CMSDANSKIN
ACOUSTICS

Uniclass	EPIC
L551:N373	E123:Y45
CI/SfB	
(4-) V (P3)	

Institute of Acoustics
sponsoring organisation

Fellert Spray Applied Acoustic Plastering System

Highly absorbent plaster to improve sound surroundings

High Performance Sound Absorption

The Fellert Spray Applied Acoustic Plastering System can be provided in a variety of finishes and colours, creating a broad range of potential applications. It has been used effectively on the walls of theatres and auditoriums, as well as spaces such as galleries, boardrooms, concert venues and public swimming baths.

The system has been installed at a number of high profile projects globally including The Bank of England, London and the University of Cambridge.

Office Environments

Quality acoustic solutions in office environments can help to improve productivity and concentration.

Auditoriums and Lecture Halls

The Fellert Spray Applied Acoustic Plastering System on walls and ceilings can help to shorten reverberation times and improve clarity.

Dining rooms and Restaurants

The anti-static quality of the Fellert Spray Applied Acoustic Plastering System makes it easy to clean and maintain. It is also made from entirely non-toxic materials.

Healthcare Environments

Clinical environments are usually clean and minimalist, which encourages sound reverberation. The Fellert Spray Applied Acoustic Plastering System can reduce this reverberation and improve acoustics.

Lobbies, Stairwells and Corridors

Older buildings in particular can have arching lobbies and stairwells which were designed without acoustic expertise. The Fellert Spray Applied Acoustic Plastering System can be applied in all of these areas.

Restorations

The Fellert Spray Applied Acoustic Plastering System offers three distinct types of finish, which mean that it can be used sympathetically in older buildings and restorations.

Physical Information

Natural: A lightly textured finish that is sprayed on.

Trowelled: A hand-crafted finish that is sprayed on and then hand-trowelled on the final application.

Ultra Smooth: The finish resembles a smooth hand-crafted plaster.

The Fellert Spray Applied Acoustic Plastering System is made entirely from environmentally friendly materials and is also an antistatic product that will not attract dust particles. It does not contain or release any toxins or any substances that can provoke allergies.

As no materials are added that can be injurious to health and the environment, the Fellert Spray Applied Acoustic Plastering System can be returned to natural circulation without harming the environment or damaging local habitats.

One of the key features of the Fellert Spray Applied Acoustic Plastering System is its versatility. It can be specified to suit any space or design criteria. If required, the Fellert Spray Applied Acoustic Plastering System can be specified in bespoke colours or finishes.

Depending on the acoustic performance required, the Fellert Spray Applied Acoustic Plastering System is available in two construction heights.

- Option 1: 22mm
- Option 2: 42mm

22mm will make a significant difference to the acoustics in any environment. A 42mm construction height is proven to deliver acoustic excellence.



Technical Information

The Fellert Spray Applied Acoustic Plastering System is manufactured to extremely high standards and tested to ensure that it provides outstanding performance.

Acoustic Performance

The Fellert Spray Applied Acoustic Plastering System has a Sound Absorption Coefficient of up to Class A according to ISO 11654.

Tests were based on a construction height of 200mm. A 42mm deep construction offers Class C performance.

Its acoustic performance has also been measured according to the room method (SS-EN ISO 354).

Fire Resistance

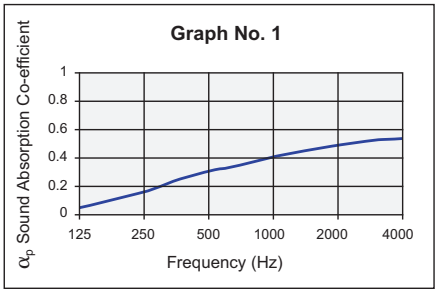
The Fellert Spray Applied Acoustic Plastering System has Fire Protection approval, Euro Class B-S1, d0 to EN13823 and EN ISO 11925-2.

It also achieves the fire resistance requirements of British Building Regulations BS476: Part 6 and 7, satisfying the highest level Class O.

Environmental

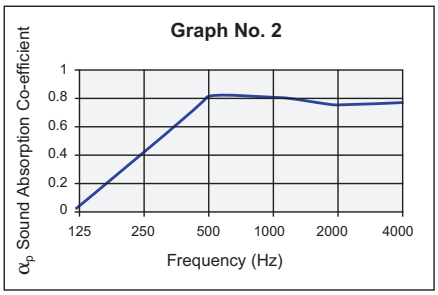
More than 30% of the content used to make the Fellert Spray Applied Acoustic Plastering System is recycled. It has zero VOC content when tested against the ASTM D3960 standard.

