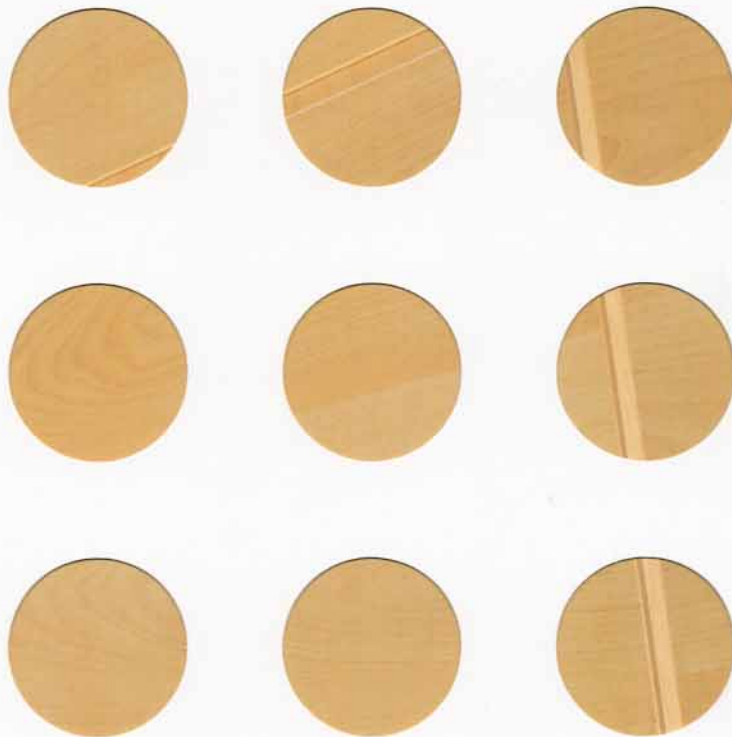


GUSTAFS

PANEL SYSTEM





National Maritime Museum, Falmouth, UK.
Birch Nature, plain.
Architect: Long and Kentish, London.



Fredrikstad Rådhus, Fredrikstad, Norway.
Maple Nature, SH8.
Architect: Lunde & Løvseth, Oslo.

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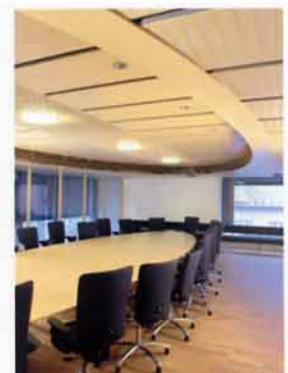
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Gustafs Panel System

Throughout time Scandinavian architects have used wood as their material of choice due to its inherent properties and not least its warmth and liveliness. A wall or ceiling clad in wood immediately provides the room with a classic exclusive appearance. It is this tradition that is the driving force behind the development of Gustafs Panels System. Today's demands for fire protection, acoustic adjustment and environmental considerations have been challenges which we have met without compromising the aesthetic values of the material.

Today we can offer a wide variety of veneers, surface finishes and accessories which provide designers creative opportunities with regard to appearance and function.

Gustafs Panel System is a well-documented panel system that draws on our experience from a wide variety of projects in both Europe and Asia. Thanks to the development of our Capax profile system we can provide simple and secure installations well tuned to today's rapid building processes.

Design

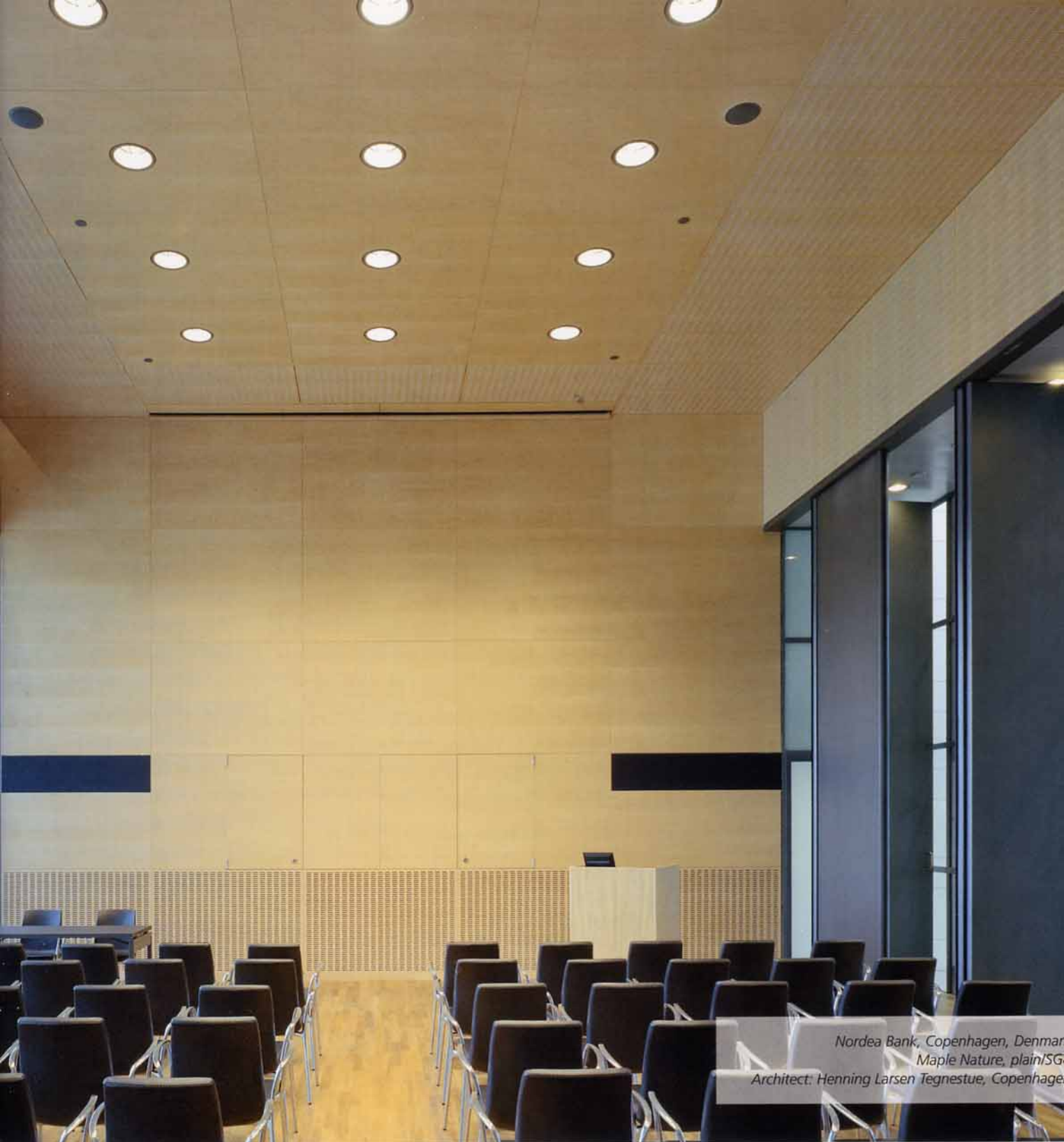
Gustafs Panel System offers many possibilities to create environments with the highest demands for design and appearance.



Fire

Gustafs Panels have a documented high resistance to fire and contributes insignificantly to the spread of fire or smoke generation. Euroclass B-s1, d0.





Nordea Bank, Copenhagen, Denmark
 Maple Nature, plain/SG
 Architect: Henning Larsen Tegnestue, Copenhagen

Acoustics

Gustafs panels help create an aesthetically appealing and acoustically adjusted interior environment.



Installation

Capax installation system offers simple and secure mounting of Gustafs panels to both walls and ceilings.





PANEL DESIGN

Gypsum woodfibre – makes good sense

When constructing a cladding panel there are many requirements that steer the choice of intrinsic materials. Among our first demands were; a strictly plane surface, dimensional stability, fire retardation and acoustic characteristics. These demands effectively eliminate most traditional wood-based choices.

However, a panel constructed of highly compressed gypsum and wood-fibre incorporates the properties needed to meet fire prevention demands and offers good acoustic characteristics while at the same time offers us wood's versatility and aesthetic charm.

The resultant panel is less sensitive to changes in temperature and humidity which in turn maintains the panels' lineage. All together, this unique combination contributes to produce a panel suited for application not only in large areas but also in a wide variety of demanding situations.

Attention to detail is important in creating a positive overall impression.

Prior to veneering, a solid wood edging is integrated around the panel, disguising the core material. When the veneer is then applied it covers the wooden edge and effectively gives the panel the appearance of being entirely of wood. This process contributes to the total strength of the panel making it more robust and ensures its dimensional accuracy.

Advantages with gypsum woodfibre board

Fire

Due to the surface veneer's strongly bound adhesion to the gypsum woodfibre board, initial sources of fire are prevented from spreading over the panel's surface. Even when an intensive fire source has developed the dense nonflammable core of the panel prevents fire penetration thus protecting underlying and adjacent materials.

Acoustics

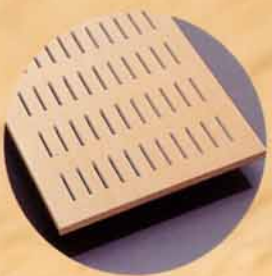
With regard to room acoustics, the use of innately heavy wall cladding is often favourable compared to lighter materials. Gustafs Panels system utilising gypsum woodfibre board weighing 15 kg/m² is roughly twice as heavy as most wood-based panel materials.

Stability

It is an inherent characteristic of natural wood to move in relationship with changes in humidity and temperature. This can result in bulging or shrinkage of wall panel surfaces. A gypsum wood-fibre board is considerably less susceptible to these effects than other commonly used materials such as MDF-board. This results in a planer surface overall.

