

Ecooustic® Panels + Screens

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Specifiers Guide - Acoustic Products



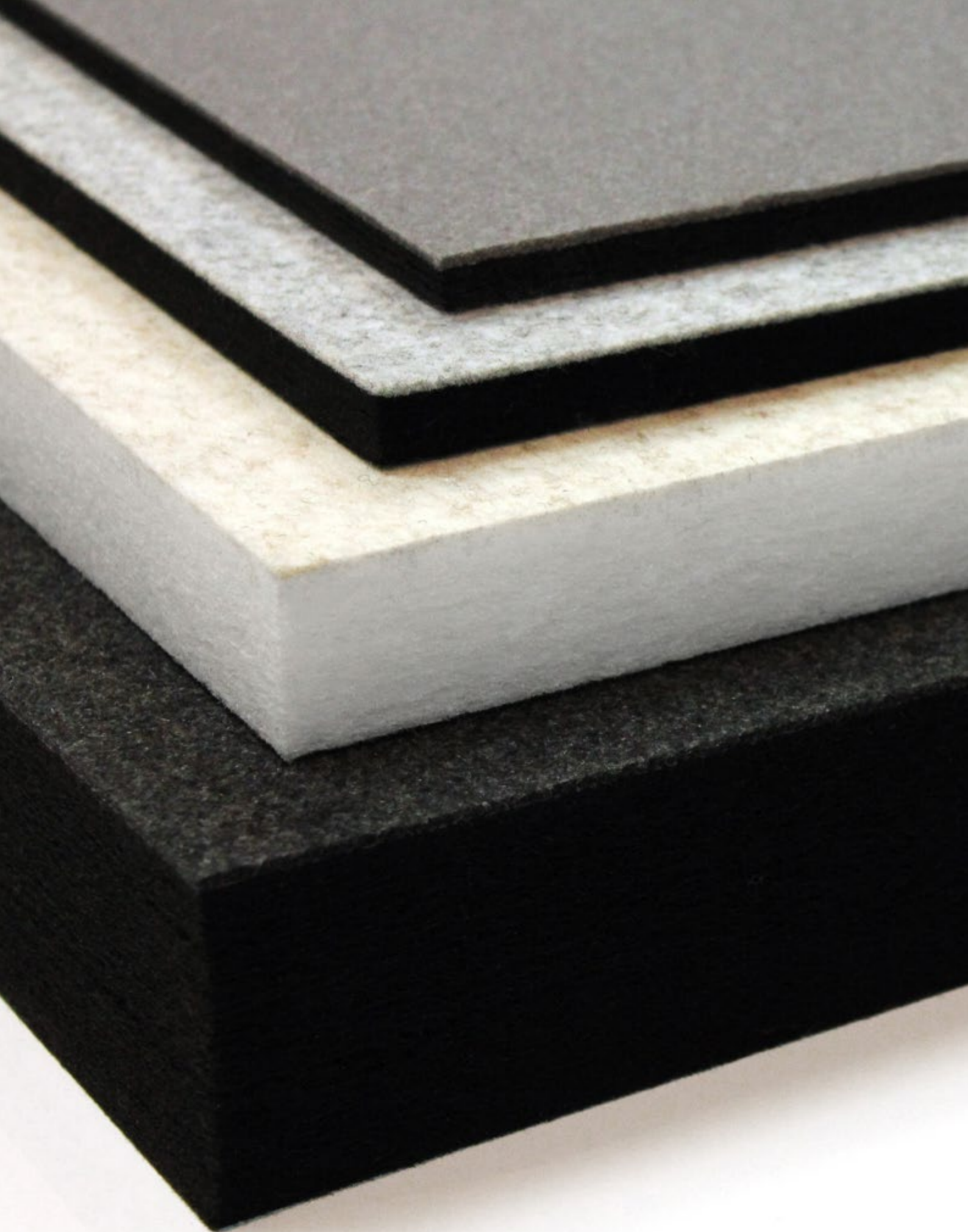


Ecoustic® Panel
Compulsive Productions by Matt Gibson Design + Architecture
Photography: Shannon McGrath

PANELS + SCREENS

- Ecoustic® Panel
- Ecoustic® Velour Panel
- Ecoustic® SC Panel
- Ecoustic® V Panel
- Ecoustic® Duo
- Ecoustic® Edging
- Ecoustic® T Trim
- Ecoustic® Screen
- Ecoustic® Workstation SC Prints
- Ecoustic® Soffit

Ecooustic® Panel



Description Elegant acoustic panels with a white or black core detail available in four sound absorbing thicknesses, 8mm, 13.5mm and high-performing 25mm + 50mm

Composition 100% PET (up to 65% recycled PET)

Thickness 8mm, 13.5mm, 25mm, 50mm (+/-1-2mm approx.)

Dimensions 1210 x 2720mm approx.

