

Acoustek 

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About Acoustek

With 40 years design/manufacturing experience within the commercial furniture industry, we have seen varied trends and created products relevant to designer requirements.

The grand epiphany of 'the open office,' which began its rampant spread through the majority of offices over a decade ago, gave birth to new design concepts. The 'industrial look' soon emerged within offices and restaurants complete with introduction of polished concrete floors and similar hard surfaces that reflected noise.

This radical shift against conventional private offices was certain to boost communication and improve workflow. The open plan restaurant allowed more seating and the industrial look was firmly embraced.

However despite the designers best intentions, the resultant increased reverberate noise. Lack of privacy and more uncontrolled interactions have all been associated with higher stress, diminished ability to concentrate and diminished productivity.

'Conversation Friendly Restaurants' soon became a rarity which gave rise to further studies on the effects noise has upon us.

Tests done by Russell Keast (Associate Professor of Food and Sensory Science - Deakin University) proved that:

- Significant levels of background noise reduce a patrons ability to detect flavour.
- Difficulty conversing and ordering also hinders positive experience causing frustration for clients and staff alike.

In essence, those cutting edge polished concrete floors, exposed brick or tiled walls all look excellent but are more 'visual experience focused' than 'quiet and content' productivity, or enjoyable ambient dining experience.

Our range of acoustic products were designed to combat reverberate noise. Our acoustic wall tiles will absorb up to 85% of reverberate noise and provide aesthetically pleasing designs with which to decorate or 'face lift' any area, their added benefit of noise attenuation makes them a 'sound investment'.

Fact.

After bad service, restaurant noise is the most common dining complaint.





Why Acoustic Treatment?

Noise. An irritant, a pollutant, a health hazard, yet accepted by many as 'normal'.

A good acoustic office environment can:

- Increase motivation by 60%
- Increase complex task efficiency by 50%
- Increase problem solving by 20%
- Lower adrenaline levels by 30%

Reverberate noise - an infinite number of sound reflections that will keep the 'source sound' audible for a short period of time.

Hard surfaces will reflect the sound more and bounce the noise wave back to meet its source, whereby it then joins the second wave of noise transmission and subsequently a third etc.



If enough surfaces produce strong audible reflections, persons within that environment will be bombarded with several versions of each noise emitted with each version only slightly delayed in time relative to the previous wave noise.

The latter is evident in many restaurants where the assault on ears can vary from chairs scraping floors, foot steps on hard surfaces, but more often general conversation where individual volume tends to increase relevant to the interfering sound reverberation, thereby contributing to the further mayhem.

Such mayhem propagates into an unhealthy auditory sphere formation bombarding the ears and all manner of other sensory perceptions.

Introducing an acoustic screen or barrier between a noise source and an individual will reduce the noise by an average of 8dB, yet the human ear perceives 50% noise reduction.

Fact.



