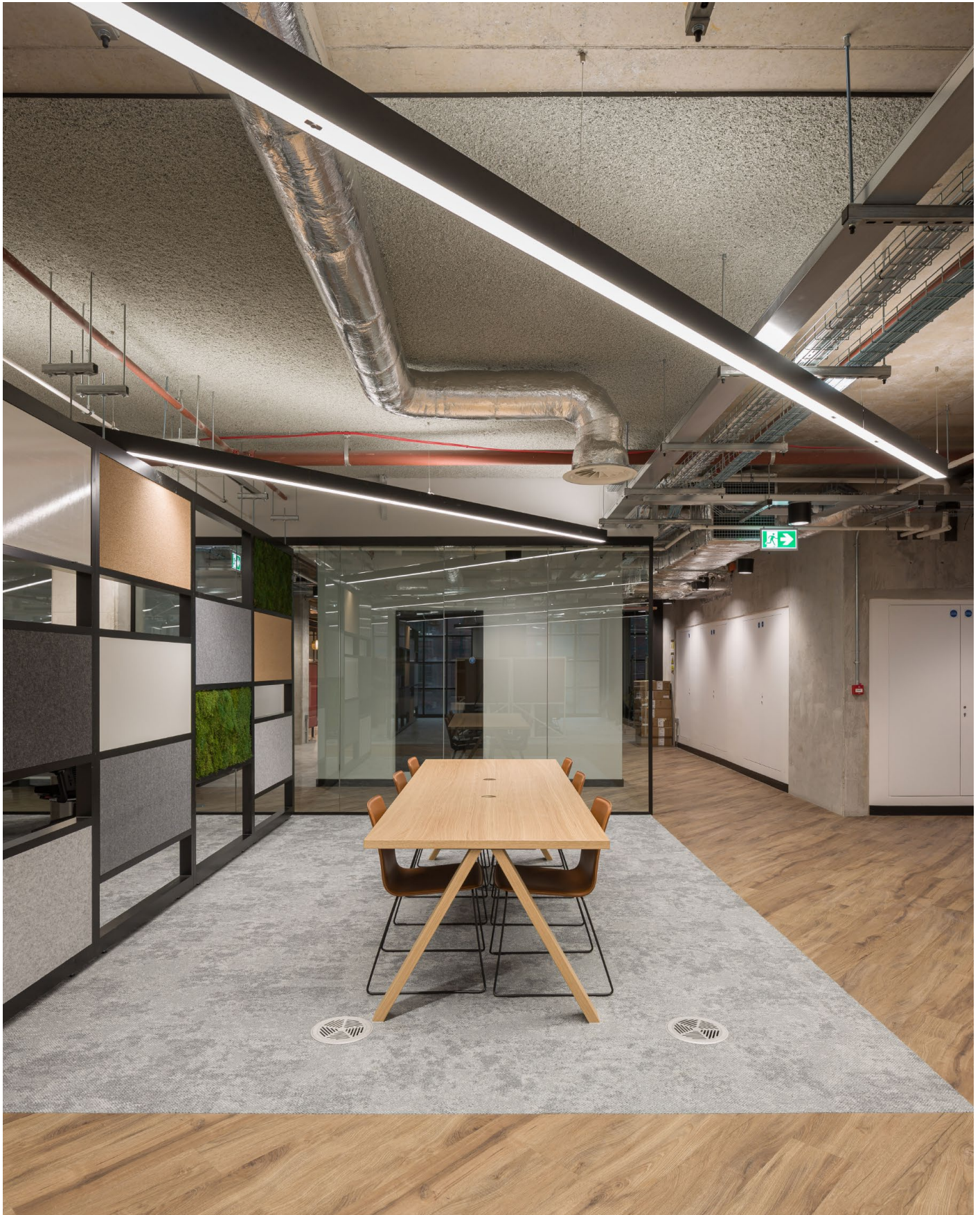


Acoustic plaster and spray ceilings

Product guide

STIL
ACOUSTICS



Acospray DC3, Manchester Goods Yard

Acoplaster F1 ceiling



**Spray applied
acoustic ceiling
finishes.**

Part 1 - Acospray

A solution to enable designers to explore favourable features such as open-plan layout, without having to consider the design impact of traditional absorption materials. Exceptional acoustic performance is achieved, and as the material is primarily used on ceilings, large areas can be covered to enable maximum control of reverberant noise.

Check the webpage for recent projects.



Acospray DC3, Cafe,
London



The most popular one coat system.

1.1 Acospray DC3 datasheet

The most popular spray finish, DC3 offers excellent acoustic control with an even, coarse texture. Different thicknesses affect the acoustic performance and installation time, and the material can be coloured to suit the project.