Insulation

The gypsum woodfibre panel offers insulating properties that are considerably better than other popular board and panel solutions. Due to the panel's high density and its low level of thermal conductivity, the material helps to maintain room temperatures at a constant. Effectively, this means temperate rooms which are steered by air conditioning systems will maintain their temperature more efficiently and longer even when the air conditioning system is closed down.



Caser Seguros, Madrid, Spain
Maple Nature, plant
Architect: Ricardo Sánchez Lampreave, Madrid

Comparative technical data – Gypsum woodfibre board/MDF board

Property	Gypsum woodfibre	MDF
Density	1 250 kg/m ³	780 kg/m ³
Weight	15,0 kg/m ²	9,3 kg/m ²
Moisture content on delivery 65% RF +20°C	2%	5-8%
Moisture difference 40-65% RF	2%	5-7%
Linear expansion 30-80% RF	0,08%	0,4%
Thermal conductivity	0,24 W/Km	0,14 W/Km
Specific heat capacity	1 320 J/kg deg C	1 851 J/kg deg C
Fire Euroclass	A2	D
Gustafs Panel System	Type BF-panel	Type MDF-panel
Fire Euroclass	B-s1, d0	D-s1, d0

Fire test and Euroclass

As early as 1997 the European Commission decided that a common standard should be created which would harmonise the various fire testing procedures that existed throughout the European Union. The result of this decision was the establishment of Euroclass fire classification for building materials. This system is the result of co-operation between fire technicians and concerned authorities throughout the European Union. Euroclass has now been adopted by the member countries and after a transitional period is now replacing existing nation testing certification.

Since this common standard for building materials is now implemented it basically means that all building materials that are manufactured and sold in the EU are subject to Euroclass system. This in turn identifies their fire preventive properties and helps indicate their suitability for building application.

The system is divided into various classes in accordance to the following:

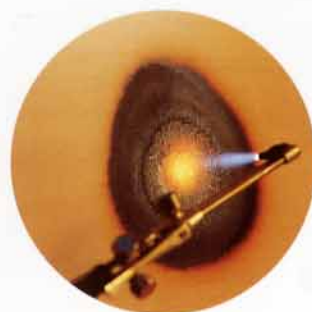
A1	Nonflammable materials	No contribution to fire
A2	Nonflammable materials	No noticeable contribution to fire
B	Flammable	Little or no contribution to fire
C	Flammable	Limited contribution to fire
D	Flammable	Contributes to fire
E	Flammable	Major contribution to fire
F	Flammable	Not within classes A1-E

The end result

The fire retardant properties of Gustafs Panels System are not reliant on chemical treatment; instead it is the mechanical composition of all the details which create the end result.

Our perforated and slotted panels fall into this classification provided they are installed in combination with mineral wool.

Gustafs Panels System has been tested and certified at a national level in most European countries, Asia and the United States. Current national certificates can be obtain in pdf-format from our website www.gustafs.com.



As can be seen from the table Gustafs Panels achieved the highest class for flammable materials. However the classification system has additional information worth considering.

Gustafs panels, type BF-Panels have, in accordance with the Euroclass system, achieved classification:

B-s1, d0

This coding can be deciphered accordingly:

- B** the panels contribute little or insignificantly to fire.
- s1** the panels contribute little or insignificantly to the development of smoke.
- d0** the panels do not create flaming particles or droplets when subjected to fire.



Fredrikstad Rådhus, Fredrikstad, Norway
Maple Nature, SH
Architect: Lunde & Lovseth, Oslo


Design and good acoustics

Whether your project is an airport terminal, auditorium, conference centre or lobby space, designers must consider the acoustic environment they create. Certain sounds need to be directionally steered and others reduced or eliminated. Designers are therefore recommended to consult with an acoustician in order to achieve the required results. Gustafs Panel System can help in this process to create an aesthetically satisfying and acoustically adjusted environment. Sound absorption for example, is attained by using perforated or slotted panels in combination with mineral wool and air space. Our various acoustic patterns are tested and documented to achieve known sound absorption coefficients for both walls and ceilings.

More acoustic information can be obtained from our website www.gustafs.com.

*Royal Society of Medicine, London, UK.
Oak Nature, PH8.
Architect: MJS, London.*



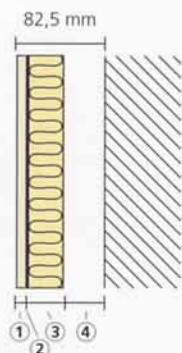
The photograph captures the interior of the Vara Concert Hall, showcasing its striking architectural design. The walls are clad in light-colored wood panels, some of which are arranged in a staggered, three-dimensional pattern that creates a dynamic play of light and shadow. In the foreground, rows of plush red upholstered seats are visible, with metal handrails positioned in front of them. A tall, slender, dark vertical pole stands prominently on the left side of the frame. To the right, a series of horizontal wooden slats are integrated into the wall, likely serving as ventilation or acoustic treatment. The overall atmosphere is warm and modern, reflecting the hall's design philosophy.

Vara Konserthus, Vara, Sweden
Birch Nature, plan
Architect: Arkitekttriangeln, Trollhättan

Acoustic patterns

Wall

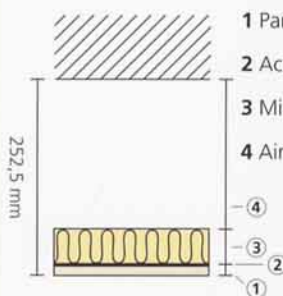
- 1 Panel 12,6 mm
- 2 Acoustic felt
- 3 Mineral wool 40 mm
- 4 Air gap 30 mm



— 30 mm air gap wall

Ceiling

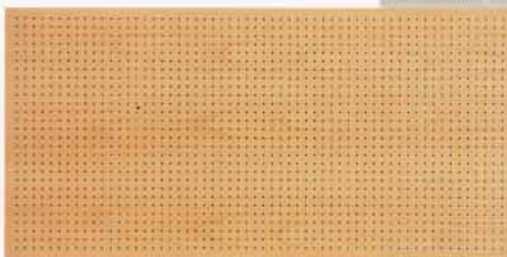
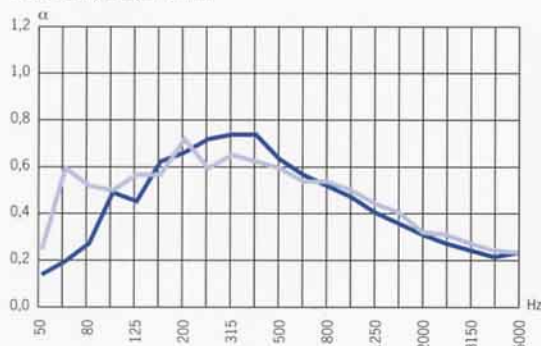
- 1 Panel 12,6 mm
- 2 Acoustic felt
- 3 Mineral wool 40 mm
- 4 Air gap 200 mm



— 200 mm air gap ceiling

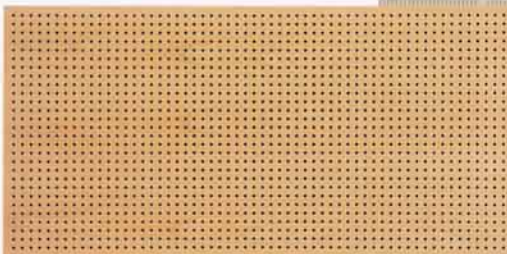
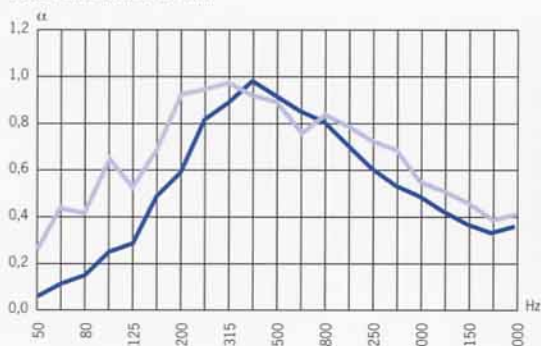
Absorption coefficient according to SS-EN 20354 (ISO 354) and evaluating to ISO 11654.

PH5 Perforation 5 mm



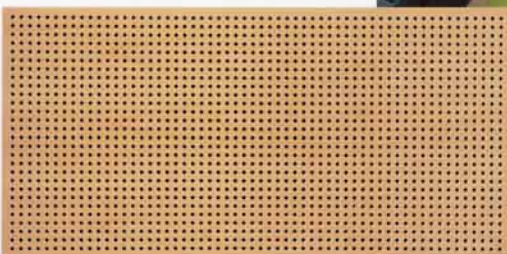
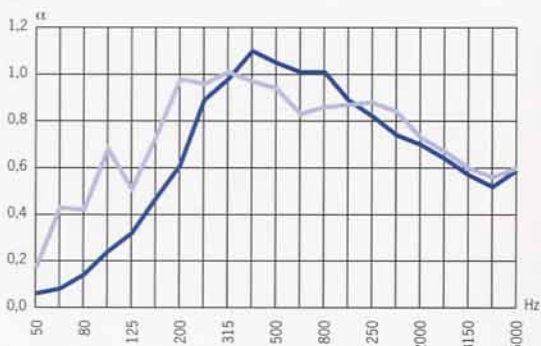
A = 20 mm, *B = 30 mm,
**C = 30 mm, E = 20 mm, Ø = 5 mm.
Absorption class D. Open area 5%.

PH8 Perforation 8 mm

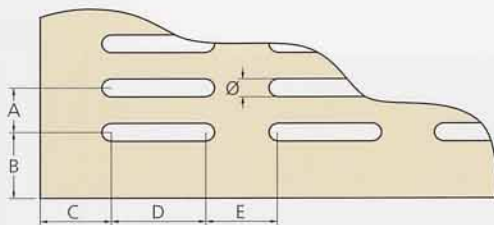


A = 20 mm, *B = 30 mm,
**C = 30 mm, E = 20 mm, Ø = 8 mm.
Absorption class D. Open area 12%.

