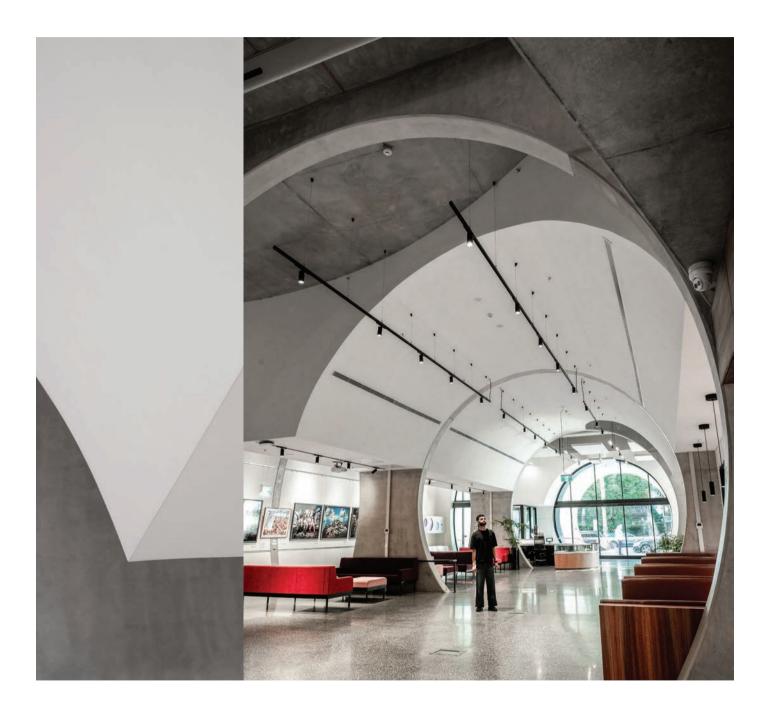
YOU PROBABLY DON'T SEE IT, BUT YOU DEFINITELY HEAR IT







### *ontents*

- 04 ABOUT ECOPHON
- GOOD ACOUSTICS MATTER 06 **EVERYWHERE**
- **OUR ACOUSTIC PLASTER** 08
- **ARCHITECT YOUR SPACE** 10
- **COLOURS WITH BEAUTY BENEFITS** 12
- **INSTALLATION GUIDANCE** 14
- **TYPES OF INSTALLATIONS** 16
- REFERENCES 18
- **COLOURS AND SURFACES** 34
- **36 SYSTEM PROPERTIES**

This publication shows products from Ecophon product range and those of other suppliers. The specifications are intended to provide a general guide to which products are most suitable for the preferences indicated. Technical data is based on results obtained under typical testing conditions or long experience in normal conditions. The specified functions and properties for products and systems are only valid on condition that instructions, installation diagrams, installation guides, maintenance instructions and other stated conditions and recommendations have been taken into consideration and followed. Deviation from this, such as changing specific components or products, will mean that Ecophon cannot be held responsible for the function, consequences and properties of the products. All descriptions, illustrations and dimensions contained in this brochure represent general information and shall not form part of any contract. Ecophon reserves the right to change products without prior notice. We disclaim any liability for misprints. For the latest information go to www.ecophon.com or contact your nearest Ecophon representative.

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### Jätkäsaari School, Finland | Eduaction

### **ON PEOPLE**

Having a sound effect on people, in every way we can, is what we do proudly. That promise makes every one of us a passionate advocate for the importance of room acoustics to people's wellbeing - whatever the space, activity or need.

Keskuspuiston Ammattiopisto School, Finland | Education

# Sound ettect

Saint-Gobain Ecophon contributes to good indoor environments for working, healing and learning. We do this by developing, manufacturing and delivering acoustic products and systems designed around the natural evolution of human hearing - replicating the outdoor sound experience indoors, because that's just better for people.

# JOOD acoustics

### **MATTER EVERYWHERE**

06

The importance of acoustics is underappreciated. Sound impacts us in daily life, and the scientific support for improving our indoor sound environments is well-documented.

And what exactly is an ideal indoor sound environment for people?

One based on how we experience sound outside. The human auditory sense is naturally adapted to an outdoor environment where there is not any sound reflections from ceilings and walls.

