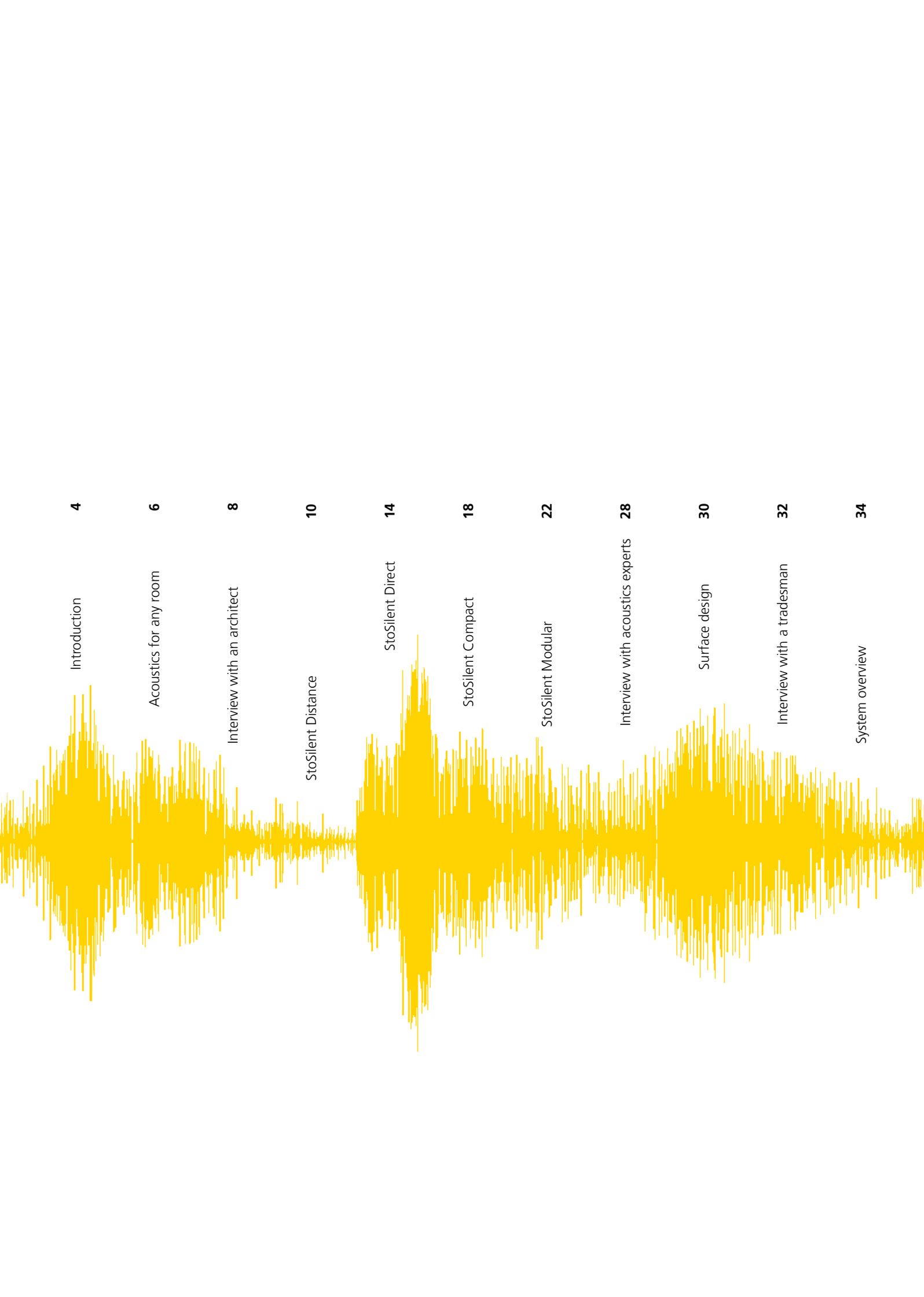


## Acoustic systems by Sto

# Contents



It should be noted that the details, illustrations, general technical information, and drawings contained in this brochure are only general proposals and details which merely describe basic functions schematically. No precise dimensions are included. The applicator/customer is solely responsible for determining the suitability and completeness of the products used for the respective construction project. Neighbouring works are only described schematically. All specifications and information must be adjusted or agreed in the light of local conditions and do not constitute work, detail or installation plans. The technical specifications and product information included in the Technical Data Sheets and system descriptions/approvals must be observed.



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## The art of the invisible

Room acoustics





Effective acoustic solutions are becoming more important in modern architecture. Even during the planning stage, the question is raised: what can be used to positively influence the sound in a room – and yet be as inconspicuous as possible? Ultimately, how a room sounds is largely decided by how it is seen and perceived by those who use it.

We at Sto have been researching this topic for over 25 years – always with the same goal – to provide you with all the means and materials to design acoustically perfect rooms.

# Design has never been as free

## StoSilent acoustic solutions

Requirements on reverberation time, sound distribution, or speech intelligibility change depending on how a room is used. Whereas cushioned silence is valued in offices or lobbies, in a concert hall every sound, no matter how soft, must be heard. Acoustics are influenced by various factors: the composition of floors, walls and ceilings, the ambient interior climate, the type of furniture, and the number of people. Our many years of research, experience gained from many successful projects of almost all types, and our cooperation with leading architects, tradesmen, and acoustics experts have resulted in systems that take these factors into account and optimise the acoustics of any room.

Augsburger Aktienbank AG joint stock bank, DE-Augsburg



Sto Logistics Centre, DE-Stühlingen



## Four systems for every acoustics requirement

Our four systems offer more than just the technical conditions for the best sound properties in rooms. The interaction of StoSilent with highly varied finishes and the 800 colours of the StoColor System also provide you with the freedom of design that you would like for your work.

### StoSilent Distance

Suspended acoustic panel system

### StoSilent Direct

An acoustic system that can be applied directly to a wide range of substrates.