1. 3mm. Sprayed CMS Alpha Acoustic plaster on 13mm. gypsum board close mounting. Total construction height is 16mm.



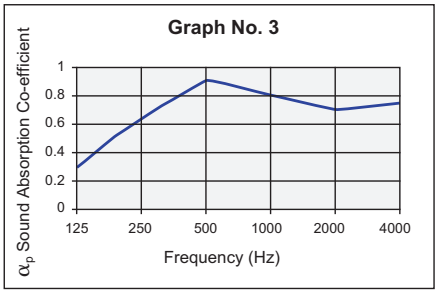
Frequency (Hz)	α_p
125	0,05
250	0,15
500	0,30
1000	0,40
2000	0,50
4000	0,55

2. 3mm. Sprayed CMS Alpha Acoustic plaster on 19mm mineral wool absorption board(60 kg/m³) close mounting. Total construction height is 22mm.



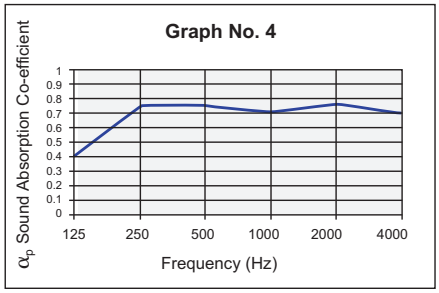
Frequency (Hz)	α_p
125	0,05
250	0,40
500	0,80
1000	0,80
2000	0,75
4000	0,75

3. 3mm. Sprayed CMS Alpha Acoustic plaster on 39mm mineral wool absorption board(60 kg/m³) close mounting. Total construction height is 42mm.



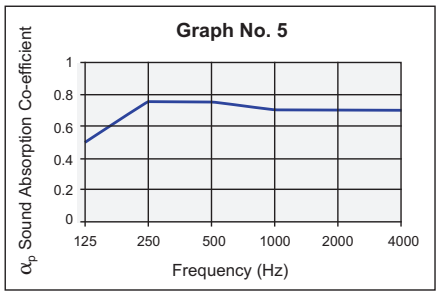
Frequency (Hz)	α_p
125	0,35
250	0,80
500	0,90
1000	0,70
2000	0,65
4000	0,75

4. 3mm. Sprayed CMS Alpha Acoustic plaster on 19mm mineral wool absorption board (60 kg/m³) in frame work, ceiling height 200mm. Total construction height is 222mm.



Frequency (Hz)	α_p
125	0,40
250	0,75
500	0,75
1000	0,70
2000	0,75
4000	0,70

5. 3mm. Sprayed CMS Alpha Acoustic plaster on 39mm mineral wool absorption board (60 kg/m³) in frame work, ceiling height 200mm. Total construction height is 242mm.



Frequency (Hz)	α_p
125	0,50
250	0,75
500	0,75
1000	0,70
2000	0,70
4000	0,70



Installation

The Fellert Spray Applied Acoustic Plastering System has two constituents. Firstly, fibreglass board is attached with adhesive or mechanical fixings. Secondly, the acoustic plaster is mixed with water. Depending on the type of finish required, it can be applied with a spray machine or hand-trowelled to an approximate thickness of 3mm.

The Fellert Spray Applied Acoustic Plastering System is supplied by CMS Danskin Acoustics and installed by approved installation partners. Detailed installation guidelines are available on request.

Types of Installation

The predominant installation method is:

Fibreglass Board and Fellert Spray Applied Acoustic Plastering System to a GWB Substrate

The Fibreglass Board is attached to a non-taped and non-primed drywall substrate with approved adhesive. A mesh tape and approved primer are applied to the plastic or aluminium C channel. The fibreglass board is then sprayed with the Fellert Spray Applied Acoustic Plastering System.

Other installation methods include:

Fellert Spray Applied Acoustic Plastering System only (no Fibreglass Board) to a GWB Substrate

Approved primer is applied to a drywall substrate prepared to a level 4 standard. The primed surface is then sprayed with the Fellert Spray Applied Acoustic Plastering System.

To Previously Painted Surfaces

The substrate is tested for bond strength and cleaned. The fibreglass board is attached to the painted substrate with the approved adhesive and additionally secured with a minimal amount of spring washers if required. A self-adhesive mesh tape and approved primer are applied to the plastic or aluminium C channel.

