

INT&RIOR SYSTEMS

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T&R PRODUCTS

ACOUSTIC SOLUTIONS





Please note:

T&R Interior Systems rely on a range of testing reports - both international and local - and label our products to the best of our knowledge.

We are committed to honest reporting and believe in constantly re-testing and checking the data that we have.

We regularly update our datasheets and website with the latest testing (some older printed literature may have incorrect numbers on them). Please check the website for the latest datasheets, this will always be the most up to date.

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Please contact us if you have any questions or wish to discuss testing.



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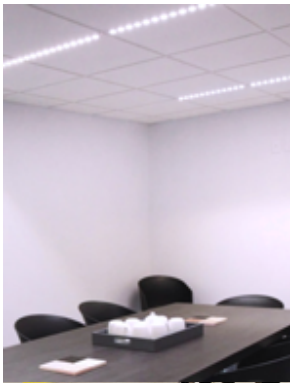
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Product Range

- GRIDLUX LIGHTING
- C MAX - GLASSWOOL
- DAIKEN - MINERAL FIBRE
- INNOVATIVE ACOUSTIC SOLUTIONS
- HYGIENE
- SEISMIC



WHITE



MIRROR



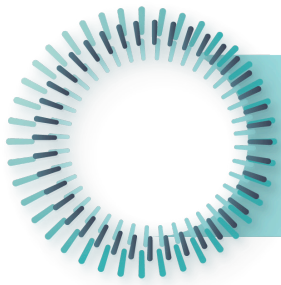
OPAL



The image shows a modern interior space, likely a waiting area or lounge. The ceiling is a Gridlux lighting system, featuring a grid of white panels with black lines and integrated linear lighting. The room is furnished with several colorful armchairs in red, yellow, and grey. A potted plant is visible in the background. The text "Gridlux Lighting" is overlaid in the center. The Gridlux logo is in the bottom right corner.

Gridlux Lighting

GRIDLUX



GRIDLUX LED MODULE

Chrome, Opal and White Mirror Optic 1200/600



Gridlux LED Module offers a new and exciting way to incorporate lighting into a suspended ceiling grid. It is designed in the shape of a standard tee bar to allow selected tees in the grid to be substituted with the Gridlux. It can be fully integrated or retrofitted into any type of suspended ceiling as long as the web tees are 38mm. It creates a stylish and innovative lighting solution suitable for offices, schools, and commercial interiors.

- Low Glare (UGR=19) option (GridLux Chrome) while providing 400 lumens on the workstation (dependant on configuration).
- This is a perfect acoustic solution; removing light panels in a ceiling results in more absorption across the ceiling surface.
- Gridlux has been engineered to take seismic load, (similar to CBI cross tees) and is therefore ideal to be used as part of a seismic suspended ceiling design.
- 5-year replacement warranty.
- Long-life energy-saving LED technology.
- Complete system installed with flex and plug; can be used with Building Management System.
- Anodised and powder-coated aluminium extrusion body, steel mounting clips.
- Easy Installation.

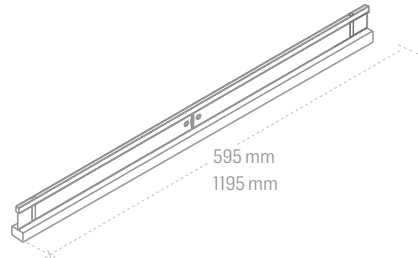
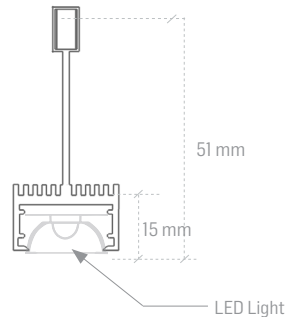
Please Note: Gridlux is installed as part of the ceiling, and should be tendered as part of the ceiling contract. Installation will need to be coordinated with the electrical contractor for suitable power points in the plenum.



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TEST DESCRIPTION	RESULT	TEST METHOD
Power Consumption	25W (600mm) & 45W (1200mm)	
Input Voltage	240V	
Light Output	1743/3486lm	
Luminaire Efficiency	102.9lm/W	at 700mA
Weight	1200mm - 500g (+ driver weight) the gridlux light replaces the existing 280g structural cross tee element. Including the weight of the incorporated structural element, the full weight is 780g.	

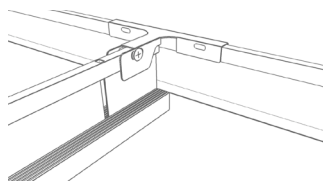
• COLOUR

White and Black others available on indent

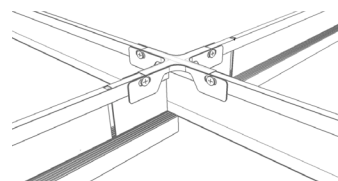
• SIZE

L: 595 mm W: 24mm H: 51mm

L: 1195mm W: 24mm H: 51mm



Three Way Connector



Four Way Connector

• Tridonic Driver Details

Available with Tridonic drivers to suit a range of lighting control systems.

For a non- dimmable setup:

- Each individual 1200mm light, or pair of 600mm lights, is supplied with a Tridonic driver and a 2.5m long 3 core flex & (3-pin) pre fitted plug.

For a dimmable or DALI setup:

- Each individual 1200mm light, or pair of 600mm lights, is supplied with a Tridonic DALI driver and a 2.5m long 5 core flex & (5-pin) pre fitted plug. Wiring between each plug socket will be 5 core wiring and is the responsibility of the on-site electrician and/or electrical engineer.



Required (5-pin) plug socket.



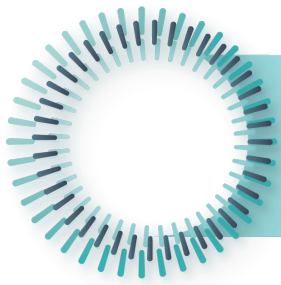
Core flex & (5-pin) pre fitted plug



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GRIDLUX - TRIDONIC DRIVER

TRIDONIC



Tridonic driver for Gridlux

Available as:

Non-Dimmable - (3 pin)

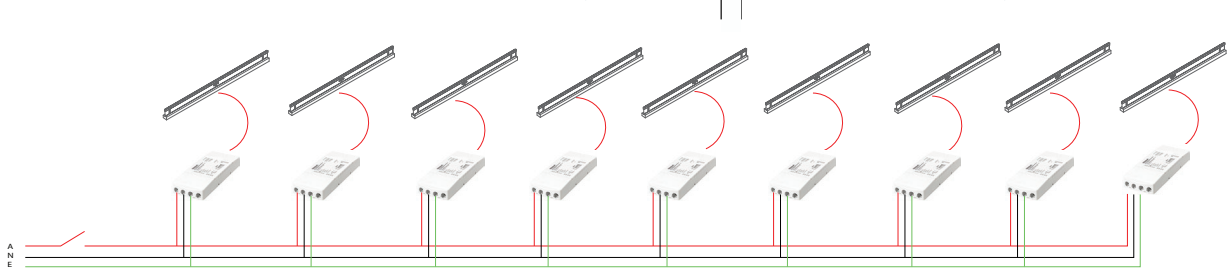
Dimmable - (5 pin)

The Tridonic Driver is the future of LED Drivers. It is a highly advanced system with outstanding dimming function.

- Constant-current LED Driver with application-oriented operating windows
- One4all interface supports DALI, DSI, switchDIM and corridor FUNCTION
- High efficiency of up to 93 %
- Unmatched standby losses of < 0.15 W

Non-Dimmable - 3 pin

For standard non-dimmable application use standard 3 pin wiring. Each individual 1200mm light, or pair of 600mm lights, is supplied with a Tridonic driver and a 2.5m long 3 core flex & (3-pin) pre fitted plug.



Dimmable - 5 pin

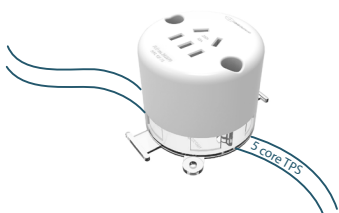
For any setup that isn't a simple on/off function (such as dimmable, DALI and any other lighting protocol) use the specifications below:

Each individual 1200mm light, or pair of 600mm lights, is supplied with a Tridonic (switchDIM one4all) driver and a 2.5m long 5 core flex & (5-pin) pre fitted plug.

The electrical installation will include 5 core wiring and 5-pin plug base (CMS QF75).

The wiring between each plug base will be 5 core wiring.

The digital one4all interface of the Dimmable Tridonic driver ensures proper operation and integration in various lighting control systems. In addition, all the parameters of the Tridonic driver can be configured for maximum effect. The current can be adjusted in 1 mA increments for individual matching to the required luminous fluxes.



Core flex & (5-pin) pre fitted plug socket to be supplied by electrical engineer/contrator. CMS 5 Pole plug base QF75.

5 core TPS installed from Distribution Board and loops in a daisy chain between all 5 pin sockets.