### StoSilent Compact

Acoustic plaster for use on curves and for low room heights

### StoSilent Modular

Variable ceiling and wall elements



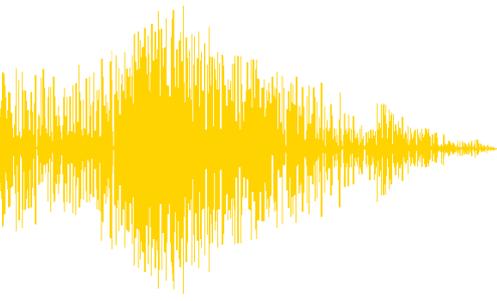
Discover StoSilent references at [www.stosilent.com](http://www.stosilent.com) or order the "Look & Listen Book" from your Sto adviser.

Municipal pool, DE-Viersen



Max Planck Institute, DE-Seewiesen





**“The acoustic solution is part of the building substance and shouldn't be overlooked”.**

An interview with the architect Angela Dapper

Angela Dapper, Architect, Senior Associate  
at Denton Corker Marshall, GB-London  
Photo: Colin Thomas



Stonehenge Visitor Centre, GB-Amesbury  
Photo: Peter Cook



The prehistoric monument Stonehenge is one of England's most famous tourist attractions. Around a million visitors flock to the mysterious stone circle every year. The new, award-winning visitor centre provides an insight into its history and research. It was designed by Angela Dapper, architect and senior partner at Denton Corker Marshall in London. In this interview, she describes the challenges she faced when planning the room acoustics.



■ *Ms Dapper, you've largely opted for materials such as concrete and glass for the Stonehenge Visitor Centre. Wasn't this rather a challenge from an acoustic point of view?*

**A. Dapper:** Absolutely – there is a high noise level in the visitor centre every single day. The finish also has a lot to withstand from the sheer volume of visitors. This is exactly why we decided to combine different materials for the different areas within the centre. The café and souvenir shop, for example, have hard surfaces such as polished concrete floors and glazing, so we used acoustic ceilings. In contrast, we lined the chestnut-wood wall cladding with acoustic felt.

■ *How did you decide on this mixture of different materials? What type of acoustic ambience were you hoping to create?*

**A. Dapper:** The visitor centre needs to cater for both busy and quiet days. We planned the acoustic materials in such a way to be suitable for both scenarios. For this to happen, the acoustic solution has to be thought of as being an integral component of the building substance. We ultimately decided on the StoSilent Distance A2 system (formerly known as StoSilent A-Tec panel).

■ *What made you opt for this particular solution?*

**A. Dapper:** Well the monolithic, seamless design allows the system to absorb an incredible amount of sound. This means that the increased noise levels created by the open spaces and hard surfaces can be offset by the special acoustic ceiling and acoustic felt behind the wall covering. The exhibition areas, on the other hand, are less open and have more partitions which are connected to the special acoustic ceiling. This helps to reduce noise transfer.

■ *At what point of the construction process did you start planning the acoustic solution?*

**A. Dapper:** For this particular project, the acoustic ceiling was already included in planning very early on. That way we could be sure that the ceiling would be able to balance out the sound reflected by the hard and robust materials used for the walls and floors.

■ *How did you approach the acoustics planning process?*

■ **A. Dapper:** First of all, an acoustic consultant determined the appropriate sound levels and separation between the individual areas. We based our acoustic designs on this information and worked together with Sto and manufacturers of other acoustic materials to develop the ideal solutions.

■ *And how did you handle the actual design?*

■ **A. Dapper:** It was particularly important to us to find products which worked in harmony with the simple, subtle range of materials in use throughout the entire building. The StoSilent Decor M coating (formerly known as StoSilent Superfine) allowed us to achieve a light, textured surface in natural white, which perfectly complements the building's unobtrusive aesthetic appeal.

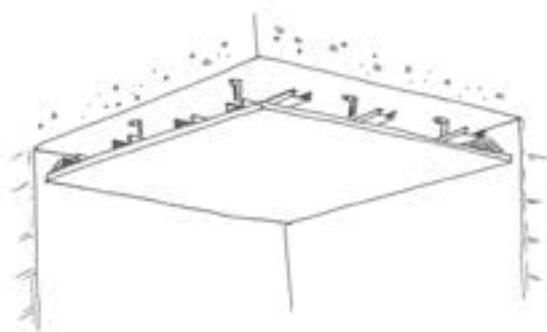




## **StoSilent Distance**

The suspended panel system

It's hard to imagine modern architecture without large, even, white surfaces. The StoSilent Distance board system also allows the seamless and sound-absorbing design of walls and ceilings, which have to be suspended, for example, to reduce the room height. The room concept is thus retained with good acoustics included.



Schematic diagram of StoSilent Distance

# Seamless acoustics

## StoSilent Distance

The StoSilent Distance system can be installed as a suspended ceiling or as a wall covering with a cavity. The sub-construction is made of metal profiles and the acoustic panel consists of expanded glass granulate. The advantages of this material: it is light, absorbs sound, and can be adjusted to any shape of room to form a homogeneous, seamless surface.

### Benefits

- Seamless installation possible up to 200 m<sup>2</sup>
- Also suitable for curved surfaces and vaults
- Depending on the system variant, also suitable for damp rooms
- Conceals the mains utilities
- Perfusion safe

### Surface design

- StoSilent Top Basic: intermediate coat and finish with a fine surface
- StoSilent Top Finish: finish with a fine surface
- StoSilent Decor M: spray plaster with a textured surface
- StoSilent Decor MF: optional porous finish

You can read more about the possible surfaces and colours on page 30.

