

Stratocell
Whisper[®]

Sound
Absorbing
Polyethylene
Foam



BRANZ Appraised
Appraisal No.949 [2017]
Stratocell[®] Whisper[™] FR
Sound Absorbing Foam



ELIMINATE NOISE POLLUTION

The World Health Organisation has concluded that noise pollution is an environmental killer, second only to air pollution. Our hearing is an active sense, meaning that excessive noise can trigger stress responses in our bodies, impacting our physiological and mental health.

Increasing population densities, industrialization and the prevalence of acoustically reflective hard surfaces in our day to day environment, mean that noise is becoming a part of our lives that should not be overlooked.

The intelligibility of speech is impacted by the presence of reverberation or echo. Stratocell Whisper® works to absorb sound energy, reducing echo and eliminating the problem of reverberation which results in an improved acoustical environment.

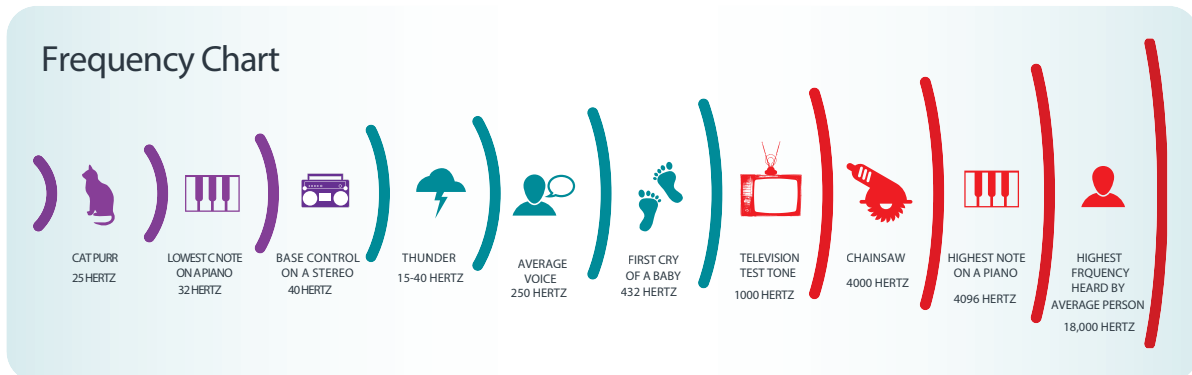
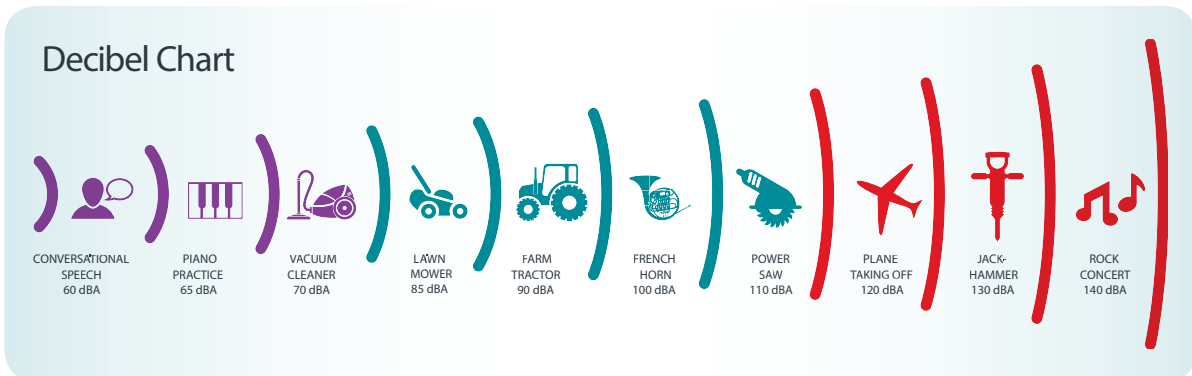
WHAT IS STRATOCELL WHISPER® FOAM?

It is a closed cell polyethylene foam providing excellent acoustic properties. This material is easy to fabricate and

install, and retains its structure in humid environments, which will save you time and money. It's superior noise reduction qualities stand up to the most rigorous applications, such as road and rail traffic and industrial machinery.

When you have external conditions to deal with like water, moisture, humidity, dirt, dust, ultraviolet light, chlorine, air, and some harsh chemicals, your choice in acoustic solutions are reduced to just a few.