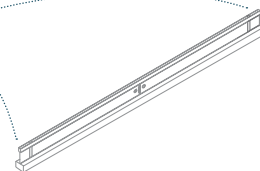


Core flex & (5-pin) pre fitted plug

- Supplied



Tridonic Driver (Dimmable)



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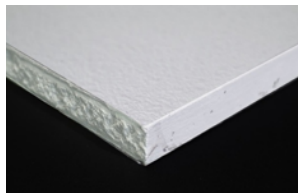


Holland Beckett Law - Rotorua - Darryl Church Architects

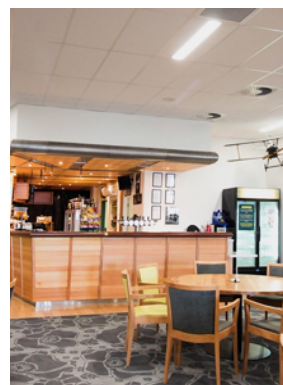
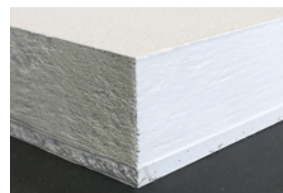
ABSORB



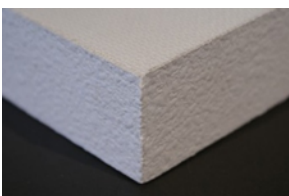
REFLECT



COMBO



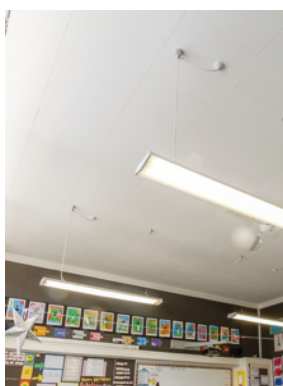
IMPACT



IMPACT
COMBO



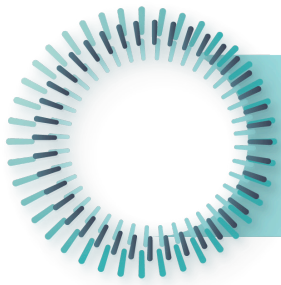
DIRECT FIX



All tiles in the C Max range (except for Impact and Black) have the same face finish. This allows designers to achieve the desired acoustic performance (depending on space type and useage) while maintaining a monolithic look throughout the entire project.

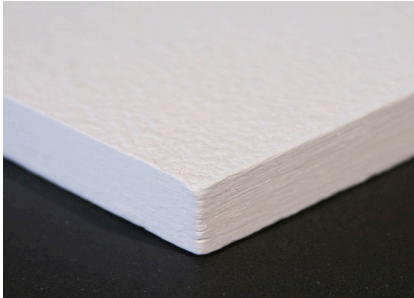
A modern interior space, likely a cafe or office lounge, featuring a dark ceiling with a grid of acoustic tiles. The tiles are illuminated by warm, yellow light strips. The room has wooden tables and chairs, a large whiteboard with drawings, and a metal shelving unit. A large potted plant is on the left, and a window with a view of trees is on the right. The text 'C MAX Acoustic Ceiling Tiles' is overlaid in the center.

C MAX Acoustic Ceiling Tiles



C MAX ABSORB

High Performance Acoustic Ceiling Tile



C Max Absorb is a glass wool tile with a refined white painted, monolithic, pre-finished face:

- High Noise Reduction Coefficient (NRC) efficiently reduces Reverberation Time.
- Mid-range tile suitable for exhibit halls, museums, medical centres, offices, classrooms, receptions, meeting rooms and other commercial interiors.
- Constructed from 90% dry felt resin bonded glass-wool, utilising longer fibres in a more compact fibre arrangement. This non-absorbent, non-water soluble design gives C Max Absorb improved durability when compared to mineral fibre.
- The high density glass-wool tile achieves a density of 100kg/m^3 . This results in a light weight, high performance ceiling tile which is user friendly and ideal for use in large spaces. It won't sag or pillow.
- This tile comes with a 30 year lifetime system warranty to withstand conditions up to 40° and 99% relative humidity without visible sag, when used with a T&R Interior Systems branded suspension system. Tiles should be installed in accordance with NZS1170.5 and the grid manufacturer's instructions.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT -

For Green Star rated projects, CMX meets the Greenguard Emission Certificate standard.



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GENERAL TEST DESCRIPTION	RESULT	TEST METHOD
Light Reflectance	LR 87% +	ASTM E1477-98
Density	100kg/m ³	
Fire Test - ISO 5660 Part 1	Group 1-S	Cone Calorimeter NZBC C/VM2 Appendix A
Moisture Rate	≤ 1 %	JC/T 670 – 2005
Thermal Resistance	≥ 0.4 (m ² -k/w)	ASTMC 423



SIZE

15mm, 20mm and 40mm Depth
 Square Edge, Reveal Edge,
 Direct Fix (20mm and 40mm only) *Concealed,
 [600 x 600] [1200 x 600]
 *[2400 x 600] *[2400 x 600] *[1200 x 300] *[1500 x 300]
 * Available by indent order.

To suit 24mm Grid patterns
 (C Max 15 mm RE available to suit 15mm grid)
 Other sizes available on request.

COLOUR

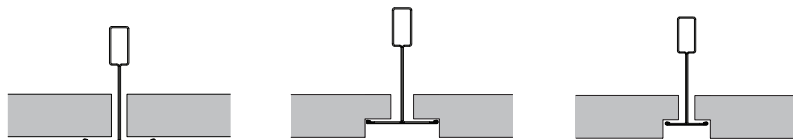
WHITE AND BLACK



15MM TEST DATA

15MM TEST DATA	RESULT	TEST METHOD
Absorption (ISO 354)	NRC 0.85	ASTM C423
	SAA 0.94	ASTM C423
	αW 0.80	ISO 11654: 1997
Attenuation (ASTM E1414-11A)	CAC 22	ASTM E413-10
	Dn,c,w 22	ISO 717-1
Weight	1.5 kg	
Est R Value	R0.4	

EDGE DETAIL



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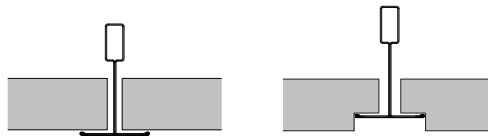
C MAX ABSORB

High Performance Acoustic Ceiling Tile

NRC **HIGH**
CAC **LOW**

20MM TEST DATA	RESULT	TEST METHOD
Absorption (ISO 354)	NRC 0.90	ASTM C423
	SAA 1.02	ASTM C423
	α_w 0.90	ISO 11654: 1997
Attenuation (ASTM E1414-11A)	CAC 23	ASTM E413-10
	$D_{n,c,w}$ 23	ISO 717-1
Weight	2.0 kg	
Est R Value	R0.5	

EDGE DETAIL

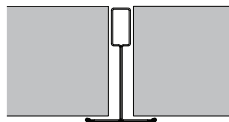


This tile is available on indent (lead time applies)

NRC **HIGH**
CAC **MED**

40MM TEST DATA	RESULT	TEST METHOD
Absorption (ISO 354)	NRC 0.95	ASTM C423
	SAA 1.12	ASTM C423
	α_w 0.95	ISO 11654: 1997
Attenuation (ASTM E1414-11A)	CAC 32	ASTM E413-10
	$D_{n,c,w}$ 32	ISO 717-1
Weight	4.0 kg	
Est R Value	R1	

EDGE DETAIL



** Acoustic Performance re-tested in New Zealand labs in 2019. Absorption Test: E400 Mounting Method. Please note; these results may differ from earlier datasheets*



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C MAX ABSORB

Also comes in **BLACK**



Palace Burger - Tauranga



NZ Merino - Christchurch - Studio ZQ

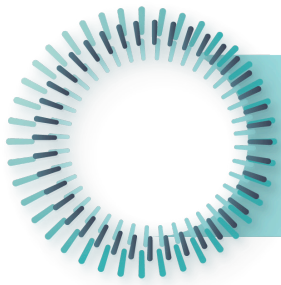


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PLEASE NOTE THAT SOME TILES MAY HAVE A LEAD TIME. CONTACT US FOR LEAD TIME OR ALLOW 12 WEEKS FOR DELIVERY. MINIMUM ORDER QUANTITIES MAY APPLY



C MAX DIRECT FIX

High Performance Acoustic Ceiling Tile



C Max Direct Fix is a white painted, textured glass wool acoustic ceiling tile. Direct fix eliminates the need for an exposed grid and enhances the clean smooth monolithic surface. Available in a range of colours as well as white.

- It has a high noise reduction coefficient (NRC 0.75 – 1.00 – depending on installation method) to reduce reverberation time.
- A high end tile.
- Designed for direct fix application to new existing gypsum board or over timber/metal battens. The Direct Fix 20mm tile on batten exceeds Department of Education acoustic requirements when installed over gypsum board backing.
- This product is constructed from 90% dry felt resin bonded glass-wool, utilizing longer fibres in a compact fibre arrangement. The non-absorbent, non-water soluble design gives C Max Direct Fix improved durability when compared to mineral fibre.
- C Max Direct Fix achieves a density of 100kg/m³. This results in a light weight, high performance ceiling tile which is user friendly and ideal for use in classrooms, offices, medical centres, lobbies and receptions and other commercial interiors.
- 30 year lifetime system warranty to withstand conditions up to 40° - 99% relative humidity without visible sag.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT -

For Green Star rated projects, C Max Direct Fix meets the Greenguard Emission Certificate standard.



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TEST DESCRIPTION	RESULT	TEST METHOD
Absorption (ISO 354) 20mm direct fix:	NRC 0.75	ASTM C423
	α_w 0.55	ISO 11654
	SAA 0.94	ASTM C423
with 35mm air gap:	NRC 0.85	ASTM C423
	α_w 0.85	ISO 11654
	SAA 0.92	ASTM C423
Attenuation (ASTM E1414-11A)	(without plasterboard backing)	
20mm	CAC & $D_{n,c,w}$ 23	ISO 717-1 ASTM E413-10
Light Reflectance LR	87% +	ASTM E1477-98
Density	100kg/m ³	
Weight	20mm: 2kg/m ²	
Fire Test - ISO 5660 Part 1	Group 1-S	Cone Calorimeter NZBC C/VM2 Appendix A
Moisture Rate	≤ 1 %	JC/T 670 – 2005
Thermal Conductivity	≥ 0.04 (kcal/mh°C)	JIS A 1412
Est. R-Value (m ² k/w)	20mm: R0.5	

COLOUR

White

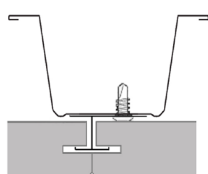
SIZE

20mm Depth x [600 x 600] [1200 x 600]

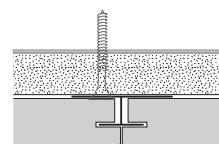
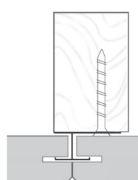
Other sizes available on request

INSTALLATION

Tiles are best installed in an Ashlar pattern. C Max Direct Fix is only covered by warranty if only installed in the Ashlar pattern.