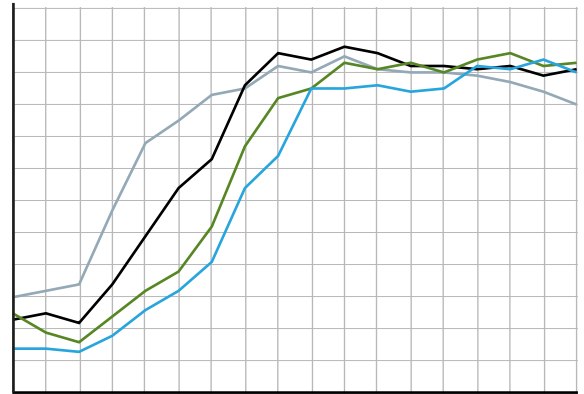
Key Features

- Fast installation
- Covers imperfections
- High sound absorption
- High recycled content
- Cost effective
- Can be patch repaired
- Colour matching
- Applies to uneven surfaces

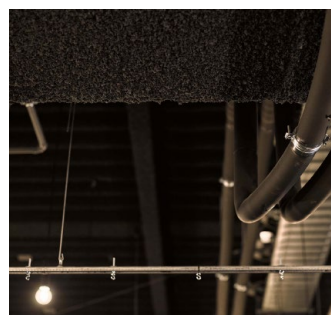
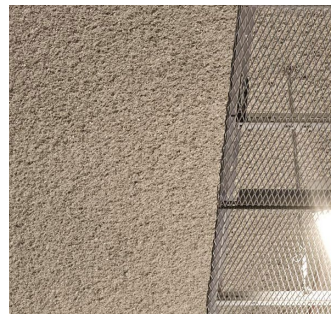
Fire performance

EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.

Acospray DC3 absorption (354: 2003)



Build up	α_w	NRC	Class	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
15mm	0,55	0,70	D	0,15	0,25	0,65	0,95	0,95	1,00
20mm	0,60	0,80	C	0,20	0,30	0,75	1,00	1,00	1,00
25mm	0,75	0,85	B	0,25	0,50	0,90	1,00	1,00	1,00
35mm	1,00	0,95	A	0,30	0,75	1,00	1,00	1,00	0,95





Acospray DC3 in Hong Kong Grey. Pernod Ricard, London.



Acospray DC3 ceiling, Cafe, London



Acospray DC3 in ILA. Manchester Goods Yard



Acospray DC3 in ILA. Manchester Goods Yard

**The finest finish
for a one process
system.**

1.2 Acospray DC2 datasheet

DC2 is the least textured of the spray-only finishes. Typically used to create a homogenous texture to ceilings and add an extra ambience while also providing excellent acoustic control.

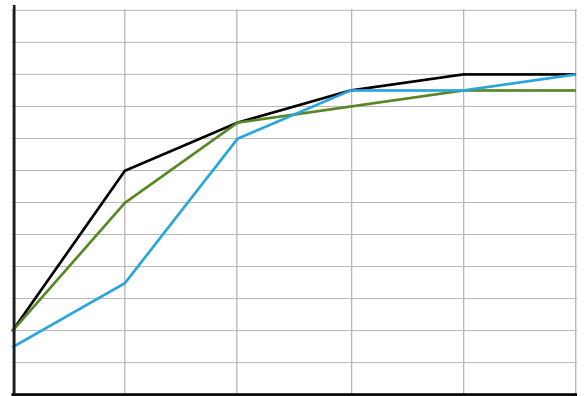
Key Features

- Fast installation
- Covers imperfections
- High sound absorption
- High recycled content
- Cost effective
- Can be patch repaired
- Colour matching
- Applies to uneven surfaces

Fire performance

EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.

Acospray DC2 absorption (354: 2003)*



Build up	α_w	NRC	Class	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
15mm*	0,55	0,70	D	0,15	0,25	0,65	0,95	0,95	1,00
32mm*	0,60	0,80	C	0,20	0,30	0,75	1,00	1,00	1,00
42mm*	0,75	0,85	B	0,25	0,50	0,90	1,00	1,00	1,00

*Improved absorption data soon to be published



One coat followed
by a trowel finish.

1.3 Acospray DC2 2.0 datasheet

DC2 2.0 is the same as DC2, but the finish is trowelled smooth when still wet. The finish doesn't provide as fine a texture as DC1 or Acoplaster, but offers fast installation and reduced costs.

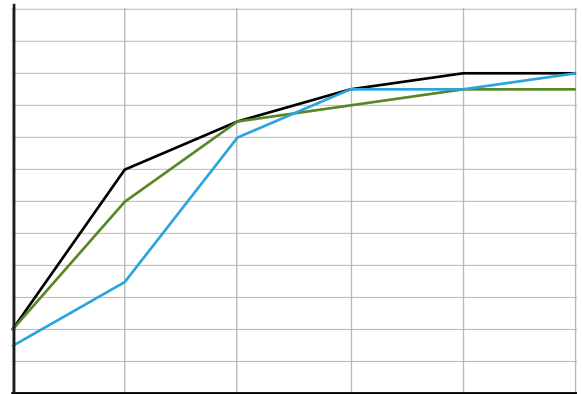
Key Features

- Fast installation
- Smoothed finish
- High sound absorption
- High recycled content
- Cost effective
- Can be patch repaired
- Colour matching

Fire performance

EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.

Acospray DC2 absorption data (354: 2003)*



Build up	α_w	NRC	Class	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
15mm*	0,55	0,70	D	0,15	0,25	0,65	0,95	0,95	1,00
32mm*	0,60	0,80	C	0,20	0,30	0,75	1,00	1,00	1,00
42mm*	0,75	0,85	B	0,25	0,50	0,90	1,00	1,00	1,00

*Improved absorption data soon to be published

*Can be mounted on Acoboard for increased absorption





DC3 ceiling.



DC3 in bespoke colour directly applied to uneven surface

Contact us for
bespoke colours.

Colour options

There are a range of standard colours as detailed below. Bespoke colours are also possible. For less heavily pigmented bespoke colours, such as off-whites, pigments are added to the adhesive at the time of spraying. For stronger colours, the fibres themselves are pigmented during production. Minimum quantities apply for this.