The fibreglass board is then sprayed with the Fellert Spray Applied Acoustic Plastering System.

Fibreglass Board & Fellert Spray Applied Acoustic Plastering System Directly-to-Grid

The fibreglass board is attached to a 40mm o.c. metal drywall grid system with the spring washers. A mesh tape and approved primer are applied to the plastic or aluminium C channel.

The fibreglass board is then sprayed with the Fellert Spray Applied Acoustic Plastering System.

Installations to curved surfaces are not recommended with the direct-to-grid applications. Install all curved applications to GWB or other solid surface.

General Installation Statement

While the above Fellert Spray Applied Acoustic Plastering System can be applied to horizontal and vertical surfaces, it is not recommended to use the Fellert Spray Applied Acoustic Plastering System within touching distance, i.e. within 2.5m of standing floor level. The official fibreglass board thickness is 19mm or 39mm.

Repair and Maintenance

The Fellert Spray Applied Acoustic Plastering System has a unique composition that makes it easy to clean.

Anti-static qualities mean it does not magnetically attract particles from the surrounding air, which is the principal reason for dirt on ordinary painted surfaces. Therefore, dust and other debris can be removed simply by vacuum cleaning.

Other stains can usually be cleaned using a soft sponge and fresh water.

The Fellert Spray Applied Acoustic Plastering System stands up well to impact. However, where damage to the plaster occurs, it can often be repaired in a localised way, without re-spraying an entire wall or ceiling.

This can mean that maintenance costs are much lower than with other types of acoustic solutions.

Fellert Spray Applied Acoustic Plastering System

The Fellert Spray Applied Acoustic Plastering System is a high quality plastering system that absorbs unwanted noise in a wide range of environments. As an acoustic solution, it has a highly absorbent effect that allows optimum acoustic control in large, commercial spaces.

Offering unrivalled levels of sound absorption, the Fellert Spray Applied Acoustic Plastering System leaves walls and ceilings clear of panels and visible acoustic solutions. It is easy to repair, clean and maintain and has a proven track record of providing high performance sound absorption. It is also constructed entirely from environmentally friendly materials, which are completely free from toxins.

A High Level of Sound Absorption

The Fellert Spray Applied Acoustic Plastering System delivers up to and including Class A sound absorption options and is unique because it absorbs sounds at lower frequencies. Most acoustic solutions will absorb frequencies above 500Hz. However, the Fellert Spray Applied Acoustic Plastering System also absorbs sounds with frequencies below 500Hz; low, constant noises such as the hum of air conditioning units or the buzz of traffic, which make a significant difference to the quality of the environment.

The Fellert Spray Applied Acoustic Plastering System appeals to acousticians, architects and designers because it provides a virtually seamless surface for walls and ceilings. Other products absorb sound by incorporating an air gap. The Fellert Spray Applied Acoustic Plastering System absorbs sound in lower frequencies without the need for an underlying air gap. It is therefore a much more flexible product in terms of design, with the capability to adapt to curves, angles and unusual geometrical shapes.

A High Standard Aesthetic Finish

The adaptability of the Fellert Spray Applied Acoustic Plastering System means that architects and designers can work with real freedom. The Fellert Spray Applied Acoustic Plastering System can be attached to straight and curved walls, to dramatic angles and arching domes. It offers a more flexible, more discreet option to traditional acoustic solutions, such as suspended ceilings.

Significantly, the Fellert Spray Applied Acoustic Plastering System delivers a high quality aesthetic finish, as well as superior acoustic performance. It can be applied to new, architecturally complex buildings, as it can be finished to a high standard and in a variety of colours. It can also be used in restorations of older buildings, where an original style needs to be complemented with a modern, effective acoustic solution.

The Fellert Spray Applied Acoustic Plastering System is just one of a number of acoustic systems available exclusively in the UK from CMS Danskin Acoustics.

CMSDANSKIN ACOUSTICS

www.cmsdanskin.co.uk

Scotland Office:
1 Netherton Road
Wishaw. ML2 OEQ
t: 01698 356000
f: 01698 372222

Central Office:
Unit 4 Eagle Park,
Eagle Park Drive
Warrington. WA2 8JA
t: 01925 577711
f: 01925 577733

Southern Office:
Unit 8 Harding Way, St Ives
Cambridge. PE27 3WR
t: 01480 463750
f: 01480 495180

IVE/2co/07/11