

# Gyptone®

## Gyptone® Tiles

Acoustic tiles for demountable  
and screw fixed ceilings





# Gyptone® Acoustic Tiles

Excellent performance  
for demountable ceilings

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# Acoustics

## Good acoustics – the key to successful spaces

How do you define a comfortable space? What are the elements that make it so enjoyable? Aesthetic design, yes. Natural light and strong temperature control, too. But above everything sits acoustic comfort.

A lack of acoustic comfort often means too much noise. Unwanted sound that has a negative impact on a community's ability to live, learn or work in a given space. Good acoustic comfort, on the other hand, with appropriate acoustic reverberation times and high speech clarity, creates a functioning, calming environment that is pleasant for all users.

An important part of a good and healthy indoor climate is efficient sound absorption. The effects of poor acoustics are well recognised and particularly unpleasant: Unfavourable acoustic environments and high noise levels can lead to an increase in heart rate and blood pressure, as well as discomfort, annoyance and an increased risk of inappropriate behaviour\*.

\* SafeWork SA. "Noise & vibration in the workplace": Government of South Australia

## Strengthen your communication

Beside from its damaging effects on health and behaviour, poor acoustics can also be a major impediment to effective communication. Whether you're building a school, healthcare facility, office or hotel, communication and speech clarity is key.

Studies from the United States have shown that classrooms often have speech intelligibility ratings of 75% or less, meaning every fourth word is either misunderstood or not understood at all\*. Now imagine the impact that has a child's ability to concentrate and learn.

But what is the answer? Significantly reducing the number of noise sources is unrealistic. So too – in the short-term at least – is decreasing the amount of hard surface materials used in modern construction methods.

There is, though, another way. By using high-class, sound absorbent materials such as Gyptone Tiles, it is possible to improve the control of noise levels and create positive and healthy acoustic environments and indoor climates.

\* Seep, B., Glosemeyer, R., Hulce, E., Linn, M., & Aytar, P. "Classroom acoustics: A resource for creating learning environments with desirable listening conditions." NY: Acoustical Society of America (2000).





# Acoustics

## A life-changing impact

Within our acoustic gypsum portfolio we can absorb up to 85% of the sound that hits the surface, creating the perfect balance between sound absorption, sound diffusion and sound reflection. It is within this balance that you find the optimal acoustic comfort and the best promotion of speech clarity.

Sound reduction alone is simply not enough to deliver the acoustic comfort a modern-day construction demands. That's because when sound reduction is overdone, it can quickly damage speech clarity and create an unpleasant indoor climate. The optimal acoustic environment is not achieved by sound reduction, but by acoustic control. A control that is easily achieved when using Gyptone Tiles System.

A sound-regulated environment, where some sound waves are reflected while others are absorbed, ensures strong speech intelligibility and a pleasant acoustic environment. In practical terms, students sitting at the back of a sound-regulated classroom will hear their teacher just as clearly as those sitting at the front – ensuring a truly life-changing impact.

Gyptone acoustic Tiles are classified in sound absorption class B\*.

\* Installation with 50 mm mineral wool. Installation without mineral wool, the classification is class C.