Performance

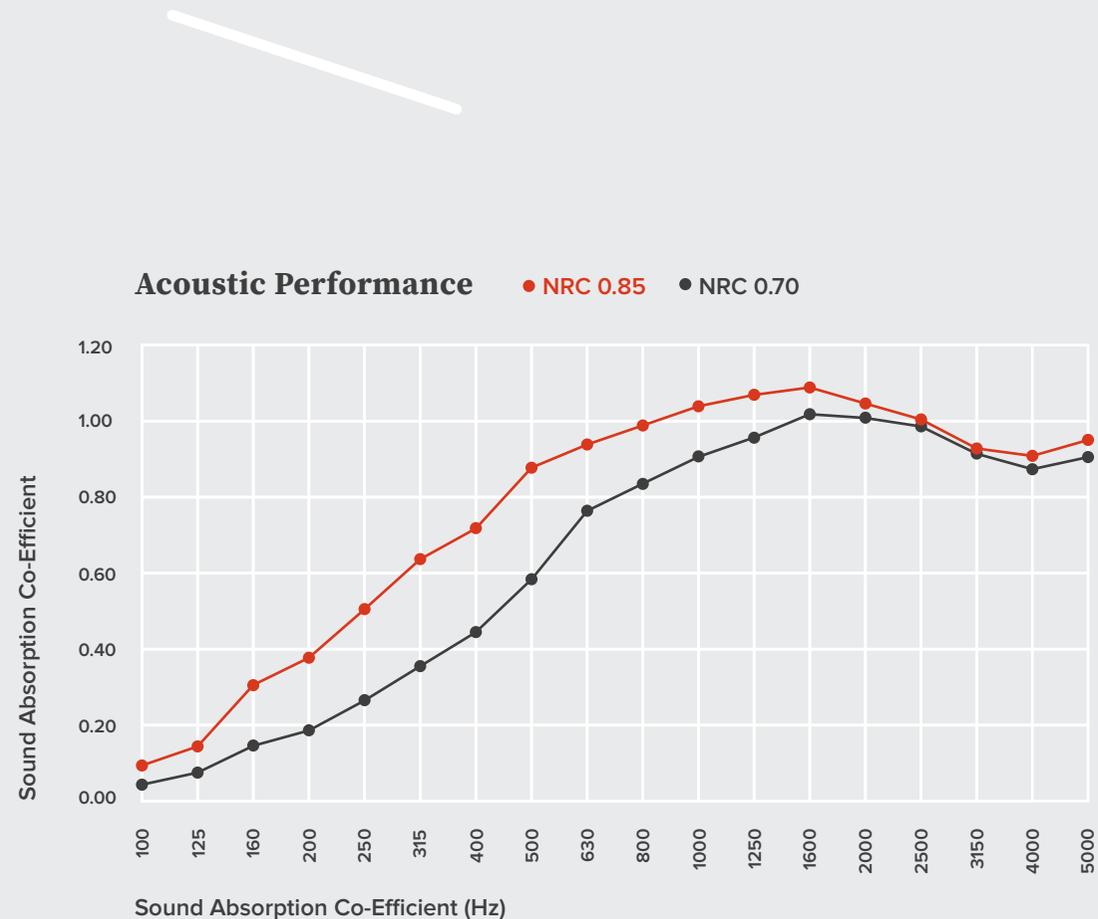
The performance of sound absorptive insulation is typically described by the Noise Reduction Co-efficient of the product. This NRC is a simplified single number that is the arithmetic average of noise attenuation over four frequencies: 250Hz, 500Hz, 1,000Hz, and 2000Hz.

In sound absorption applications, the NRC is often used as a performance measure, the higher the NRC, the greater the sound absorption at those frequencies.

However, NRC does not rate sound absorption at frequencies less than 250Hz. Absorption at low frequencies is often the most critical in building acoustics since it is typically the base sound that causes annoyance.

Acoustek wall tiles have the 'designed in' ability to incorporate acoustic wadding (if required) to further increase their NRC rating. Compare the graph enclosed, standard black line shows excellent performance NRC of 0.70 = without wadding. Add wadding (red graph line) and we achieve NRC of 0.85.

It is important to qualify whether wadding is required or not since NRC of 0.70 is excellent noise attenuation across a broad spectrum frequency, the choice is yours.



Fact.

70% of office workers said they could be more productive in a less noisy environment and 72% of office workers are dissatisfied with their speech privacy.



Environmental Benefits

Acoustek 3D Tiles, Beams and Acoustic Screens are manufactured from thermally bonded polyester fibre with a minimum of 60% recycled fibre content from PET packaging such as empty drink bottles.

- Products with recycled content reduce greenhouse gas emissions.
- High reusable potential.
- The products are 100% recyclable.
- Volatile organic compounds (VOCs) generated in the manufacturing process is classified as low (0.01 mg/m³).
- No ozone-depleting gases are used during the manufacturing process.
- No red list chemicals are present.
- Safe, non-irritant, non-toxic, and non-allergenic.



Sustainable Design

Acoustek 3D Tiles are certified GreenTagCert™ GreenRate Level A.

Suitable for use in Green Star™ projects. GreenTagCert™ is a certification and rating tool for building professionals approved by the Green Building Council of Australia (GBCA Physical).

AS standards and BS standards:
AS 1530.3, AS 3837, BS 476

TILE DESCRIPTION AND PROPERTIES

Melting point:	250°C
Vapour pressure:	Not applicable
Volatiles:	Nil
Flash point:	None allocated
Other properties:	Non-allergenic, low irritant, low flame response, resilient
Ingredients:	Organic, long chain synthetic polymers
Max service temp:	110°C
Alkalinity:	pH 7.8 (pH 7 is neutral)
Moisture absorption:	Exposure to an atmosphere of 50°C and 95% RH for four days gives moisture absorption of less than 0.2% by volume
Fire Hazard Properties:	The following results were obtained when subjected to early fire hazard testing in accordance with Australian Standards AS 1530.3 Ignitability 7 Spread of Flame 0 Smoke Developed 5 Heat Evolved 2

Why Acoustek Tiles?