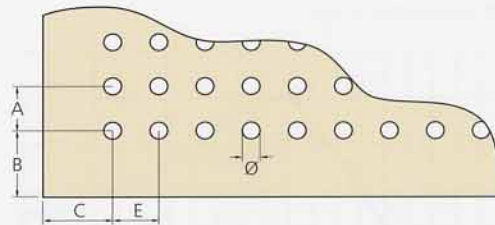
PH10 Perforation 10 mm



A = 20 mm, *B = 30 mm,
**C = 30 mm, E = 20 mm, Ø = 10 mm.
Absorption class C. Open area 18%.

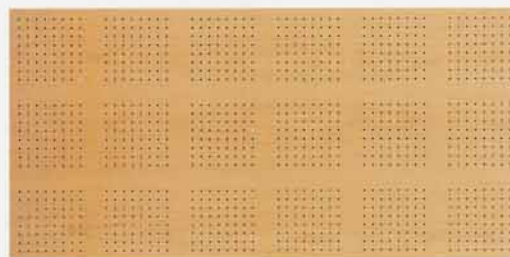
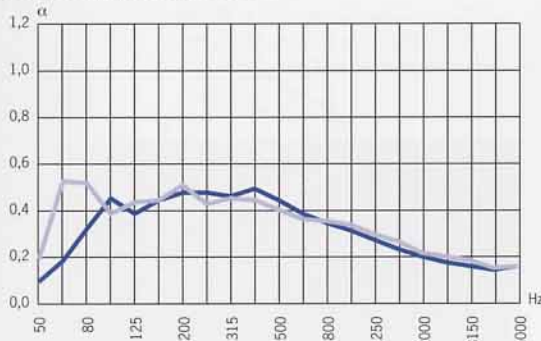


* Normally B = 30 mm. Edge DG for ceiling B = 40 mm.



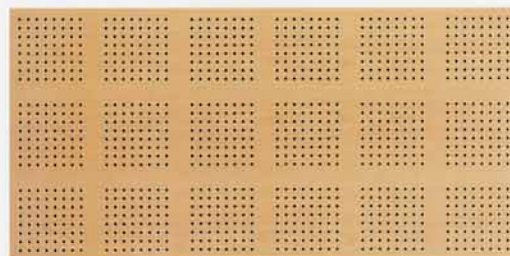
** Normally C = 30 mm. Panels length 1480-1500 mm have C = 50 mm.

PG5 Group perforation 5 mm



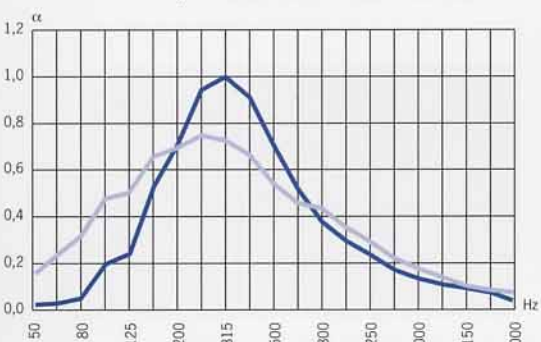
A = 20 mm, *B = 30 mm, **C = 30 mm, E = 20 mm,
 $\varnothing = 5$ mm. Module measurement 200 x 200 mm.
 Absorption class E/D. Open area 3%.

PG8 Group perforation 8 mm



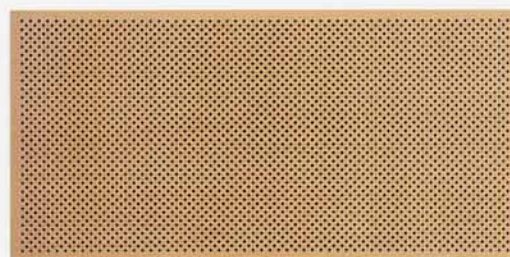
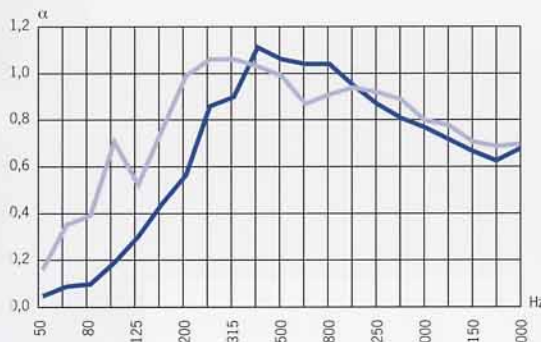
A = 20 mm, *B = 30 mm, **C = 30 mm, E = 20 mm,
 $\varnothing = 8$ mm. Module measurement 200 x 200 mm.
 Absorption class D. Open area 8%.

PS2 Double sided perforation 3/10 mm



A = 20 mm, *B = 30 mm, **C = 30 mm,
 E = 20 mm, $\varnothing = 3$ mm.
 Absorption class E. Open area 2%.

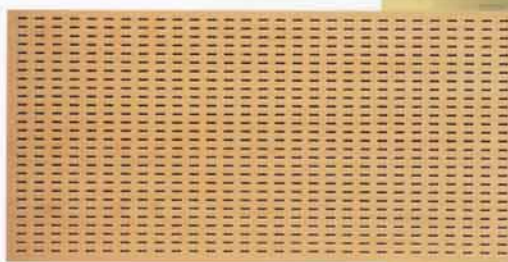
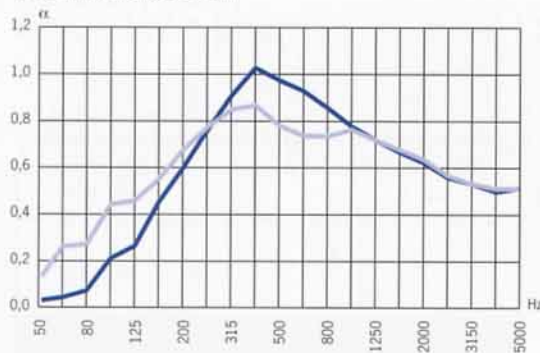
PD8 Double perforation 8 mm



A = 10 mm, *B = 30 mm, **C = 30 mm,
 E = 10 mm, $\varnothing = 8$ mm.
 Absorption class B. Open area 24%.

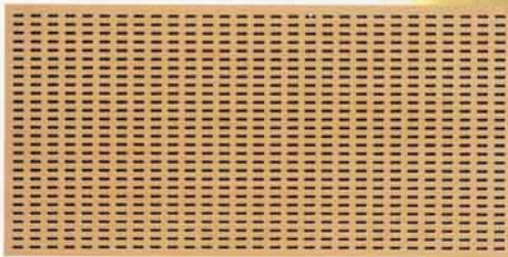
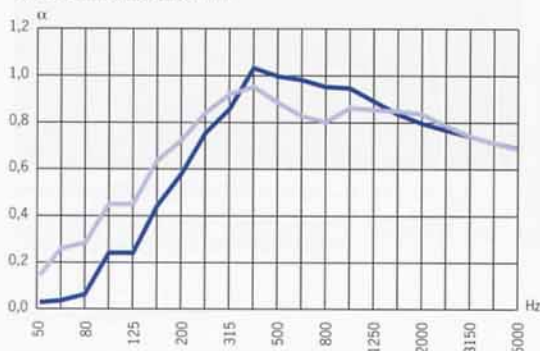
OMHEX, Stockholm, Sweden.
 White painted, RS8.
 Architect: Sandell & Sandberg,
 Stockholm.

SM5 Mini slotted 5 mm



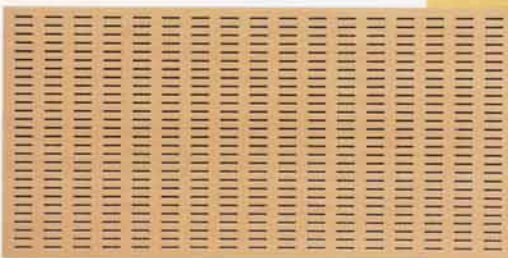
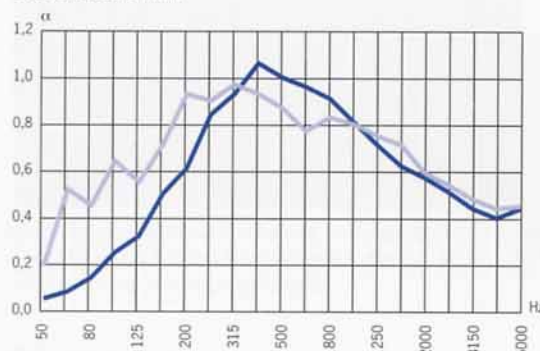
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 20 mm, E = 20 mm, Ø = 5 mm.
Absorption class C. Open area 15%.

SM8 Mini slotted 8 mm



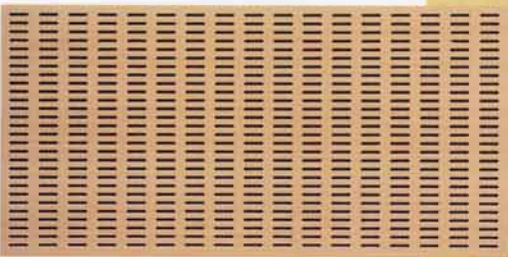
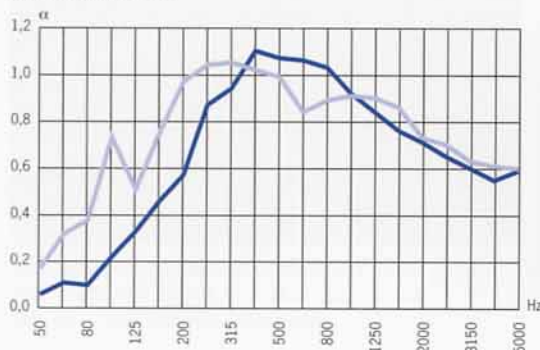
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 20 mm, E = 20 mm, Ø = 8 mm.
Absorption class B. Open area 26%.