Museum MAXXI, IT-Rome



## System variants

### StoSilent Distance

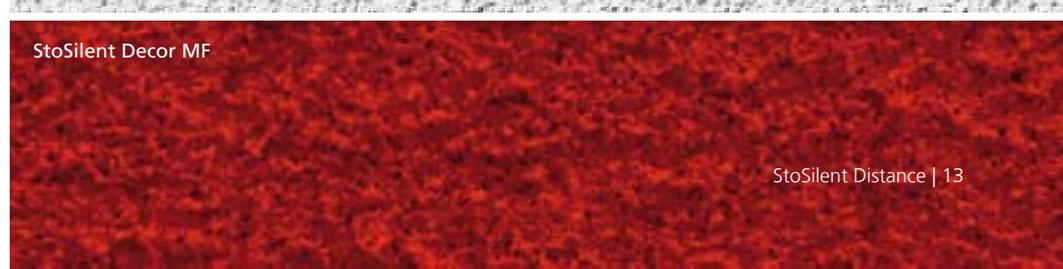
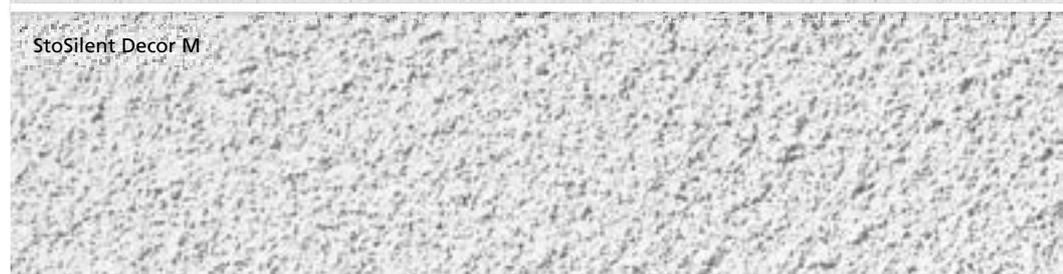
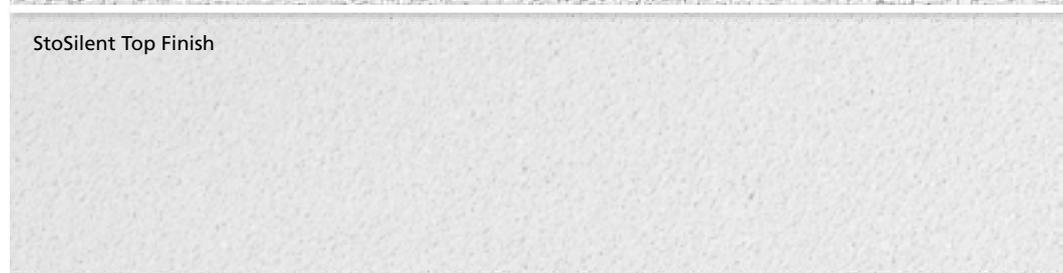
Standard system with a wide spectrum of applications. Depending on the acoustic panel and the suspension height, there are different sound absorption values, from  $\alpha_w = 0.45$  for a board thickness of 15 mm to  $\alpha_w = 0.60$  for a board thickness of 25 mm. Limited combustibility in accordance with DIN EN 13501-1

### StoSilent Distance A2

The level up from StoSilent Distance. Reaches sound absorption values up to a maximum of  $\alpha_w = 0.80$ . Non-combustible in accordance with DIN EN 13501-1

### StoSilent Distance Flex

Flexible ceiling system. Flexible with a minimum radius of 5 metres, sound absorption values up to  $\alpha_w = 0.60$ . Limited combustibility in accordance with DIN EN 13501-1

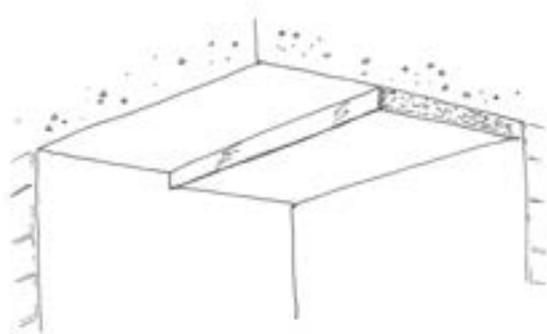






**StoSilent Direct**  
The easy  
direct system

StoSilent Direct completes our range of seamless absorber solutions. The direct system does completely without a sub-construction and is suitable for walls and ceilings which can be directly coated. Sto thus offers a highly absorbent solution that is especially advisable for a small construction height. Here you also have the option of different surface finishes.



Schematic diagram of StoSilent Direct

# Impulse generator for large surfaces

## StoSilent Direct

The specialist for particularly large surfaces is based on a sandwich consisting of expanded glass granulate and stone wool, which is excellent at absorbing sound. Since it does not require a sub-construction, the system only minimally reduces the room height. The corresponding finish means you can even design seamless surfaces of up to 700 square metres.

### Benefits

- Direct bonding on to walls or ceilings
- High sound absorption due to a porous texture and sandwich structure
- Wide range of possible coatings

### Surface design

- StoSilent Top Basic: intermediate coat and finish with a fine surface
- StoSilent Top Finish: finish with a fine surface
- StoSilent Decor M: spray plaster with a textured surface
- StoColor Climasan: interior paint for surfaces with visible joints. Breaks down odours and harmful substances

You can read more about the possible surfaces and colours on page 30.