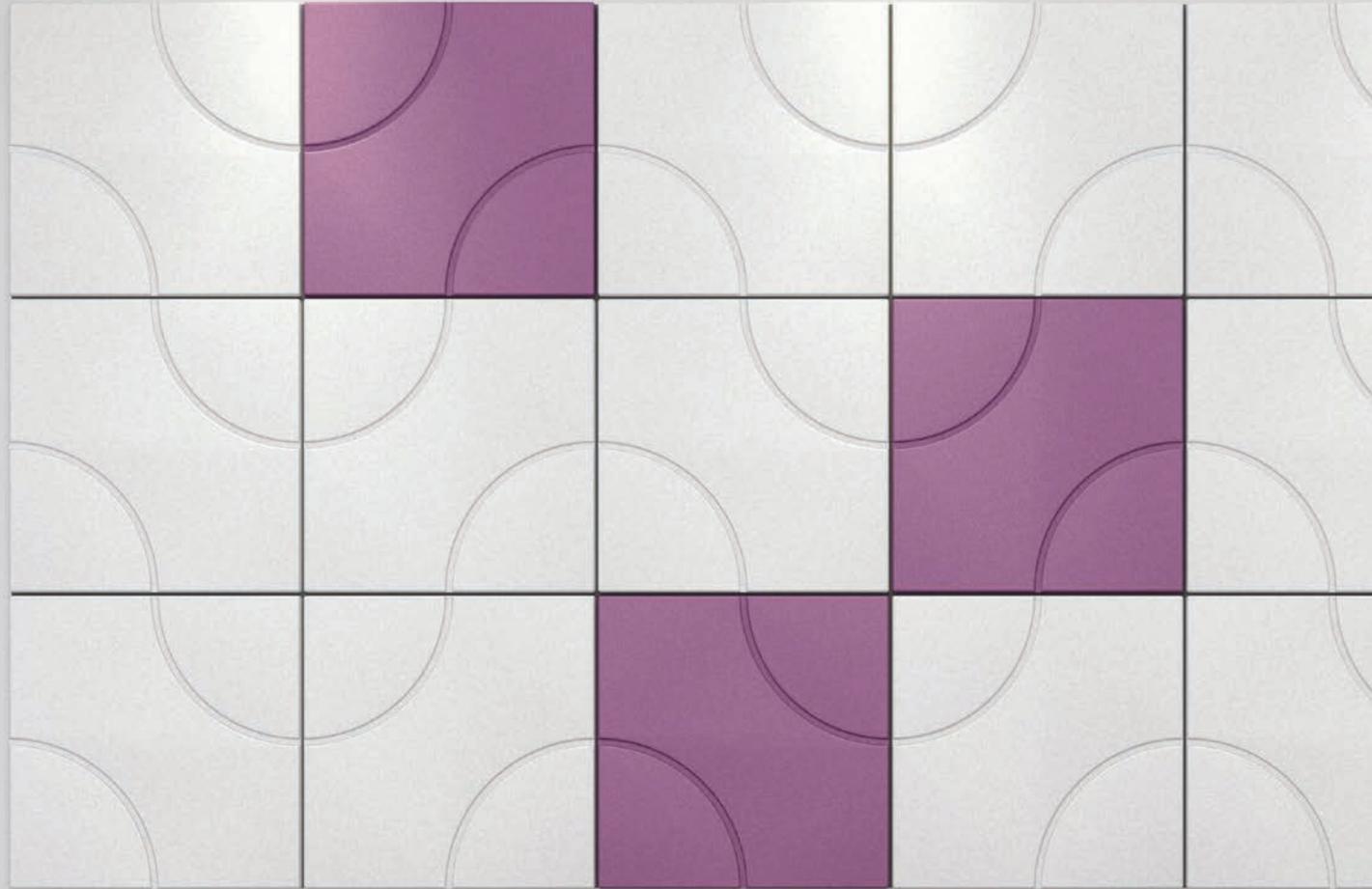
Acoustek tiles are amongst the most efficient methods of combating reverberate noise, either planned from the outset as a design feature or retrofit as a cure for any previously unforeseen 'noise annoyance factor' - the latter being experienced in most commercial interiors.

The control of reverberate noise in spaces where people work, relax, socialise and learn is of critical importance. 'Reverberant spaces' are not natural environments for humans. Spending time in such spaces can have negative impact on productivity, learning, recuperation, enjoyment and well-being.