That's why most of what we do at Ecophon is about replicating the acoustic qualities found in nature for indoor environments. We want to optimise indoor spaces to our natural way of hearing, so that speech and sound is easy to hear and understand, when needed, improving performance and wellbeing.



### Our acoustic

### PLASTER

The fade® Acoustic Plaster is a high-quality plastering system that absorbs unwanted noise in a wide range of environments. As an acoustic plaster solution spray applied to walls and ceilings, its highly absorbent qualities allow for optimum acoustic control in large, commercial spaces.

The fade® Acoustic Plaster System can be applied on virtually any surface including straight and curved walls, dramatic angles and arching domes offering a more flexible, discreet alternative to traditional acoustic solutions, such as suspended ceilings.

Bringing together high-value aesthetics and acoustic performance, the fade® Acoustic Plaster System is well-suited to a wide-range of developments, from historic buildings to high-end residential, commercial, retail and educational spaces.

By absorbing sound waves, the fade® sound-absorbing plaster system reduces reverberation time, providing the highest level of sound-absorption. In addition, the installation process is quick and easy to install and it does not contain any synthetic materials.



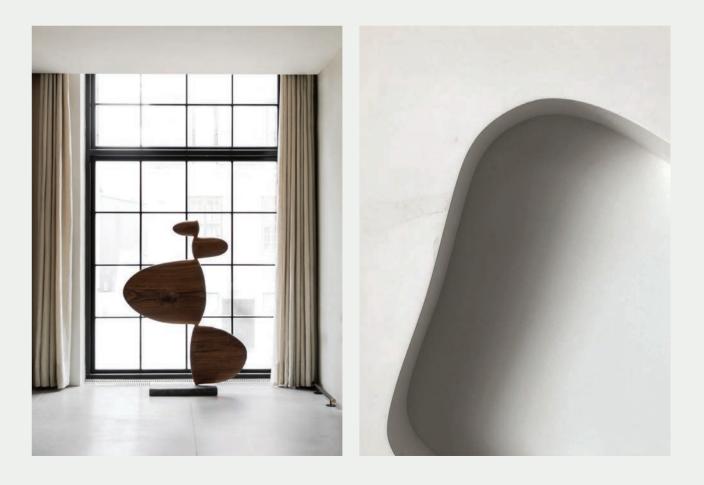
## Architect

### YOUR SPACE

The possibilities with the fade® Acoustic Plaster is endless. The flexible fade® Acoustic Plaster System is a discreet alternative to traditional acoustic solutions, such as suspended ceilings.

As an acoustic plaster solution spray applied to walls and ceilings, its highly absorbent qualities allow for optimum acoustic control in various spaces.

The fade® Acoustic Plaster System can be applied on virtually any surface including straight and curved walls, dramatic angles and arching domes.



The Museum of the Future, UAE | Leisure

10



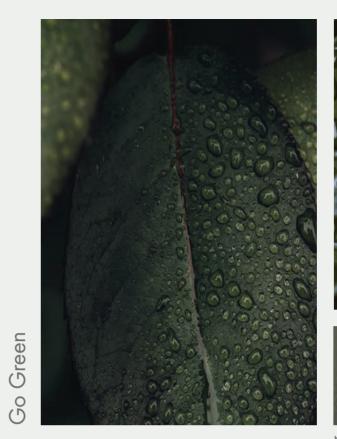
## COLOUR

### **BEAUTY WITH BENEFITS**

It's available in 6 standard colours or customized colours to meet your design intent. Explore the rest of our standard colors on page 35.



Perfect Beige



"Our bespoke colours ensure that every project is unique."





NCS S 4020-Y50R





NCS S 6010-G50Y



### Installation

### **GUIDANCE**

The fade® Acoustic Plaster System is installed with just a few easy steps.



### **Mechanical Installation**

The acoustic boards are installed to a suitable substrate with tight joints. Installation can be done mechanically with screws and fade® Special Washers 400mm (16") c/c.



2 fade® Special Joint Tape

fade® Special Joint Tape is applied onto all joints to reinforce the structure.



**1**B **Adhesive Installation** 

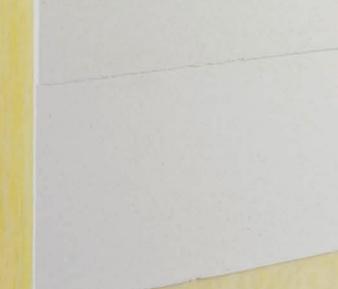
The acoustic boards are installed to a suitable substrate with tight joints. Installation can be done with the fade® Special adhesive.



