

DEKART

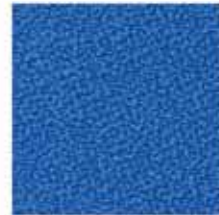
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200-055



200-003



200-064



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2

***acoustic walls
and ceilings***