Acoustek has two exclusive acoustic tile ranges, the Newport Collection and Cavasinni Collection, both have been given the utmost consideration of where and how they will fit in to cure this all too common reverberate noise problem.

The subtle and different design taste exhibited from both collections has something to suit most demographics, yet both collections retain built in allowance for the expression of individual design flair to create a decorative, effective, bespoke noise attenuation.



Cavasinni Collection

Celano, Torino, Roma, Milano.

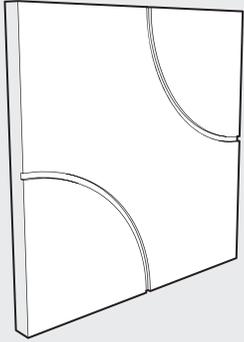
Our collaboration with the creative design talents of industrial designer Daniel Cavasinni, has produced a striking yet simple new range of acoustic tiles.

Of Italian descent, Cavasinni expresses a distinct creativity from the landscape of his unique imagination, producing a subtle integration of style from pattern to pattern. His philosophy "to create bespoke options within the same or adjacent pattern via use of tile position, depth, colour and client inspiration".



**You become
the artist.**

Celano



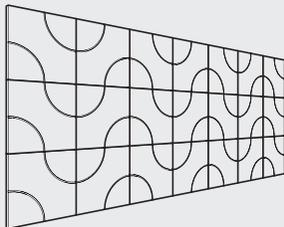
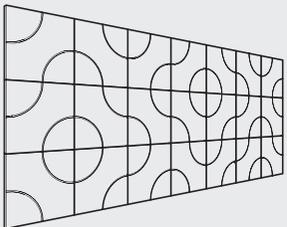
The subtle design of Celano is highlighted by the negative detail within the tile.

The coinciding point of exit with the adjacent tile's entry detail allows all manner of variation in design, we list six on our website but then add colour variation and the choice is almost infinite.

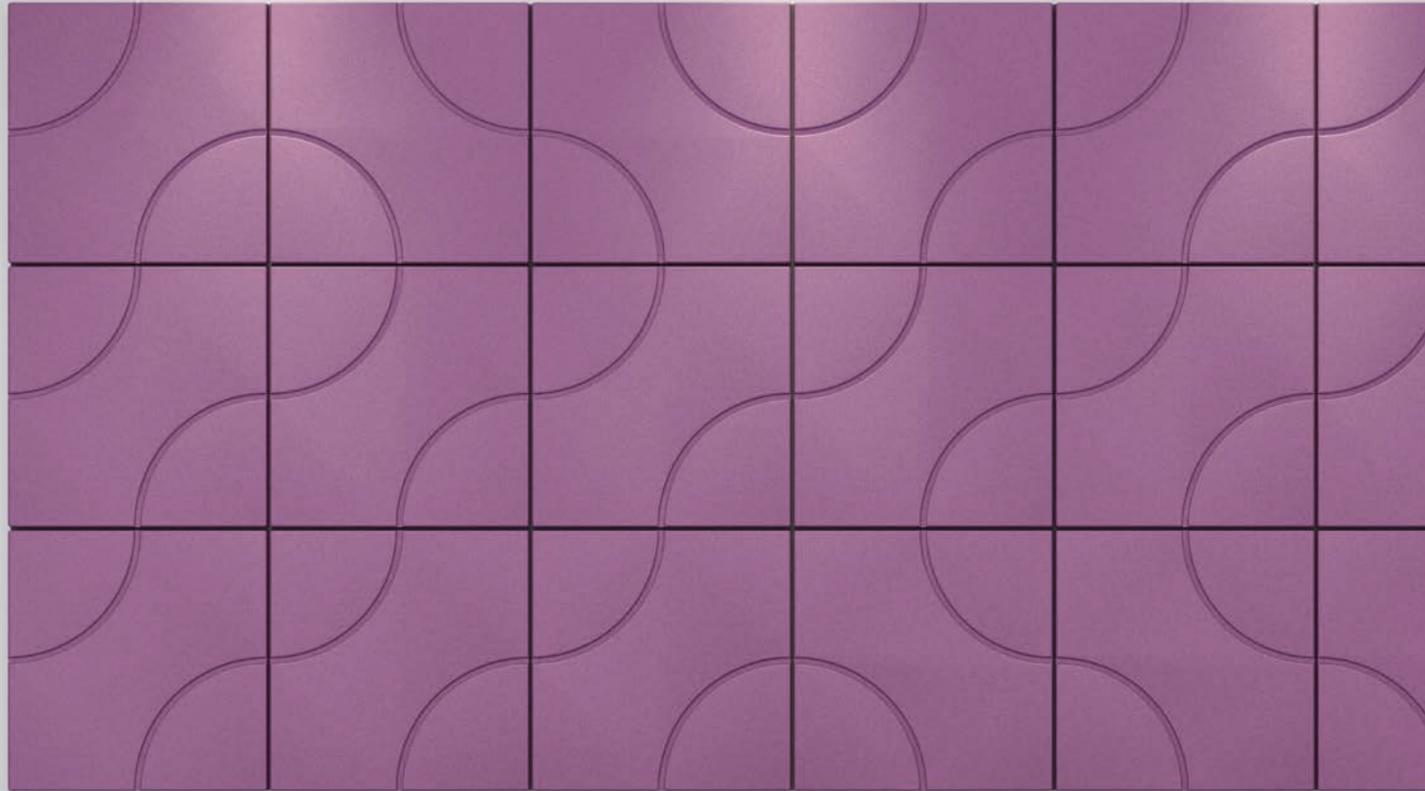
Celano's crisp clean pattern will also merge with our Torino tile for yet further individualisation of your preferred design.