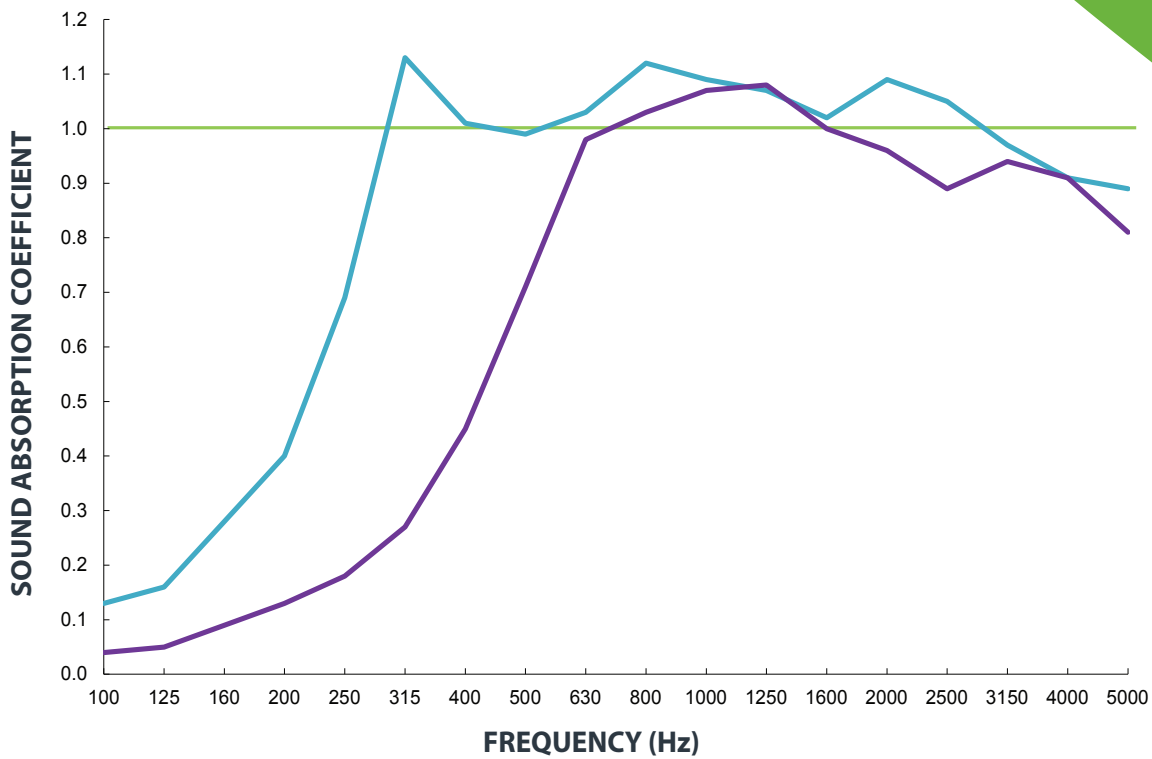
Whisper® sound absorbing panels are used to control problems with noise and sound in many indoor and outdoor environments. They can make music sound better, allow people to speak and hear better and provide a safer work environment.





REVERBERATION ROOM TESTING
ACCORDING TO EN ISO 354

Stratocell
Whisper®
50mm
is classified as high
absorbent – according
to EN ISO 11654 –
Class A