SH5 Slotted 5 mm



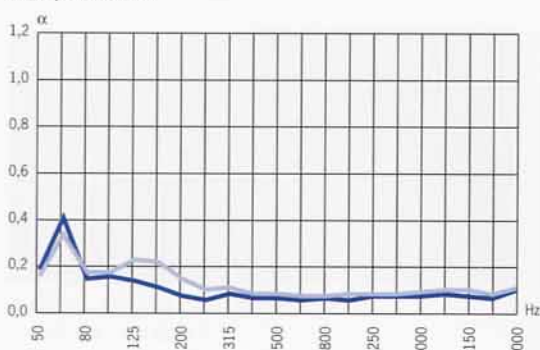
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 40 mm, E = 30 mm, Ø = 5 mm.
Absorption class C. Open area 15%.

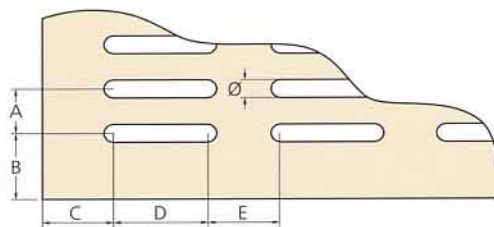
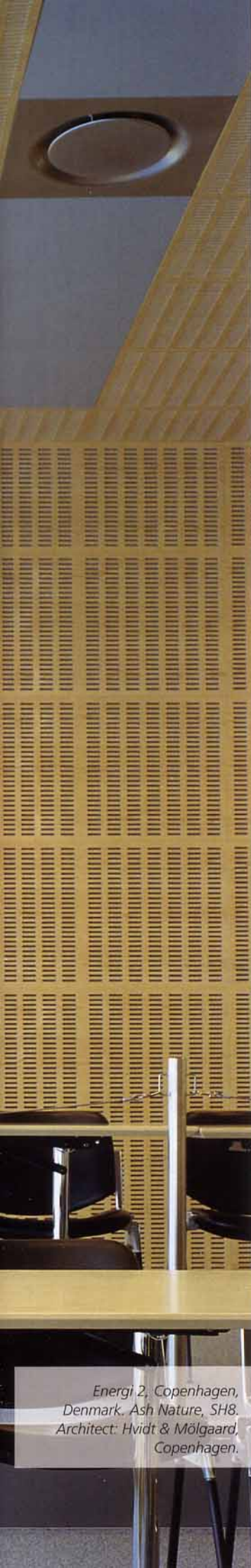
SH8 Slotted 8 mm



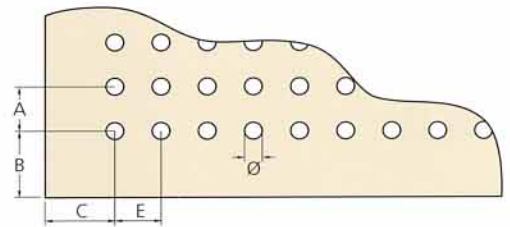
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 40 mm, E = 30 mm, Ø = 8 mm.
Absorption class C. Open area 26%.

Non perforation



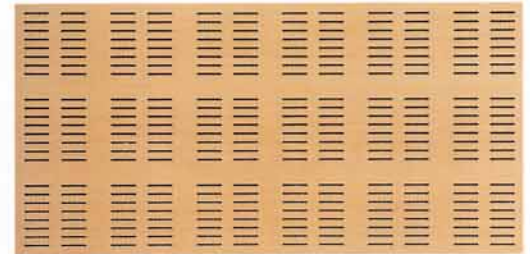
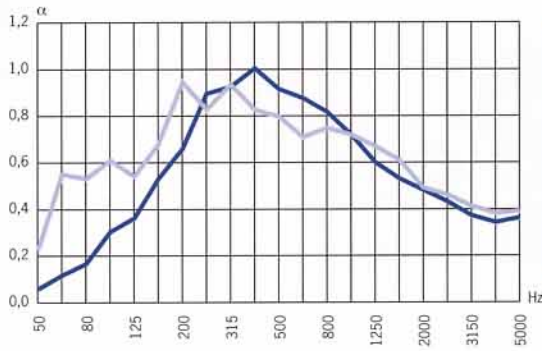


* Normally B = 30 mm. Edge DG for ceiling B = 40 mm.



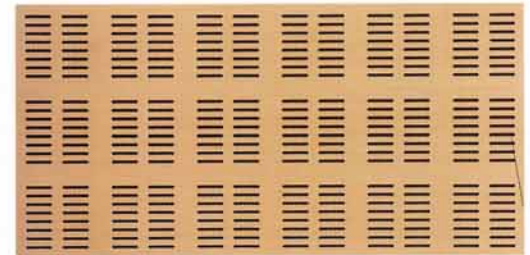
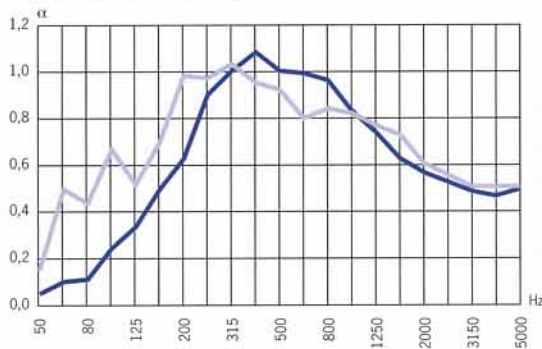
** Normally C = 30 mm. Panels length 1480-1500 mm have C = 50 mm.

SG5 Group slotted 5 mm



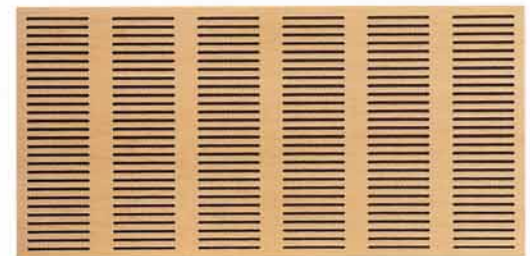
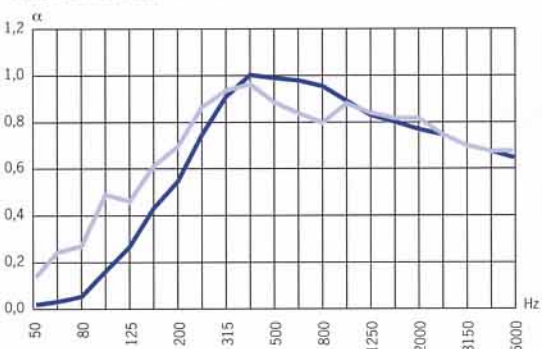
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 55 mm, E = 30 mm, Ø = 5 mm.
Module measurement 200 x 200 mm.
Absorption class D. Open area 12%.

SG8 Group slotted 8 mm



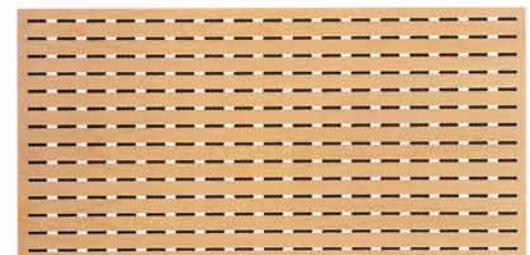
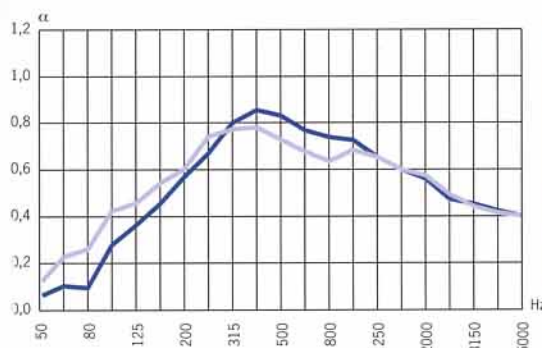
A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 55 mm, E = 30 mm, Ø = 8 mm.
Module measurement 200 x 200 mm.
Absorption class C. Open area 20%.

SX8 Maxi slotted 8 mm



A = 20 mm, *B = 30 mm, **C = 30 mm,
D = 140 mm, E = 60 mm, Ø = 8 mm.
Absorption class B. Open area 29%.

RS8-C40 Rib slotted 8 mm



A = 40 mm, *B = 30 mm, **C = 30 mm,
D = 40 mm, E = 30 mm, Ø = 8 mm.
Absorption class C. Open area 13%.

Energi 2, Copenhagen,
Denmark. Ash Nature, SH8.
Architect: Hvidt & Mølgaard,
Copenhagen.



SURFACES

Natural veneers

– classical aesthetics, endless variations



*Intercontinental Hotel, Warsaw, Poland.
Oak stained, plain.
Architect: Jestico & Whiles, London.*

Birch, Beech, Oak or Ash. Every wood species has its own colour and grain. The skilful use of the trees innate character creates veneers that are entirely unique in structure and colour tone.

As wood matures colour tones vary. So too with veneers. Differences in colour and character are inherent to wood's attraction. However, certain interiors aspire to create a stable and uniform impression which some natural veneers cannot provide over wide areas. Gemini veneer with its subtle variation of patterns and colours can provide these qualities without compromising a natural impression.

Nature veneer – Totally natural

Nature is our popular natural wood veneer selection. These veneers possess all the beauty and character nature provides. The veneer's colour tone matures with time and no two veneers are exactly alike. Totally natural, totally unique.