Green Line

Green Line colours are based on Post Consumer Recycled Content which is carefully sorted and no substances are added that do not fall within the scope of the Cradle to Cradle certification scheme.



Standard White



ILA Grey



Cool Grey



Hong Kong Grey - **Green Line**



Apple Grey - **Green Line**



India Yellow - **Green Line**



Billboard Grey - **Green Line**



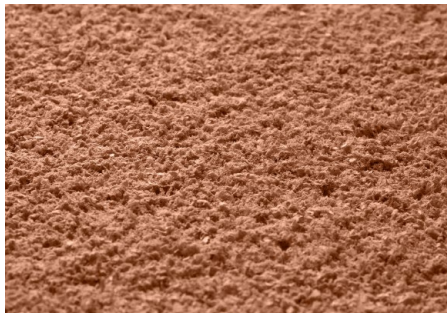
Oman Grey



Black



Denim Blue



Terracotta



Olive Green

**Acoustic renders
on Acoboard.**

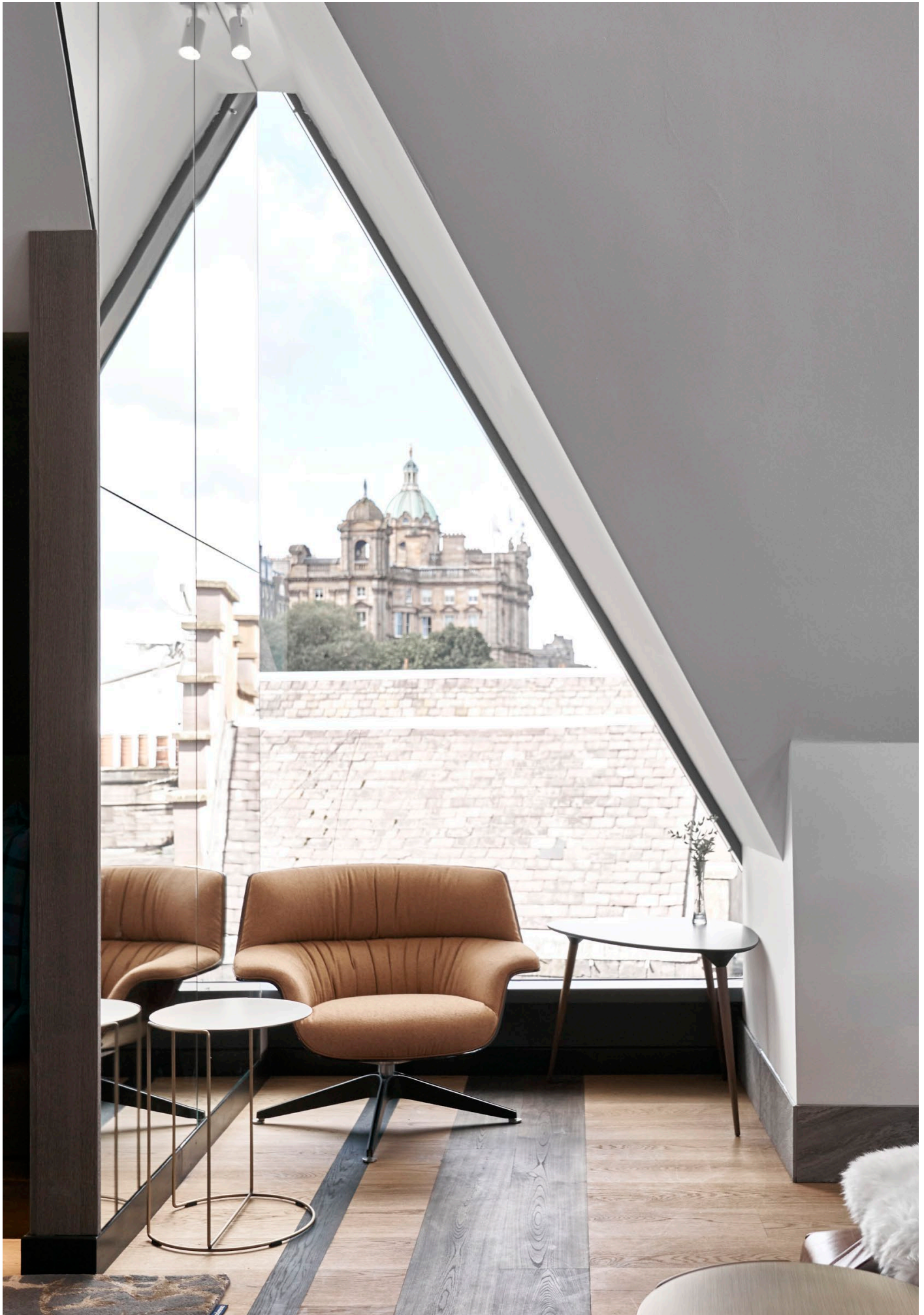
Part 2 - Acoplaster

Our acoustic plaster finishes enable the designer to effectively control reverberant noise, without worrying about selecting an absorber which compliments the design, visually. We offer two finishes - DC1, with a lightly textured surface; an F1, with a very smooth finish. Both provide Class A acoustic performance, fire retardance, and a repairable finish.

Check the webpage for recent acoustic plaster projects.



Acoplaster DC1 ceiling,
Wellington College



A great looking solution with high sound absorption.