Sto Logistics Centre, DE-Stühlingen



## System variants

### Seamless systems

- StoSilent Top Basic: seamless design up to 200 m<sup>2</sup>. Depending on the system thickness, sound absorption values up to a maximum of  $\alpha_w = 0.75$ . Non-combustible in accordance with DIN EN 13501-1
- StoSilent Decor M: seamless design up to 700 m<sup>2</sup>. Depending on the system thickness, sound absorption values up to a maximum of  $\alpha_w = 0.80$ . Non-combustible in accordance with DIN EN 13501-1

### Systems with visible joints

- Climasan-System: depending on the system thickness and coating, sound absorption values up to a maximum of  $\alpha_w = 0.95$ . Non-combustible in accordance with DIN EN 130501-1 With Climasan effect



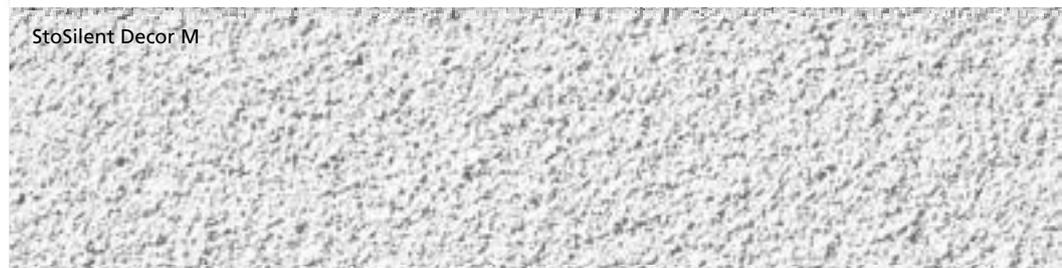
StoSilent Top Basic



StoSilent Top Finish



StoSilent Decor M



StoColor Climasan

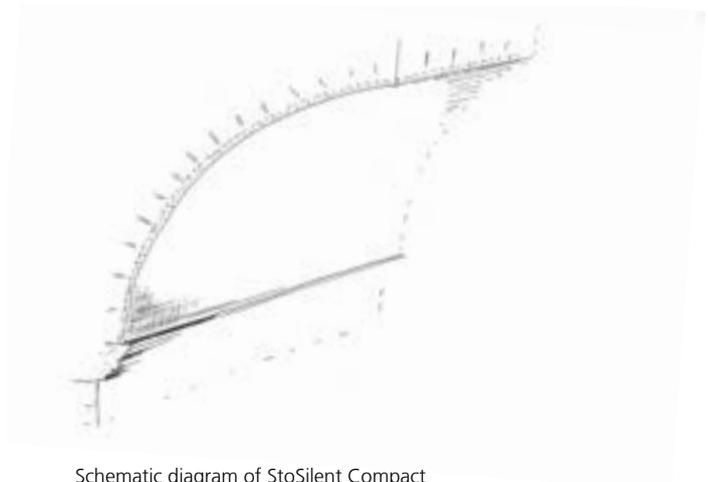






## **StoSilent Compact** The flexible plaster system

Many structural factors do not allow suspended or mounted acoustic systems – for example, listed buildings or sacred buildings. We have developed special acoustic plasters for such cases: Our StoSilent Compact plaster systems are equally as easy to apply as classical plasters, but in addition, they positively influence room acoustics and provide a special textured appearance.



Schematic diagram of StoSilent Compact

# Audibly renders the architecture smarter

## StoSilent Compact

StoSilent Compact enables seamless, homogeneous surfaces to be quickly realised. The two plaster systems, StoSilent Compact Miral and StoSilent Compact Sil, are also highly suitable absorber solutions for multi-dimensional, curved surfaces. This means that only a minimum amount of room height is lost – highly recommended for low ceiling heights.

### Benefits

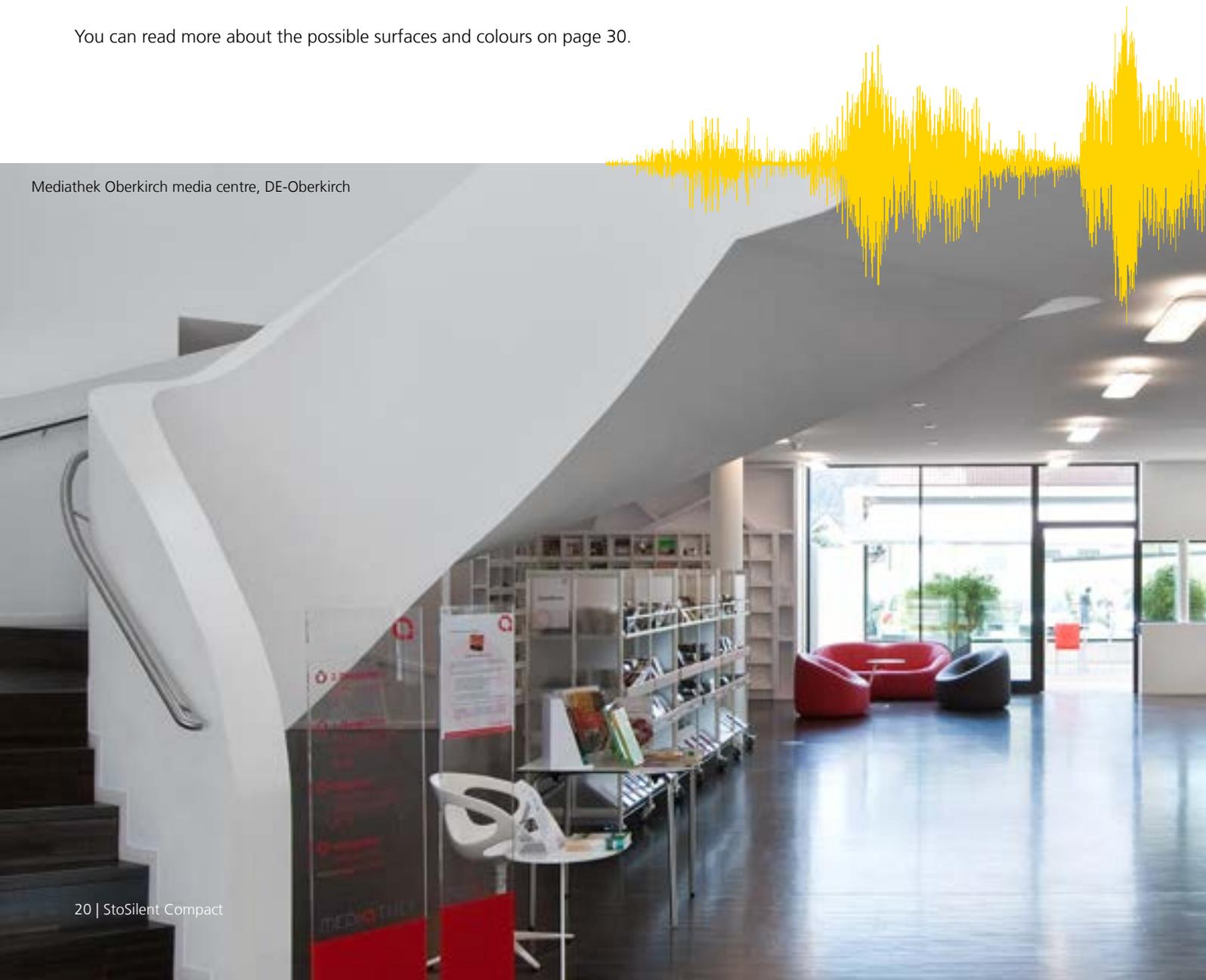
- Good room damping
- Extensive colour choice
- Coating on curves and 3D shapes possible
- Suitable for nearly all types of room