Acoustic
 8mm: α_w 0.34 / NRC 0.3
 13.5mm: α_w 0.51 / NRC 0.5
 25mm: α_w 0.8(H) / NRC 0.85
 50mm: α_w 1.0 / NRC 1.0

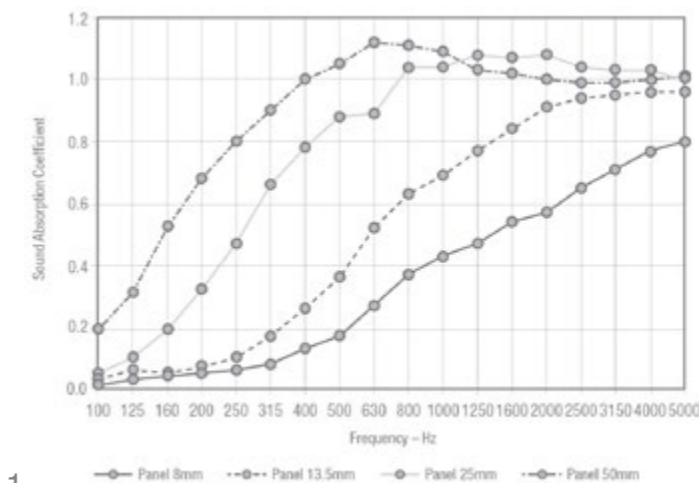
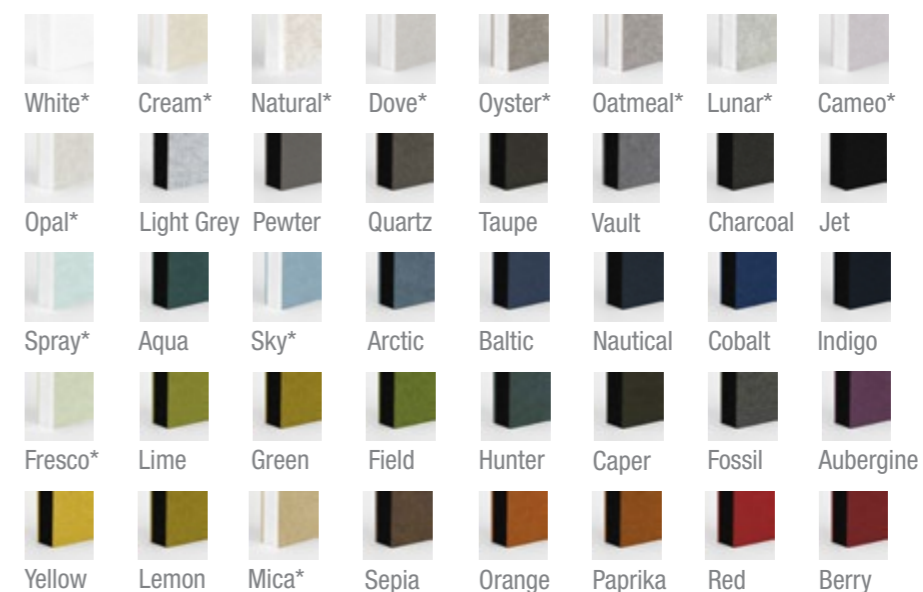
Environment
 <65% Recycled Content
 Low VOC
 Greentag Level A Certification
 EPD
 Recyclable

Fire Ratings
 AS/ISO 9705 (AS 5637.1) Group 1
 AS/NZS 1530.3 (8mm +13.5mm)
 GB 8624-2012 Grade B1 (8mm)
 BS/EN 13501-1-2007 + A1-2009 B-s1,d0 (25mm - refer to installation guidelines)

Application Screen, wall + ceiling panel

Edging 9mm, 14.5mm, 25mm + 50mm anodised aluminium edging profiles are available

Colours



[VIEW ONLINE](#)

Ecoustic® Velour Panel



Description Ecoustic Velour Panel is an acoustic panel available in four sound absorbing thicknesses, achieving between NRC 0.3 – 1.0, with a hook + loop receptive velour surface

Composition 100% PET (<68% recycled content)

Thickness 9mm, 15mm, 25mm, 50mm (+/-1-2mm approx.)

Dimensions 1210mm x 2720mm approx.

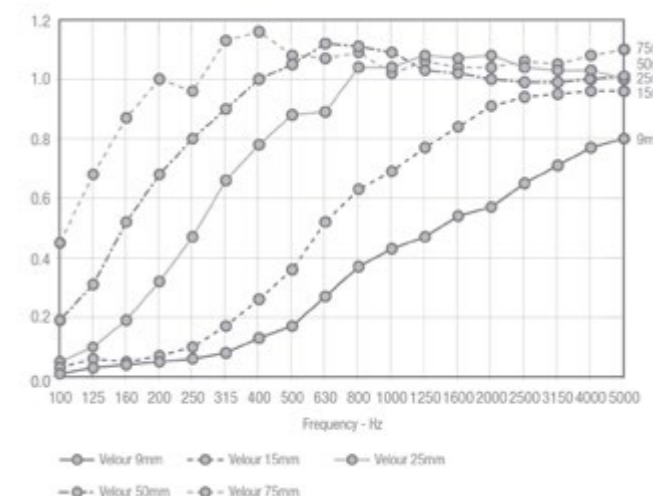
Acoustic NRC 0.3 - 1.0

Environment <68% recycled PET
Low VOC
Greentag Level A Certification
EPD
Recyclable

Fire Ratings ASTM E84
AS/ISO 9705 Group 1

Application Wall + ceiling
(contact adhesive + mechanical fastening required for ceilings)

Colours



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Ecoustic® SC Panel



Description An acoustic panel with a solid colour (SC) profile, ideal for applications with exposed edges such as workstations and partitions, available in three sound absorbing thicknesses, 9mm, 12mm + 24mm

Composition 100% PET

Thickness 9mm, 12mm + 24mm (+/-1-2mm approx.)

Dimensions
 9mm: 1220 x 2440mm approx.
 12mm: 1220 x 2800mm approx.
 24mm: 1220 x 2720mm approx.