Shown with air gap



Shown as direct fix

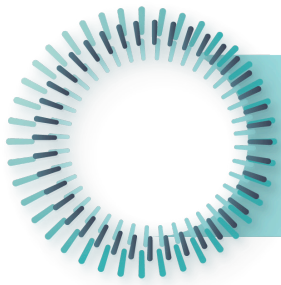
* Acoustic Performance re-tested in New Zealand labs in 2019.
Please note; these results may differ from earlier datasheets



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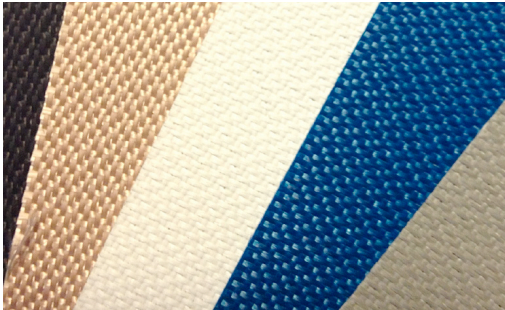
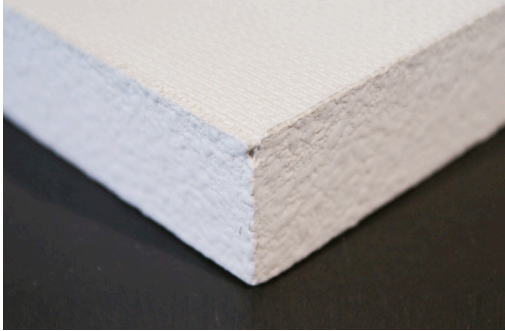
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C MAX TECH

Specialised Acoustic Panel



The C Max Tech is a 20mm and 40mm thick glass-wool ceiling tile or 40mm acoustic panel with a strong woven fibre glass face.

- Great acoustic properties, the high Noise Reduction Coefficient will significantly reduce reverberation time.
- Can be wiped for easy cleaning. Stain resistant face.
- Mid-range tile.
- Due to its unique strong woven fibre glass face, it is ideal for workshops, tech spaces, kitchens, laboratories and hygiene spaces. The face has been tested and proven to prevent growth of microbial activity.
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and meets Cleanroom ISO Class 3.
- Suspend C Max Tech panel in a standard T&R Interior System two way grid system or mount on the wall using a specialised aluminium frame.
- This product is constructed from 90% dry felt resin bonded glass-wool, utilizing longer fibres in a compact fibre arrangement. The non-absorbent, non-water soluble design gives C Max Tech improved durability when compared to mineral fibre. This tile achieves a density of 100kg/m³. This results in a light weight, high performance ceiling tile which is user friendly and ideal for use gymnasiums, sport centres, community halls, workshops, kitchens and schools.
- Available in a selection of colours on indent – standard colour is white.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, C Max meets the Greenguard Emission Certificate standard.




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TEST DESCRIPTION	RESULT	TEST METHOD
Absorption (ISO 354) : (40mm)	NRC 0.90	ASTM C423 - 99
	α_w 0.95	ISO 11654: 1997
	SAA 0.96	ASTM C423 - 99
Absorption (INSUL) : (20mm)	NRC 0.90	ASTM C423 - 99
Attenuation (ASTM E1414-11a)	CAC 40	ASTM E413-10
	D_{ncw} 40	ISO 717-1
Light Reflectance	LR 84% +	(White Panel Only)
Density	100kg/m ³	
Weight	20mm: 2kg/m ²	40mm: 4kg/m ²
Fire Test - ISO 5660 Parts 1&2	 Group 1-S	Cone Calorimeter NZBC C/AS1-AS27
Thermal Conductivity	≥ 0.04 kcal/mh°C	JIS A 1412
Est. R-Value (m ² k/w)	40mm: R1 20mm: R0.5	

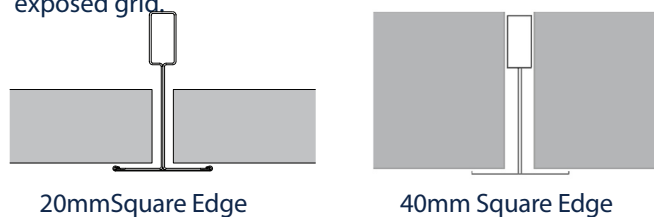
Microbial Test: When tested for surface contamination the microbial levels were found to be very low. While there were low levels of fungi detected it should also be noted that there were no bacteria or yeasts found in the samples taken.

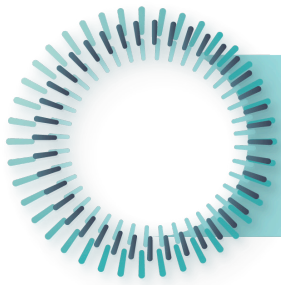
SIZE 20mm depth and 40mm Depth Square Edge
 [600 x 1200] [600 x 600]
 [1200 x 2400] 40mm Other sizes available on request

COLOURS **White**
 Available on indent, Black, Blue, Grey, Caramel – MOQ

INSTALLATION Designed to fit into a standard 24mm two way exposed grid.

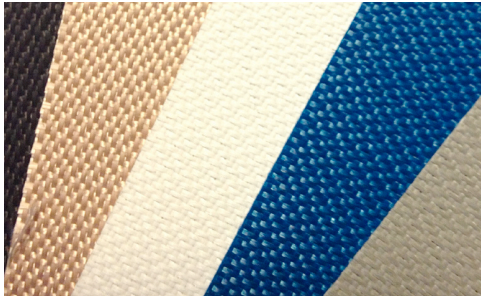
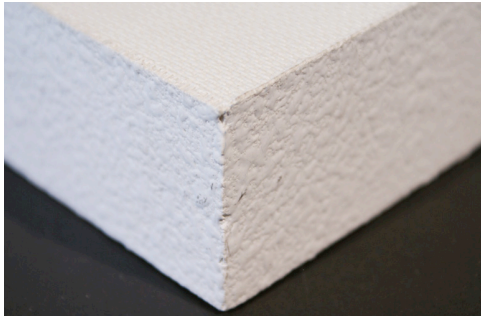
EDGE DETAIL





C MAX IMPACT

Sports Acoustic Ceiling Tile



The C Max Impact Sports Sound Panel is a 40mm thick glass-wool ceiling tile with a strong fibre glass face.

- Exceptionally high acoustic properties, the high Noise Reduction Coefficient will reduce reverberation time.
- Withstands knocks and ball impact.
- Mid-range tile.
- Due to its unique strong impact resistant fibre glass face, it is ideal for gymnasiums, sports centres, schools and community halls. It can withstand significant impact and the Robo-clip system will prevent tiles from dislodging..
- This product is constructed from 90% dry felt resin bonded glass-wool, utilizing longer fibres in a compact fibre arrangement. The non-absorbent, non-water soluble design gives C Max Impact improved durability when compared to mineral fibre. C Max achieves a density of 100kg/m^3 . This results in a light weight, high performance ceiling tile which is user friendly and ideal for use gymnasiums, sport centres, community halls, workshops, kitchens and schools.
- Suspend C Max Impact Sports Panels in a standard T&R Interior System two way grid system. Use Robo clips to prevent tiles from dislodging.
- Can be ink-jet printed with custom designs and logos.
- Available in a selection of colours on indent – standard colour is white.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, C Max meets the Greenguard Emission Certificate standard.



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NRC	HIGH
CAC	LOW

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption (ISO 354) 40mm	NRC 0.90	ASTM C423 - 99
	α_w 0.95	ISO 11654: 1997
	SAA α_w 0.96	ASTM C423 - 99
Attenuation (ASTM E1414-11a) 40mm	CAC 40	ASTM E413-10
	D_{ncw} 40	ISO 717-1
Light Reflectance	LR 84% +	(White Panel Only)
Density	100kg/m ³	
Weight	20mm: 2kg/m ²	40mm: 4kg/m ²
Fire Test - ISO 5660 Parts 1&2	Group 1-S	Cone Calorimeter NZBC C/AS1-AS27
Thermal Conductivity	≥ 0.04 kcal/mh°C	JIS A 1412
Est. R-Value (m ² k/w) 40mm	R1	



SIZE

40mm Depth Square Edge
[600 x 1200] [600 x 600]
Other sizes available on request

COLOURS

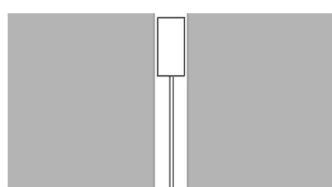
White

Available on indent, Black, Blue, Grey, Caramel – MOQ

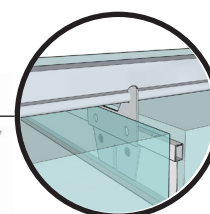
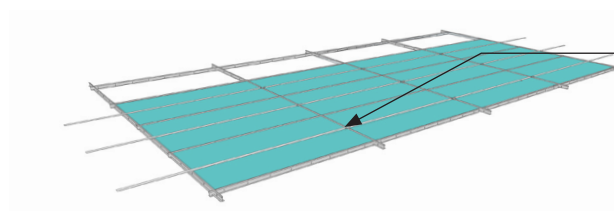
INSTALLATION

Designed to fit into a standard 24mm two way exposed grid. Use Robo Clip detail to prevent tiles from dislodging. For High impact zones use two rails, for standard impact zones use one rail across each tile.