Tile Size: 500 x 500 x 35mm

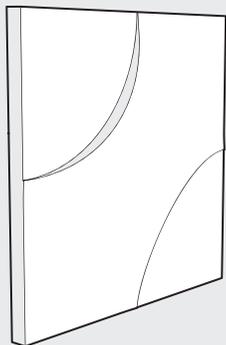
Pack Size: 9 Tiles = 2.25sqm coverage



Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Torino

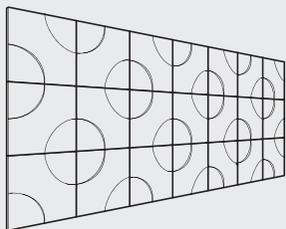
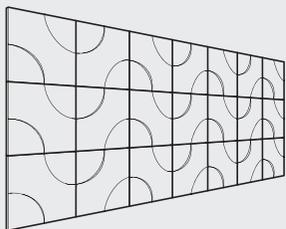


Subtlety of design is the basis for the Cavasinni Collection, here Torino gains a three dimensional profile yet still retains 'merge ability' as required with Celano.

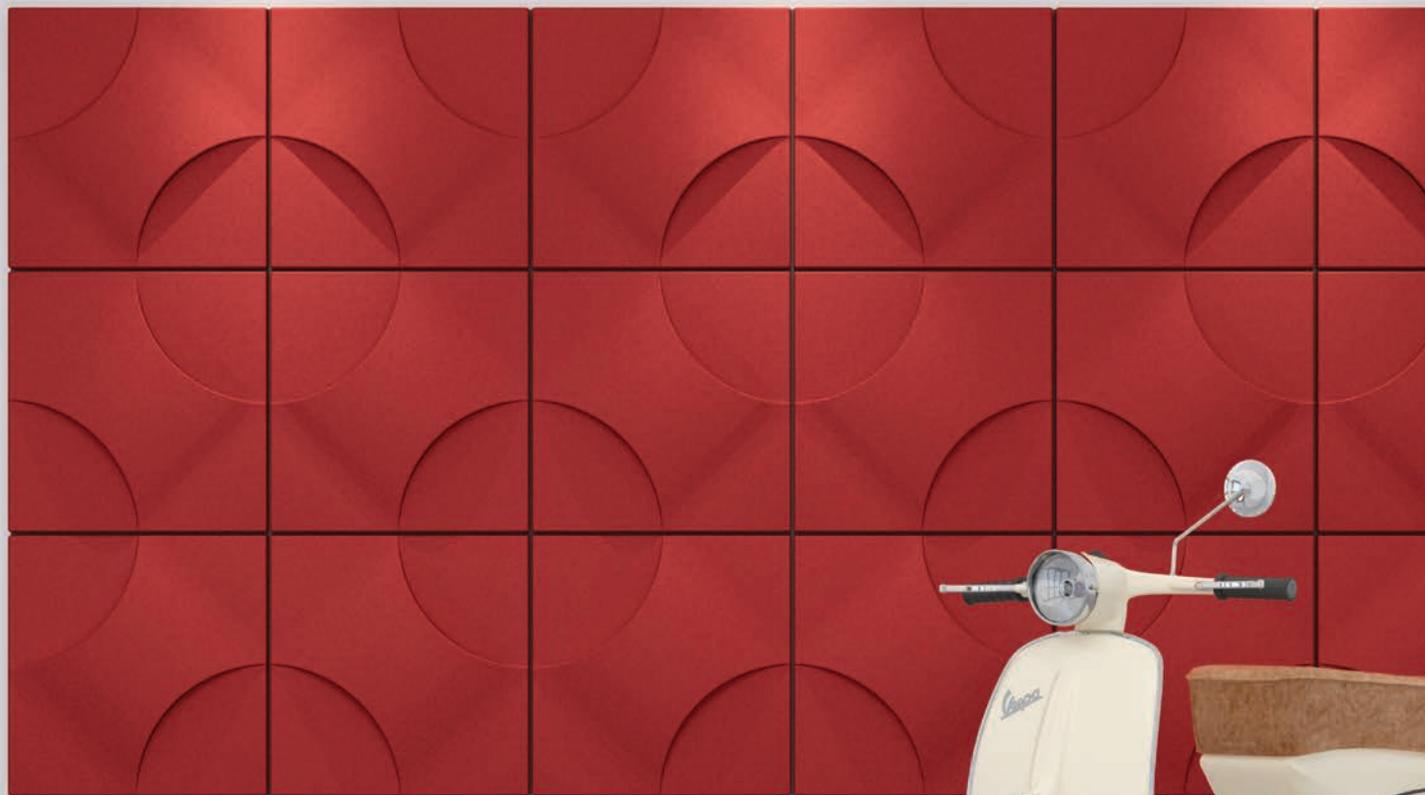
The purposeful yet simple difference in this acoustic tile's design allows individual arrangement to achieve your bespoke design.