### Filling

Acoustic plaster is applied onto the fade® Special Joint Tape and washers to level the surface.\*

\*Acoustic plaster on joints, and washers can begiven a light sand when dry to remove any irregularities







### Spraying - 1. layer

The first layer of acoustic plaster is spray applied to a 1.5-2mm thickness (1/13") and troweled to a smooth finish.



6 Troweling

Trowel both layers of acoustic plaster to a smooth finish.





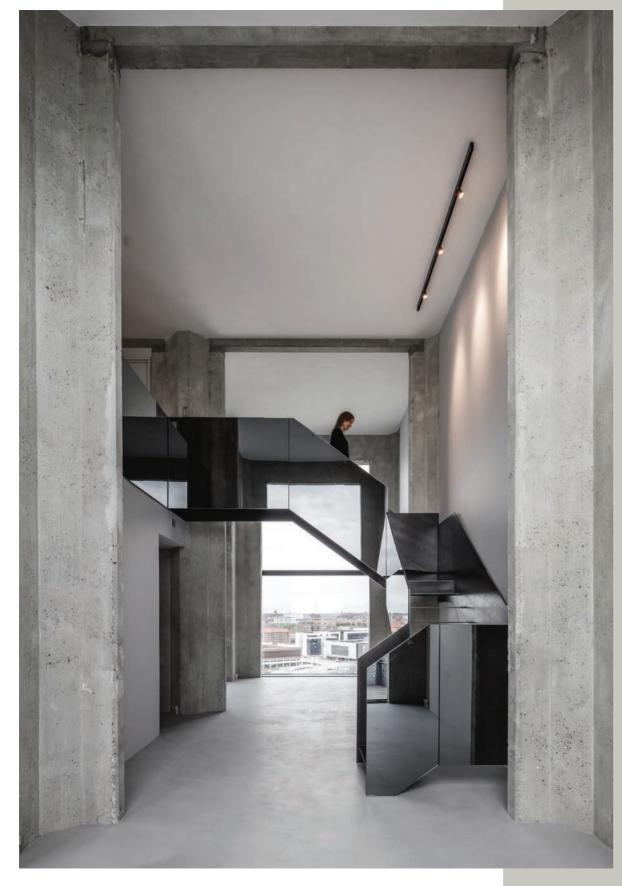
### Spraying - 2. layer

The second and finishing layer of acoustic plaster is spray applied and troweled to a smooth finish. The two layers of acoustic plaster should build 3mm (1/8'') in total.



### Sanding

For a completely smooth finish sand the entire surface until satisfied.

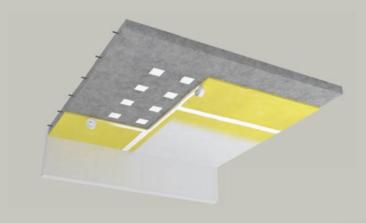


### **TYPES OF INSTALLATION**

The fade® Acoustic Plaster System is very flexible and can be installed in different ways.

### DIRECT INSTALLATION MECHANICALLY (M549)

The acoustic board is installed directly onto a plasterboard, concrete or timber substrate with either approved adhesive or mechanically fixed with fade® Special Washers.



### **DIRECT - TO - GRID**

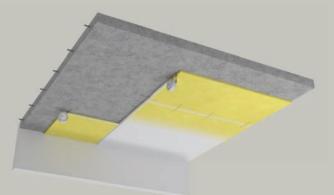
The acoustic board is installed directly to a MF metal drywall grid system 400mm (16") c/c or similar with the fade® Special Washers.