From lacquer to oil and staining

A clear lacquered finish is by far the most common maintenance-free and durable finish for wooden surfaces. Utilising a three-stage UV-lacquer process our surface finish achieves these demands while aspiring to maintain technical aspects such as our fire retardation and environmental goals. As an alternative to this type of surface treatment we are often asked to provide oiled or stained finishes.

Although the results of these special surface treatments can be both exciting and appealing colour consistency is imperative for successful results. Due to the nature of certain veneer types it can be very difficult to achieve the desired result and we therefore advise customers to confer with us on the suitability of veneers for this treatment.



Maple



Birch



Rotary cut birch



Ash



Oak



Beech



Museum d'Histoire, Paris, France.
 Birch Select, plain/PH8.
 Architect: Chemetov & Huidobro, Paris.

It is difficult reproduce true colour tones and wood grain patterns in photos. Contact us therfeore for advice and further information regarding veneers.



Oregon pine



Elm



Cherry



Pear



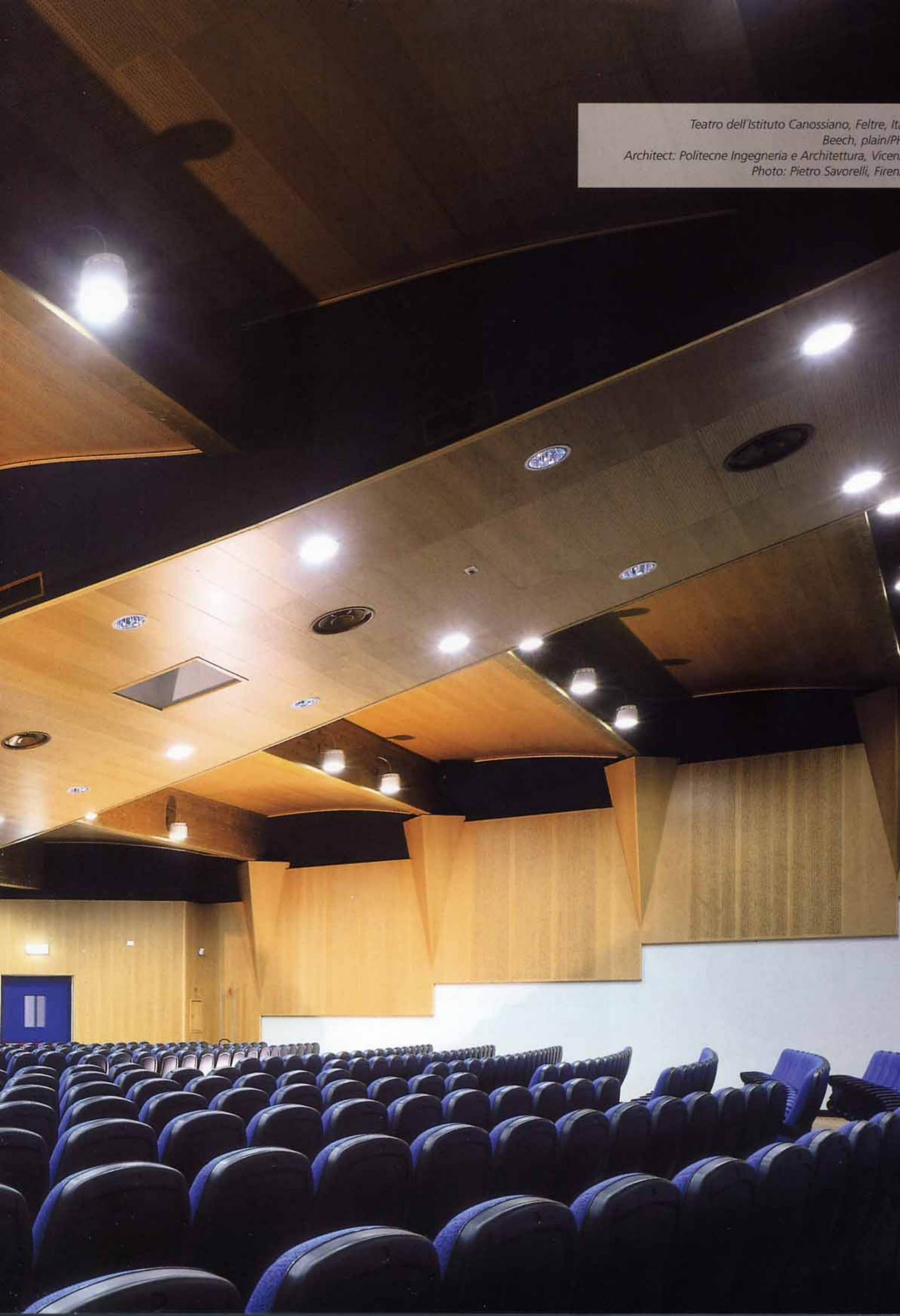
Mahogany



Teak



Teatro dell'Istituto Canossiano, Feltre, Ita
Beech, plain/PH
Architect: Politecne Ingegneria e Architettura, Vicens
Photo: Pietro Savorelli, Firen





Gemini Pale Maple



Gemini Wavy Maple



Gemini Birds Eye Maple



Gemini Birch



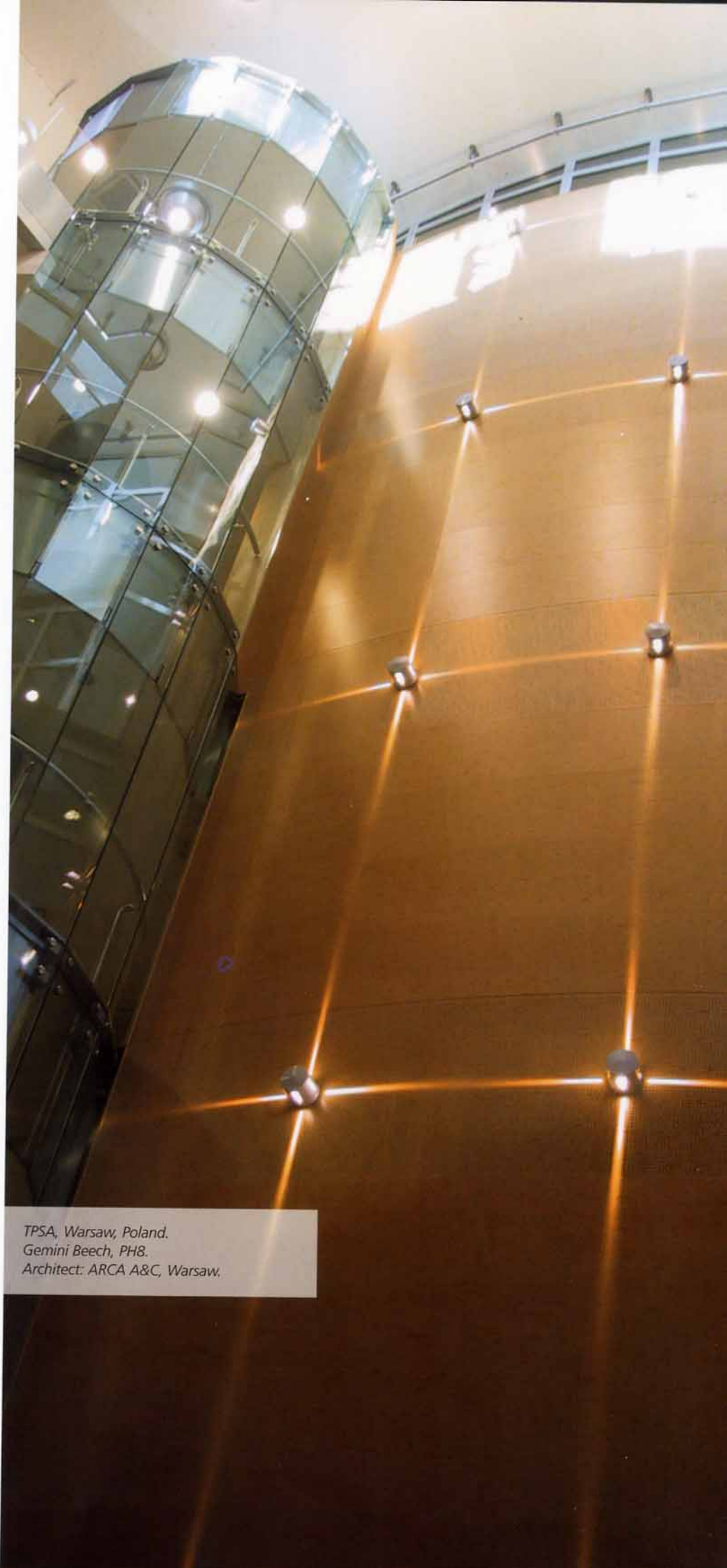
Gemini Ash



Gemini Sandy Maple



Gemini Oak



TPSA, Warsaw, Poland.
Gemini Beech, PH8.
Architect: ARCA A&C, Warsaw.



SURFACES



Gemini Beech



Gemini Cherry



Gemini Pear



Gemini Mahogany



Gemini Teak



Gemini Walnut



Gemini Wenge

Gemini veneer

– natural feeling
and visual consistency

Gemini is a dyed multi-layer wood veneer. More colour consistent and less affected by sunlight, Gemini veneers are suited for both small and large surface areas. Grain patterns and colours are also consistent with generic species and provide an even impression, irrespective of quantity. This also means that panels can be integrated into surfaces at a later date with the minimum of colour tone disruption.

The exclusive multi-layer technique combines various wood sorts to offer the remarkable properties of the Gemini Collection. The veneers consist of a selection of choice patterns and colours resembling a variety of well-known wood species. This also means Gemini veneers can be produced resembling tropical woods causing no negative effects on unique and sensitive rain forests species. Gemini veneered panels can be produced up to 2400 mm lengths.



Telenor, Oslo, Norway.
Painted, plain.
Architect: NBBJ-HUS-PKA, Oslo/Trondheim.