2.1 Acoplaster DC1 datasheet

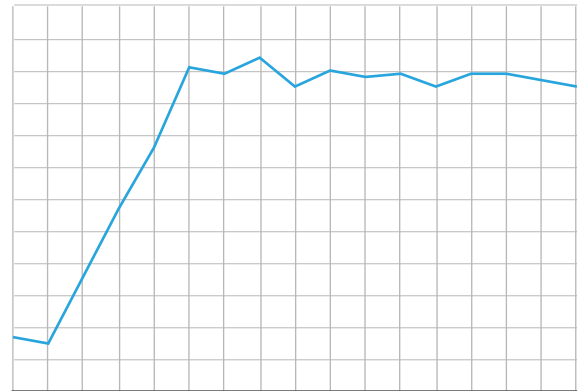
Key Features

- 15-35mm thickness, depending on acoustic requirements
- Can form to curved shapes
- High recycled content
- Can be patch repaired
- Excellent acoustic performance
- Hides wires and tubes
- Light weight

Fire performance

EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.

Acospray DC1 35mm absorption (354: 2003)



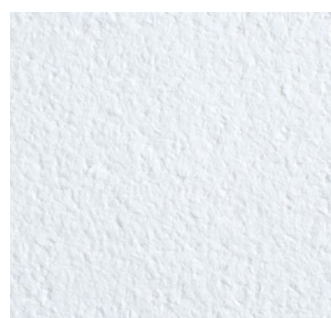
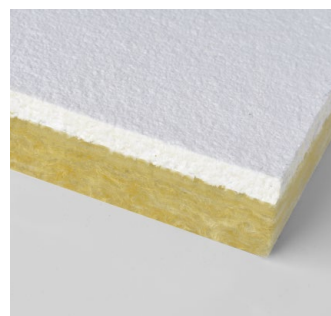
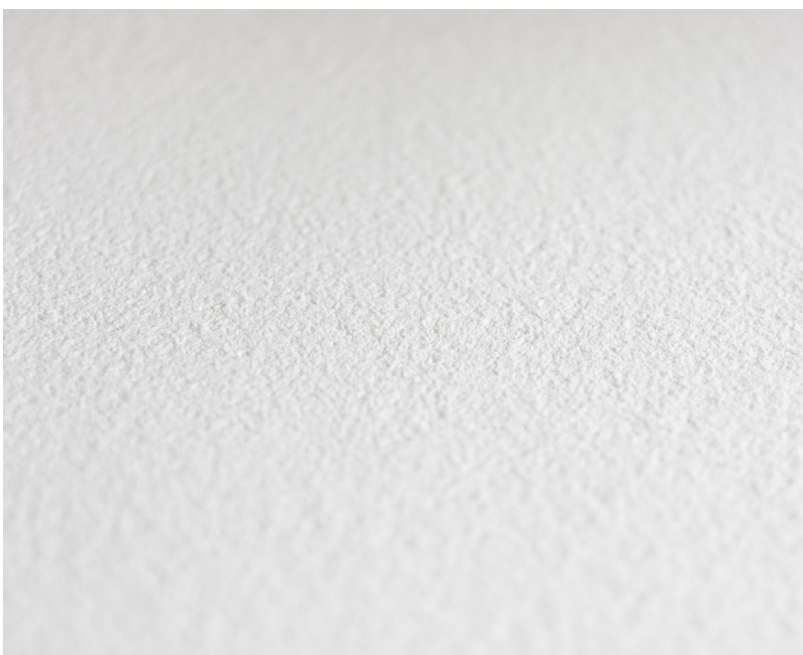
Build up	α_w	NRC	Class	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
30mm board + 5mm spray	1,00	0,95	A	0,20	0,80	1,00	1,00	1,00	0,95

Environmental factors

Primarily recycled natural cellulose fibers and mineral fibre board. Well within the EU standards of 5% Borates, making it safe for both contractors and customers. Water based polymer binders

Maintenance and warranty

Easily cleaned with a soft brushed vacuum cleaner and damaged areas can be patch repaired. Comes with 5 year warranty.





Acoplaster DC1 ceiling, Mere Restaurant, London



Acoplaster DC1. Wellington College

The smoothest
acoustical plaster
finish.

2.2 Acoplaster F1 datasheet

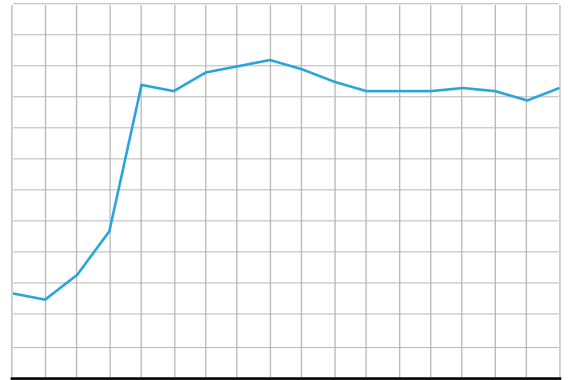
Key Features

12-32mm thickness, depending on acoustic requirements
Can form to curved shapes
High recycled content
Can be patch repaired
Excellent acoustic performance
Hides wires and tubes
Light weight

Fire performance

EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.