# Design

## Designing a better performing space

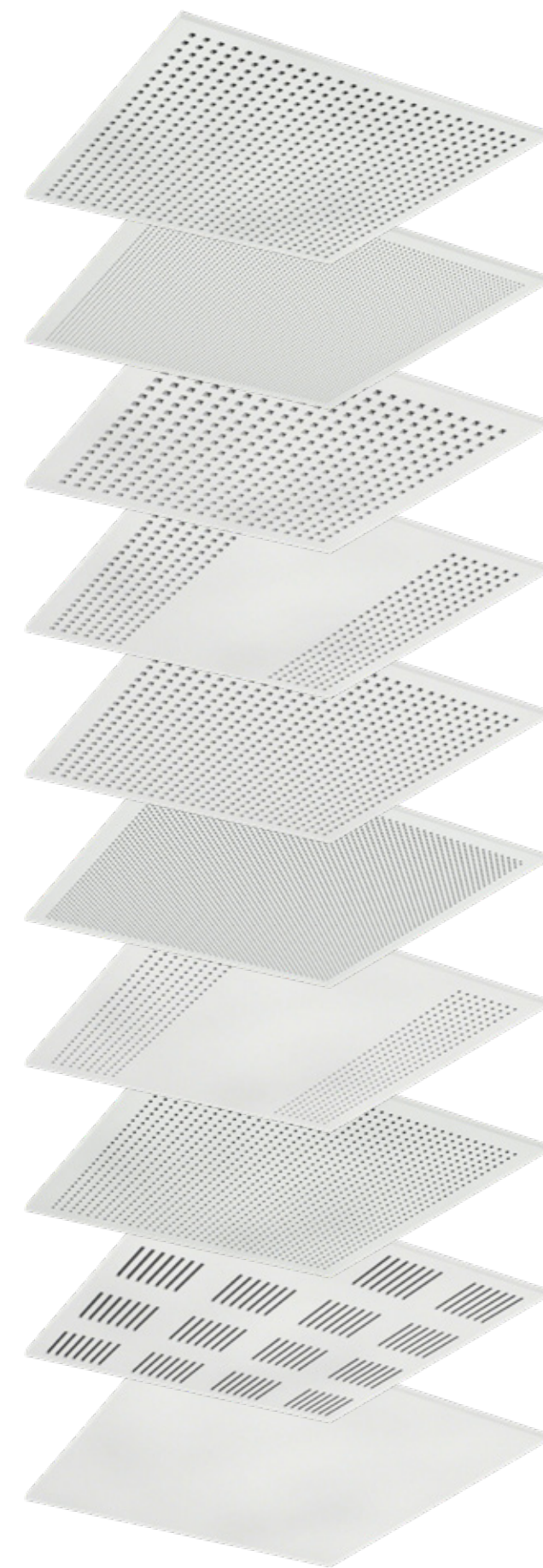
People have always shaped their environments to serve their needs: our homes provide comfort, our workplaces encourage productivity, our hospitals support good health and our schools facilitate learning. But did you know that architecture and design can promote personal wellbeing, heighten the mood – and even increase performance?\*

To do that successfully, we need a more holistic view of the way we design our buildings. One that begins with the environment in which patients, students and co-workers spend their time. This means choosing the right construction materials not only in terms of functionality, but also their aesthetic appeal and design.

## Functional excellence and aesthetic appeal

Gyptone's diverse portfolio of robust, sound-absorbing and sustainable ceilings and wall linings is the ideal choice for most indoor environments. Combining functional excellence with aesthetic appeal, our products enable the creation of superior interior spaces that encourage and support the people using them.

In fact, with Gyptone you can create a spectacular look while still using a durable material with good acoustic properties. And if you need access to underlying installations, easy access to installations behind the ceiling is required.



Gyptone® Tiles are available in a series of standard designs. Special designs can be made on request.

\* Ampt A, Harris P, Maxwell M. 2008 The Health Impacts of the Design of Hospital Facilities on Patient Recovery and Wellbeing, and Staff Wellbeing: A Review of the Literature. Centre for Primary Health Care and Equity, University of New South Wales: Sydney.