Painted and metal panels

Many interiors utilise the beauty and simplicity of painted or laminated surfaces. These surfaces are very often highly demanding especially if they incorporate technical features such as fire retardation and acoustic characteristics. Among the many advantages of a Gustafs panel is its plane and even surface area. This enables us to create a painted or metallic surface finish which otherwise is extremely difficult to achieve on site.

Utilising our production technology we can produce painted surfaces in a multitude of colours in accordance with NCS or RAL codes up to a glance factor of 60. We also offer a standard collection of metal laminates including among others, aluminium, brushed steel and bronze.

*Kista Entré, Stockholm, Sweden.
Brushed aluminium.
Architect: Scheiwiller Svensson, Stockholm.*



Matt bronze



Brushed steel



Brushed aluminium



Aluminium relief



Painted in NCS
or RAL colour



ENVIRONMENT

Our contribution to a sustainable environment

It is just as important for us to ensure the survival of the rain forest areas as it is to eliminate the use of health hazardous chemicals in our production process. One way is to strive to find new materials that imitate rare wood species. Another way is use only environmentally safe materials and methods in our manufacturing process.

Gustafs Panels consist of 98% natural materials which include gypsum and wood. The use of chemical products is limited to the veneer adhesive and the surface treatment. Naturally, our environmental efforts are controlled by legislation but, we strive to exceed the legal demands and set our environmental goals at a higher level. We regularly conduct environmental audits of our process as a natural part of our continuous improvement ambitions. Our environmental policy is so important to us that we try to maintain an open dialogue concerning environmental issues with our staff, suppliers and customers.

*Chalmers Högskola, Gothenburg, Sweden.
Maple Nature, plain.
Architect: Gert Wingårdh Arkitektkontor,
Gothenburg.*



Environmental Declaration

PRODUCT

Name: Gustafs Panel System

Type: BF-panels. Panels for covering walls and ceilings indoors.

Manufacturer:

Gustafs Inredningar i Dalarna AB

Produced in: Gustafs, Sweden

CONTENTS DECLARATION

	percentage by weight
Gypsum	81 %
Wood Chips	12 %
Wood, edge strips and veneer	3 %
Water	2 %
Kraft paper	1 %
Adhesive	1 %
Laquer	< 0,3 %
Total thickness	12,6 mm
– of which Gypsum woodchip board	12,0 mm

EMISSION TEST The sample was placed in FELD (Field and Laboratory Emission Cell). Result after 4 weeks: Emission factor, TVOC < 10 µg/(m² x h). No individual substance had an emission level higher than 5 µg/(m² x h).

PRODUCTION Existing emission to the air from gluing and lacquering is less than the stipulated concession agreement. Bi-products of wood and paper are used for energy, Gypsum is disposed of in accordance with environmental regulations.

DISTRIBUTION For transport of raw materials and finished products, car and boat transportation is used. Finished products are distributed directly to the building site. Packaging consists of wood and cardboard. Wood pallets are re-used.

CONSTRUCTION PHASE Installation is carried out with the help of power hand tools. Any Gypsum and woodchip dust is collected and disposed of in accordance with environmental regulations.

USAGE PHASE No environmentally dangerous emissions occur when managing and maintaining Gustafs Panel System. No energy is needed for the usage of the panels. The lifespan is estimated at more than 30 years.

DEMOLITION No environmentally dangerous emissions occur at demolition.

BI-PRODUCTS When demounted, the aluminium profiles can be reused. Wood batons are used for energy and panels are deposited. More information can be obtained from our website www.gustafs.com.



Our working method, the building process

We have developed a method of working which stems from our wide experience of building projects from throughout the world. Included in the method is an understanding for architectural conception, building processes and project utilisation. Our model offers due regard for all involved. Communication between client and producer has been enhanced with the widespread use of CAD applications and internet technology. Our future improvements lie in the widening potential of both these merging technologies. Already today our website www.gustafs.com is an invaluable source of information for clients looking for CAD and pdf information files.

Reduce the cost!

Standard or special formats? The most effective way of reducing the cost of a panel installation is to choose Gustafs Panel System in standard format and use Capax profiles for wall and ceiling installation. Costs for standard panels are 15 – 25% cheaper than special formats. Capax profile system ensures a secure and time saving installation. In this way savings of between 20 – 30% can be achieved without compromising quality in preference to a tailor-made solution. Rational choices of materials and efficient installation solutions are watchwords in today's building processes.

We gladly offer our advice on how to achieve efficient and cost saving order and installation.

An example of how to describe a wall or ceiling Panel

Type: Gustafs Panel System. Veneered gypsum woodfibre with over-veneered solid wood edges.

Thickness: 12,6 mm

Type of veneer: Gemini type beech

Format: Standard 1200 x 600 mm

Direction of veneer: 1200 mm side

Type of edge profile: Edge G, closed edges

Perforation/ slotting: PH8 mm

Reverse side: Black acoustic felt

Fire Classification: Euroclass B

Acoustic demands: ISO 11654 – class D

Installation: Capax wall installation



Niveau

Niveau installation is an alternative to wall panel mounting where adjustment to adjacent details such as door openings, ceilings or floor skirting is avoided. Installation is therefore time saving and cost effective. The Niveau profile system creates the appearance of a "floating" panel installation and allows for acoustic adjustment with the help of perforated panels and mineral wool. A Niveau installation offers a unique and economic way of changing the both the appearance and acoustic characteristics of a room.

Novotel, Gothenburg, Sweden
Oak Nature, PH8



INSTALLATION

Capax installation system, simple and fast

Capax is the name of our unique installation system consisting of aluminium profiles for walls and ceilings. The profiles are strong and their torsional rigidity insures the utmost lineal accuracy. The range of Capax profiles accommodates both aesthetic and functional demands. There are a variety of joints and connections to choose from. Special profile types disguise cut edges and allow for panel cutting on site. Thus, panels can be ordered in standard sizes and then adjusted on site to meet the actual dimensions, allowing for a more cost-effective installation.

Telenor, Oslo, Norway.

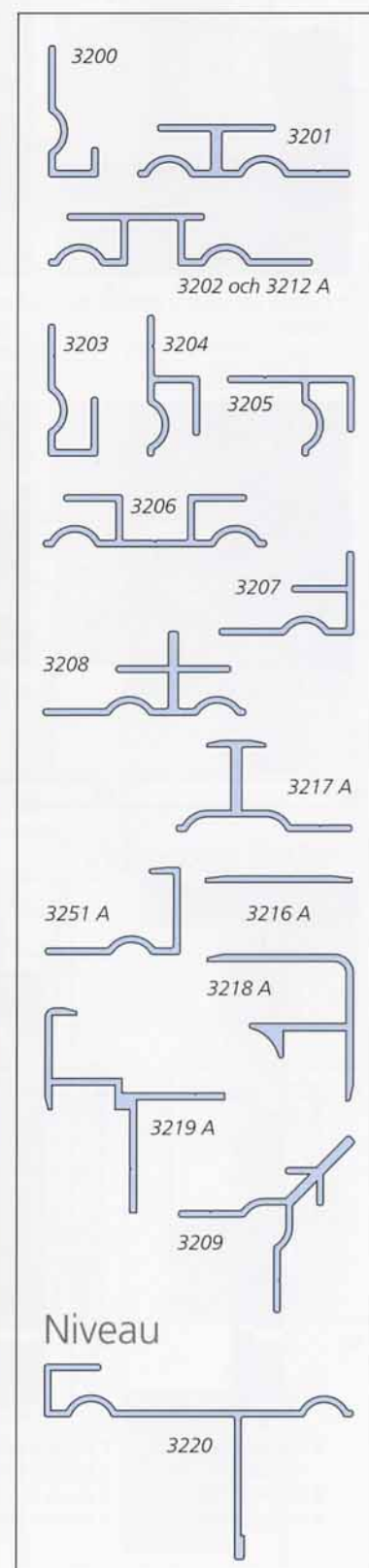
Ash Nature, plain.

Architect: NBBJ-HUS-PKA, Oslo/Trondheim.





Capax wall profiles



A = anodized profile

Telenor, Oslo, Norway.
 Ash Nature, plain.
 Architect: NBBJ-HUS-PKA, Oslo/Trondheim.