### Surface design

- StoSilent Compact Miral: acoustic plaster on a cement basis
- StoSilent Compact Sil with StoSilent Decor MF: silicate-bound acoustic plaster and textured finish

You can read more about the possible surfaces and colours on page 30.

Mediathek Oberkirch media centre, DE-Oberkirch



## System variants

### StoSilent Compact Miral

The mineral acoustic plaster on a cement base enables rough surfaces to be produced, ranging from level surfaces through to domes and vaults.

- Plaster application by machine
- Sound absorption up to  $\alpha_w=0.30$  (H)
- Non-combustible in accordance with DIN 13501-1
- Standard colour shade: white
- Fully tintable with the StoColor Silent finish

### StoSilent Compact Sil

The silicate-bound acoustic plaster is suitable for finely textured surfaces, such as smooth surfaces and barrel vaults.

- Manual plaster application
- Sound absorption up to  $\alpha_w=0.45$
- Limited combustibility in accordance with DIN EN 13501-1
- Standard colour shade: white
- Fully tintable with the StoSilent Decor M finish

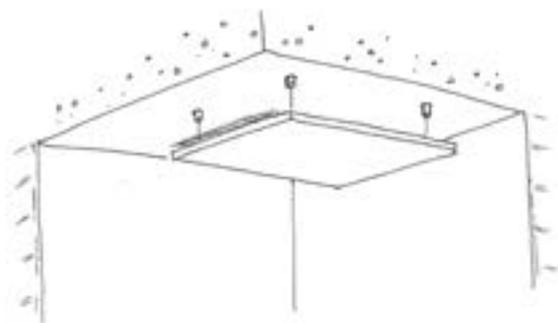






## **StoSilent Modular** The variable ceiling system

StoSilent Modular is recommended wherever suspended or directly mounted systems are not possible, or where the acoustics need to be optimised when the room is already in use. This innovative acoustic system is so variable in form that it enables you to consciously set visual accents. Play with colours, shapes, and integrated lighting elements as you wish. StoSilent Modular provides you with all the options.



Schematic diagram of StoSilent Modular

# A good option for any location

## StoSilent Modular

We offer StoSilent Modular in three different materials: PET fibres, expanded glass granulate, and polyester fibres. These materials have special properties which demonstrate high sound absorption and thus promote good room acoustics. Whether rectangular, curved, or freeform – the ceiling elements can be realised according to your wishes.

### Benefits

- Adjusted reverberation time depending on how the room is used
- Higher speech intelligibility and lower noise level
- Function of thermally activated building elements is retained
- Special formats according to customer requirements
- Wide range of surfaces and colour design
- Quick to install and remove

### Surface design

- PET fibre nonwoven surface: fine, aligned fibre structure
- Polyester fibre nonwoven surface: fine, unaligned fibre structure
- StoSilent Top Finish: finish with a fine surface
- StoSilent Decor M: spray plaster with a textured surface
- StoSilent Decor MF: optional, fully tintable, textured finish

You can read more about the possible surfaces and colours on page 30.

Schöpf residential building, AT-Mieming



## System variants

### StoSilent Modular 100

Economical solution with an aluminium frame

### StoSilent Modular 200

Acoustic solution made of expanded glass granulate panels with a wide shape and colour spectrum



### StoSilent Modular 300

System with an ultra-thin fibre board for special design requirements

### StoSilent Modular 400

Individual solution for freely designable ceiling elements



PET fibre nonwoven surface



Polyester fibre nonwoven surface



StoSilent Top Finish



StoSilent Decor M



StoSilent Decor MF



# Perfectly finished acoustics

## System variants of StoSilent Modular

We deliver modular systems as finished acoustic elements, including the load-bearing construction, mounting rim profiles, and finish. StoSilent Modular 300 meets special design requirements: the slim absorbing board combined with a thick aluminium edge, measuring only three millimetres, gives the system an elegant appearance.

### StoSilent Modular 100



The economical solution consists of PET nonwoven fibre panels and anodised aluminium frames, which are primarily used to regulate reverberations and reduce noise in buildings. StoSilent Modular 100 does more than just meet the customary market requirements for technical sound protection. Thanks to the appealing surface and the high-quality frame, the solution sets standards in design.