### Suitable substrates:

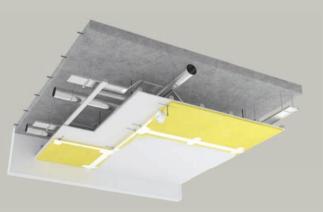
Regular gypsum wallboard, MF metal drywall grid system 400mm (16") c/c or similar, concrete, previously painted substrates, timber/steel frame

The Silo, Denmark | Residential

16



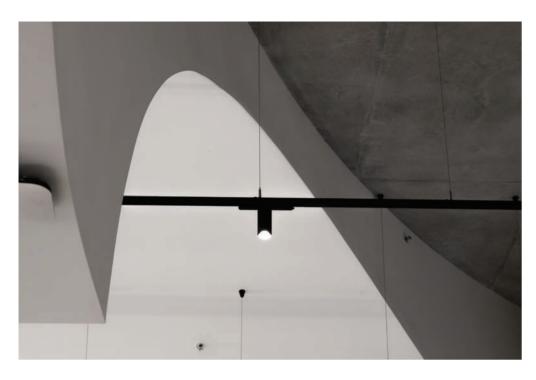
### DIRECT INSTALLATION ADHESIVE (M556)



## References

VillAnn, Sweden | Residential



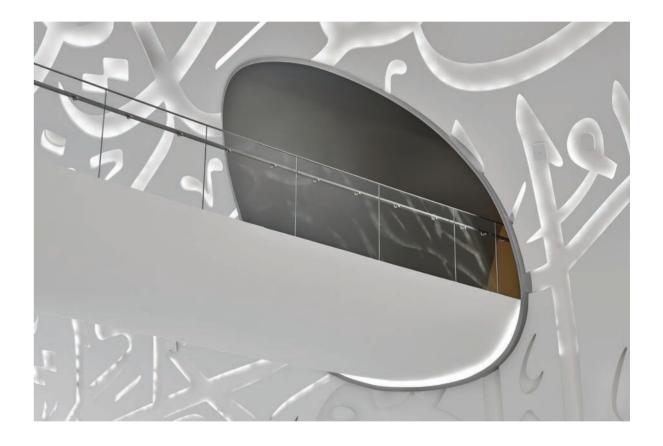




Victorian Pride Centre, Australia | Leisure







Museum of the Future, UAE | Leisure



Le Jules Verne, The Eiffel Tower, France | Hospitality







Orsted, Denmark | Commercial



The Louvre Museum, France | Leisure







Niittykumpu Metro Station, Finland | Transport





The Silo, Denmark | Residential





### **COLOURS AND SURFACES**

### FADE STANDARD FINISHES

Plus+ S 0300-N



### FADE STANDARD COLOURS

Clay NCS S 4020-Y50R





Perfect Beige NCS S 2005-Y50R Sandstone NCS S 3005-Y20R



### NOTE

Colours may vary slightly between different production batches.

Reproduction of colours vary between print and reality.



Albus S 0500-N















Grey Sky NCS S 5005-Y50R





### System properties

0

36 0

0

### ACOUSTICS, TECHNICAL PROPERTIES AND INSTALLATION DIAGRAMS

- 38 fade® Acoustic Plaster Albus
- 41 fade® Acoustic Plaster Plus+

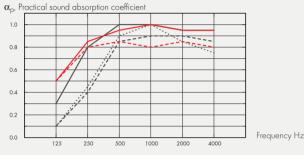


### fade® Acoustic Plaster Albus

### Acoustics:

### Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



- --- fade® Albus, 20 mm, 23 mm o.d.s. ···· fade® Albus, 25 mm, 28 mm o.d.s.
- fade® Albus, 40 mm, 43 mm o.d.s.
- --- fade® Albus, 20 mm, 200 mm o.d.s.
- fade® Albus, 40 mm, 200 mm o.d.s. o.d.s = overall depth of system
- $\alpha_{\rm p}$ , Practical sound absorption coefficient TH o.d.s. m Sound absorption class mm 125 Hz 250 Hz 4000 Hz 500 Hz 1000 Hz 2000 Hz 23 0.10 0.40 0.85 0.90 0.90 20 0.85 0.70 С 25 28 0.10 0.45 0.90 1.00 0.85 0.75 0.75 С 40 43 0.30 0.80 1.00 1.00 0.95 0.95 1.00 Δ 20 200 0.50 0.80 0.85 0.80 0.85 0.80 0.85 В 40 200 0.50 0.85 0.95 1.00 0.95 0.95 1.00 Α