Acoustic
 9mm: NRC 0.3 / αw 0.2 Direct Fix
 12mm: NRC 0.4 / αw 0.25 Direct Fix
 24mm: NRC 0.65 / αw 0.45 Direct Fix

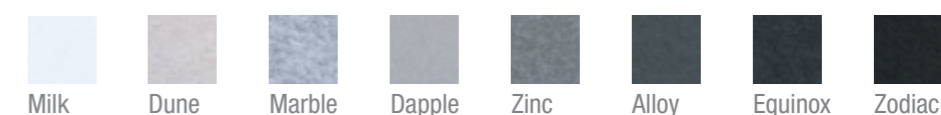
Environment
 Low VOC
 Manufacturer - ISO 14001 EMS
 Cradle to Cradle Bronze Certified
 Recyclable

Fire Ratings
 AS/NZS 1530.3
 ASTM E84
 AS/ISO 9705 Group 1

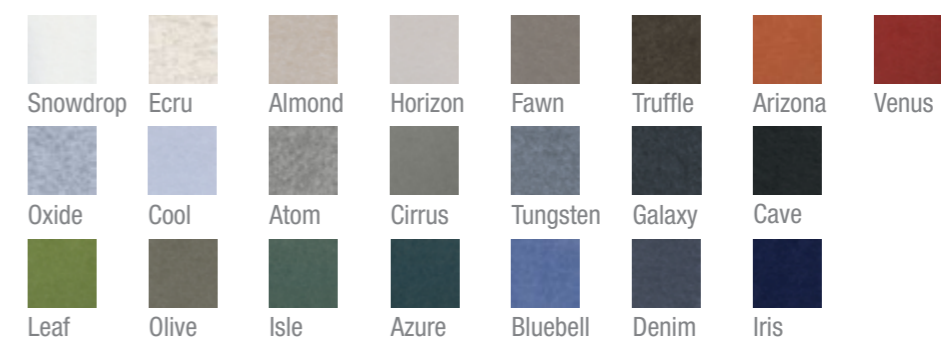
Application Workstation screen, partition, wall panel, ceiling

Colours

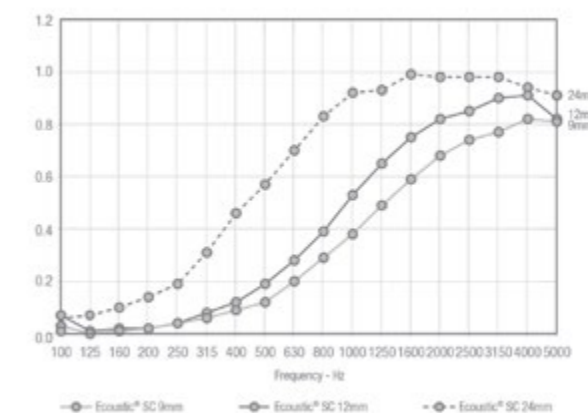
Solid Colour 9mm



Solid Colour 12mm



Solid Colour 24mm



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Ecooustic® V Panel

Description Available in a variety of designs + finishes, Ecooustic V is a range of acoustic panels providing flexibility in acoustic performance + aesthetics, 9mm, 12mm + 24mm

Composition 100% PET

Thickness 9mm, 12mm + 24mm (+/-1-2mm approx.)

Dimensions
 9mm: 1100 x 2400mm nominal
 12mm: 1100 x 2700mm nominal
 24mm: 1100 x 2700mm nominal

Acoustic
 9mm: NRC 0.3 / α_w 0.2 Direct Fix
 12mm: NRC 0.4 / α_w 0.25 Direct Fix
 24mm: NRC 0.65 / α_w 0.45 Direct Fix

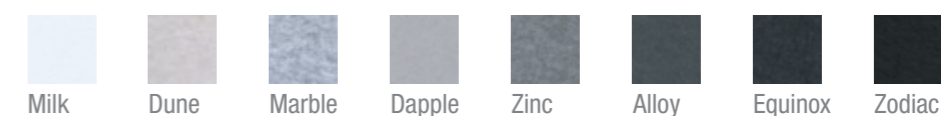
Environment
 Low VOC
 Manufacturer - ISO 14001 EMS
 Cradle to Cradle Bronze Certified
 Recyclable

Fire Ratings
 AS/NZS 1530.3
 ASTM E84
 AS/ISO 9705 Group 1

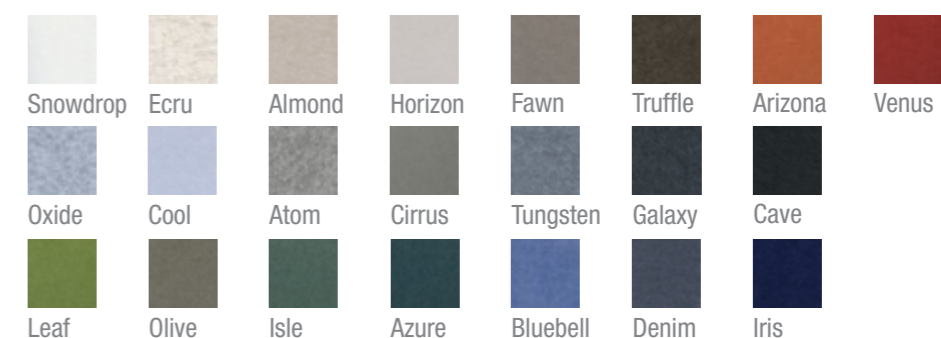
Application Workstation screen, partition, wall panel, ceiling