EDGE DETAIL



Square Edge 24mm Grid



Robo Clip

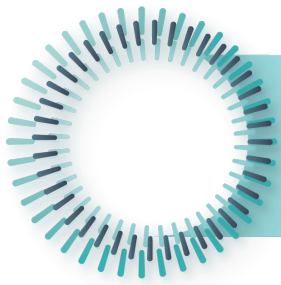
See Installation guide for details



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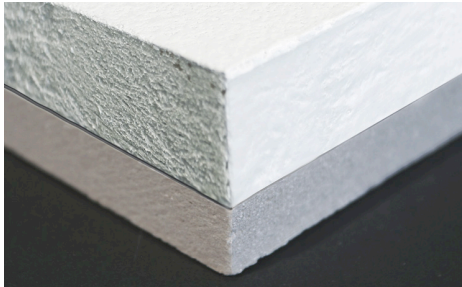
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C MAX COMBO +

Lightweight High Performance Acoustic Ceiling Tile



C Max Combo + is a composite tile with a refined white painted, monolithic, pre-finished face. It has an absorptive layer with an attenuating backer behind. Combo + not only has amazing acoustic properties (and meets Ministry of Education requirements) but also is a much better solution for seismic requirements. Performance data demonstrates an NRC of 0.85 and a minimum CAC of 42, that can be increased to a CAC of 52 quite easily.

The invention comprises two layers of material that are flexibly attached together with an air gap in between. This allows each of the layers to flex and vibrate and to define a cavity. The resulting tile weight is only 7.5kg.

- Patent is pending on this revolutionary design
- The absorbent face is made from a compounded, high density glass-wool.
- The attenuating backer reduces sound transfer over office partitions and reduces rain noise from roofing. It is a high performance ceiling tile which is user friendly and ideal for use in airports, offices, classrooms, boardrooms, museums and other commercial interiors.

This tile comes with a 30 year lifetime system warranty to withstand conditions up to 40° and 99% relative humidity without visible sag, when used with a T&R Interior Systems branded suspension system. Tiles should be installed in accordance with NZS1170.5, AS/NZS2785 and the grid manufacturer's instructions.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT -

For Green Star rated projects, CMX meets the Greenguard Emission Certificate standard.



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NRC HIGH
CAC HIGH

TEST DATA	RESULT	TEST METHOD
Absorption (ISO 354)	SAA 0.94	AST C432
	ap 0.90	ISO 11654 -1997
	NRC 0.85	ASTM C423
Attenuation (ASTM E1414-11A)	CAC 42	
	D _{n,c,w} 42	ASTM E413-10
Weight	7.5kg/m ²	
Density	Glasswool 100kg/m ³ Mineral fibre: 250kg/m ³	
Light Reflectance	LR 87% +	ASTM E1477-98
Fire Test - ISO 5660 Parts 1&2	Group 1-S	Cone Calorimeter NZBC C/AS1 – AS27
Moisture Rate	≤ 1 %	JC/T 670 – 2005



SIZE

35mm depth, Square Edge, *Reveal Edge**

[600 x 600] [1200 x 600] *[1200 x 300] *[1500 x 300]

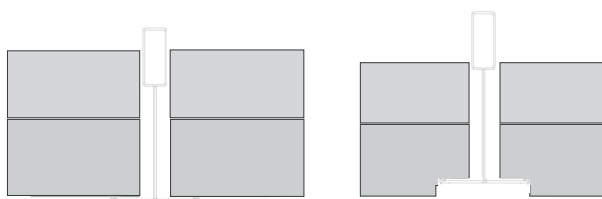
To suit 24mm Grid patterns

* Available by indent order. Other sizes available on request.

COLOUR

White (and Black available on indent and MOQ)

EDGE DETAIL



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The ceiling attenuation class of one room with C Max Combo Plus and an adjacent room of C Max Absorb 15mm ceiling tiles in a suspended ceiling grid.

Attenuation	CAC & $D_{n,c,w}$ 32	ASTM E413-10
--------------------	--	---------------------

The ceiling attenuation class of one room with C Max Combo Plus and an adjacent room of C Max Absorb 15mm ceiling tiles in a suspended ceiling grid with a baffle stack (with NOVAhush 900P 600mm wide and 30% compression) across the partition.

Attenuation	CAC & $D_{n,c,w}$ 47	ASTM E413-10
--------------------	--	---------------------

The ceiling attenuation class of C Max Combo Plus ceiling tiles in a suspended ceiling grid with a baffle stack (with NOVAhush 900P 600mm wide and 30% compression) across the partition.

Attenuation	CAC & $D_{n,c,w}$ 51	ASTM E413-10
--------------------	--	---------------------

The ceiling attenuation class of C Max Plus ceiling tiles in a suspended ceiling grid with a 1200mm insulation strip across the partition.

Attenuation	CAC & $D_{n,c,w}$ 45	ASTM E413-10
--------------------	--	---------------------

The ceiling attenuation class of C Max Combo Plus ceiling tiles in a suspended ceiling grid with R3.6 insulation across the entire ceiling (EarthWool Ceiling Batt).

Attenuation	CAC & $D_{n,c,w}$ 52	ASTM E413-10
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** Acoustic Performance re-tested in New Zealand labs in 2020*

Absorption Test: E400 Mounting Method

Please note; these results may differ from earlier datasheets



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Wellington East Girls' College - WSP Opus



Marist School - Auckland - DLM Architects

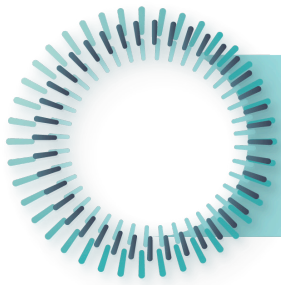


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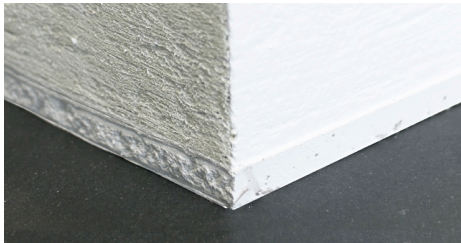
PLEASE NOTE THAT SOME TILES MAY HAVE A LEAD TIME. CONTACT US FOR LEAD TIME OR ALLOW 12 WEEKS FOR DELIVERY. MINIMUM ORDER QUANTITIES MAY APPLY



C MAX IMPACT COMBO

High Performance Acoustic Sports Tile

INDENT ONLY



- The C Max Impact Combo + Sports Sound Panel is thick glass wool tile with a strong impact-resistant fibre glass face and an attenuating layer behind (This is adhered on site). This combination results in a tile with an extremely high Noise Reduction Coefficient (NRC) combined with a high Ceiling Attenuation Class (CAC).
- The tile exceptionally high acoustic properties for both absorption and attenuation: the high Noise Reduction Coefficient (NRC) will reduce reverberation time and the mineral fibre backer blocks noise from the ceiling plenum (such as rain noise). This is an ideal tile for gymnasiums where sound transfer is a concern.
- Due to its unique strong impact resistant fibre glass face, it is ideal for gymnasiums, sports centres, schools and community halls. It can withstand significant impact.
- This product is constructed from 90% dry felt resin bonded glass-wool, utilizing longer fibres in a compact fibre arrangement. The non-absorbent, non-water soluble design gives C Max Impact improved durability when compared to mineral fibre.
- Suspend C Max Impact Combo + Sports tiles in a standard CBI two way grid system. Use custom Robo clips to prevent tiles from dislodging.
- Can be ink-jet printed with custom designs and logos.
- Available in a selection of colours on indent – standard colour is white.

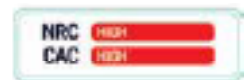
EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, C Max meets the Greenguard Emission Certificate standard.




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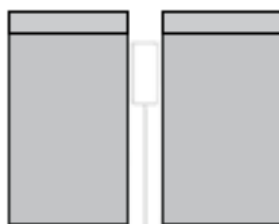


TEST DATA	RESULT	TEST METHOD
Absorption (ISO 354)	NRC 0.90	ASTM 423-17
	SAA 1.02	ASTM 423-17
	α_w 0.85	ISO 11654 – 2002
Attenuation (ASTM E1414-11a)	CAC 46	ISO 717-1
	$D_{n,w}$ 46	ASTM E413-10
Light Reflectance	LR > 85% + (White Panel Only)	
Density (glass fibre) - 38mm	105kg/m ²	
Density (compressed fibre) - 6mm	1055kg/m ²	
Combined Weight	10.8kg/m ²	
Fire Test - ISO 5660 Parts 1&2	 Group 1-S	Cone Calorimeter NZBC C/AS1-AS27

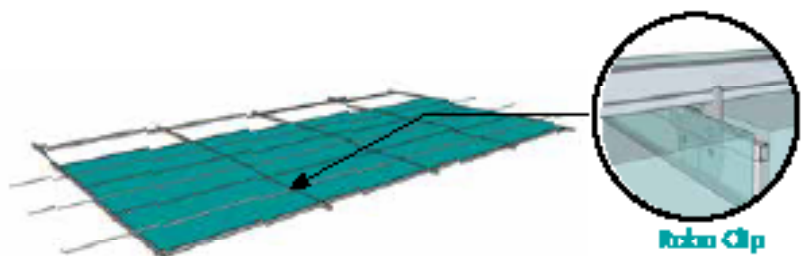
Available on Indent - MOQ and lead time applies

- SIZE**
 44mm or 47mm Depth Square Edge x (600 x 1200)
 (600 x 600)
 Other sizes available on request
- COLOURS**
 White
 Black, Blue, Grey, Caramel
- INSTALLATION**
 Designed to fit into a standard 24mm two way exposed grid. Use Robo-Clip detail to prevent tiles from dislodging.