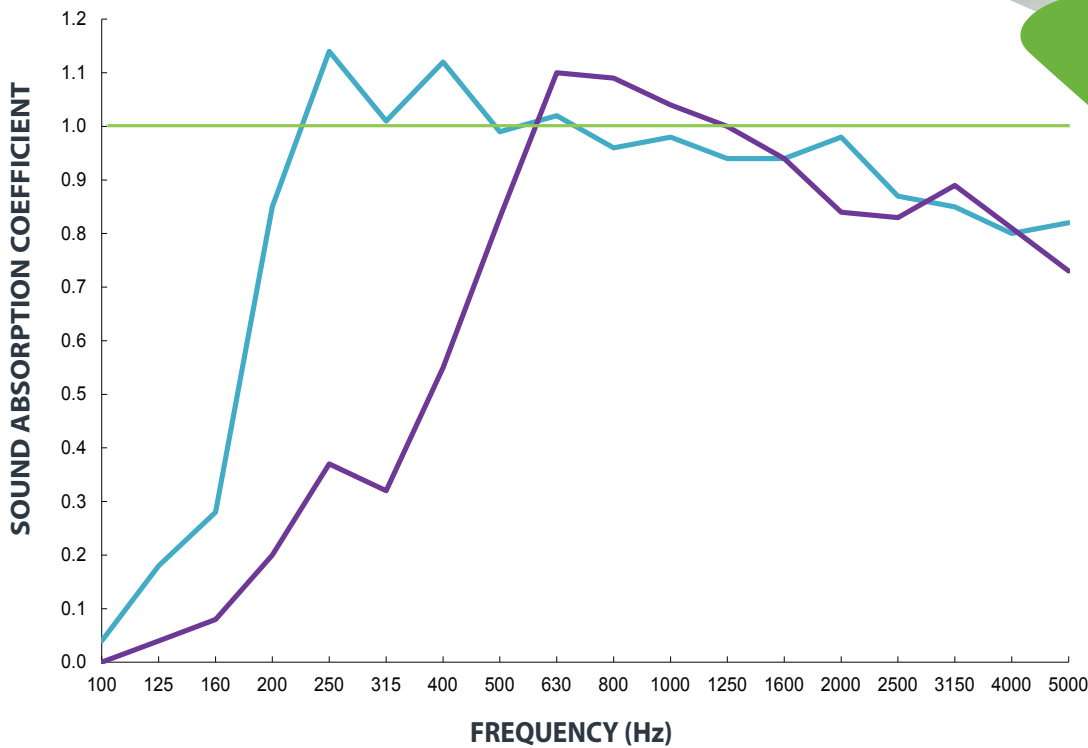
Stratocell Whisper® 50mm
Stratocell Whisper® 25mm

	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	NRC	SAA
Whisper 25mm	0.04	0.05	0.09	0.13	0.18	0.27	0.45	0.71	0.98	1.03	1.07	1.08	1	0.96	0.89	0.94	0.91	0.81	0.75	0.76
Whisper 50mm	0.13	0.16	0.28	0.4	0.69	1.13	1.01	0.99	1.03	1.12	1.09	1.07	1.02	1.09	1.05	0.97	0.91	0.89	1	0.98

REVERBERATION ROOM TESTING
ACCORDING TO ASTM C423

IMATIC 500

ROTATION



Stratocell
Whisper®
25mm and 50mm
is classified as high
absorbent – according
to ASTM C 423

Stratocell Whisper® 50mm
Stratocell Whisper® 25mm

	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	NRC	SAA
Whisper 25mm	0.00	0.04	0.08	0.20	0.37	0.32	0.55	0.83	1.10	1.09	1.04	1.00	0.94	0.84	0.83	0.89	0.81	0.73	0.75	0.76
Whisper 50mm	0.04	0.18	0.28	0.85	1.14	1.01	1.12	0.99	1.02	0.96	0.98	0.94	0.94	0.98	0.87	0.85	0.80	0.82	1	0.98

Testing of Stratocell Whisper® was carried out at Intertek, New York in America under ASTM c423-09a Measurement of Sound Absorption in a reverberation room. Refer to test report no 101171478CRT-001 & 101171478CRT-001b

THE PERFECT ACOUSTIC SOLUTION

Stratocell Whisper® has superior sound absorption, making it the ideal choice.





SOUND ABSORPTION

Stratocell Whisper® has an NRC of 1 at 50mm, giving it excellent sound absorbing properties.



MOISTURE RESISTANT

Stratocell Whisper® is unaffected by exposure to moisture. There is no need for a water protection film.



STRONG STRUCTURE

With its self-supporting structure, Stratocell Whisper® foam is easy to cut and easy to install on site.



LIGHT WEIGHT

Stratocell Whisper® foam is easy to handle with a weight of less than 1.5 kilograms per square meter.



FIBRE FREE- WASHABLE

No fibrous materials, low particle emissions and low VOC.



UV RESISTANT

Whisper® UV has been independently tested to over 2000 hours in a QUV accelerated aging chamber. Testing showed that after UV exposure, the material exhibited similar acoustic behaviour to non exposed material. Whisper UV is rated as a self-extinguishing material to DIN 4102 Class B2.



FIRE RETARDANT

Stratocell Whisper® FR foam achieved a Group 1-S result in the C/VM2 appendix A to ISO 9705:1993 as outlined in New Zealand building code. Similarly it achieved Group 1 compliance of the Australian NCC specification C1.10 to AS ISO 9705-2003 as outlined in the Australian building code.

Stratocell Whisper® is available in Fire Retardant and UV resistant additives.