Colours

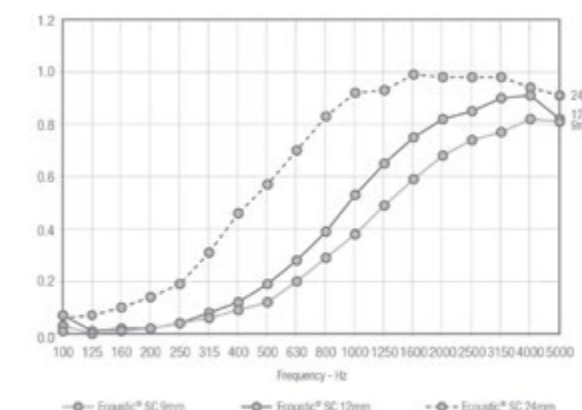
Solid Colour 9mm



Solid Colour 12mm



Solid Colour 24mm



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Ecooustic® Duo

Description Acoustic panel made from Ecooustic Felt + SC Panels to create unique colour combinations

Composition 100% PET

Thickness 13mm (+/-1-2mm approx.)

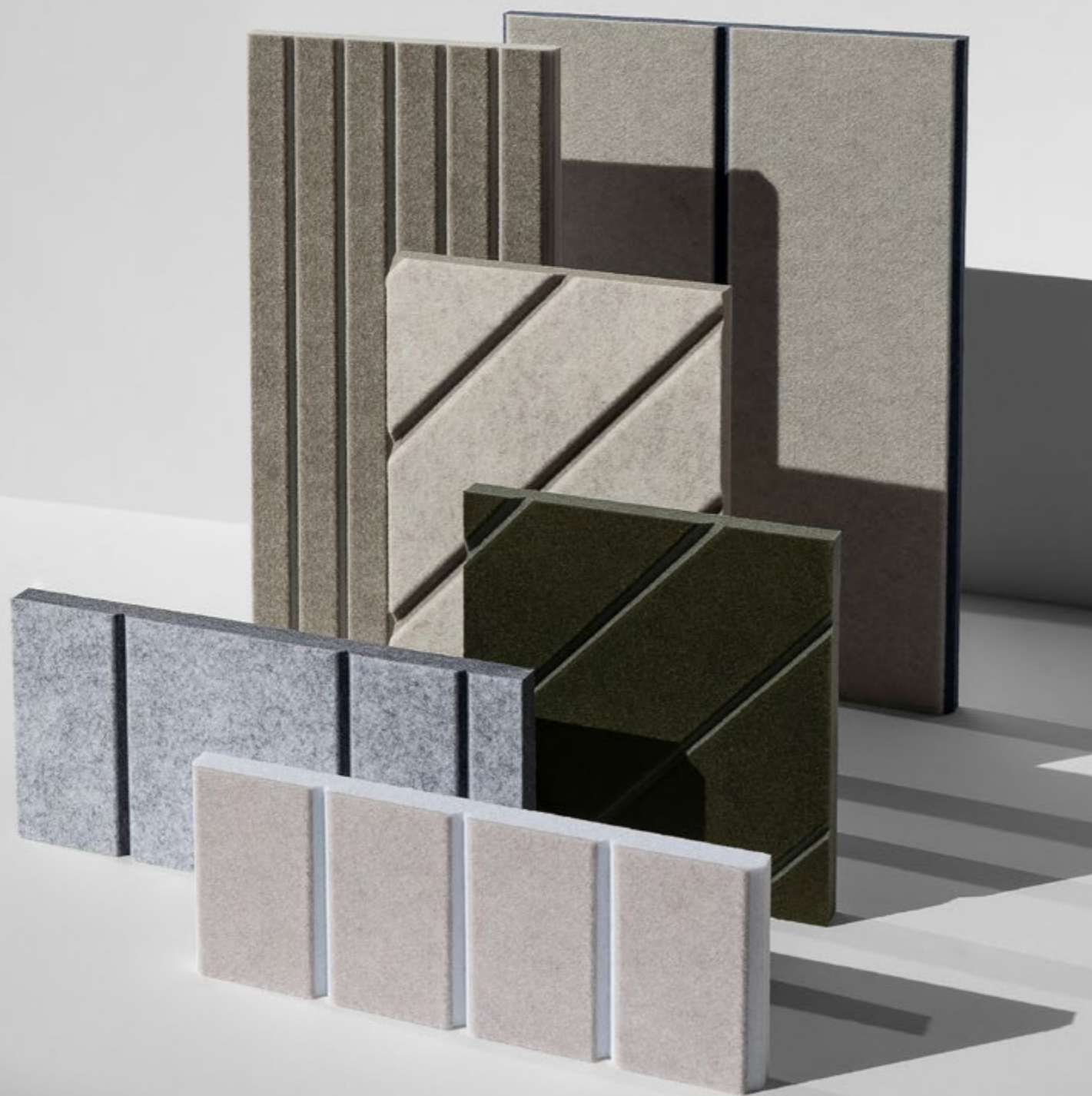
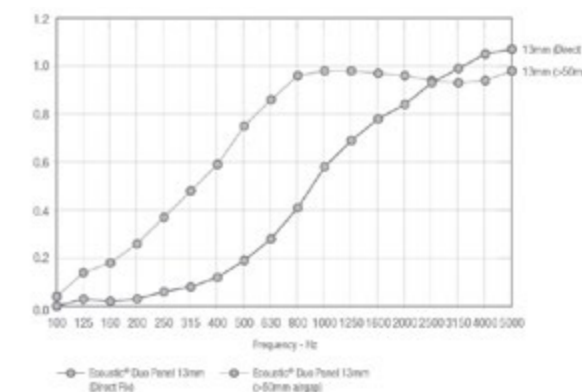
Dimensions 13mm: 1100 x 2700mm nominal