EDGE DETAIL



Square Edge 24mm Grid



Robo-Clip

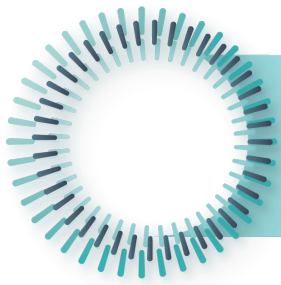
See Installation guide for details



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C MAX REFLECT

Reflective Gypsum Tile



Designers must consider where to place absorption material to reduce reverberation times and where to use reflective surfaces to ensure that - where applicable - a speaker's voice is clearly projected to the people in the room. Immediate reflection of sound waves carries the voice into the space and are essential for good speech intelligibility. C Max Reflect has an extremely low Noise Reduction Coefficient to aid direct reflections.

Advantages:

- To add reflective surfaces: enhancing direct reflections of sound
- Suitable for use in classrooms, lecture halls and where early reflections are desired.
- Can be combined with other tiles in the C Max range (Absorb, Combo, Direct Fix) to achieve optimum acoustics while maintaining a monolithic look
- Tiles should be installed in accordance with the grid manufacturers instructions.




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TEST DESCRIPTION	RESULT	TEST METHOD
Absorption	NRC 0.10	ASTM C423
	SAA 0.12	ASTM C423
	α_w 0.25	ISO 11654: 1997
Attenuation (ASTM 1414-11a)	CAC 43	ASTM 413-10
	D_{ncw} 40	ASTM 413-10
Light Reflectance	LR 87% +	
Density	1000kg/m ³	
Weight	7.2kg/m ²	
Fire Test - ISO 5660 Parts 1&2	 Group 1-S	Cone Calorimeter NZBC C/AS1 – AS27

SIZE

7mm Depth Square Edge, [1200 x 600] [600 x 600]

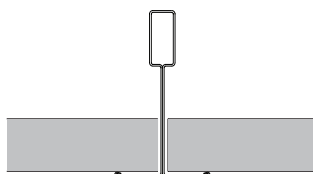
To suit 15 or 24 mm grid patterns

Other sizes available on request.

COLOUR

White

EDGE DETAIL





Tauranga Airport - Jasmax



Above Your Space - Christchurch - AE Architects



Offices - Christchurch - Buchan Group



Marist School - Auckland - DLM Architects

HARMONY



VENUS



NEW NDF



FINE FISSURED

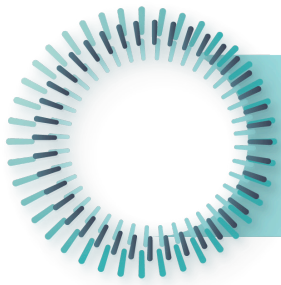


DAI LOTONE



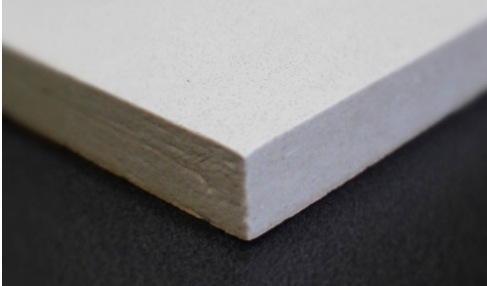
A photograph of a modern building's interior, featuring glass railings and a high ceiling. The image is overlaid with a semi-transparent white rectangle containing text. Teal-colored decorative lines, resembling stylized sound waves or architectural elements, are scattered across the image.

DAIKEN Acoustic Ceiling Tiles



DAIKEN HARMONY

Acoustic Suspended Ceiling Tile



Daiken Harmony Acoustic Ceiling Tiles have monolithic white face with a very subtle sandy fibre texture. The clean monolithic look is an ideal aesthetic choice for many commercial interior space requirements. The surface is specifically engineered to provide high absorption (NRC) to reduce reverberation time while the density of the mineral fibre provides good attenuation performance across the ceiling plenum. This versatile mineral fibre ceiling tile is able to meet most standard acoustic specifications.

- Fine, monolithic texture
- High light reflectance
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and meets Cleanroom ISO Class 3.
- High sound absorption qualities, which reduces reverberation time, and a medium Ceiling Attenuation Class (CAC) to reduce sound transfer through the ceiling plenum.
- Suitable for use in offices, education centres, lobbies, reception areas call centres and commercial interiors.
- Mineral Fibre tiles are not only non-combustible, but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 50° - 99% relative humidity without visible sag when used with a T&R Interior Systems brand suspension system.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.

Made with 76% recycled content.



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TEST DESCRIPTION	RESULT	TEST METHOD
Absorption	NRC 0.70 ASTM C 423	
	α_w 0.70 ASTM C 423	
Attenuation	CAC 37 (500 - 4000 Hz)	ASTM E 413
Weight	19mm: 5.3 kg/m ²	
Light Reflectance	LR 1 75% +	BS 8493:2008
Fire Test - ISO 5660 Parts 1&2	Group 1-S	BRANZ Cone Calorimeter
Relative Humidity	RH 99%	NZBC C/AS1 – AS27
Thermal Conductivity	0.045 kcal/mh ° C	JIS A 1412
Est. R-Value (m ² k/w)	R0.5	

SIZE

19mm Depth Square Edge [1200 x 600] [600 x 600]
 [1200 x 300]*
 19mm Depth Reveal Edge [1200 x 600] [600 x 600]
 [1200 x 300]*

To suit 15 or 24 mm grid patterns

*Available on Indent. Other sizes available on request.

COLOUR

White

EDGE DETAIL



Reveal Edge



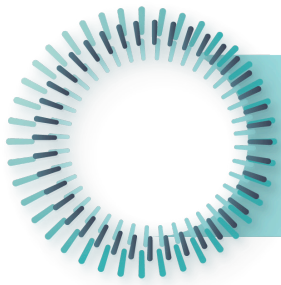
Square Edge



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DAIKEN VENUS

Mineral Fibre Acoustic Suspended Ceiling Tile



Daiken Venus is a white mineral fibre ceiling tile with a stippled texture and scattered pinhole finish.

- The Venus tile has a medium Noise Reduction Coefficient (NRC) and a medium Ceiling Attenuation Class (CAC) to help reduce reverberation time and prevent sound transfer through the ceiling plenum.
- Cost is middle of the range.
- A very versatile tile - Suitable for application in a variety of areas such as libraries, hotel lobbies and entrance halls, shops and other commercial interiors.
- Daiken Mineral Fibre Ceiling tile materials are not only non-combustible but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 40° - 99% relative humidity without visible sag when used with a T&R Interior Systems brand suspension system.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.




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NRC MED
CAC MED

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption	NRC 0.45	ASTM C 423
	α_w 0.45	ISO 11654
	SAA 0.43	ASTM C 423
Attenuation	CAC 36	
Weight	15mm: 4.2kg/m ²	
Light Reflectance	LR 1 75% +	ASTM C 523
Relative Humidity	RH 99%	
Fire Test	Group 1 – S	BRANZ Cone Calorimeter NZBC C/AS1- AS27
		
Thermal Conductivity	0.045 kcal/mh ° C	JIS A 1412
Est. R-Value (m ² k/w)	R0.3	

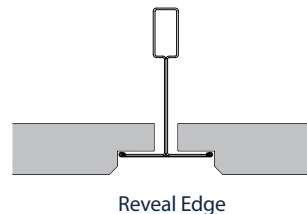
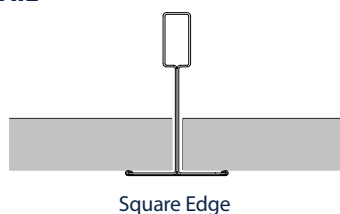
SIZE

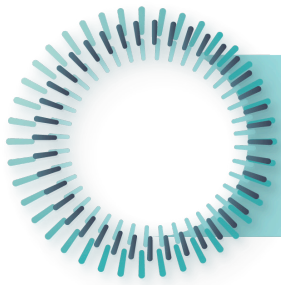
15mm Depth Square Edge x [1200 x 600]
15mm Depth Reveal Edge x [1200 x 600] [600 x 600]
To suit 15 or 24 mm grid patterns.
Other sizes available on request.

COLOUR

White

EDGE DETAIL





DAIKEN NEW NDF

Mineral Fibre Acoustic Suspended Ceiling Tile



Daiken New NDF Mineral Fibre Acoustic ceiling tile has a non-directional fissured clean white surface.

- Daiken New NDF has a medium Noise Reduction Coefficient and medium Ceiling Attenuation Class to help reduce reverberation time and to prevent sound transfer through the ceiling plenum
- New NDF is the most economical tile in the Daiken Range.
- The New NDF tile has been used in NZ for twenty years and is still available for supply and ongoing maintenance. They are favoured for their durability and ease of handling.
- This is the ceiling contractors most favoured commodity panel.
- Daiken Mineral Fibre Ceiling tile materials are not only non-combustible but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 40° - 99% relative humidity without visible sag when used with a T&R Interior Systems brand suspension system.

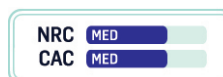
EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.