Tile Size: 500 x 500 x 55mm

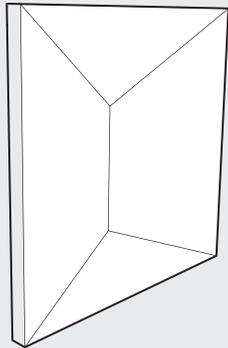
Pack Size: 9 Tiles = 2.25sqm coverage



Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Roma

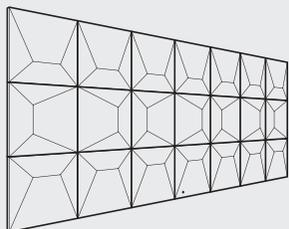
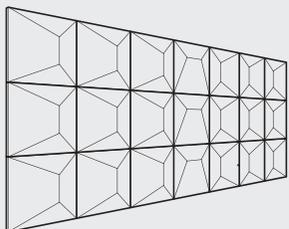


The simple creativity within this pattern continues the concept of design layout versatility, some suggestions listed on our website. Blend all in the same colour to create an effective but unobtrusive pattern. Add colour to make a statement that will compliment your chosen decor.

Roma will also merge with Milano to give added feature or contrast.

Tile Size: 500 x 500 x 55mm

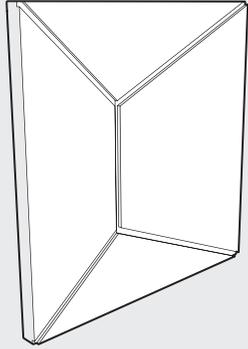
Pack Size: 9 Tiles = 2.25sqm coverage



Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Milano

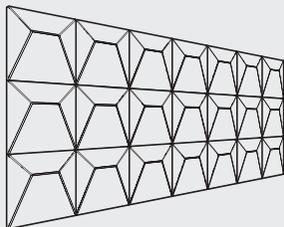
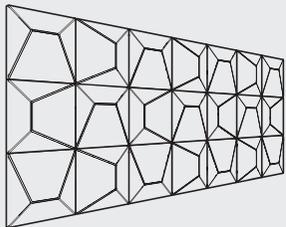


Cavasinni has once again employed negative detail to good effect, the character of this tile is similar to, but different from Roma.

The pattern's enhanced 3 dimensional effect will create a bolder statement that responds with colour. A more definite statement or toned to suit the ambience of surrounding colours, the choice is yours.

Tile Size: 500 x 500 x 55mm

Pack Size: 9 Tiles = 2.25sqm coverage



Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Newport Collection

Sand, Diffuse, Metro, Urban.

Invoking thoughts from the beach to the city, Newport styles vary from nature's fractal design and shape to organised structure.