Acoustic 13mm: NRC 0.4 / α_w 0.25 Direct Fix

Environment Low VOC
 Felt: Greentag Level A certified
 SC Manufacturer: ISO 14001 EMS
 SC: Cradle to Cradle Bronze certified
 Recyclable

Fire Ratings AS/NZS 1530.3
 AS/ISO 9705 Group 1

Application Wall and ceiling



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Ecoustic® Duo

Colours

Face - Felt

Cream	Natural	Oatmeal	Oyster	Quartz	Taupe	
Opal	Dove	Lunar	Light Grey	Pewter	Vault	Charcoal
Spray	Sky	Arctic	Baltic	Cobalt	Nautical	Indigo
Fresco	Lime	Green	Field	Hunter	Caper	Aqua
Yellow	Lemon	Mica	Orange	Paprika	Sepia	
Cameo	Aubergine	Red	Berry	Fossil	Jet	

Base - SC 12mm

Snowdrop	Ecu	Almond	Horizon	Fawn	Truffle	Arizona	Venus
Oxide	Cool	Atom	Cirrus	Tungsten	Galaxy	Cave	
Leaf	Olive	Isle	Azure	Bluebell	Denim	Iris	



Ecoustic® Edging

Description Ecoustic® Panels can be fixed to walls using aluminium Ecoustic® Edging. With its slim profile, Ecoustic® Edging profiles are ideal to use to install Ecoustic® panels as they create lightweight, easily assembled systems that reduce the use of non-recyclable glues and tapes

9mm*, 14.5mm*, 25mm + 50mm natural anodised aluminium edging profiles are available for each Ecoustic® Panel thickness

Composition 100% aluminium

Thickness 1.4mm approx.

Length 2750mm (+/-5mm)

Finish Natural anodised aluminium 3mm counter sunk holes
First hole in at 25mm followed by a 300mm pitch for subsequent holes

Please Note *The edging profiles for the 8mm and 13.5mm Ecoustic® Panel are 1mm larger to allow for a 1mm tolerance in panel thickness

Application Edging trims for wall panels



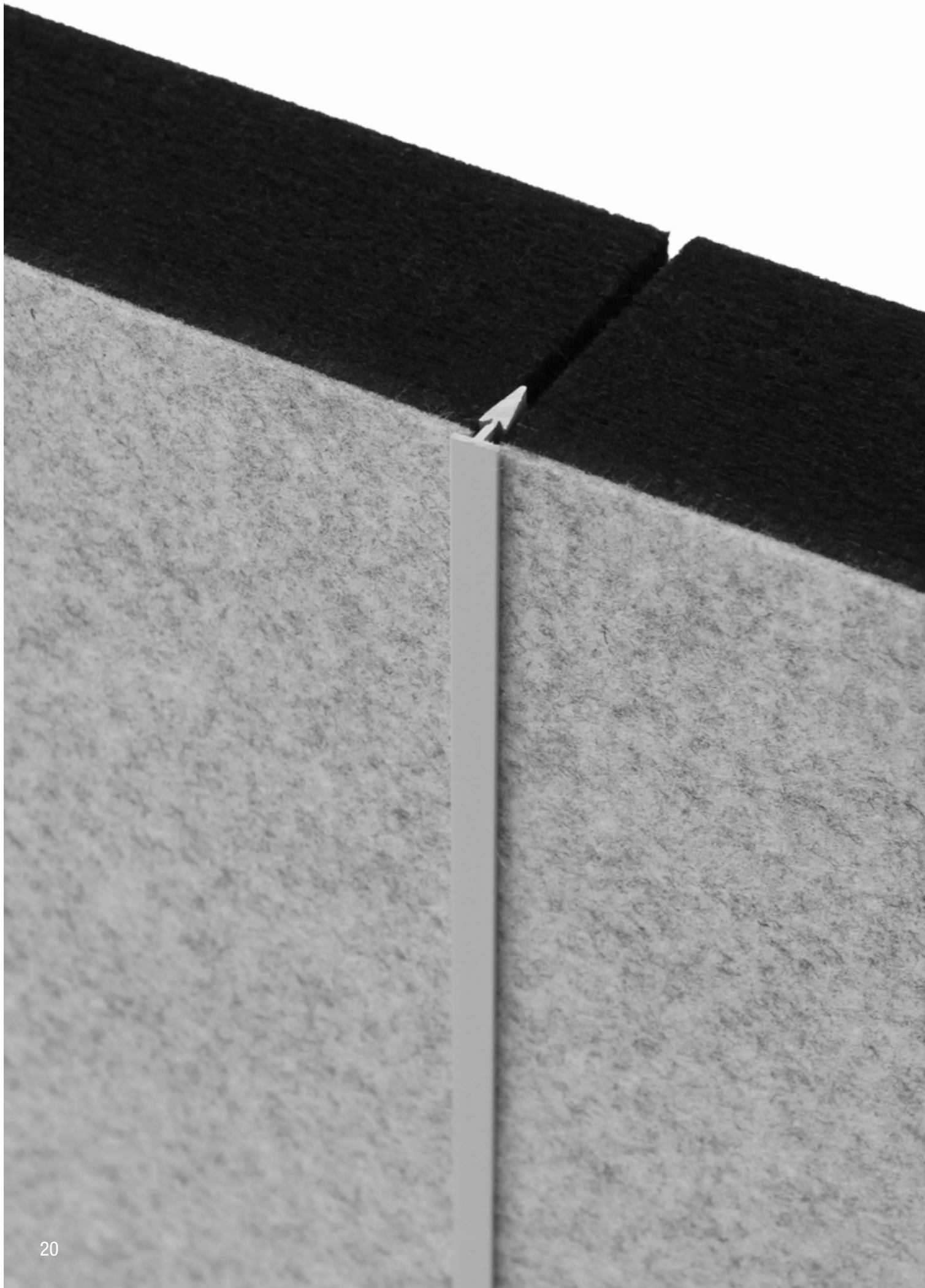
Edging profile installed back-to-back with Ecoustic® Panel Charcoal



