

## Technical Data Sheet

# SonaSpray<sup>®</sup> fc



### Fire performance ratings

All our products significantly better the new fire requirement required under the updated Approved Document B.

European fire test by Efectis Nederland:  
B – s1, d0

UK fire test by Warrington fire research:  
Class 0 to BS476 Part 6  
Class I to BS476 Part 7

Full fire test reports available on request.

**Note:** Always insist on obtaining a copy of the fire test report before using a product.

Its Class 0 to BS476 & B-s1,d0 fire rating provide significant benefits over the new Approved Document B requirements by providing little to no smoke and absolutely no droplets, assisting in the safe escape of occupants.

Visit our website for more information on the fire properties of SonaSpray and the new Approved Document B requirements.

### Acoustic DATA

SonaSpray fc installations can be tailored to meet your specific project acoustic needs. There is a choice of finish; you may select texture, colour and acoustic performance. SonaSpray fc can be applied at variable thicknesses and variable areas to provide designed acoustic ambience. It is spray applied to the full sound absorber thickness in one application.

## SonaSpray fc standard absorption coefficients

Thickness	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	NRC	$\alpha_w$
8mm	0.10	0.20	0.55	0.75	0.80	1.00	0.60	0.50
12mm	0.10	0.35	0.80	0.95	1.00	1.00	0.65	0.65
16mm	0.10	0.35	0.85	1.00	1.00	0.95	0.70	0.65
20mm	0.10	0.35	0.85	1.00	1.00	0.95	0.75	0.65
25mm	0.05	0.40	0.95	1.00	1.00	1.00	0.85	0.70

Test DATA certified by TNO Technical University Delft NL. Tests were on a solid backing. A sound absorbing fc panel substrate with air space behind the panel will change absorption; normally there is improved absorption at low frequency.

Acoustic testing has been carried out against concrete. Substrates likely to provide increased performance include plasterboard with the use of an air gap behind, rib deck or profiled metal sheet. Please contact Oscar Acoustics' technical department for free design assistance.

### Quality assurance

- SonaSpray is manufactured by ICC to ISO 9001.
- Installed using a four stage Oscar Acoustics quality assurance plan.

Oscar was established in 1978; this experience enables us to provide a well detailed, quality installation that stands the test of time. From specification to installation, everything is kept in-house. Oscar Acoustics only use qualified in-house operatives who specialise in installing our systems to ensure high standards are maintained.

### Design assistance

- BIM Objects available for every product.
- All products are included within all current NBS software.
- Recessed & surface mounted items possible – see website for more information.
- Standard detail drawings for most situations.
- Bespoke detailing solutions possible.

## Environmental

The SonaSpray range contributes towards many sustainable design and health certification systems including BREEAM, SKA, Living Building Challenge and adds up to 17 points towards the LEED (Leadership in Energy and Environmental Design) rating of a project.

The SonaSpray range achieves M1 certification as Low Emitting Building Materials. This is the best possible classification.

SonaSpray finishes are compliant with CDPH/ CA Section 01350 and are GREENGUARD Gold Certified for Indoor Air Quality. GREENGUARD Gold Products are now confirmed to show compliance with BREEAM rating system HEA Indoor Air Quality and ensure that a product has met some of the world's most rigorous and comprehensive standards for low emissions of VOC's into indoor air. The range is also covered by an Environmental Product Declaration in accordance with ISO 14025 and meets the requirements of the Living Building Challenge and LEED.

Cellulose, the primary raw ingredient of SonaSpray, contains wood, cotton and other rapidly renewable natural resources. These materials can effectively lower the carbon footprint of the building project by sequestering rich stores of carbon for the life of the structure or application.

## Oscar Acoustics - ISO 14001 accredited

Oscar Acoustics have taken steps to reduce our environmental impact and demonstrate our commitment to protecting the environment by achieving ISO 14001 certification.