WALL INSTALLATION



1 Putting up battens behind the panels.



2 Adjusting surface alignment by inserting spacers behind the battens.



3 Inserting mineral wool slabs between battens.



4 Checking and sorting panels according to colour and grain pattern.



5 Fastening of lower start profile.



6 Screwing in the joint profile.

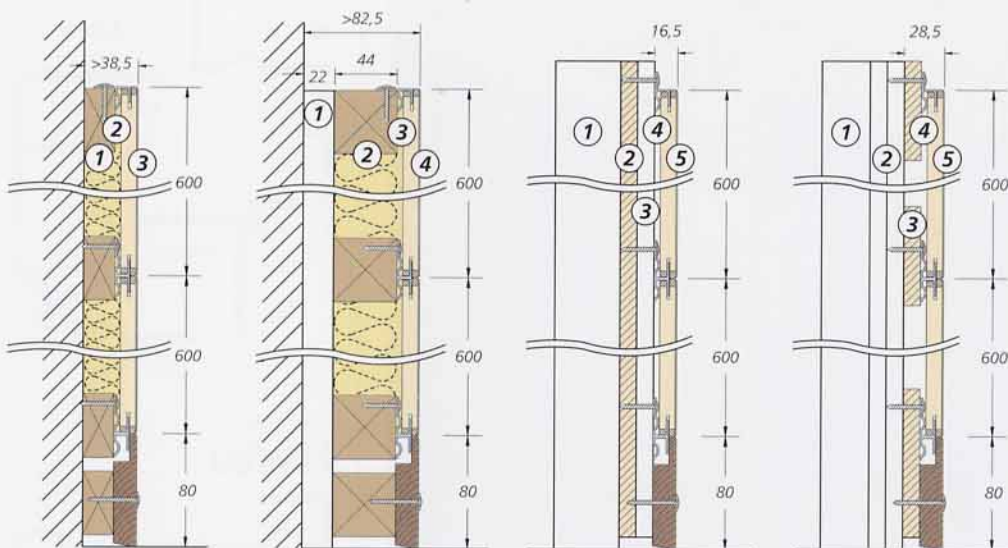


7 Fixing the next panel.

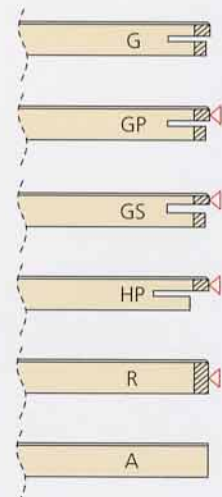


8 Sawing the panel from the back. Use tools with extraction facilities.

Wall assembly



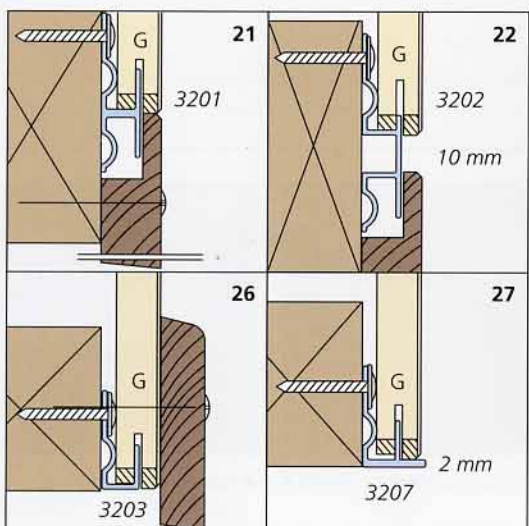
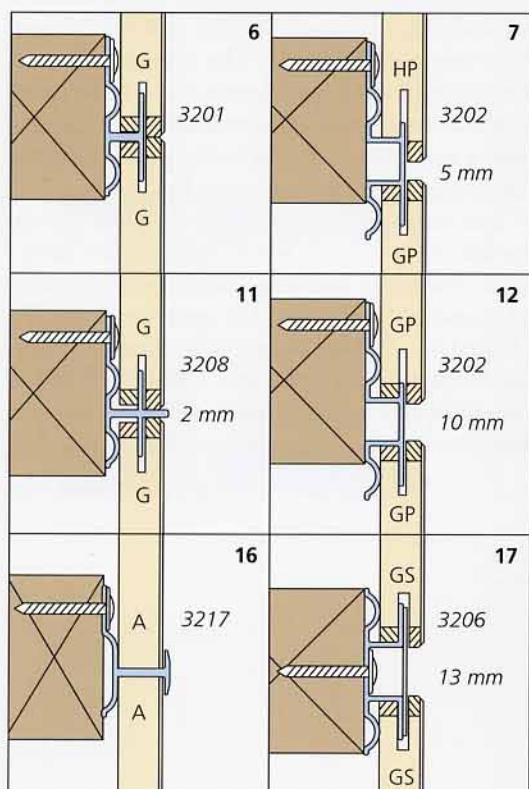
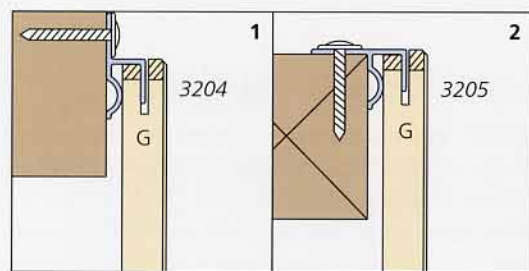
Edge profiles



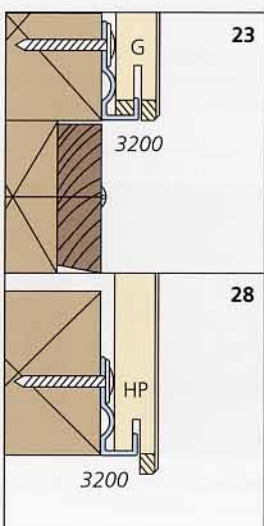
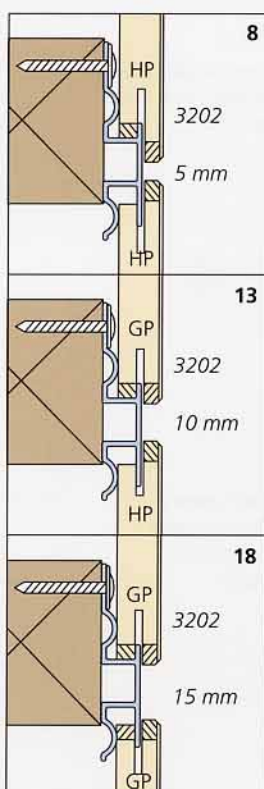
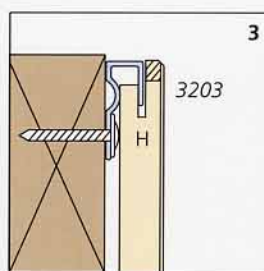
◁ Lacquered edge.

▨ Solid wood or veneered MDF.

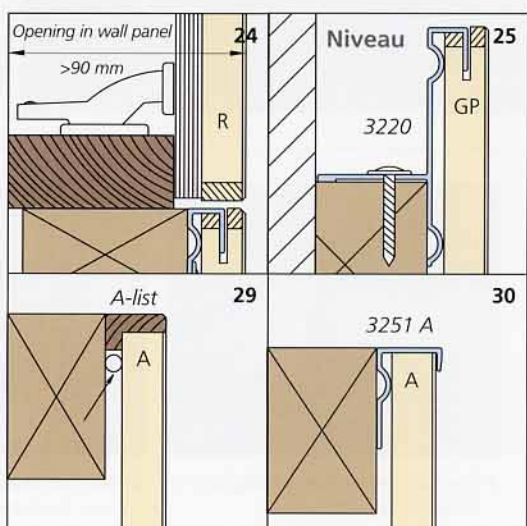
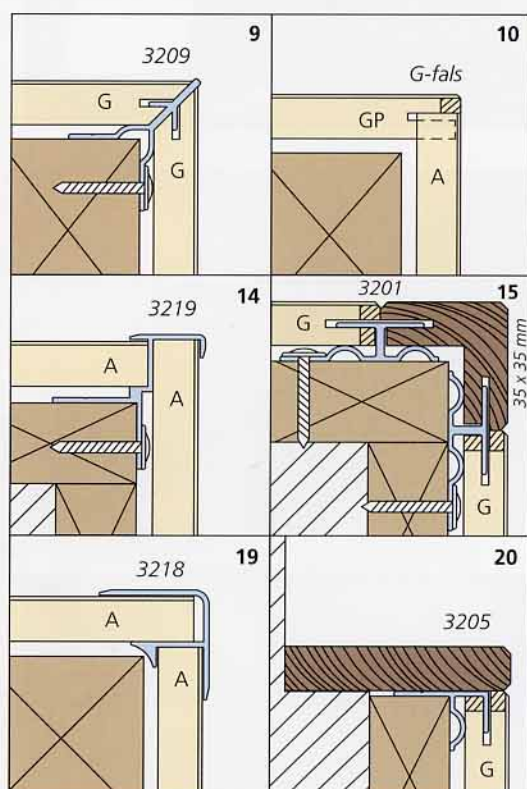
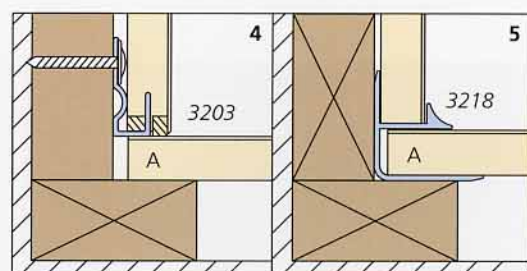
Fixed panels



Demountable panels



Corners and other joints



These details can be downloaded from our website www.gustafs.com.



CEILING INSTALLATION



*Free hanging ceiling
without wall edge
profiles.*



*Each panel is
demountable.*



*Concealed
suspension
system.*

Capax ceiling installation

Gustafs' new installation system for suspended ceilings constitutes a considerable improvement to previous installation solutions.

The most important characteristic of the system is that it is properly dimensioned to accommodate the weight of Gustafs Panels. The construction is torsionally rigid and self-bearing, lacking the need to fix onto adjacent walls. The system offers full panel demountability and thereby access to overlying technical installations while maintaining its overall stability and strength. Capax ceiling profile system is aesthetically appealing and totally hidden.

Capax suspended ceiling system consists of a robust T-profile main runner which supports the panel's length. The broad side of the panels meet each other end to end with precision. The main runner profile is locked in place by means of a distance profile, thus creating a very stable grid system. The system is constructed for a panel breadth of 600 mm but even allows for a 50 mm variation between 300 and 800 mm.



1 Measure and indicate hanger distance, c/c 1200 mm.



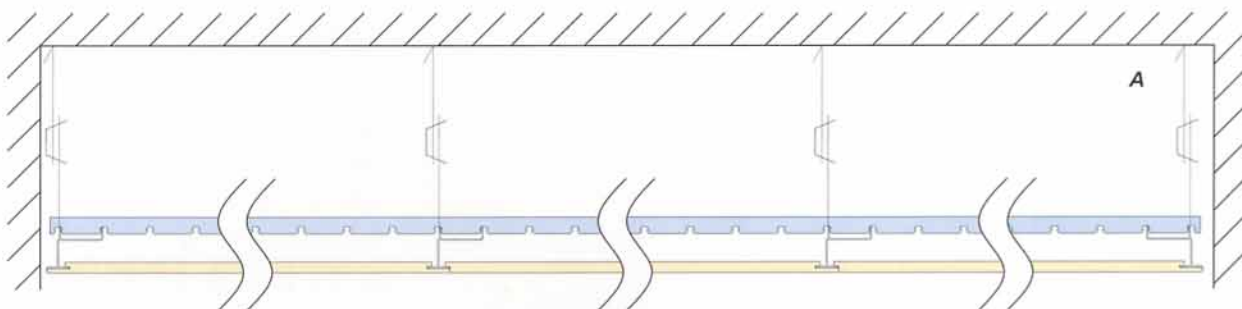
2 Hang up main runner profile away from the room.