Colours allow these tiles to meld into the background or become a dominant feature providing aesthetic impact and acoustic excellence.

[Click here to explore all of your colour layout options.](#)

From beach to the city.



Sand



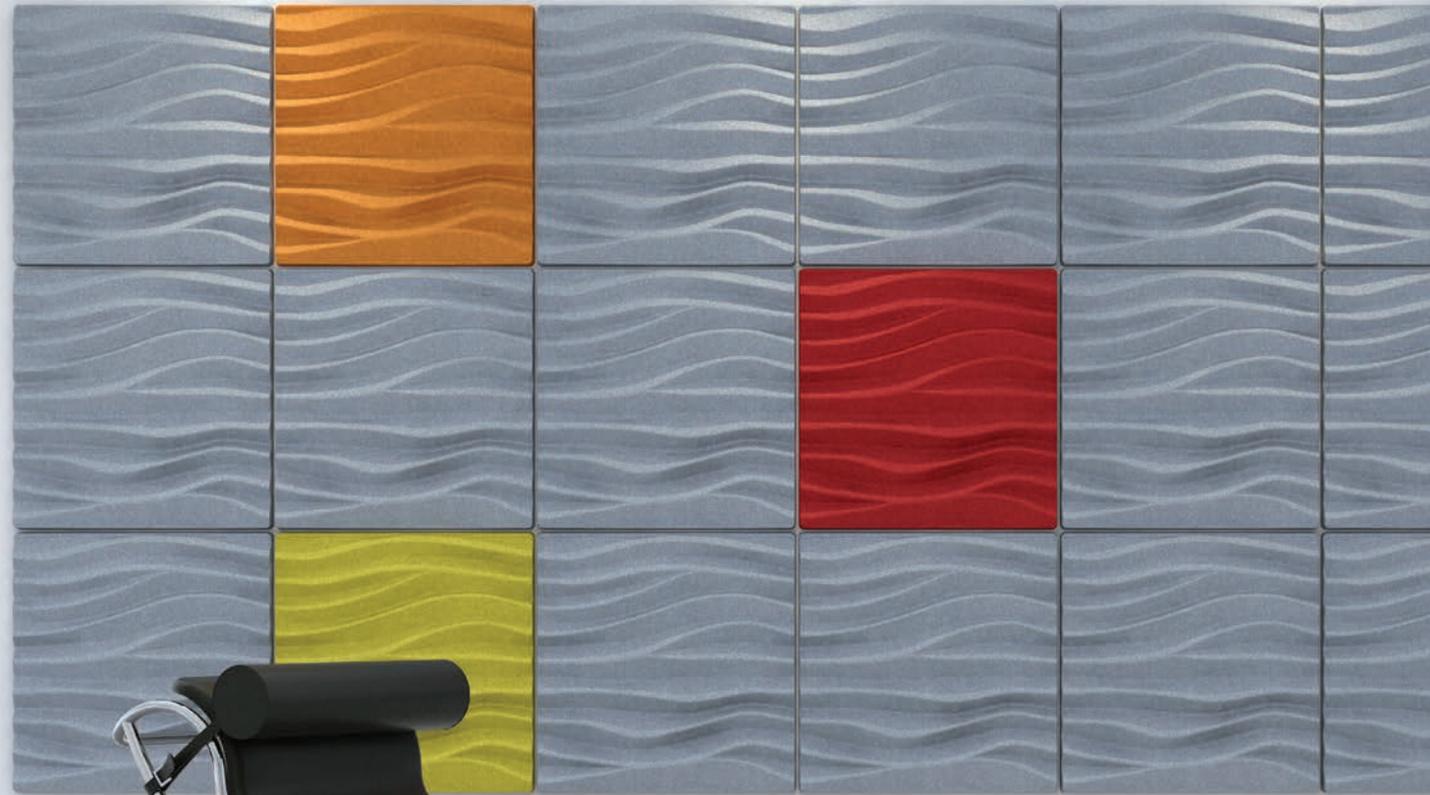
Based upon a 'fractal' design, this acoustic panel from the Newport Collection mimics the effect of tidal ebb and flow leaving its unique impression on Sand.

This pattern can be mounted vertically or horizontally and offers yet further design flexibility in the pursuit of arresting reverberate noise and background echo.

Tile Size: 500 x 500 x 55mm

Pack Size: 9 Tiles = 2.25sqm coverage

Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Diffuse



Based upon a standard 'diffuser pattern' this acoustic tile from the Newport Collection provides an effective vertical or horizontal pattern with depth and contour.