RIGOROUS APPLICATIONS

Stratocell Whisper® sound absorbing panels are the perfect solution to reduce problems with noise or unwanted sound in all types of indoor and outdoor environments.

Stratocell Whisper® is manufactured to perform in the most rigorous indoor, outdoor and industrial environments. It is a lightweight and durable alternative to traditional materials. It is a closed cell laminated polyethylene foam which has cells that are subsequently opened through the manufacturing process, resulting in a highly efficient sound absorbent material with many unique features such as:

- Superior noise control
- Resistant to moisture
- Flame retardant
- Does not support fungal growth

TYPICAL APPLICATIONS:

- Construction
- Machinery
- Automotive
- Transportation
- Buildings
- Industrial





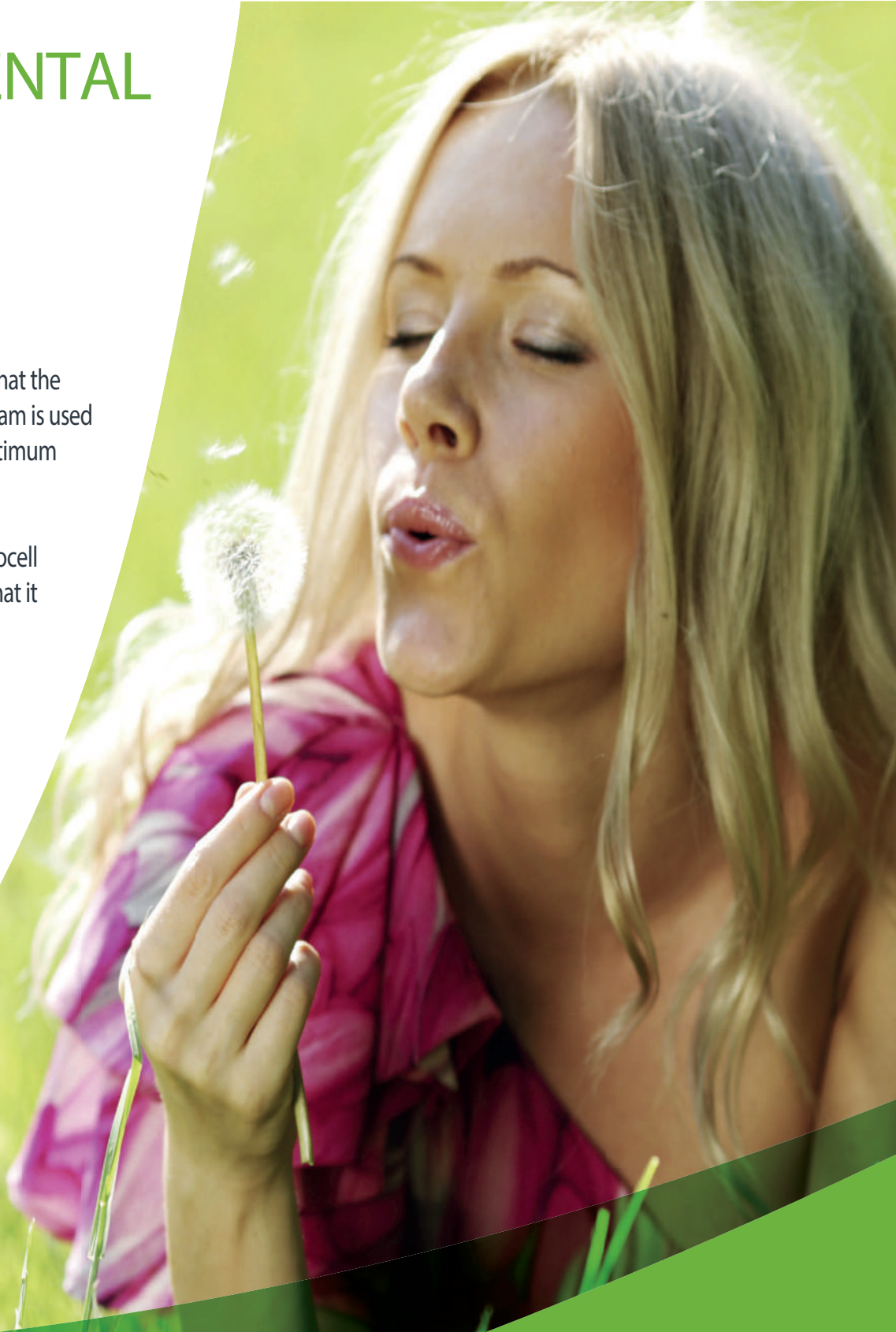
ENVIRONMENTAL APPROACH



Our design specialists have ensured that the minimum amount of polyethylene foam is used in all products, whilst maintaining optimum performance.