#### Benefits

- Low weight
- High quality, fine nonwoven surface
- Colour shade white
- Approx. 26 mm frame height
- Recycled material
- Oeko-Tex® certificate for the absorbing material
- Anodised surface
- Available up to formats of 3.00 m x 1.25 m
- Three suspended variants (vernier hanger, threaded rod, steel wire)

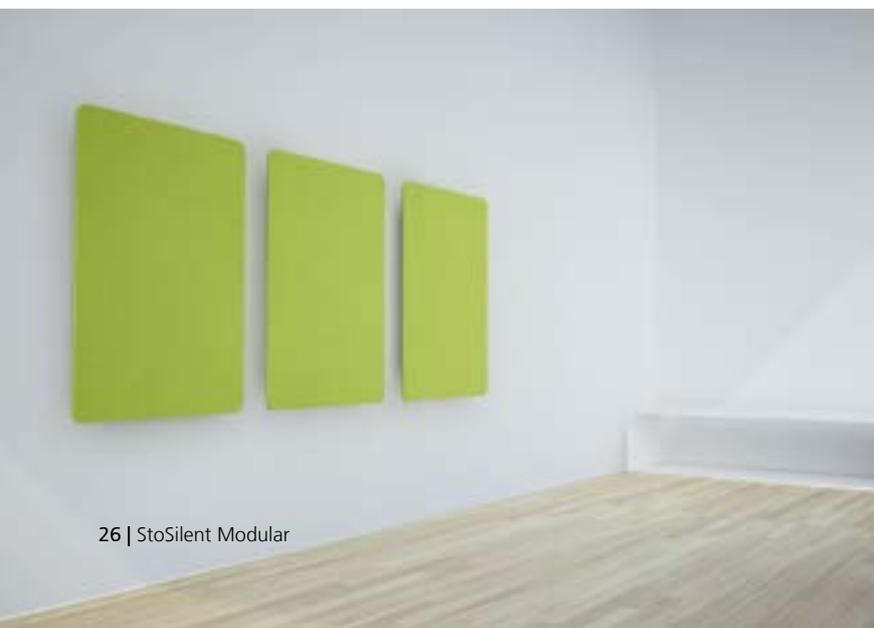
### StoSilent Modular 200



The acoustic solution consists of expanded glass granulate boards and the finish. StoSilent Modular 200 enables almost any shape and colour to be realised up to formats of 2.40 m x 1.20.

#### Benefits

- Low weight
- Plaster-coated
- 17 mm thick absorbing board with a foam layer
- Expanded glass granulate recycled material
- High-quality suspension set
- StoSilent Top coating for StoSilent Modular 200
- StoSilent Decor coating for StoSilent Modular 210





### StoSilent Modular 300

DESIGN  
CONCEPT  
AVAILABLE  
FROM 2016



The slim, polyester fibre board, measuring just eight millimetres, has a high-quality haptic surface, is highly absorbent and is recommended for rooms with high demands, such as executive offices or conference rooms, but also for restaurants. Thanks to the special construction of the aluminium carrier frame, the element can be fixed to walls or ceilings. A three-millimetre, thin, visible profile edge elegantly completes the element.

#### Benefits

- Low weight
- High quality, multi-functional carrier profile
- Installation also as wall panel
- Minimal design solution with full functionality
- Wide range of colour shades available
- Particularly suitable as "acoustic furniture"

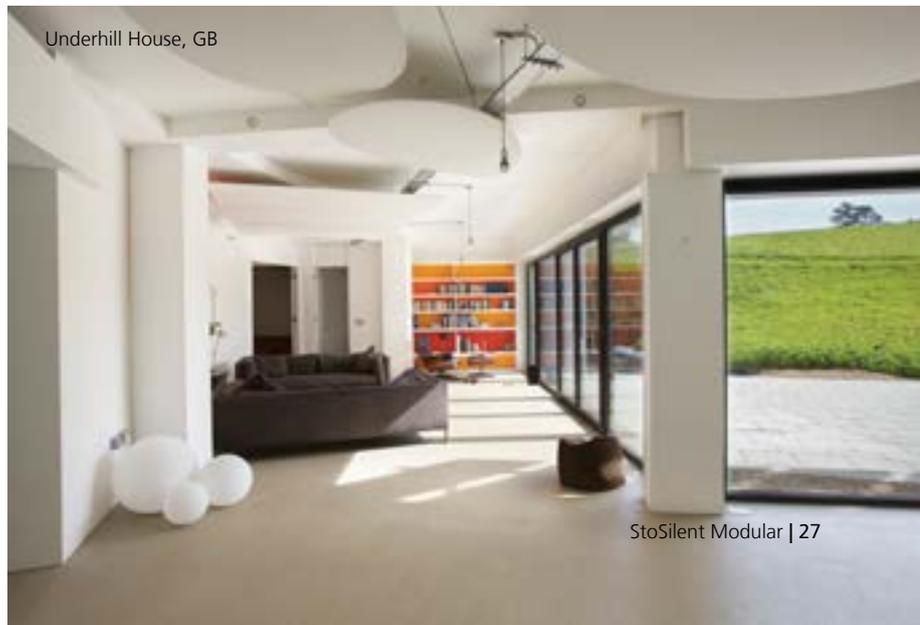
### StoSilent Modular 400



StoSilent Modular 400 offers an unlimited range of shapes: the system can be custom-made on the construction site according to customer requirements in practically any size.

#### Benefits

- Low weight
- Free shapes possible
- Plaster-coated with StoSilent Top or StoSilent Decor
- Expanded glass granulate recycled material
- High-quality suspension set in three versions



Underhill House, GB



## **“We are the architects' support, not their obstacle.”**

An interview with Dr.-Ing. Horst Drotleff and  
Dr. phil. Andreas Liebl, Fraunhofer Institute, Stuttgart

Fraunhofer Institut for Building Physics, Stuttgart, Germany



Decibels and reverberation time are almost obsolete when it comes to determining perfect room acoustics. Interestingly, this statement comes from two experts at the Fraunhofer Institute for Building Physics. In this interview, building physicist Dr.-Ing. Horst Drotleff and psychologist Dr. phil. Andreas Liebl explain why architects and suppliers of acoustic systems should listen more to us users. The experts use psychoacoustic findings to develop innovative acoustic systems.