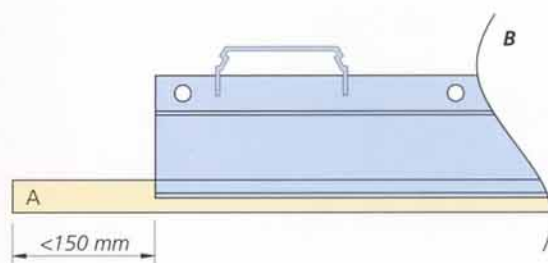
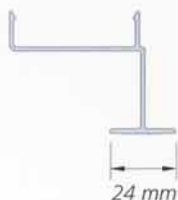
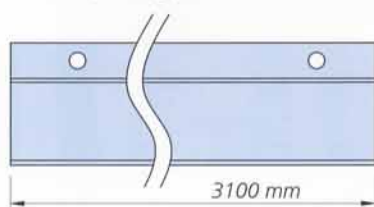
3 Connect main runners.



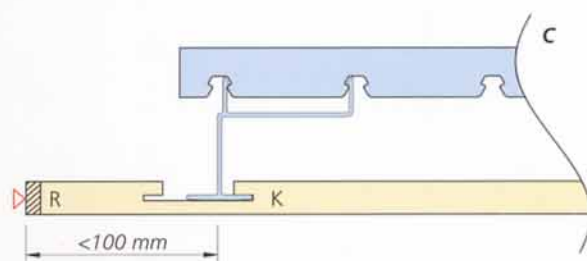
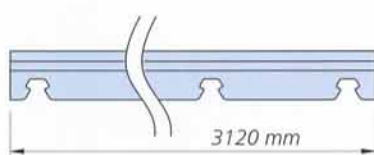
4 Fasten distance profile c/c 1200 mm.



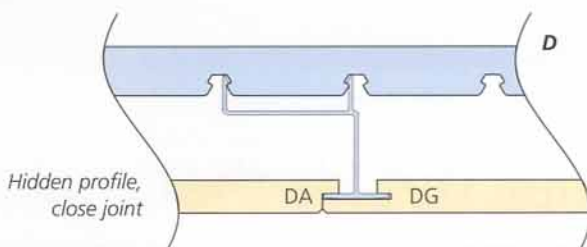
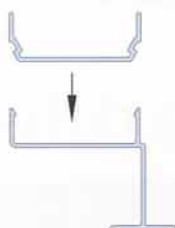
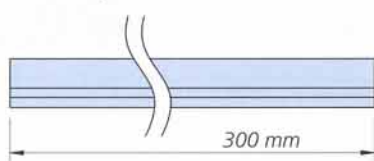
3261 Suspending profile



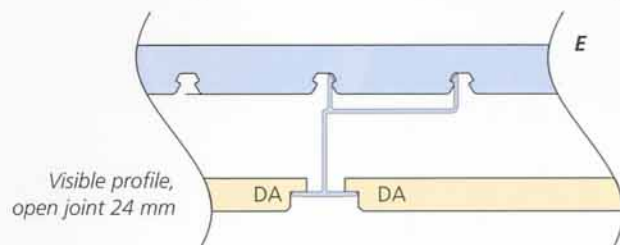
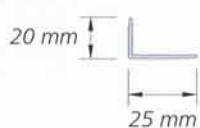
3262 Distance profile



3263 Rail joint



3253 Wall profile



These details can be downloaded from our website www.gustafs.com.



5 Secure snap lock with self-drilling screw.



6 Install panels.



7 Install mineral wool insulation.



8 Dust off panels.



SPECIAL SOLUTIONS



A variety of special friezes to perforated panels.



Switch appliance in perforated panel.

Small details that make a difference



An example of acoustic reflectors.



Solid wooden grating.



Corner detail in wood and finish around stairway.

For more information see our website www.gustafs.com.

Curved panels



Panels curved during installation. >10 m radius.

Abbey Centre, Belfast.

Gemini Cherry and Gemini walnut, plain.

Architect: WDR & RT Taggart, Belfast.



Form pressed panels. 0,5 – 5 m radius.

AMNGR, Murmansk, Russia.

Cherry Nature, plain. Architect: Studio Telivuo Oy, Finland.



Straight panels installed in faset.

Printemps Clichy, Paris, France. Birch Nature, SH8.

Architect: Reichen et Robert Architectes, Paris.



Panels glued to curved structure. 5 – 10 m radius.

Grafarvogskirkja, Reykjavik, Island.

Birch Nature, plain. Architect: Á stofunni arkitektar, Reykjavik.

Technical data

- Thickness:** 12,6 mm
- Standard lengths:** 400, 600, 1000, 1200, 1500, 1800, 2400 and 3000 mm
- Special length:** 400 – 3000 mm
- Standard width:** 400, 600, 800 and 1200 mm
- Special width:** 260 – 1200 mm
- Weight plain panels:** 15,7 kg/m²
- Surface treatment:** 3 layers of UV-tempered clear varnish, brilliance value 20
- Veneer gluing:** Melamin – urea glue with a low content of formaldehyde



University of Wrocław, Wrocław, Poland.
Rotary cut birch, plain/SH8.
Architect: Zbigniew Maćków, Wrocław.

Maintenance

Climate

Gustafs Panel System™ is only for indoor use. Before installation the room should be heated and well dried. Temperature over 18 C°, humidity 25-60%. Max humidity in the underlying construction 15%.

Construction damage

Protect the panels during transport and storage. Cover all parts that can be exposed to damage. Remember not to expose the panels in strong sunlight.

UV-light

Wood is a natural material and changes over time when exposed to UV-light. Different kinds of wood react in different ways and also the radiation varies with the seasons.

Water

Too much water causes discolouration and cracking in the veneer. If this happens it is necessary to replace the panel. Small damages can be reconditioned with furniture polish.

Heat

Temperatures over 50 C° can result in discolouration and cracking of the surface. See water damages above.

Cleaning

Gustafs panels are simple to maintain. Normally there is no need for a regular cleaning. If required the panels can be dusted with a dry mop or vacuumed.

Stains

A well-wrung cloth moistened with lukewarm water and wiped dry afterwards. For greasy stains cleaning fluid or white spirit can be used. For stains from fruit, berries, beer, wine or coffee use a synthetic cleaning fluid without ammonia in lukewarm water. Blood is removed with cold water.

A Coruña Radio Pontevedra **Aalborg** Sykeplejeskole **Abuja** Europe House
Amsterdam Hilton Hotel **Avila** Universidad Catoilica **Barcelona** La Caixa
Berlin Spanish Embassy **Bilbao** Palacio de Euskalduna **Birmingham** Land Rover
Budapest National Theater **Cambridge** William Gates Lecture Room
Cambridge University **Chichester** Rolls Royce HQ **Dublin** Dublin University
Düsseldorf Hilton Hotel **Falun** Lasarettet **Feltre** Teatro dell'Istituto Canossiano
Gdansk University Gdansk **Gdynia** Prokom **Glasgow** Glasgow Airport Business
Park **Gävle** Sjukhus **Göteborg** Sahlgrenska Medical center **Halmstad** Tylöhögskola
Kongress **Holland** Provinciehuis den Bosch **Hongkong** San Po Kong Primary School
Huddinge Karolinska Institutet **Jönköping** Tingsrätt **Kalmar** Sjöfartshögskola
Kalstad Stora Enso **Kungsbacka** Coloplast **København** Dansk Designcenter
Las Palmas Cine Cuyás **Leeds** BBC Radio Rooms **Linköping** Universitetet
KEY-hus **London** Bartlett School of Architecture **Ludvika** ABB **Lund** Edison Park
Madrid Aeropuerto de Barajas **Malmö** Hotell St Jörgen **Mölnådal** Astra Zeneca
Newry Buttercrane Centre **Norrköping** Louis de Geer Concert hall **Odense**
Odense Universitet **Oslo** Rikshospital **Palma de Mallorca** Banca March **Paris**
Museum d'Histoire Naturelle **Parma** Grand Hotel Parma **Poznan** Poznan
Financial Centre **Reykjavik** Grafarvogskirkja **Roma** Genzano di Roma **Santander**
Aeropuerto de Santander **Segovia** Auditoria Caja Segovia **Seoul** Community
Welfare Centre **Sevilla** Parlamento Andaluz **Singapore** Church of St. Mary of the
Angels **Stockholm** Ericsson Kista **Sundsvall** Tingshus **Södertälje** Astra Zeneca
Taipei Auditorium of Water Department **Taranto** Villaggio Medusa **Torshavn**
Tryggingarfelagið Føroyar **Trollhättan** Vattenfall **Trondheim** Værnes Lufthavn
Umeå Umeå Universitet MIT **Uppsala** Kristallen **Uppsala** Ångströmlaboratorium
Valencia Parque Oceanografico **Vitoria** Museo de Bellas Artes **Warszawa**
Hotel Intercontinental **Wrocław** Wrocław University **Västerås** Högskolan
Mälardalen **York** York Racecourse **Ystad** Sparbanken **Zürich** Star Alliance
Lounge **Åmål** Högskolan **Örebro** Musikhögskolan **Gustafs** Panel System



*Ministerio de Ciencia y Tecnología, Madrid, Spain.
Birch Nature, plain.
Architect: Luis Gayarre, Madrid.*

GUSTAFS :: PANEL SYSTEM

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