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Ecoustic® T Trim

Description	Ecoustic® T Trim is a slim 7mm profile that can conceal junction gaps between Ecoustic® Felt, Velour + SC panels
Composition	100% aluminium
Length	2750mm (+/-5mm)
Finish	Natural anodised or black powdercoat
Please Note	T Trim is suitable for 13.5mm, 15mm, 25mm, 50mm, 75mm + 100mm panels
Application	T trims for wall panels



Ecoustic® Screen

Description An acoustic screen from Ecoustic with a white or black core detail

Composition 100% PET (up to 65% recycled PET)

Thickness 12mm (+/-1mm approx)

Dimensions 2420 x 1210mm approx.
1820 x 1210mm* approx. (*minimums apply)

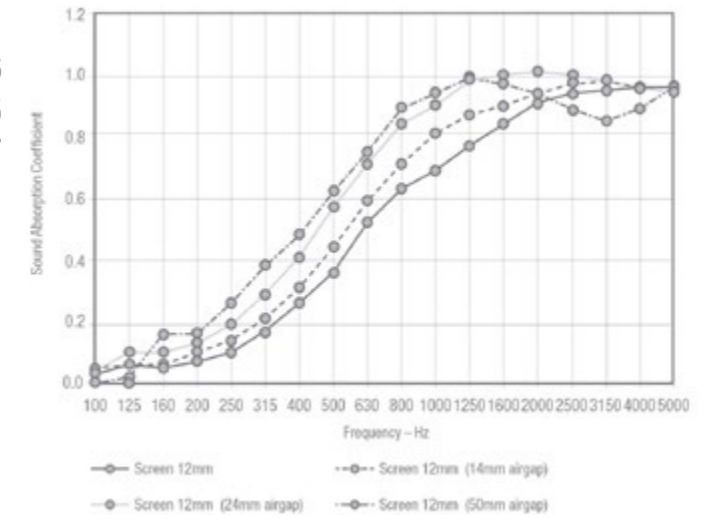
Acoustic Direct Fix α_w 0.51 / NRC 0.5
14mm Airgap α_w 0.56 / NRC 0.6
24mm Airgap α_w 0.6 / NRC 0.65
50mm Airgap α_w 0.55 / NRC 0.7

Environment <65% Recycled Content
Low VOC
Greentag Level A Certification
EPD
Recyclable

Fire Ratings AS/NZS 1530.3
AS/ISO 9705 Group 1

Application Screen, wall + ceiling panel

Colours



Ecoustic® Panel Meta White on Light Grey
Collins Foods by Harry Poulos Architects
Photography: Wade Roberts

Ecoustic® Workstation SC Print



Description Acoustic screens with double-sided prints, ideal for frameless workstation screens

Composition 100% PET

Thickness 12mm (+/-1mm approx)

Dimensions 1200 x 2700mm approx.

Acoustic α_w 0.8 / NRC 0.85 (200mm)

Environment Low VOC
Oeko Tex Certified
Recyclable

Fire Ratings Low VOC
Manufacturer - ISO 14001 EMS
Cradle to Cradle Bronze Certified
Recyclable