Absorption data for Acoplaster F1 (EN 354: 2003)



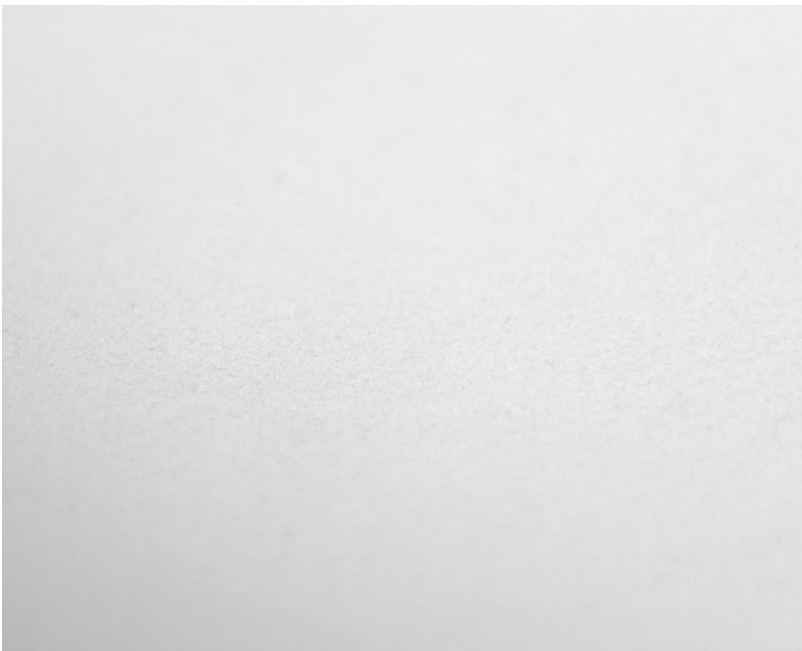
Build up	α_w	Class	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz
30mm Acoboard + 2mm finish	0,90	A	0,30	0,75	1,00	0,95	0,90	0,90

Environmental factors

Primarily recycled natural cellulose fibers and mineral fibre board.
Well within the EU standards of 5% Borates, making it safe for both contractors and customers.
Water based polymer binders

Maintenance and warranty

Easily cleaned with a soft brushed vacuum cleaner and damaged areas can be patch repaired. Comes with 5 year warranty.






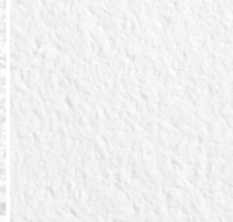



Acoplaster F1 ceiling, Wimbledon. By Nice Brew Design.



Acoplaster F1

Quick reference

	Acospray			Acoplaster	
					
Type	DC3	DC2	DC2 2.0	DC1	F1
Description	The most popular finish - finer than DC5, sprayed direct	The finest spray-only finish	DC2 with trowel smoothing after spraying	Finish applied to Acoboard. Lightly textured finish	Finish applied to Acoboard. Smooth finish
Acoustics	Class A (α_w 1,00) at 35mm	Class B (α_w 0,85) at 42mm	Class B (α_w 0,85) at 42mm	Class A (α_w 1,00) at 35mm	Class A (α_w 0,90) at 32mm
Fire performance	EN 13501-1:2007+A1:2009 B-s1.d0	EN 13501-1:2007+A1:2009 B-s1.d0	EN 13501-1:2007+A1:2009 B-s1.d0	EN 13501-1:2007+A1:2009 B-s1.d0	EN 13501-1:2007+A1:2009 B-s1.d0
Smoothness	•	••	•••	••••	•••••
Build up	Spray only	Spray only	Spray then trowel	5mm layer on Acoboard	2mm layer on Acoboard
Installation	One coat	One coat	One coat then trowel	2 stage	3 stage
Rapid installation	•	•	•		
Mounting on Plasterboard	•	•	•	•	•
Direct to soffit	•	•	•	•	•
Curved surfaces	•	•	•	some	some
White	•	•	•	•	•
Colour match*	•	•	•		

*Discuss with Stil Acoustics the limitations of pigmentation before specifying.



Installation

All installations are carried out by Stil Acoustics approved installers due to the highly technical nature of the systems, and the specialist equipment required.



Substrates

Acospray and Acoplaster can be applied directly to either concrete, plasterboard, or metal deck ceilings. Plasterboard should have the moisture resistant surface which is readily available. If this isn't used, the boards should be primed first. Acospray (apart from DC2.0) can also be applied to corrugated ceilings and to cover services. Please consult us before specifying Acoplaster on curved surfaces. Any threaded rods for service applied before application.

Example procedure - Acoplaster

1. Substrate is checked for defects
2. Primer applied if required
3. Edge profiles applied if required
4. Boards adhered to the ceiling
5. Seams of boards filled
6. Perimeter is masked off before spraying
7. First layer spray applied
8. Second layer spray applied
9. Finish is troweled smooth
10. Finish is left to dry
11. (F1 only) Finish is sanded

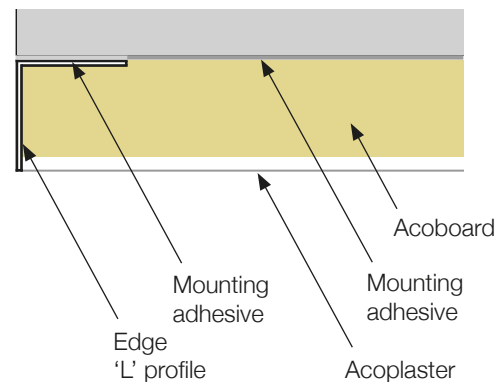
Example procedure - Acospray

1. Substrate is checked for defects
2. Primer applied if required
3. Edge profiles applied if required
4. Perimeter of the room and any sensitive surfaces are masked
5. Apply Acospray
6. (DC2 2.0 only) Trowelling performed
7. Edges trimmed
8. Masking removed