Dr.-Ing. Horst Drotleff

- *Dr Drotleff, Dr Liebl – you conduct research and development in the field of room acoustics. To broach an exciting aspect of your work right away: you use psychological findings for this. What do acoustics have to do with our psyche?*

**A. Liebl:** A whole lot. Here at the Fraunhofer Institute, we develop solutions which configure acoustics according to how the room is used. This is fundamental for acoustics: you have to first know how the room is used before you can acoustically optimise it in a suitable way – namely, in line with the subjective psychological auditory impressions.

**H. Drotleff:** There are different expectations for a restaurant compared to a classroom, for example. Discretion is important in one, speech intelligibility in the other. Consider the foyer of an insurance group: a large hall, lots of wood, lots of natural stone – but the acoustics do not reverberate, they are elegantly discreet. The objective is to meet the right expectations for the rooms.

- *Can expectations actually be measured objectively?*

**A. Liebl:** Of course. With different psychological methods, like surveys or experiments. In order to obtain a user opinion, we regard people as measuring instruments. Take the term “noise”, for example: a signal with the same measured value is assessed differently by different people.

- *Many different people have to work together in open plan offices. Is there something like a happy medium?*

**A. Liebl:** Definitely. There is no arbitrary individuality in the perception of sound. There are patterns which apply to certain groups of people. We define general acoustic conditions accordingly. Our analyses show, for example, that additional sound introduced into offices is perceived as quieter by test subjects because speech intelligibility decreases.

- *So “the quieter, the better” does not apply?*

**A. Liebl:** No. People are still thinking too much in terms of levels and the minimisation principle. We have to develop concepts and components for different requirements.

- *Modern architecture uses a lot of concrete and glass. Both materials are acoustically difficult. Do architects have to sacrifice their designs for the sake of acoustics?*

**H. Drotleff:** Not at all. This is where the suppliers in particular come in. Functionality and design are only seemingly contradictory. Systems such as StoSilent show that the architectural ideal of seamless surfaces is possible. In the end, we are a support for architects – not an obstacle. When an architect plans a building with a lot of concrete and glass, for example, we just have to develop the concrete to be absorbent and design the glass surfaces so that they, too, absorb sound and provide suitable room acoustics.

Read the interview in full at: [www.stosilent.com](http://www.stosilent.com)



Dr. phil. Andreas Liebl

# Colours hit the right note

## Plasters and paints for StoSilent

What would an architectonic design be without an extensive colour range? We offer the matching coatings in a wide range of colours for all our acoustic solutions. That not only means always having the right room acoustics solution for the room to be designed, but also something that is especially important in architecture: freedom.

The entire colour range of StoSilent can be found at [www.stosilent.com](http://www.stosilent.com)



## StoSilent coatings

### StoSilent Decor



With the thin-layer spray plaster, almost all StoSilent acoustic systems can be coated by machine. The colour design is practically unlimited.

- StoSilent Decor M: textured, silicate-bound coating, low-emission, eco-certified (natureplus®)
- StoSilent Decor MF: an optional finish on a dispersion base

### StoSilent Top

This finish on a dispersion base makes the finest surfaces possible. StoSilent Top is suitable for seamless application by hand up to 200 square metres. A limited colour choice is available for coating.

- StoSilent Top Basic: intermediate coat and finish with a fine surface
- StoSilent Top Finish: finish with a fine surface

## StoSilent paints

### StoColor Silent

This renovation paint was specially developed for the StoSilent acoustic systems.

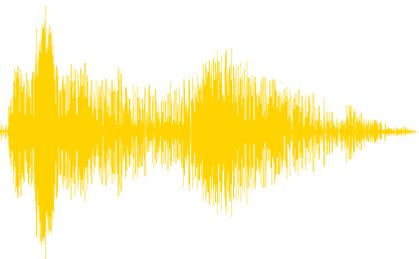
- Tintable in the entire Sto colour spectrum
- Depending on the finish, the selection of colours is limited to pastel colour shades (particularly for silicate paints)

### StoColor Climasan

The colour coating gets rid of odours and breaks down harmful substances. It is the only interior paint that manages this completely without sunlight. Conventional interior lighting is sufficient to activate the catalyst in the interior paint.

- Noticeably better air, even in highly utilised rooms
- Tintable in pastel colour shades from the StoColor System





## “When it comes to acoustics, looks matter as well.”

### An interview with the specialised tradesman Ton Pennings

Dutch tradesman Ton Pennings specialises in the application of acoustic systems. In this interview, he describes the procedure for their planning and installation.

■ *Mr Pennings, what constitutes a well-designed acoustic system?*

**T. Pennings:** First of all, the physical appearance of an acoustic system has a key role to play. Whatever the solution, it should look clean and elegant in all lighting conditions, however the light falls. Just take the seamless systems from Sto, for example: if they are correctly installed, the distance between the boards is no more than 0.2 millimetres. At most! Then we know for sure that they've been fitted absolutely flat and evenly – that is to say, seamlessly. And on top of this, the systems have a whole host of performance requirements to fulfil. These are agreed with the client in advance.

■ *Do architects take a lot of convincing when it comes to acoustic systems?*

**T. Pennings:** They often prefer a smooth ceiling surface area and disregard the acoustics at first. But that's understandable, of course, as acoustic systems certainly shouldn't compromise the positive overall impression of a room. That said, the solutions available today – such as the acoustic systems from

Sto – provide a functional alternative with exceptional aesthetic appeal. Our task as planners and tradesmen is clear: we provide two different calculations by drawing up one option without acoustic measures and another with these in place. This calculation allows us to highlight the added value that an acoustic system can offer. The client can then make an informed decision on this basis. The calculation often speaks for itself.

■ *What does good acoustic consultation involve?*

**T. Pennings:** It all comes down to providing a comprehensive concept. Acoustics consultants start by discussing acoustic performance with the client as well as the expectations of the room as a whole. Next on the agenda for finding the ideal system is calculating the reverberation level. Additional services are available on top of the standard package, such as the installation of voltage rails, LED lighting, and a complete extraction system. In a nutshell, a good acoustic system doesn't just come down to acoustic properties, it also takes into account all interior architectural requirements, from lighting to heating and cooling.