	THK mm	o.d.s. mm	NRC	SAA	
-	25	28	0.80	0.80	
-	40	43	1.00		
-	40	200	1.00		

### Indoor Air Quality:

Certificate / Label French VOC A+ Finnish M1

Environmental Footprint: Life-cycle stages A1 to A3 from EPD, in conformity with ISO 14025 / EN 15804 Acoustic boards for fade® 15 mm: 2,79, Acoustic boards for fade® 20 mm: 3,65, Acoustic boards for fade® 25 mm: 4,51, Acoustic boards for fade® 40 mm: 6,0, fade® Albus - Acoustic Plaster: 0,45,

Fire safety: The glass wool core of the tiles is tested and classified as non-combustible according to EN ISO 1182. Fire test, E 84-11a. Europe: EN 13501-1, A2-s1,d0,

Humidity Resistance: Resistance to Humidity (RH 100%, 40°C) - ISO DS/EN 6270-2

Visual appearance: White NCS S 0500-N, CIE Y=79% light reflectance. Gloss < 1 . Colours may vary slightly between different production batches

**Cleanability:** Surface dust and dirt can be vacuumed off using a soft brush attachment or blown off using pressurised air.

Accessibility: The system supports installation of inspection hatch according to installation diagrams.

Installation: Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. When installing direct-to-arid the installer must ensure that the building is airtight to prevent dust deposits from airflow through the openpored acoustic plaster system.

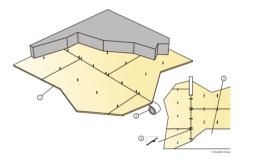
System weight: The weight of the system (including suspension grid) should be approximately M549/M558 ≈ 2,5 - 5,2 kg/m<sup>2</sup>, M550/M559 ≈ 14,3 - 17 kg/m<sup>2</sup>, M551/M560 ≈ 5,3 - 8 kg/m<sup>2</sup>.

Mechanical properties: Additional load (lighting, ventilation, etc.) should be supported by the suspension system according to the manufacturers recommendation or be hung directly from the soffit.

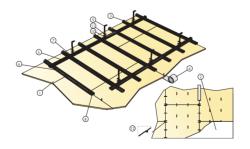
CE: fade® ceilings system is CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

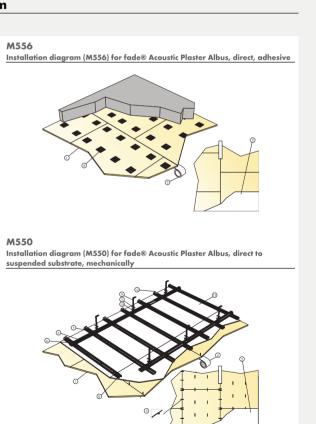
### Installation diagram in detail www.ecophon.com



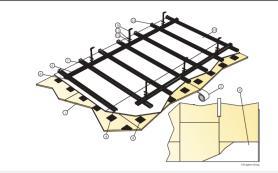


M551 Installation diagram (M551) for fade® Acoustic Plaster Albus, direct to grid, mechanically





### M557 Installation diagram (M557) for fade® Acoustic Plaster Albus, direct to suspended substrate, adhesive

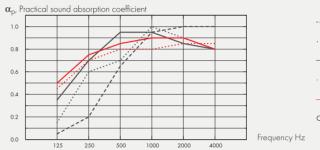


### fade® Acoustic Plaster Plus+

### Acoustics:

### Sound Absorption:

Test results according to EN ISO 354. Classification according to EN ISO 11654, and the single value ratings for Noise Reduction Coefficient, NRC and Sound Absorption Average, SAA according to ASTM C 423.



ТНК	o.d.s. mm	$lpha_{ m p}$ Practical sound absorption coefficient					α <sub>w</sub>	Sound absorption class	
mm		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	u, <sub>₩</sub>	Sound absorption class
20	23	0.05	0.20	0.65	0.95	1.00	1.00	0.50	D
25	28	0.15	0.60	0.70	1.00	0.90	0.80	0.80	В
40	43	0.35	0.70	0.95	0.95	0.85	0.80	0.90	A
25	200	0.45	0.70	0.80	0.80	0.85	0.85	0.85	В
40	200	0.50	0.75	0.85	0.90	0.90	0.80	0.90	A

	THK mm	o.d.s. mm	NRC	SAA
-	15	18	0.65	0.64
-	20	23	0.70	0.71
-	25	28	0.80	
-	40	43	0.90	
-	25	200	0.80	
-	40	200	0.85	