Sealed Air's polyethylene based Stratocell Whisper® foam is resilient ensuring that it has a long lifespan in operation. Whisper's light weight also ensures minimum amounts of supporting materials are required in installation.

Sealed Air recycles thousands of tons of foam annually, and we welcome the return of uncontaminated Stratocell Whisper® foam into our recycling stream for local recycling into a multitude of LDPE based products.



GALLERY

Pool Complex



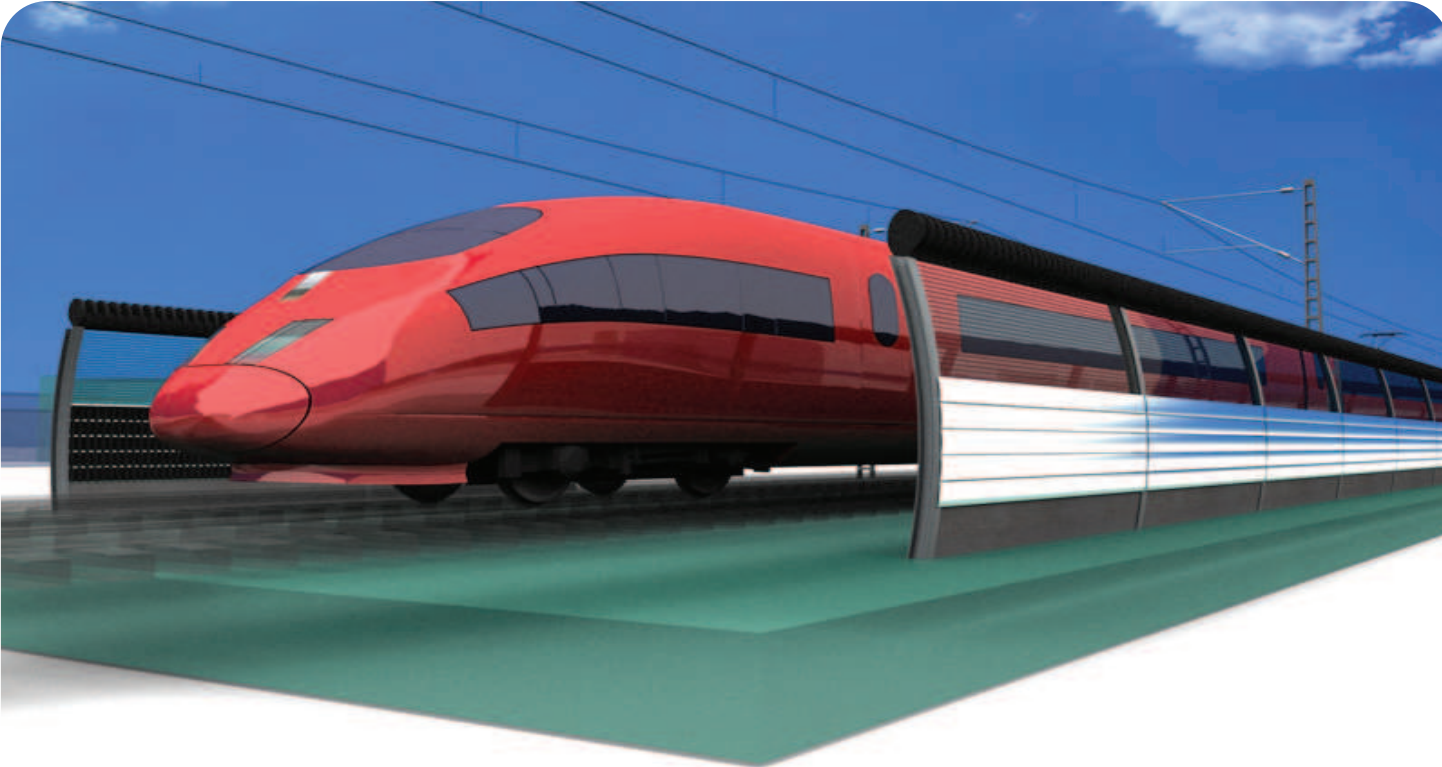
Music Studio



Motorway



Railway



PRODUCT CODES

Product Code	Material	Size	Colour
100787637	Stratocell Whisper® FR	25mm x 1.2m x 2.4m	White
100787682	Stratocell Whisper® FR	50mm x 1.2m x 2.4m	White
100787705	Stratocell Whisper® UV	50mm x 1.2m x 2.4m	Black
100787687	Stratocell Whisper® FR	50mm x 1.2m x 2.4m	Black