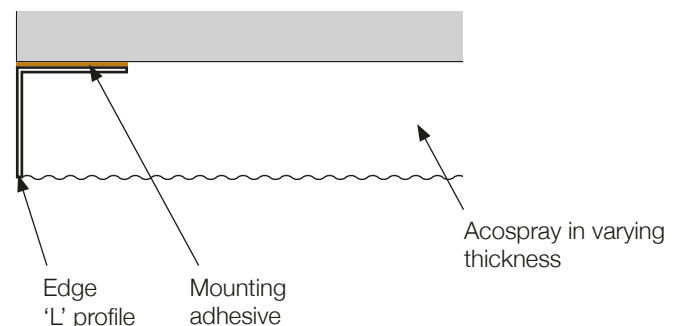
Edges

When working up to a wall, no finishing detail is required. If the material needs to break, an L-profile is commonly used. Please contact us if you require additional information on access hatches, light surrounds, and corner details.

Acoplaster edge detail

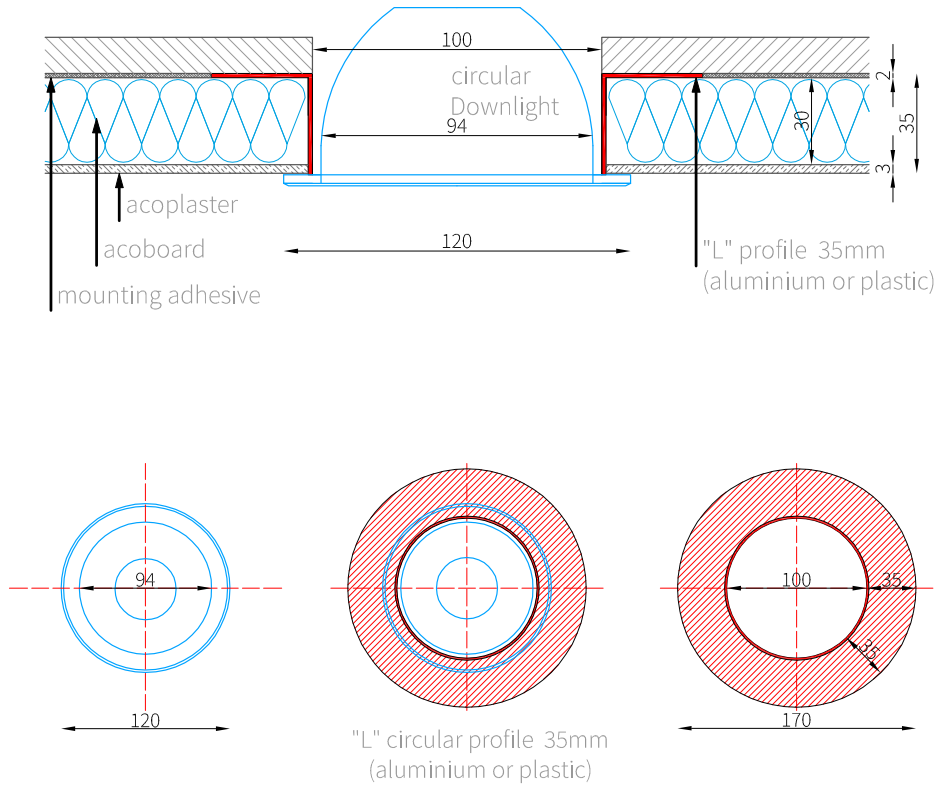


Acospray edge detail

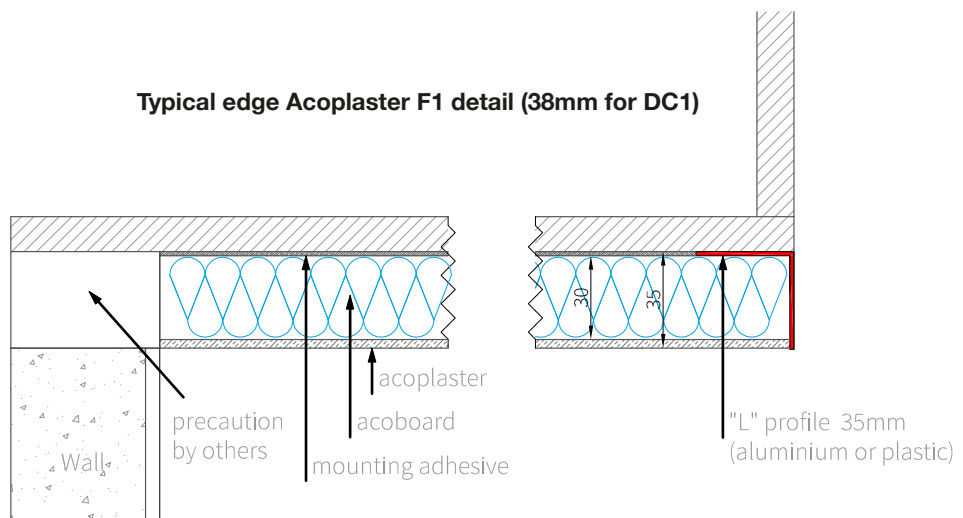


Typical details

Typical circular light detail for Acoplaster F1 detail (38mm for DC1)