### Indoor Air Quality:

Certificate / Label French VOC A+ Finnish M 1 •

**Environmental Footprint:** Life-cycle stages A1 to A3 from EPD, in conformity with ISO 14025 / EN 15804 Acoustic boards for fade® 15 mm: 2,79, Acoustic boards for fade® 20 mm: 3,65, Acoustic boards for fade® 25 mm: 4,51, Acoustic boards for fade® 40 mm: 6,0, fade® Plus+ - Acoustic Plaster: 0,40,



- --- fade® Plus+, 20 mm, 23 mm o.d.s.
- ···· fade® Plus+, 25 mm, 28 mm o.d.s.
- fade® Plus+, 40 mm, 43 mm o.d.s.
- ···· fade® Plus+, 25 mm, 200 mm o.d.s.
- fade® Plus+, 40 mm, 200 mm o.d.s.
- o.d.s = overall depth of system

**Fire safety:** The glass wool core of the titles is tested and certified as non-combustible according to EN ISO 1182. Fire test E 84-11a. Europe: EN 13501-1, A2-s 1, d0,

Humidity Resistance: Resistance to Humidity (RH 100%, 40°C) - ISO DS/EN 6270-2

**Visual appearance:** White NCS S 0300-N, CIE Y=81% light reflectance. Exposure to UV-light - ASTM G 154-16. Gloss < 1. Colours may vary slightly between different production batches

**Cleanability:** Surface dust and dirt can be vacuumed off using a soft brush attachment or blown off using pressurised air.

Accessibility: The system supports installation of inspection hatch according to installation diagrams.

**Installation:** Installed according to installation diagrams, installation guides and drawing aid. For information regarding minimum overall depth of system see quantity specification. When installing direct-to-grid the installer must ensure that the building is airtight to prevent dust deposits from airflow through the open-pored acoustic plaster system.

**System weight:** The weight of the system (including suspension grid) should be approximately M549/M558 ≈ 2,5 - 5,2 kg/m<sup>2</sup>, M550/M559 ≈ 14,3 - 17 kg/m<sup>2</sup>, M551/M560 ≈ 5,3 - 8 kg/m<sup>2</sup>.

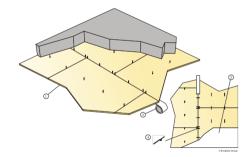
**Mechanical properties:** Additional load (lighting, ventilation, etc.) should be supported by the suspension system according to the manufacturers recommendation or be hung directly from the soffit.

**CE:** fade® ceilings system is CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

M561

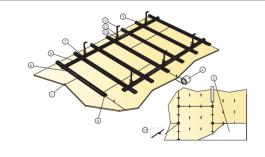
### Installation diagram in detail www.ecophon.com

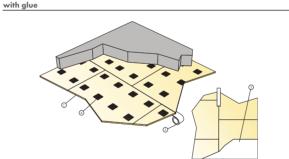
M558 Installation diagram (M558) for fade® Acoustic Plaster Plus+, direct to suspended substrate, mechanically



M560

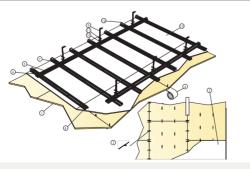
Installation diagram (M560) for fade® Acoustic Plaster Plus+, direct to suspended substrate, adhesive



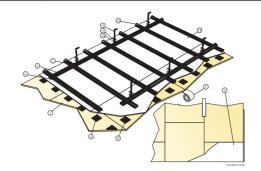


Installation diagram (M561) for fade® Acoustic Plaster Plus+ Direct installation

M559 Installation diagram (M559) for fade® Acoustic Plaster Plus+, direct to grid, mechanically



M562 Installation diagram (M562) for fade® Acoustic Plaster Plus+, direct, adhesive





fade® Acoustic Plaster Plus+, Created:2023-06-14

Ecophon is the leading supplier of indoor acoustic solutions that improve working performance and quality of life. We believe in the difference sound can make to our everyday lives, and are passionate advocates for the importance of room acoustics to people's wellbeing – whatever the space, activity or need.

Having a sound effect on people is the principle that guides all we do. We're proud of the Swedish heritage and human approach that promise is founded on.

Our uncompromising commitment to transparent sustainable practice. And, as members of the Saint-Gobain Group, to be doing our part in making the world a better home.