Drents Museum, NL-Assen



Ton Pennings, Penningsgroep, Netherlands





# The perfect acoustics for any room

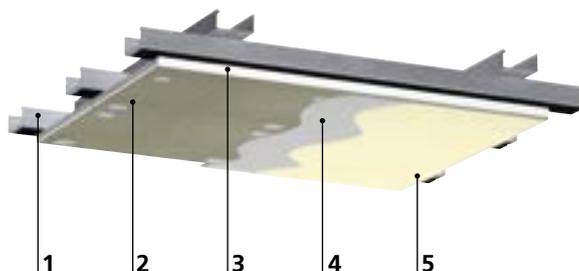
## The StoSilent acoustic systems at a glance

### System

#### StoSilent Distance

System build-up (example)

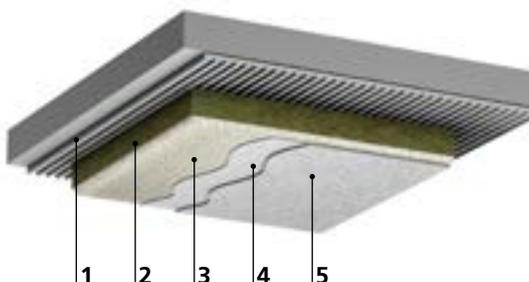
- 1 Sub-construction made of metal profiles
- 2 Sound-absorbing acoustic panel
- 3 Self-adhesive StoSilent Profile Tape
- 4 Sound-permeable intermediate coat  
StoSilent Top Basic
- 5 Finish of StoSilent Top Finish



#### StoSilent Direct

System build-up (example)

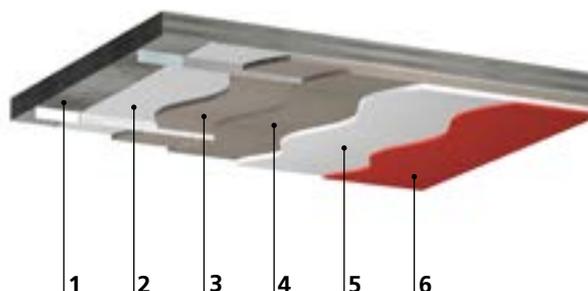
- 1 Adhesive
- 2 Joint coating
- 3 Acoustic panel
- 4 Intermediate coat
- 5 Finish



#### StoSilent Compact

System build-up (example StoSilent Compact Sil)

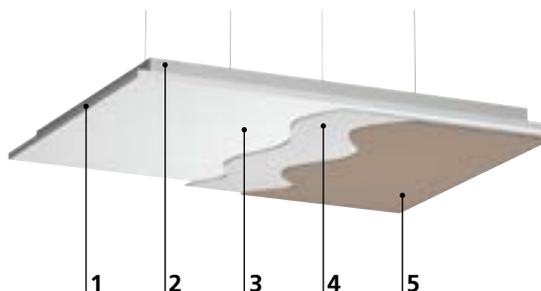
- 1 Prime coating
- 2 Bonding agent
- 3-5 Intermediate coat
- 6 Finish



#### StoSilent Modular

System build-up (example StoSilent Modular 200)

- 1 Carrier board
- 2 Load-bearing construction
- 3 Melamine resin foam
- 4 Intermediate coat of StoSilent Top Basic
- 5 Finish of StoSilent Top Finish



Seamless or variable, fine or rough, coloured or brilliant white: with StoSilent you can give colour and shape to room acoustics. Here you can see at a glance which is the right system for your project.

Find out more about StoSilent at [www.stosilent.com](http://www.stosilent.com)

Version	Acoustic panel	Surface	Maximum sound absorption	Building materials class	Area of application		Formability
					Ceiling	Wall	
StoSilent Distance	StoSilent Board 300	StoSilent Top	0.45–0.60	B-s1,d0	● ●	● ●	●
	StoSilent Board 310	StoSilent Decor	0.45–0.55	B-s1,d0	● ●	●	●
StoSilent Distance A2	StoSilent Board 100	StoSilent Top	0.80	A2-s1,d0	● ●	●	
	StoSilent Board 110	StoSilent Decor	0.80	A2-s1,d0	● ●	●	
	StoSilent Board 200	StoSilent Top	0.55	A2-s1,d0	● ●	●	
	StoSilent Board 210	StoSilent Decor	0.55	A2-s1,d0	● ●	●	
StoSilent Distance Flex	StoSilent Board 310 F	StoSilent Decor	0.45	B-s1,d0	● ●	●	● ●
StoSilent Direct	StoSilent Board MW 100	StoSilent Top Basic	0.75	A2-s1,d0	● ●	● ●	●
	StoSilent Board MW 100	StoSilent Decor	0.80	A2-s1,d0	● ●	● ●	●
	StoSilent Board MW 100	StoColor Climasan	0.95	A2-s1,d0	● ●	● ●	●
StoSilent Compact Sil		StoSilent Decor MF	0.45	C-s1,d0	● ●	●	● ●
StoSilent Compact Miral		StoSilent Miral AP	0.30 (H)	A2-s1,d0	● ●	●	● ●
StoSilent Modular 100	Nonwoven fibre	Nonwoven surface	Depending on suspension height, format, material, and finish	B-s1,d0	● ●	on request	
StoSilent Modular 200	Expanded glass granulate	StoSilent Top		B-s1,d0	● ●		
StoSilent Modular 210	Expanded glass granulate	StoSilent Decor		B-s1,d0	● ●		
StoSilent Modular 300	Nonwoven fibre	Nonwoven surface		B-s1,d0	● ●		
StoSilent Modular 400	Individual, on-site solution, construction based on StoSilent Board, different coating systems possible						

DESIGN CONCEPT AVAILABLE FROM 2016

● ● excellent ● good ● to a limited extent



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