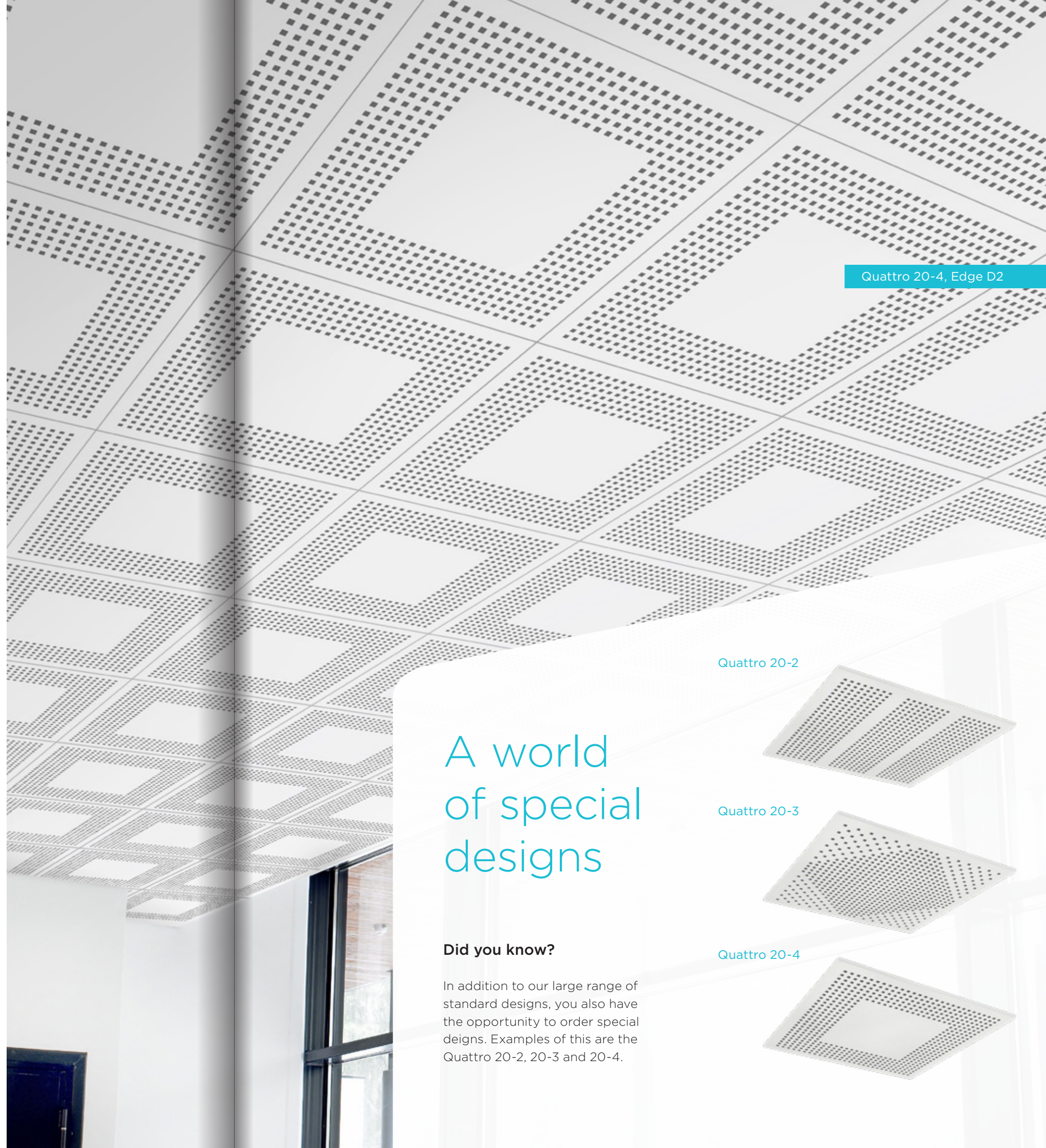




Quattro 20-2, Edge D2



Quattro 20-3, Edge D2



Quattro 20-4, Edge D2

## A world of special designs

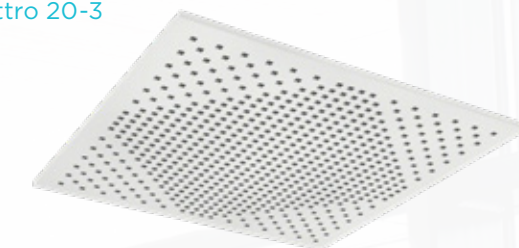
### Did you know?

In addition to our large range of standard designs, you also have the opportunity to order special designs. Examples of this are the Quattro 20-2, 20-3 and 20-4.