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TEST DESCRIPTION	RESULT	TEST METHOD
Noise Reduction Coefficient	NRC 0.55 - 0.60	ASTM C 423
Ceiling Attenuation Class	CAC 36	ASTM E 413
Weight	15mm: 4.2kg/m ²	
Light Reflectance	LR 1 75% +	ASTM C 523
Fire Test - ISO 5660 Parts 1&2	 Group 1-S	BRANZ Cone Calorimeter
		NZBC C/AS1 – AS27
Relative Humidity	RH 99%	
Thermal Conductivity	0.045 kcal/mh ° C	JIS A 1412
Est. R-Value (m ² k/w)	R0.3	

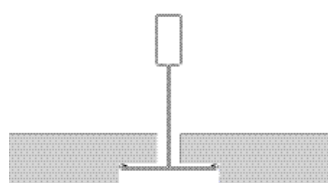
SIZE

15mm Depth Square Edge x [1200 x 600]
 15mm Depth Reveal Edge x [1200 x 600] [600 x 600]
 To suit 15 or 24 mm grid patterns
 Other sizes available on request.

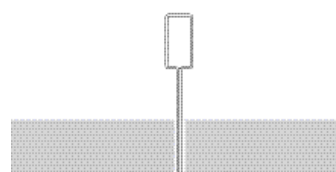
COLOUR

White

EDGE DETAIL



Reveal Edge



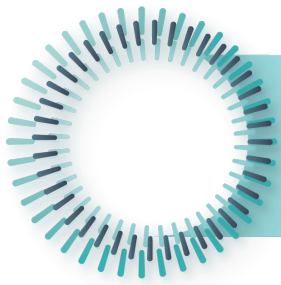
Square Edge



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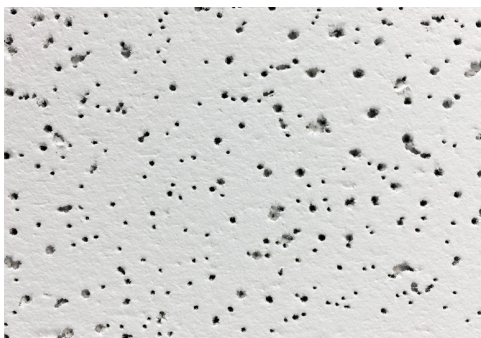
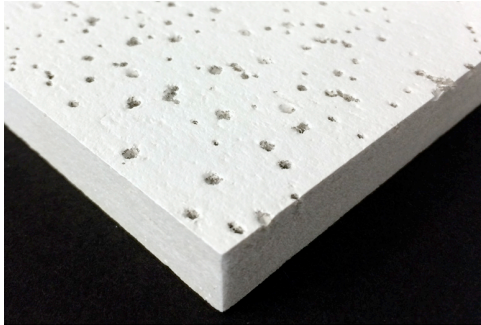
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DAIKEN FINE FISSURED

Mineral Fibre Acoustic Ceiling Tile



Daiken Fine Fissured Mineral Fibre Acoustic ceiling tile has a non-directional fissured clean white surface.

- The tile has a medium Noise Reduction Coefficient and medium Ceiling Attenuation Class to help reduce reverberation time and to prevent sound transfer through the ceiling plenum
- Fine Fissured is an economical tile in the Daiken Range.
- The Fine Fissured tiles are favoured for their durability and ease of handling.
- Daiken Mineral Fibre Ceiling tile materials are not only non-combustible but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 40° - 99% relative humidity without visible sag when used with a T&R Interior Systems brand suspension system.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.



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NRC MED
CAC MED

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption (ISO 354)	NRC 0.45	ASTM C423 - 99
	α_w 0.45	ISO 11654
	SAA 0.47	ASTM C423 - 99
Attenuation (ASTM E1414-11a)	CAC 35	ISO 717-1
	$D_{n,C,W}$ 35	ISO 717-1
Weight	15mm: 4.2kg/m ²	
Light Reflectance	LR 1 75% +	ASTM C 523
Fire Test - ISO 5660 Parts 1&2	Group 1-S	BRANZ Cone Calorimeter NZBC C/AS1 – AS27
Relative Humidity	RH 99%	
Thermal Conductivity	0.045 kcal/mh °C	JIS A 1412
Est. R-Value (m ² k/w)	R0.3	



SIZE

15mm Depth Square Edge x [1200 x 600]

15mm Depth Reveal Edge x [1200 x 600] [600 x 600] on indent only

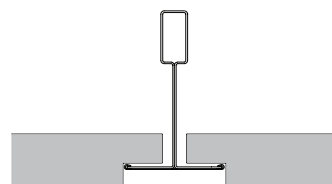
To suit 15 or 24 mm grid patterns

Other sizes available on request.

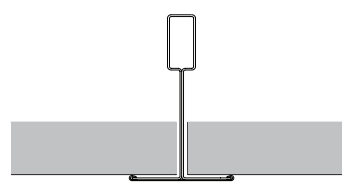
COLOUR

White

EDGE DETAIL



Reveal Edge



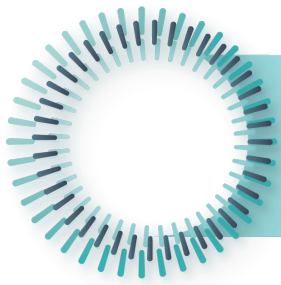
Square Edge



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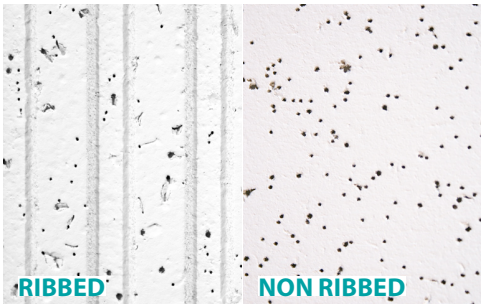
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DAIKEN DAI LOTONE

Staple and Glue Direct Fix Ceiling Tile



Daiken Dai Lotone is a high density tongue and groove mineral fibre ceiling tile with a white painted finish designed for direct fix applications to new and existing gypsum board or timber battens. No additional painting required.

- Daiken T&G ceiling tiles have superior noise absorption.
- A mid-range tile.
- Daiken Dai Lotone Ceiling tiles are manufactured to produce porous properties with a low specific gravity and therefore exhibits efficient thermal insulation and sound absorption qualities, while resisting sound transmission more effectively than glass fibre products.
- Effective thermal insulation (more than 6 times gypsum board).
- Due to its high density and fine grained substrate, Daiken can achieve unique and high quality detailing in their tiles. This is reflected in the Rib 501 pattern.
- Daiken T&G ceiling tiles have outstanding fire resistance.
- Daiken Mineral Fibre Acoustic Ceiling materials are not only non-combustible but is less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 40° - 98% relative humidity without visible sag.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken “Excel – Tone MR” mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard. Fire Tested – BRANZ 1- S



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NRC **HIGH**
CAC **LOW**

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption Direct Fix	NRC 0.45	ASTM C423
	SAA 0.58	ASTM C423
	α_w 0.45	ISO 11654: 1997
On 35mm battens	NRC 0.50	ASTM C423
CAC	Depends on existing ceiling	ASTM E 413
Light Reflectance	LR 1 (over 80%)	ASTM C 523
Weight	Rib: 3.65kg/m ² Non-Rib: 2.72kg/m ²	
Moisture Content	1.5%	JIS A 6307
Thermal Conductivity	0.045 kcal/mh °C	JIS A 1412
Est. R-Value (m ² k/w)	9mm: R0.2 12mm: R0.25	
Fire Test	Group 1-S	BRANZ Cone Calorimeter BC C/AS1-AS27



SIZE

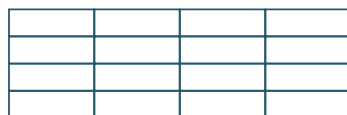
Non Rib: 9mm Depth x [606 x 303]
Rib: 12mm Depth x [606 x 303]
Other sizes available on request.

COLOUR

White

INSTALLATION

Tiles should be installed in accordance with the manufacturers / distributors recommendations. The use of clean hands or gloves is recommended when installing tiles. We recommend the ashlar pattern for aesthetic appeal and ease of installation.



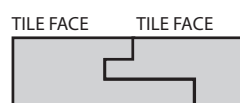
Line Through Pattern



Ashlar Pattern

EDGE DETAIL

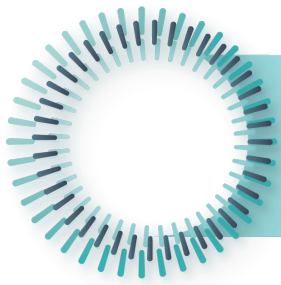
Tongue and Groove



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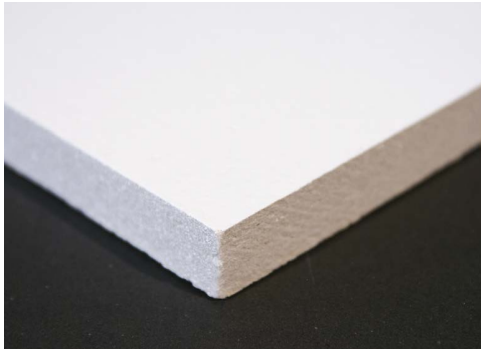
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DAIKEN PLAIN

Mineral Fibre Acoustic Suspended Ceiling Tile



Daiken Plain Acoustic Mineral Fibre Ceiling tiles are non-fissured, with a smooth white painted surface.

- The Plain tile has a good Ceiling Attenuation Class (CAC) to prevent sound transfer through the ceiling plenum.
- Cost is middle of the range.
- This tile blends with most interiors and is an excellent replacement for Pinex Tiles. It is suitable for use in offices, shops and other commercial interiors where a white monolithic look is desired.
- A favoured tile with Contractors due to its robust dust free friendly nature.
- Daiken Mineral Fibre Acoustic Ceiling tile materials are not only non-combustible, but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 40° - 99% relative humidity without visible sag when used with a T&R Interior System brand suspension system.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.