Striking but simple, this acoustic tile absorbs up to 85% of reverberate noise. Soft or bold colours show the character of this tile and enhance the decor of any room.

Tile Size: 500 x 500 x 55mm

Pack Size: 9 Tiles = 2.25sqm coverage

Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Metro



Clean crisp style with simplicity yet speaks organised structure that can be varied with a change of direction.

Same colour or shade variation this tile performs as others within the Newport Range to combat reverberate noise, enhance decor and create an ambient style of your choice.

Tile Size: 500 x 500 x 55mm

Pack Size: 9 Tiles = 2.25sqm coverage

Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Urban



Square blocks of varied height give thoughts of Urban living, yet inject colour and create a 'Mondrianesque effect'. Offset the Pattern for an even more bespoke design and effect.

The aim of the Newport Collection is to achieve design flexibility, be bold or placid, all have their own character that can be developed into your preferred layout. All in the pursuit of arresting reverberate noise.

Tile Size: 500 x 500 x 25 - 55mm
Pack Size: 9 Tiles = 2.25sqm coverage

Check our website for layout suggestions and install instructions.
Colour swap tiles to create even more individuality.



Finishings.



Decorative Finishes

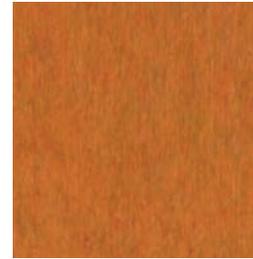
Have design freedom with our extensive range of fabric colours and finishes.



Ruby



Amber



Gold



Gem



Aubergine



Agate



Marine



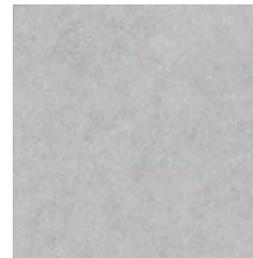
Turquoise



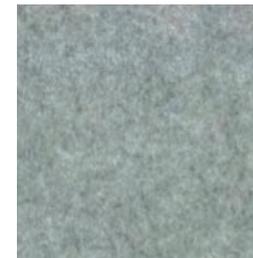
Aqua



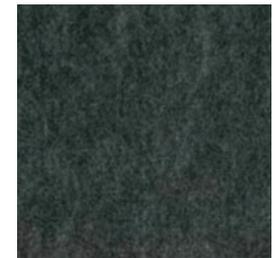
Flannel



Schist



Charcoal



Slate



Stone



Opal



Ebony

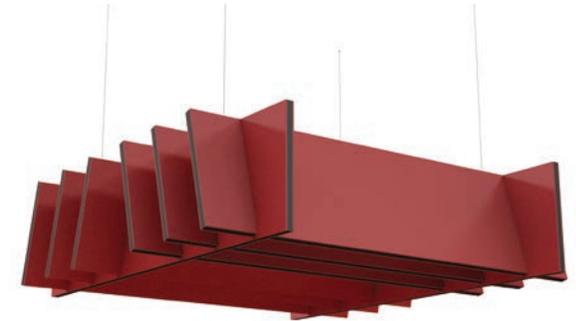


Other Products in the Acoustek Range

Beams - Acoustic Lighting

Acoustic Beams perform extremely well both acoustically and with room heat dissipation. The heat flows upwards past the beams whilst the sound is absorbed by the acoustic medium.

The inclusion of LED lighting under the beam as required gives the added bonus of illumination of the localised area in focus.



Beam Height options:	300mm, 400mm and 600mm
Beam Length options:	1200mm, 1800mm and 2400mm
LED option with all sizes or plain acoustic Beam	

Clouds - Acoustic Lighting

Square, round or rectangular, Acoustek Clouds offer instant and localised acoustic privacy. Utilising our deluxe compressed sheet product starting point NRC 0.65 we can customise size or offer our standard sized options.

Choose from the 'Quiet' fabric range of colours or plain black and plain white. The black or white core with fabric option provides a distinctive finish to the edge of each panel.



Round Cloud options:	600mm, 800mm, 1200mm diam
Square Cloud option:	1200 x 1200mm
Rectangular Cloud option:	1200 x 800mm



Adjacent Image Features:

Milano Tiles, Suspended Acoustek Beams with and without lights and Acoustek Cloud.

Acoustek

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*Tolerance in Size: Length +/- 5mm; Width +/- 5mm; Depth +/- 2mm.

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