Quattro 20-2



Quattro 20-3



Quattro 20-4





# Edge design

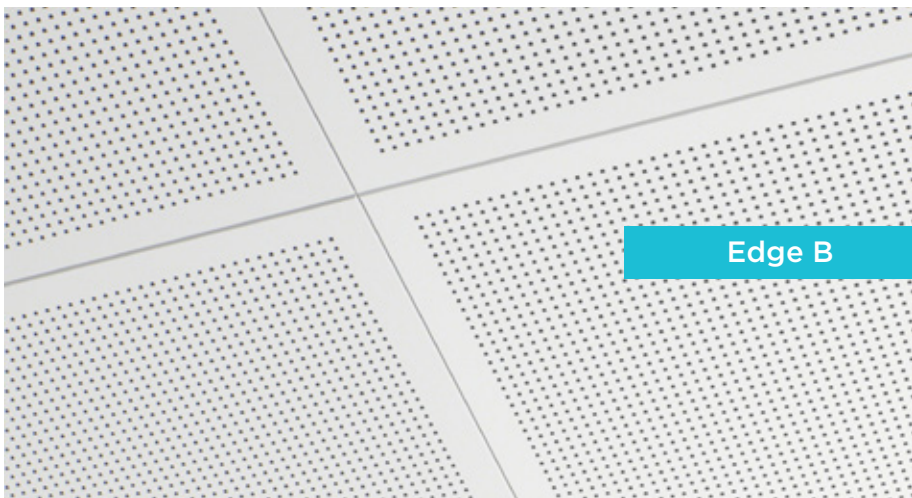
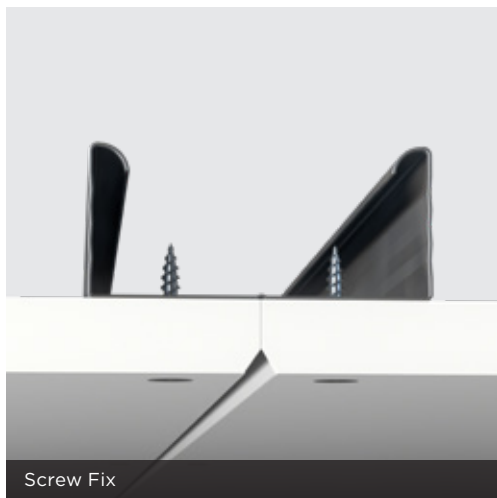
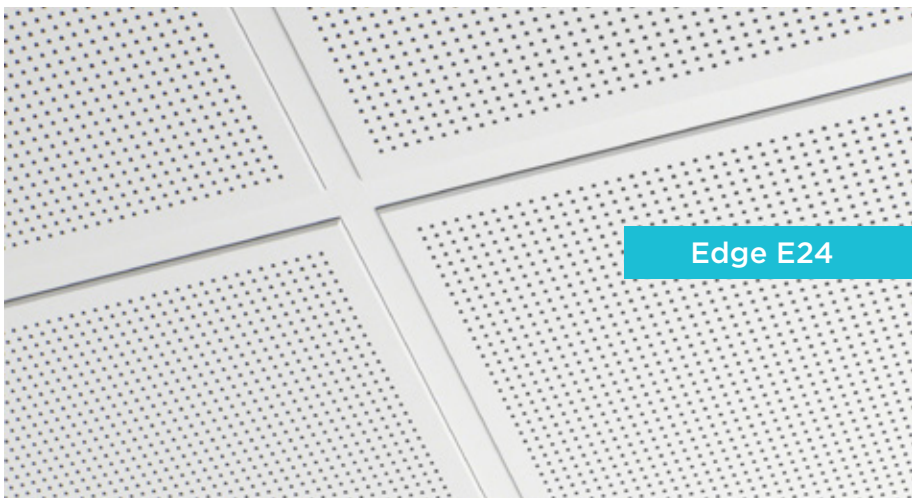
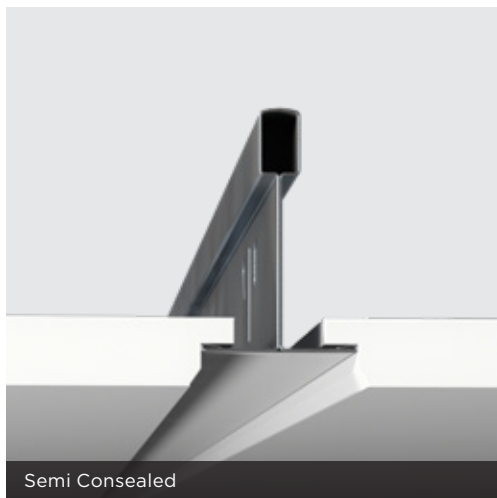