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NRC	MED
CAC	MED

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption	NRC 0.15	
Attenuation	CAC 36	ASTM E 413
Weight	4.2kg/m ²	
Light Reflectance	LR 1 (over 75%)	ASTM C 523
Fire Test	Group 1 –S	BRANZ Cone Calorimeter NZBC C/AS1 – AS27
Relative Humidity	RH 99%	
Thermal Conductivity	0.045 kcal/mh ° C	JIS A 1412
Est. R-Value (m ² k/w)	R0.3	



SIZE

15mm Depth Square Edge and Reveal Edge x [1200 x 600] [600 x 600]

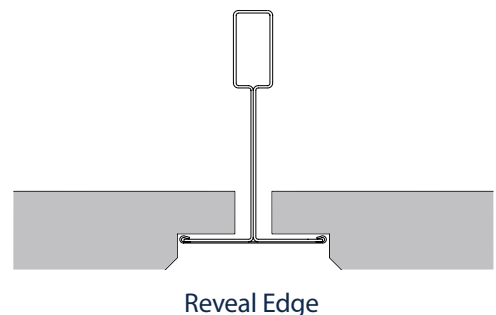
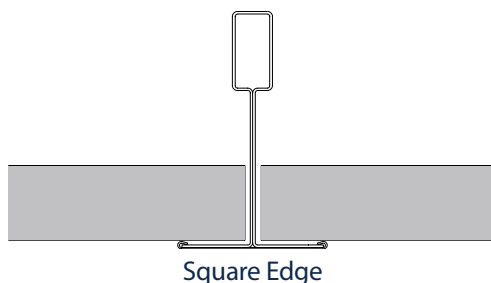
To suit 24 mm grid patterns

Other sizes available on request.

COLOUR

White

EDGE DETAIL



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Transpower - Boulcott Street - Jasmax & Architecture +



MBIE - Porirua Call Centre - King & Dawson

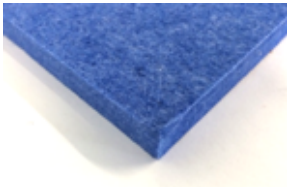


Radiology - Auckland - ASC Architects



Dawson House - New Plymouth - Catalyst & Jacksons Architects

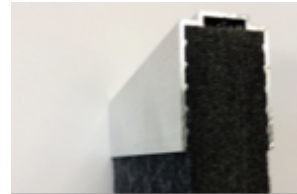
FOCUS



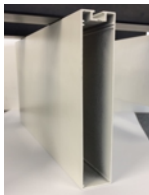
FOCUS 3D



FOCUS BAFFLE



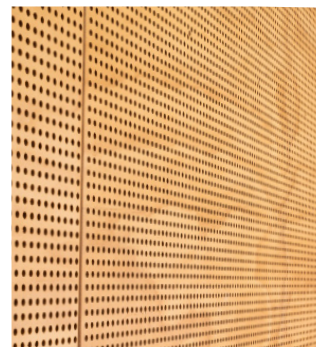
ALUMINIUM
BAFFLE



SILENCE
CLOUD

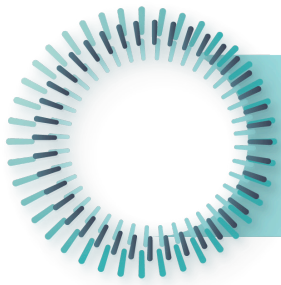


BOSK
PANELS



A modern interior space featuring a wall covered in large, white, geometric acoustic panels. Two black, dome-shaped pendant lights with wooden stems hang from the ceiling. A green plant is visible in the lower left corner, and a white desk is partially visible at the bottom.

Innovative Acoustic Solutions



FOCUS

Acoustic Polyester Panel



Focus is an innovative acoustic panel with a sleek polyester texture. The sheets have been acoustically tested for sound absorption performance and perform very well with an airgap behind. The panel is a baseboard for a large variety of innovative and acoustically absorbent products.

- Focus panels come in a range of solid colours.
- The panels are 9mm and available in 18mm thickness as a laminated panel. Applications include panels for walls and ceilings, workstation panel construction, wall panelling, suspended cloud panels and other decorative features.
- Easy to suspend or direct fix.
- The surface is receptive to staples for education and office applications and will self-heal.
- It has been tested and meets Cleanroom ISO Class 3 requirements. Focus panels can therefore be used in medical applications. Because polyester not affected by moisture, mould or mildew the panels will not rot or deteriorate in high humidity environments such as an aquatic centre.

Focus panels are a high quality baseboard and thus can be manufactured to bespoke designs to suit architectural requirements:

- Focus panels can be cut with a range of cutting processes: options include circles, ovals, clouds, hexagons, grooved panels, decorative trellis panels and other complex shapes.
- Can be folded into 3D geometries.
- Can be printed with corporate logos or images, and etched or cut for branding and bespoke options.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - Focus Polyester Panels are made with 60% recycled materials.



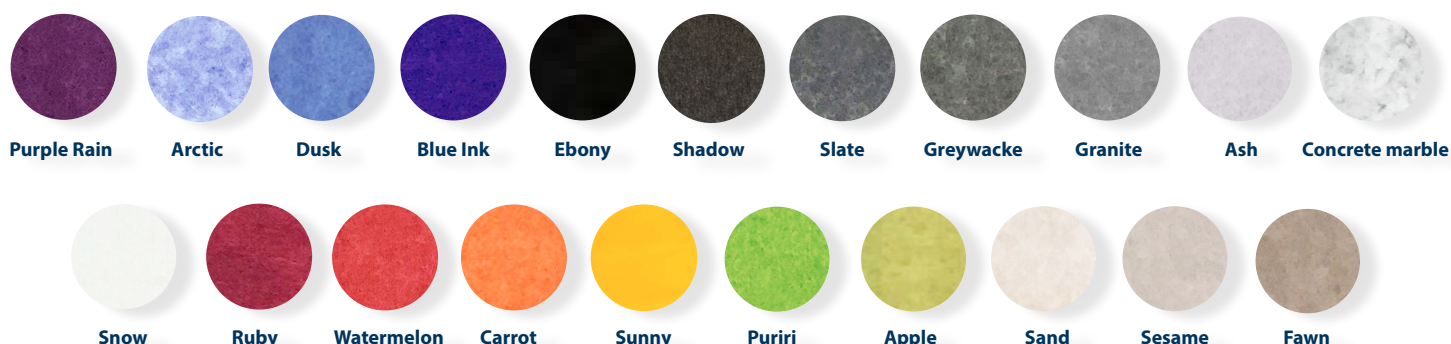
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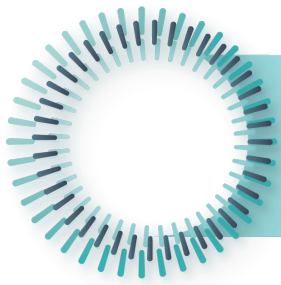
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TEST DESCRIPTION	RESULT	TEST METHOD
Sound Absorption (9mm)	0.30 NRC with no airgap	ISO 354:2003
	0.60 NRC with 38/45mm airgap*	ASTM C423 - 99
	0.85 NRC with 200mm airgap	ISO 354:2003
Sound Absorption (18mm)	0.90 NRC with 38/45mm airgap*	ISO 354:2003
*Tested October 2018		
Fire Test - ISO 9705	Group 1- S	ISO 9705
Cleanroom Suitability	ISO Class 3	ISO 14644.3:2015
Abrasion - Taber Type Test	Rating 6 (1000 Cycles)	GMW 3208-2007
Density	210kg/m ³	
Composition	100% Polyester Fibre (PET). 60% recycled content	
Weight	9mm: 1.9 kg/m ² 18mm: 3.8 kg/m ²	
R-Value (m ² k/w)	9mm: R0.2	
SIZE	Comes in various sizes but standard blanks are 1220 x 2440mm Job specific cuts available	
COLOUR	Available in a range of colour finishes	

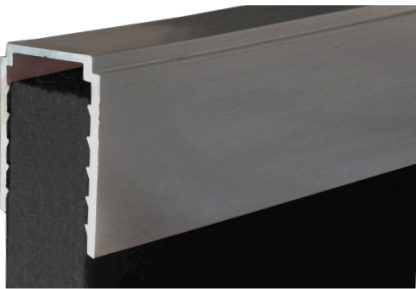


Please confirm colour selection by referring to a physical sample



FOCUS BAFFLE

Acoustic Polyester Ceiling Baffle



The Focus Baffle is a design-friendly, elegant linear ceiling, made up of polyester profiles. Focus polyester baffle sheets have been acoustically tested for sound absorption performance and perform very well.

Appropriate for high-end airports, malls, offices, hotel foyers, museums and commercial areas.

- The baffles are aesthetically pleasing and easy to maintain. Unlike timber, the baffle doesn't warp.
- Available in variable drops. Offers excellent design potential.
- Unique and client specific in its suspension system options.
- Comes in length of 2.44 metres. It can be cut down to size on site. We do not recommend joining baffles. A negative detail between lengths is recommended for a clean look. Can be direct fixed and suspended.
- High quality with design flexibility, thus can be manufactured to bespoke designs to suit architectural requirements.