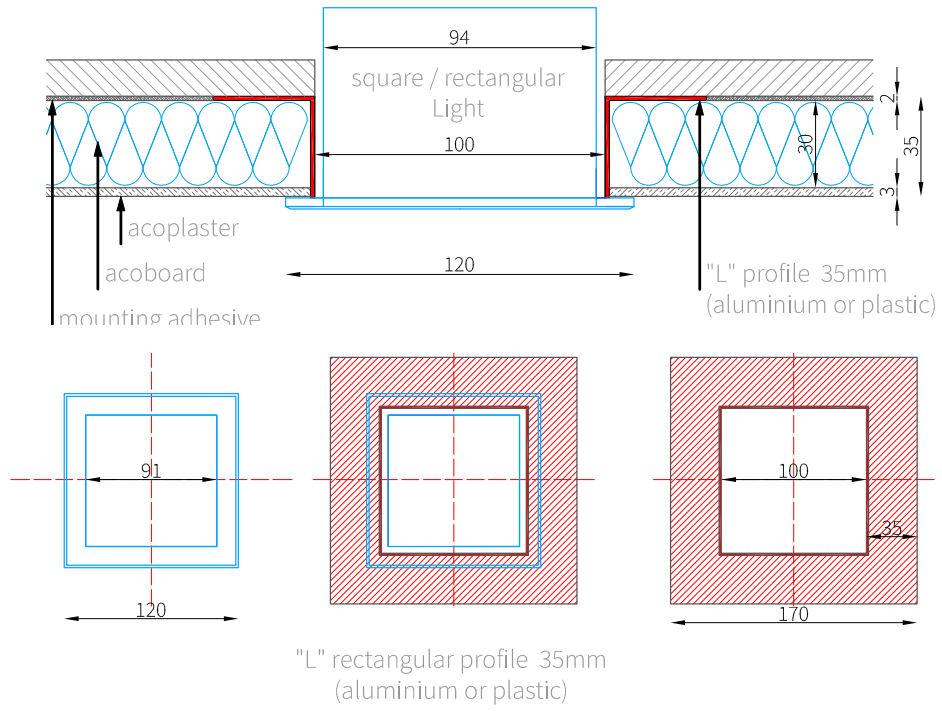


Typical edge Acoplaster F1 detail (38mm for DC1)

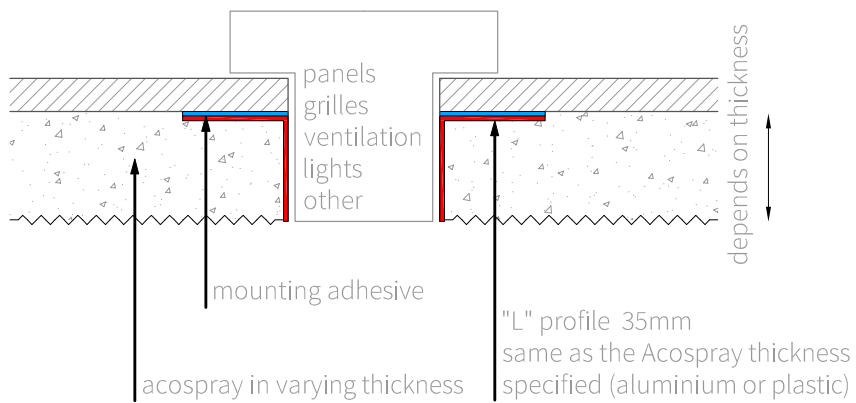


Typical details

Typical Acoplaster F1 light detail (38mm for DC1)



Typical AcoSpray detail



* Text highlighted in blue for editing /removing for project specifics.

Acospray DC3 / DC2 / DC2 2.0 Specification example

M22 SPRAYED MONOLITHIC COATINGS

120 SPRAYED COATING SOUND ABSORBING COATING
Spray applied one coat system for reverberation control

Coating material:

- * Drawing references: [aaaa](#)
- * Supplier: Stil Acoustics, Email: info@stil-acoustics.co.uk Web: www.stil-acoustics.co.uk
- * Product reference: Acospray [DC3/DC2/DC2 2.0](#)
- * Fire performance: EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.
- * Thickness: [35mm \(see datasheets as thickness dictates acoustic performance\)](#)
- * Acoustic performance: $\alpha_w - 1,00$; EN 11654 - Class A
- * Product description: Spray applied acoustic coating made from naturally safe recycled cellulose fibre and water based adhesives to create a seamless acoustic absorber. Dispose of as non-hazardous waste.
- * Quality assurance: Materials, equipment and labour to be provided only by an Stil Acoustics approved installer.
- * No substitution may be made to any components of the system.
- * Boric Acid: Less than 5% in line with EU standards
- * Colour: [See from published information or suggest bespoke](#)

Preparation:

- * Services: [Services can be covered by spray unless otherwise specified. Electrical conduits should be at least 10mm thinner than the finished thickness of the Acospray.](#)
- * Preparation general: Any clips, threaded rods or other attachments should be installed AFTER application. Examine surfaces to ensure that there are no areas such as untreated wood, oxidised metal or other condition which could result in migratory staining/damage of the Acospray.
- * It may be beneficial to install threaded rods prior to spraying. Consult Stil Acoustics or approved installer beforehand
- * [Soffit - plasterboard: Moisture resistant plasterboard should be used where possible \(if not, primed\). Substrate should be airtight](#)
- * [Soffit - Metal deck: Assuming a new metal deck is airtight, clean and galvanised, spray directly. If not, priming may be required. Underlying shape will be visible once sprayed.](#)
- * [Soffit - concrete: Given that conditions above are met, sprayed directly to the substrate](#)
- * Masking: materials used for masking can damage surface finishes such as paint. It is recommended that these are applied after.
- * Acospray perimeters require an L- profile finishing detail, to the same thickness as the spray, where it is not possible to finish against a wall or other partition.
- * Plastic profiles can be used or powder coated Aluminium.
- * Drying conditions: min 15°C and recommended 8 air changes per hour

* Areas highlighted in blue for editing to project specifics.

Acoplaster DC1 / F1 Specification example

M22 SPRAYED MONOLITHIC COATINGS

120 SPRAYED COATING SOUND ABSORBING COATING

Spray applied one coat system for reverberation control

Coating material:

- * Drawing references: [aaaa](#)
- * Supplier: Stil Acoustics, Email: info@stil-acoustics.co.uk Web: www.stil-acoustics.co.uk
- * Product reference: Acoplaster [DC1/F1](#)
- * Fire performance: EN 13501-1:2007+A1:2009 B-s1.d0. European equivalent to BS 476: Part 6 & 7 Class O.
- * Thickness: [35mm \(DC1\) / 32mm\(F1\)](#)
- * Acoustic performance: $\alpha_w - 1,00$; [11654 - Class A \(DC1\) / \$\alpha_w - 0,90\$; 11654 - Class A \(F1\)](#)
- * Product description: Spray applied acoustic coating made from recycled cellulose and water based adhesives applied to mineral fibre board to create a seamless acoustic absorber.
- * Quality assurance: Materials, equipment and labour to be provided only by an Stil Acoustics approved installer.
- * No substitution may be made to any components of the system.
- * Boric Acid: Less than 5% in line with EU standards
- * Colour: [See from published information or suggest bespoke](#)

Preparation:

- * Preparation general: Any clips, threaded rods or other attachments should be installed AFTER application. Examine surfaces to ensure that there are no areas such as untreated wood, oxidised metal or other condition which could result in migratory staining/damage of the Acoplaster.
- * It may be beneficial to install threaded rods prior to spraying. Consult Stil Acoustics or approved installer beforehand
- * [Soffit - plasterboard: Moisture resistant plasterboard should be used where possible \(if not, primed\). Substrate should be airtight](#)
- * [Soffit - concrete: Given that conditions above are met, sprayed directly to the substrate](#)
- * Masking: materials used for masking can damage surface finishes such as paint. It is recommended that these are applied after.
- * Acoplaster perimeters require an L- profile finishing detail where it is not possible to finish against a wall or other partition.
- * Plastic profiles can be used or powder coated Aluminium.
- * Perimeter profile thickness: depth of the system plus 3mm to compensate for board adhesive
- * Drying conditions: min 15°C and recommended 8 air changes per hour

Installation / site checklist - acoustic spray / plaster

Project

Checklist - To be completed by the contractor prior to application

	Tick
Aluminium or plastic profiles need to be placed to end the spraywork when it is not possible to end against a wall or window frame. This should be applied in advance if not included in the quotation. *Please contact Stil Acoustics for size of the profile.	
Area should be free from obstructions and other trades	
220V power supply available	
Substrate needs to be clean, dry and free of oil and dust	
Loose parts need to be removed	
Holes and cracks in substrate need to be closed air tight	
Unevenness must be smoothed (unless desired, i.e corrugated surface)	
Electricity pipes and cables that have to be out of sight, need to be placed directly on the substrate so that they can be hidden in the spraywork (average 30% extra labour)	
Electricity boxes need to be extended in the thickness of the spraywork	
Fixtures in the ceiling need to have an edge to work up against at the thickness of the applied acoustical render (plus 3mm Acoplaster)	
Metal parts need to be treated to prevent rust	
Distance between air ventilation ducts need to be at least the width of the channel	
For renovation projects, the substrate need to be treaded with Acoprimer to prevent bleedings	
Masking the walls can cause damage to paintwork. Make sure delicate finishes are applied after the application of the acoustical spray	
When gypsum boards are used make sure the water resistant type (green color) is used, otherwise apply water resistant primer	
Power near to the working space	
Clean water near to working space	
Space between air duct or any other installation part needs to be big enough to spray in between	
Accessibility to get the machine in place must be provided. Drums can weigh 200kg	
Damages done by third parties are only repaired when there is a order in writing	
Be efficient with where to put the machine when you spray multiple corridors on multiple levels. Moving the machine causes set backs in your time frame	
Are there enough possibilities for ventilation during the curing time?	
A minimum temperature of 10°C is require for the spray/plaster to dry	
Preferable succeeding order of workflow, 1) put up steel rods for technical installation purposes 2) finish plastering the walls 3) spray ceiling 4) finish technical installation 5) paint the walls or other finish	
< 3,2m sprayable form the floor	
<4m sprayable from the floor with extension (include if not quoted for)	
>4m need scaffolding or moving platform (include if not quoted for)	

Completed by On behalf of Date



STIL ACOUSTICS

info@stil-acoustics.co.uk
www.stil-acoustics.co.uk