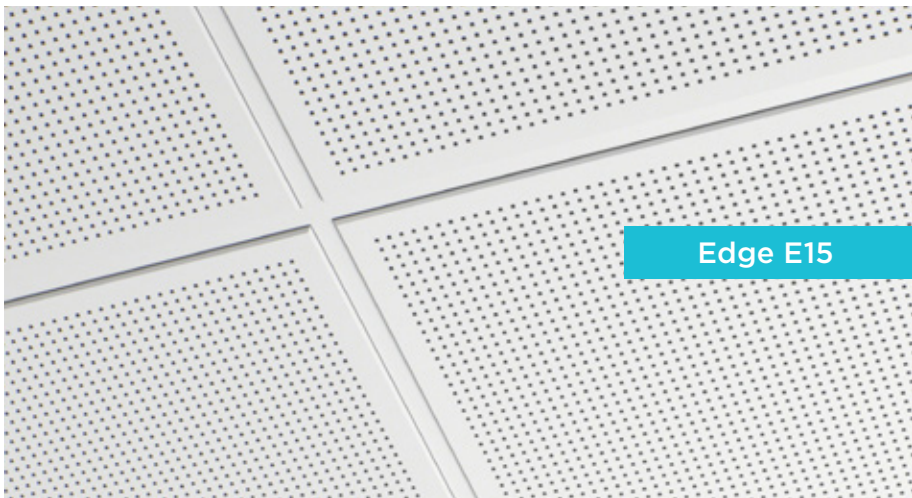
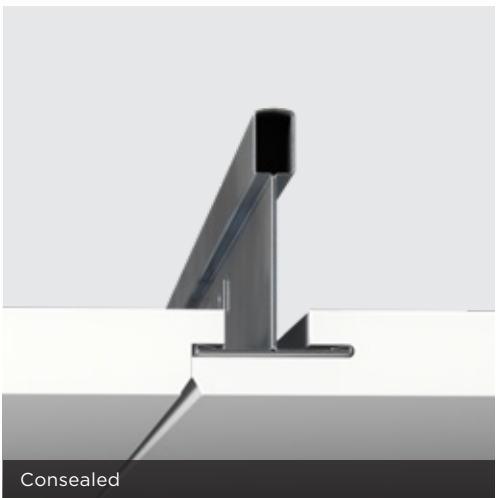
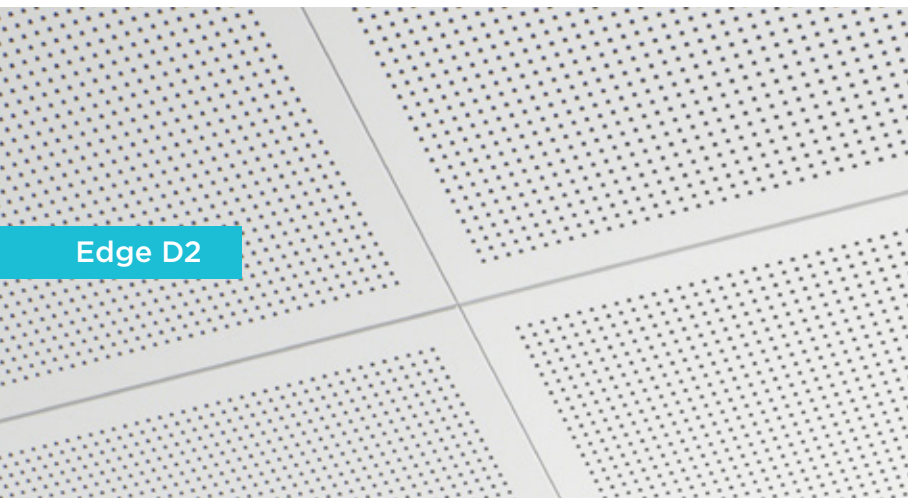
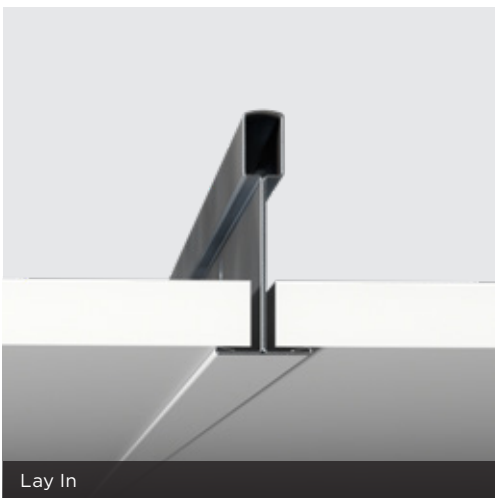
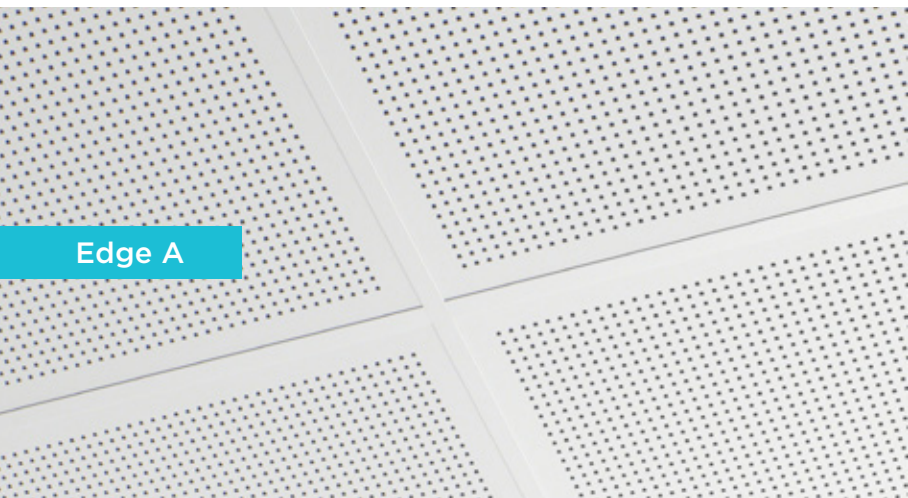
## Designed for the installation of your choice