PRODUCT SPECIFICATION SHEET: STRATOCELL WHISPER® FR

Physical Properties	Test Method	Unit	Value
Nominal Density	ASTM D3575-08 Suffix W ISO 845:2006	Kg/m ³	25
Compressive Strength Vertical @ 25% Vertical @ 50%	ASTM D3575-08 Suffix D ISO 7214:2007	KPa	7 12
Compressive Strength 25% (4th compression) 50% (4th compression) 70% (4th compression) (100mm/min compression speed)	ISO 3386 1986 part 1 DIN 53577	KPa	3 7 25
Compression Set	ASTM D3575-08 Suffix B (50% Compression) ISO 1856:2000 (25% compression)	%	< 30 < 20
Cell Size	BS 4443/1 Met.4	Cells/25mm	< 10
Fire-test-response Characteristics (1) Building & Construction	ISO 9705 - 1993	Group	1-S NZBC Verification Method C/VM2 Appendix A NCC Specification C1.10
	AS ISO 9705 - 2003 BRANZ Fire Test FI 5558-TT AS2122.1-1993	Group	1 Test results available upon request
Marine	DNV2.21 Craft Ch.5 Sec.6 B201 EN ISO 9094-1:2003 part 1 EN ISO 9094-2:2002 part 2	OI -	≥ 21
Automotive Appliances & Electronics	FMVSS 302 UL94	Class Class	Pass HF1
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Kg/m ²	< 3
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Volume %	< 5
Thermal Conductivity @ 23°C @ -5°C	ASTM D3575-08 Suffix V ISO 8301	W/mK	0.104 0.082
Thermal stability (24hrs at 70°C)	ASTM D3575-08 Suffix S ISO 2796	%	< 3
Tensile Strength @ Peak	ASTM D3575 Suffix T ISO1798	KPa	130
Tensile Elongation	ASTM D3575 Suffix T ISO1798	%	60
VOC Emissions	AFNOR NF EN ISO 16000-9	Class	A+
Recycling	Recycle used uncontaminated Stratocell Whisper™ FR product to minimise landfill.		
MSDS	Available upon request		

(1) These numerical laboratory fire-test-response characteristics are not intended to reflect hazards presented by this material under actual fire conditions

PRODUCT SPECIFICATION SHEET: STRATOCELL WHISPER® UV

Physical Properties	Test Method	Unit	Value
Nominal Density	ASTM D3575-08 Suffix W ISO 845:2006	Kg/m ³	30
Compressive Strength Vertical @ 25% Vertical @ 50%	ASTM D3575-08 Suffix D ISO 7214:2007	KPa	10 24
Compressive Strength 25% (4th compression) 50% (4th compression) 70% (4th compression) (100mm/min compression speed)	ISO 3386 1986 part 1 DIN 53577	KPa	3 13 50
Compression Set	ASTM D3575-08 Suffix B (50% Compression) ISO 1856:2000 (25% compression)	%	< 30 < 20
Cell Size	BS 4443/1 Met.4	Cells/25mm	< 10
Fire test-response Characteristics (1) Building & Construction	DIN 4102	Class	B2
Thermal Conductivity @ 23°C (73°F) @ -5°C (23 °F)	ASTM D3575-08 Suffix V ISO 8301	W/mK	0.104 0.082
Thermal stability (24hrs at 70°C)	ASTM D3575-08 Suffix S ISO 2796	%	< 3
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Kg/m ²	< 3
Water Pick Up by Diffusion (RH > 95% - after 28 days)	UNI EN 12088	Volume %	< 5
Tensile Strength @ Peak	ASTM D3575 Suffix T ISO1798	KPa	130
Tensile Elongation	ASTM D3575 Suffix T ISO1798	%	70

(1) These numerical laboratory fire-test-response characteristics are not intended to reflect hazards presented by this material under actual fire conditions

ACCELERATED AGEING TEST REPORTS IN QUV-CHAMBER AVAILABLE UPON REQUEST.

INSTALLATION



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REFER TO YOUR SALES CONTACT FOR A COPY OF OUR INSTALLATION GUIDE.



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BUILDING SYSTEMS

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