## Thermal DATA

SonaSpray is excellent at thermally insulating by creating macroscopic air spaces between and within the cellulose fibres. U-Values can be adjusted to your projects exact requirements by adjusting the spray material depth.

## Mass

- Dry Weight of SonaSpray fc per 10mm thickness = 1.60 kg/m<sup>2</sup>
- Wet Weight of SonaSpray fc per 10mm thickness = 2.93 kg/m<sup>2</sup>
- Dry Weight of SonaSpray fc per 20mm thickness = 3.20 kg/m<sup>2</sup>
- Wet Weight of SonaSpray fc per 20mm thickness = 5.86 kg/m<sup>2</sup>

## Bonding to Substrate

SonaSpray fc sound absorber can be applied to virtually any substrate. Some surfaces may need priming to control suction. Old surfaces may need a barrier coating to prevent

staining from leaching out of contaminants whilst the surface is wet. Fully cured SonaSpray fc will improve strength.

Bond Strength:	SonaSpray fc	>600 psf ASTM E-736
Compression Strength:	SonaSpray fc	>400 psf ASTM E-761

## Durability

The adhesive used with SonaSpray fc sound absorber provides a strong, durable and resilient bond. When fully cured, surface strength of old plaster will typically improve.

## Recessed items

Recessed services e.g. spot lighting will require a halo spacer to match the material depth. Oscar Acoustics manufacture and install stainless steel halo spacers to the same size as the hole cut out. Stop beads may be required around openings which again we can supply and install. Specially designed access hatches are also available through Profab, enabling the SonaSpray to continue across the hatch door. Problems can arise from using other hatches. These items are at extra cost and are to be purchased direct from the Profab. Please contact Oscar Acoustics for details and an item code. Surface mounted fittings e.g. hanging/pendant lights will require pattresses to match the material depth. Please contact Oscar Acoustics for further advice.

### **Please Note:**

90% of flangeless fittings do not work properly with any acoustic finish. If you are specifying a flangeless fitting, please contact Oscar Acoustics for advice.

## Where to use

SonaSpray fc sound absorber can be quickly and effectively applied to most prepared surfaces and construction configurations. This allows minimum working down time in existing structures with abilities to meet critical deadlines in new construction. SonaSpray fc has a fine surface texture and is suited to ceilings of offices, restaurants, receptions, designer homes, school classrooms, swimming pools etc. in fact it is an excellent sound absorber for any premium indoor space with a noise problem.

## Maintenance

SonaSpray fc sound absorber can be over-painted or applied with additional coats of SonaSpray. Small areas of damage can be repaired by hand. Maintenance of this seamless decorative sound absorbing finish is minimal.

If SonaSpray fc is disturbed or damaged so that fibre is released into the atmosphere, the resulting contamination is harmless. Maintenance work can be undertaken while the building is occupied. Please refer to COSHH data for detailed product analysis.

## Colour

Standard Colours: (s) = Stock  
(ns) = Non-Stock

SonaSpray fcx: Arctic White (s), White (ns)

SonaSpray fc: Arctic White (s), White (ns), Black (ns)

SonaSpray K-13 Special: White (s), Light Grey (s), Grey (s), Dark Grey (ns), Black (s), Beige (ns), Tan (ns)

SonaSpray K-13: White (s), Light Grey (s), Grey (s), Dark Grey (ns), Black (s), Beige (ns), Tan (ns)

Bespoke Colours are manufactured to order. Minimum order quantities apply and square meterage is dependent on the product and thickness of spray. Please send us your colour requirement using a Dulux paint reference and we will respond with quantity, price and colour samples.



Pictured: SonaSpray fc in Blavatnik School of Government. Credit to Laing O'Rourke, Hoare Lea Acoustics & CG Reynolds.



ISO 9001 : 2000  
Certified by OTS  
Quality Registrars, Inc.

SonaSpray is manufactured by ICC, Houston, Tx  
ISO 9001: 2000 certification