**Gyptone edge A** is removable and mounted in an exposed grid system (T15 or T24). The visible width of the grid system is 15 or 24 mm. Gyptone edge A is a fully demountable ceiling that provides good opportunities for inspection in the cavity above the ceiling.

**Gyptone edge D2** is fitted into a concealed grid system. Beams and profiles are easily clicked together and have fewer hangers than similar systems. The hidden T24 grid system Cross-Lock Unipro is easily mounted.

**Gyptone Edge E15 and E24** is a suspended ceiling mounted in an semi exposed grid system. The visible width of the grid system is either 15 mm or 24 mm. Gyptone edge E15 and E24 is a fully demountable ceiling that provides good opportunities for inspection in the cavity above the ceiling.

**Edge B** - Gyptone edge B is a screw mounted and non-demountable ceiling. The ceiling can be used for many applications like schools, offices and commercial settings.





# Indoor air quality

## Cleaner indoor air quality

You may not know it, but invisible pollutants surround us at almost every turn – especially indoors.

Traditional air pollution concerns have focused on high-density urban areas, where traffic is busy and CO<sub>2</sub>-emission levels are considered dangerous. But there is still an indoor danger to tackle.

Construction materials, furniture, carpets, electronic equipment and items of clothing all emit volatile organic compounds (VOCs) such as formaldehyde. According to the World Health Organization (WHO), formaldehyde affects our health. High concentrations can cause cancer, nausea, headaches and other unpleasant symptoms – none of which should be part of a modern construction of a school, hospital, workplace or public space.

Today, Gyptone ceilings feature Activ'Air, a patented technology that actively breaks down up to 70% of the formaldehyde into harmless, non-volatile compounds. The effectiveness of the Activ'Air technology has been tested by the accredited Eurofins laboratory, and it has been proven to promote good health and wellbeing.

In fact, its effect has been shown to last for more than 50 years – creating a safe, welcoming and healthy indoor environment for generations to come. This best-in-class development also contributes to success in certifications such as Leadership in Energy and Environmental Design (LEED) and Building Research Establishment Environmental Assessment Method (BREEAM).





# Indoor air quality

## Tested and approved

All Gyptone products are tested and approved in the highest class by Danish Indoor Climate Labelling, the Finnish M1 classification, and the French health and environmental authorities.