Application Workstation screen, partition, ceiling

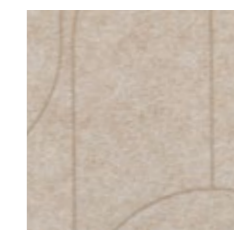
Colours



PLUS Silver on Snowdrop



PLUS White on Almond



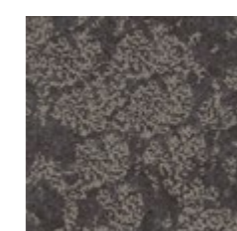
LOOP Ochre on Almond



AXIS Putty on Almond



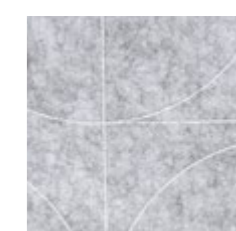
DISC Moss on Almond



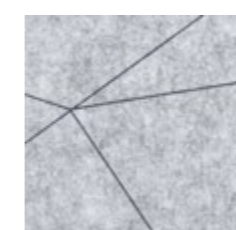
RAW Putty on Galaxy



RAW White on Oxide



LOOP White on Oxide



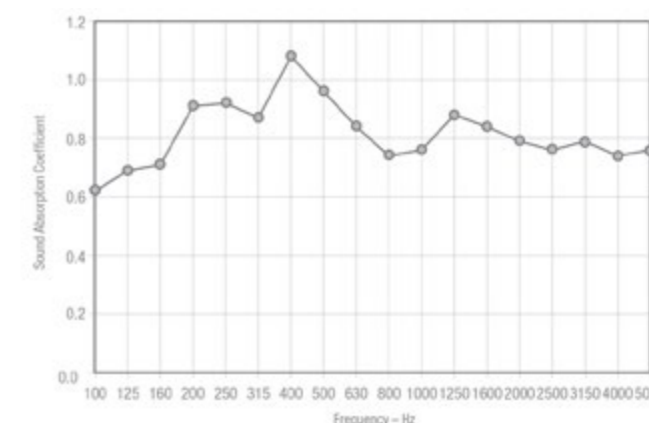
AXIS Navy on Oxide



PLUS Petrol on Oxide



TRI Slate on Oxide



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Ecoustic® Soffit

Description A highly functional acoustic ceiling soffit

Composition 100% PET (up to 65% recycled PET)

Thickness Available in two thicknesses: 25mm + 50mm

Dimensions 1200mm (w) x 1200mm (l) (maximum size) +/-1.5% approx.
600mm (w) x 1200mm (l) +/-1.5% approx.

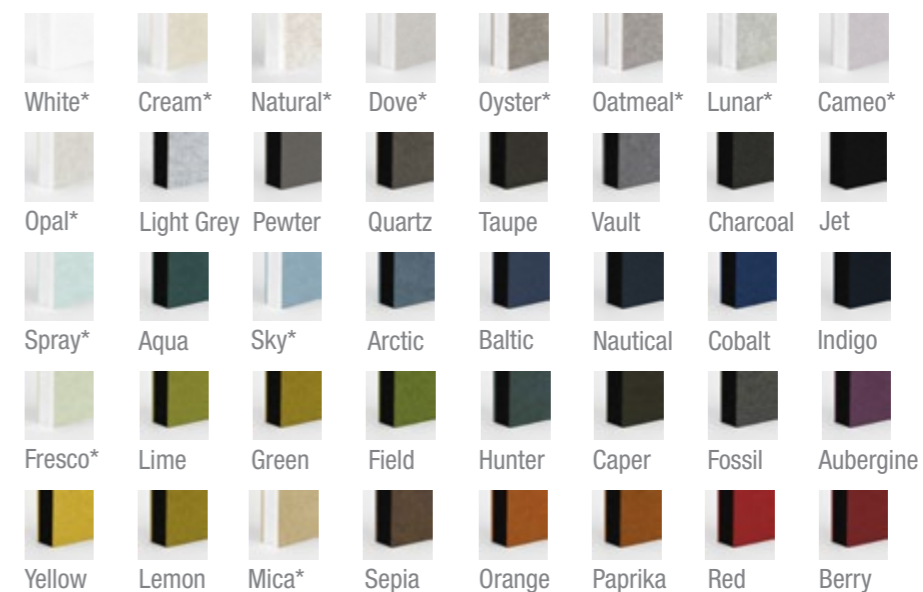
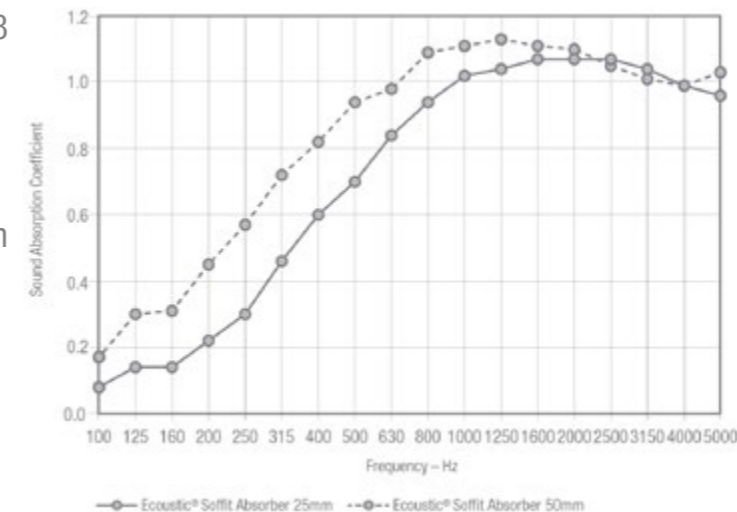
Acoustic 25mm: α_w 0.6*MH / NRC 0.8
50mm: α_w 0.85*H / NRC 0.9

Environment <65% Recycled Content
Low VOC
Greentag Level A Certification
EPD
Recyclable

Fire Ratings AS/ISO 9705 Group 1

Application Soffit + ceiling

Colours



Ecoustic® Soffit White
Uber by Geyer Architects + District Furniture
Photography: Dion Robeson

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ACOUSTIC TERMS + DEFINITIONS

Absorption: The conversion of sound energy to heat energy. It varies with the frequency and angle of incidence of the sound that strikes acoustic material. A “soft room” is a space with highly absorbent surfaces whereas a “hard room” has surfaces of low absorbent value and are therefore highly reflective and reverberant.

Air-borne sound: Sound that travels through air rather than through structure.

Air Gap: For effective absorption of sound energy, the sound wave should pass through the absorbent material during its maximum velocity (quarter-wavelength). The speed of sound is zero when it meets a rigid barrier such as the backing wall of a sound absorbing material. Increasing the thickness of the sound absorber or providing an air gap between the absorber and wall will improve absorption.