Our acoustic ceilings are produced with one of the market's lowest levels of CO<sub>2</sub>-emissions, energy consumption and water consumption per m<sup>2</sup>.



\* Based on a comparison of six published EPDs for different types of ceilings, with results verified by COWI A/S.



## Sustainability

### A sustainable approach to better acoustics

Superb acoustics make a room come to life. The challenge is achieving those results with the minimum possible environmental impact.

That's why we've developed a sustainable approach that shapes every service we offer and product we make. Its principles are embedded at every stage of our product lifecycle, from raw material sourcing and production through to recycling at the end of the building life.

We closely monitor the environmental impact of our products, using widely-accepted life cycle assessment (LCA) techniques to provide the transparency and meaningful data needed for comparisons by architects, builders and end-users.

Another part of our focus ensures we use environmentally-responsible raw materials in our manufacturing processes. All Gyptone products are 100% recyclable.

Our packaging can be recycled or re-used. And we constantly strive to reduce our consumption of energy, raw materials and packaging, making Gyptone acoustic ceilings one of the few solutions with a sustainable environmental impact.

Even after installation, our commitment to sustainability continues. All Gyptone products can be repainted again and again, without compromising the acoustic performance. Gyptone products can also help you secure high scores in international building schemes, such as LEED, BREEAM and DGNB.





# Installation & Maintenance

## Reduced installation and maintenance costs

Choosing an acoustic ceiling or wall is a complex decision. Only by considering the total cost of ownership – not just the product cost, but also the cost of installation and maintenance – can you arrive at an informed choice.

So as well as a smooth, strong and high performing solution, choosing Gyptone means your installation can be handled with speed and precision, while architects and owners alike will be thrilled with a consistent finish.

## Easy access to technical installations

Maintaining a Gyptone ceiling is simple and straightforward. Once installed, they can be maintained using any normal cleaning practices and neutral cleaning solutions. You can even use a vacuum cleaner!

If you want to refresh your look, the Tiles can be repainted with ease – as many times as you like. So whatever décor you choose, you can rest assured that the acoustic properties and fire safety support of your Gyptone Tiles will not be affected.



## Robustness, durability and fire safety

### The strong and safe choice

When strength matters, Gyptone is the only solution to consider.

All Gyptone solutions, including Gyptone Tiles, are strong, robust, and provide excellent pressure resistance. What's more, Gyptone Tiles do not decompose over time – so you won't face the unwelcome prospect of paying for costly replacements in just a few years' time.

Gyptone Tiles' flexibility is especially useful if you have a range of different installations to consider. But whatever design you choose, strength will not be a concern. Tiles with Edge A, E and B can be point loaded with up to 3 kg/m<sup>2</sup>. Tiles with Edge D2 can be point loaded with up to 1 kg/m<sup>2</sup>.

Finally, Gyptone Tiles come complete with excellent reaction to fire properties A2-s1, d0. Our solutions are tested according to both EN 13501-1 and ASTM E84 standards, meeting and exceeding all the necessary fire safety requirements both in terms of their reaction to fire and their fire protection qualities.

When it comes to ceilings, Gyptone solutions are not just the strong, smart choice – they're the safe choice, too.



Paint and repaint your ceiling without loss of acoustic performance

Repainting must be done with a short hair roller and not be spray-painted, as this impairs sound absorption.



# Product details

## Specifications

Dimensions	600 x 600 mm + 600 x 1200 mm
Thickness	Edge A* & E: 10 mm, Edge B & D2: 12,5 mm
Weight	6 kg/m² + 8 kg/m²
Edge	A, D2, E & B
Colour	Painted** (NCS 0500)
Reaction to fire	A2-s1, d0

\* Thickness of Gyptone Tile Point 80, Edge A is 8 mm.  
 \*\* Edge B Tiles are unpainted and Point 80 is painted with NCS 0300.

Gyptone Tiles acoustic solutions allow you to create a demountable ceiling.

The perforation provides, in combination with the underlying acoustic tissue, good acoustic properties.

## Patterns

Point

Perforation size: 6,5 mm Ø

Quattro

Perforation size: 3 x 3 mm

Point

Perforation size: 5 mm Ø

Quattro

Perforation size: 9 x 9 mm

Line

Perforation size: 6 x 95 mm

Quattro

Perforation size: 12 x 12 mm

Sixto

Perforation size: 11 mm Ø

Gyptone Tiles range includes circular, oblong, hexagonal or square perforations which comes in different designs.

## Edges - installation

Edge A

Edge D2

Edge E15

Edge E24

Edge B

Gyptone Tiles are produced in five different edge design, suitable for both exposed and concealed grids.

Edge A, D2, E15 and E24 are demountable.

Edge B is not demountable.

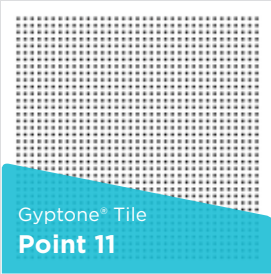
See complete overview of **Gyptone Tiles** on the next page...



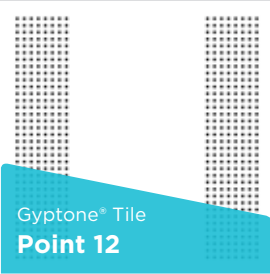
# Standard products Gyptone® Tiles



Edge: A, D2, E & B



Edge: A, D2, E & B



Edge: A, D2, E & B



Edge: A, D2, E & B



Gyptone ceilings feature Activ’Air, a patented technology that actively breaks formaldehyde down into harmless, non-volatile compounds.



Edge: A, D2 & E



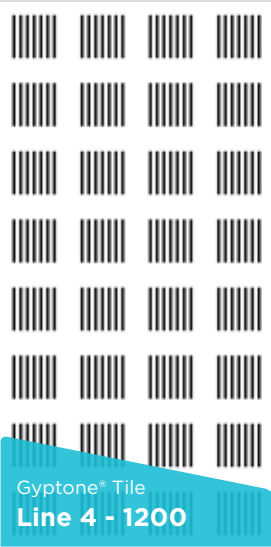
Edge: A, D2, E & B



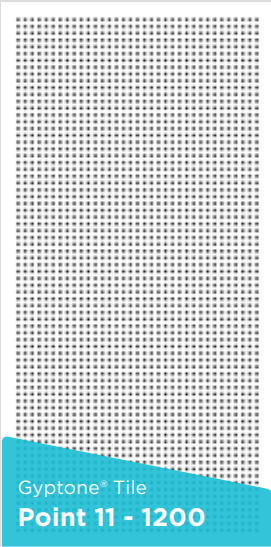
Edge: A, D2, E & B



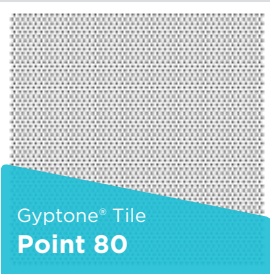
Edge: A, D2, E & B  
\* Base 38 Edge A only



Edge: A & B



Edge: A & B



Edge: A



Edge: A, D2, E & B



Edge: A & B

# Special products Gyptone® Tiles

Our special product designs are also available in hexagonal and square (12 x 12 mm) perforations.



Edge: A, D2, E & B



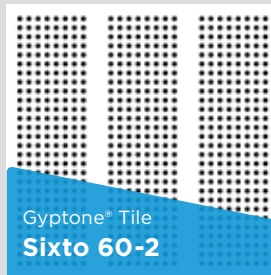
Edge: A, D2, E & B



Edge: A, D2, E & B



Edge: A, D2, E & B



Edge: A, D2, E & B



Edge: A, D2, E & B

There are many other options to customize your preferred Tile design.

Please contact us for more information.



## Gyptone® Tiles

The ideal solution for schools, offices, retail, and other indoor environments looking to combine durability with attractive design and excellent acoustic properties





Gyptone® acoustic solutions can be used in nearly any room that requires excellent acoustics and design. Our systems provide a good indoor air quality and strong surfaces with a very long lifespan based on sustainable manufacturing. Gyptone® is produced and marketed by Saint-Gobain.

## Gyptone Systems include:

- Gyptone® Tiles
- Gyptone® BIG boards
- Gyptone® BIG Curve
- Gyptone® Xtensiv
- Gyptone® Plank

For more information visit:

**[www.gyptone.com](http://www.gyptone.com)**

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