Attenuation: Also known as blocking or dampening, attenuation involves dividing a soundscape into discrete acoustic zones using different types of acoustic barriers that restrict sound from travelling without obstruction.

Broadband sound: A spectrum of sound consisting of a large number of frequencies, none of which is dominant.

Critical distance: The distance from a sound source at which the energy of direct sound and reverberant sound are equal.

Decibel (dB): The measurement term used to define sound intensity. A 10 times increase in sound intensity is defined as a Bel (named after Alexander Graham Bell); 4 Bels represent a 10,000 times increase in sound intensity. A decibel is 1/10th a Bel; 40 dB equal 4 Bels. A 1dB change in sound intensity is just noticeable; most humans can distinguish a 3dB change and consider a 10dB change as twice or half loud.

Diffraction: The change in direction of sound resulting from a discontinuity of a boundary (say, an open door).

Diffusion: A means to distribute sound energy in equally probable directions.

Echo: A return of sound that is perceived as a discrete sound.

Flanking transmission: The transmission of sound by an unintended path.

Frequency: The number of back and forth vibrations of air molecules (cycles) that occur in a second; expressed as Hertz (Hz). Sometimes known as pitch.

Hearing: The ability of the human ear to translate changes from ambient atmospheric pressure caused by sound energy into a signal recognizable by the brain. Sensitivity to sound depends upon its frequency and energy. The audible range of frequency for humans is 20Hz to 20,000Hz, provided that at least 0 dB of sound intensity (the threshold of hearing) is present.

In phase: Sound waves that reach their peak compressions (and rarefactions) at the same time.

Insulation: The ability of material to prevent sound from reaching a location either by reflection back to the sound source or by acoustic resistance.

Inverse-square law: Sound intensity (sound energy per unit of area) varies inversely with the square of the distance from its source. Sound intensity decreases 6 dB for each doubling of the distance from its source.

Noise: Unwanted sound having no utility which may be airborne or structure-borne. Like a pollutant, noise needs to be limited and controlled to diminish its negative physiological, psychological, behavioral and cognitive affects.

Noise Reduction Coefficient (NRC): The arithmetical average, expressed as a decimal to the nearest .05, of the sound absorption coefficients at 250Hz, 500Hz, 1000Hz, and 2000Hz.

Octave: A doubling or halving of frequency. 20Hz-40Hz is considered the bottom octave in a series of even-order harmonics that extend without limit beyond the audible range.

Reflection: Sound and light are reflected off smooth surfaces in a similar manner – the angle of incidence equals the angle of reflection.

Refraction: The bending of sound waves travelling through media that conduct sound at varying speed.

Resonant frequency: Any object will vibrate at a particular sound frequency, its natural resonant frequency, when disturbed by physical force or by sound having frequency equal to its resonant frequency.

Reverberation: The lingering of sound in an enclosed space after the original sound source has stopped. A room with much reverb is said to be “live”; one without reverb is said to be “dead”. Reverberation time (RT60): The time, in seconds, that reverberant sound energy in a space diminishes by 60dB.

Sabin (Metric): The metric measurement unit, of sound absorption per area of a material. One square metre of acoustic material having a sound absorption average coefficient of 1 has a Metric Sabin value of 1.

Sabine, Wallace C.: The father of modern acoustics and the developer of the Sabine reverberation equation; $RT60 = .049 \text{ sec./ft.} \times \text{Volume/Absorption Surface}$

Sound: A vibrational disturbance comprised of alternating compressions and rarefactions of air molecules. The compressions push air together and thereby cause higher-than-normal atmospheric pressure, whereas rarefactions spread air molecules

further apart thereby causing lower-than-normal atmospheric pressure. Total sound energy is the potential energy from ambient air pressure and the kinetic energy of moving air molecules.

Sound Absorption Coefficient (“alpha”): The amount, expressed as a decimal value between 0 and 1 to the nearest .05, of sound energy that is absorbed, or otherwise not reflected, by an acoustic material at a specified frequency.

Sound masking: The process by which the audibility of one sound is diminished by the introduction of another sound. White noise uses equal sound energy at all frequencies and thereby favours higher frequency spectra. Pink noise balances sound energy over a series of octaves and sounds less harsh.

Sound Transmission Class (STC): A rating system that provides an estimate of the insulation ability of a partition.

Structure-borne noise: The generation of unwanted radiated sound caused by vibrational forces in solid materials.

Wavelength: The distance a sound wave travels from compression to the next compression. The wavelength (or period) of sound at any frequency can be computed by dividing the speed of sound (1087 ft./sec.) by its frequency. At 20Hz, the wavelength of sound is 56 feet long. These long sound waves give low frequency sound (bass) its penetrating ability.

Weighted Sound Reduction Index or Rw: The rating used to measure the level of sound insulating abilities of elements such as interior and exterior walls of a building. The higher the Rw figure, the better the sound isolation that is provided. An increase of 1 Rw point is equivalent to a reduction of 1 dB of noise transmitted through the element.

Instyle is an industry leader in design and sustainability.

Founded in 1987, Instyle has grown into an internationally recognised brand offering a wide range of interior finishes including textiles, leathers, acoustic solutions and wallcoverings.

Renowned for developing sophisticated, high quality products with integrity, Instyle has won numerous accolades including the United Nations and Best of Neocon awards.

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