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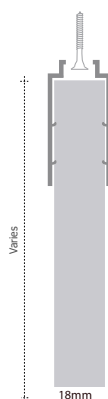
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TEST DESCRIPTION	RESULT	TEST METHOD
Noise Reduction Coefficient	NRC 0.9 (Varies depending on configuration)	ISO 9705
Density	210kg/m ³	
Weight of fabric	18mm: 4.5kg/m ²	
Fire Test - ISO 5660 Parts 1&2	Group 1-S	Cone Calorimeter

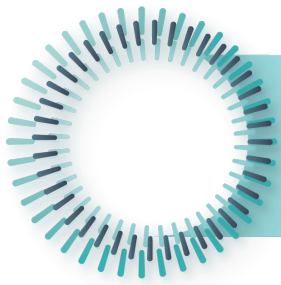
SIZE

18mm with with variable drops available.



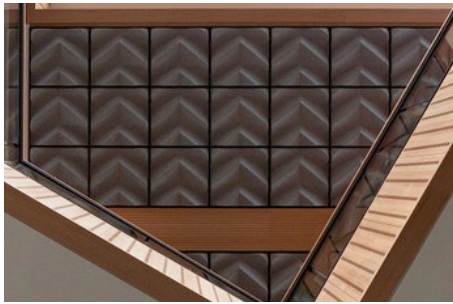
COLOUR



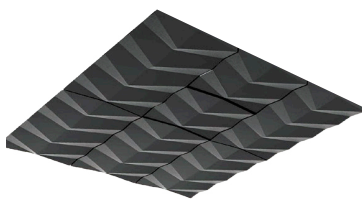


FOCUS 3D

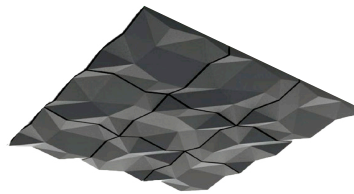
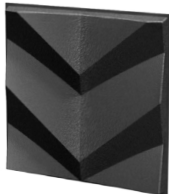
3D Acoustic Ceiling Tile (Suspended Grid System)



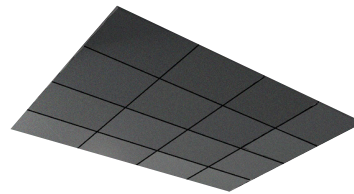
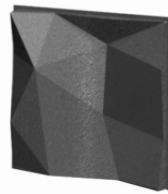
- Suitable for high end commercial and education spaces.
- Suitable for use in a suspended ceiling grid. Available in 600 x 600.
- Can be fitted to existing ceiling grid.
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and meets Cleanroom ISO Class 3.
- Elegant and contemporary designs to add interest to most interior spaces.
- Focus 3D perfectly compliments the Floc 3d range and can be used to add contrast to a woollen Floc array.



CHEVRON



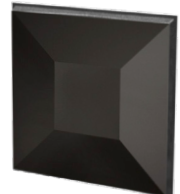
FRACTILE



FLAT



VIENNA



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NRC **HIGH**
CAC **LOW**

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption (ISO 11654)	NRC 0.80	ASTM C423 - 99
	α_w 0.75(L)	ISO 11654
	SAA 0.79	ASTM C423 - 99
Fire Test	Group 1-S	ISO 9705:1993
Cleanroom	ISO Class 3	ISO 14644.3:2015

SIZE

600 x 600 ceiling tiles

DESIGNS

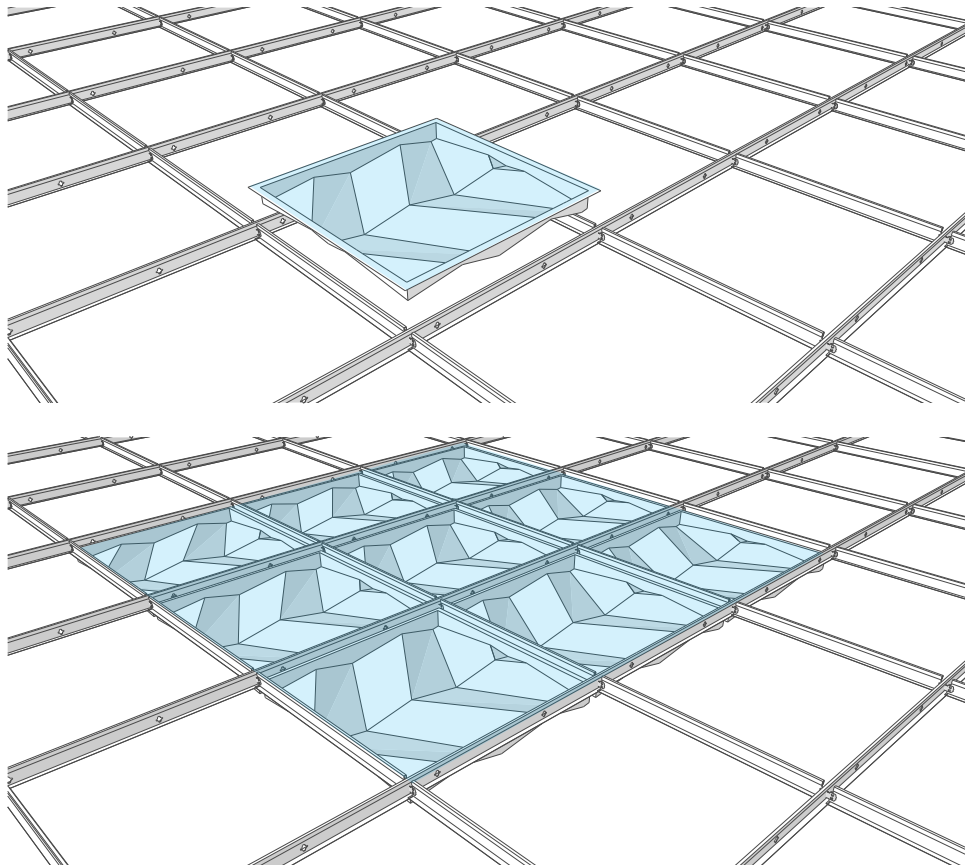
Available in Fractile, Chevron and Flat tiles

Contact T&R Interior Systems for Custom Designs

COLOUR

Available in FOCUS polyester colours.

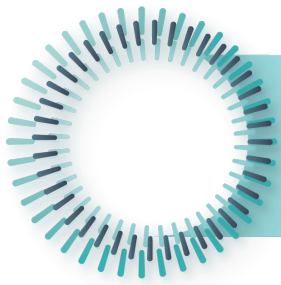
Autex Workstation colours (MOQs apply)



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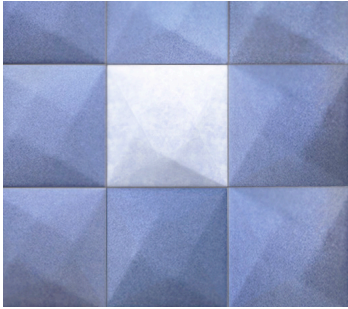
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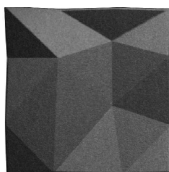


FOCUS 3D

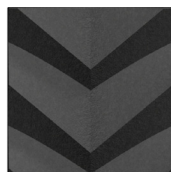
3D Acoustic Tile (Direct Fix)



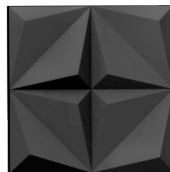
- Striking acoustic solution suitable for cafes, restaurants, offices, boardrooms and other commercial interiors.
- Ideal to use as a retrofit solution to reduce reverberation time in most commercial and education spaces.
- Direct fix to ceilings and walls.
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and meets Cleanroom ISO Class 3.
- Elegant and contemporary designs to add interest to most interior spaces.
- Focus 3D perfectly compliments the Floc 3D range and can be used to add contrast to a woollen Floc array.



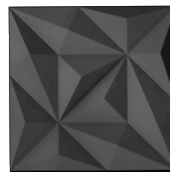
FRACTILE



CHEVRON



SIREN



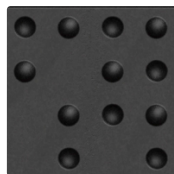
SPECTRUM



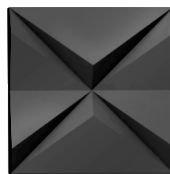
ATLAS



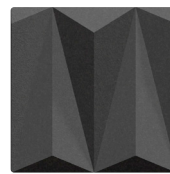
PIVOT



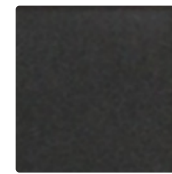
DIMPLE



GEMINI



SWISH



FLAT



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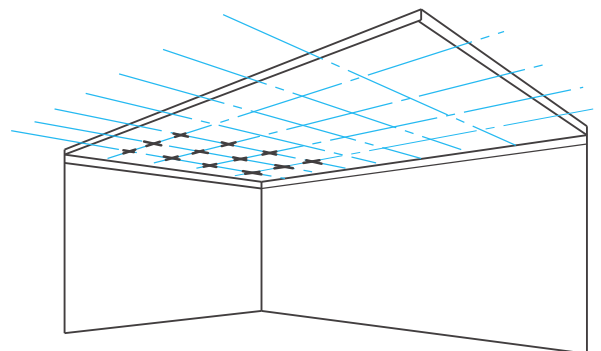
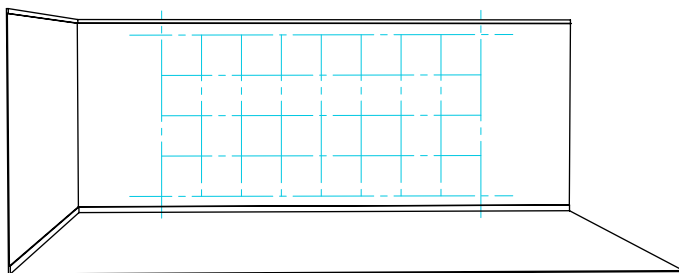
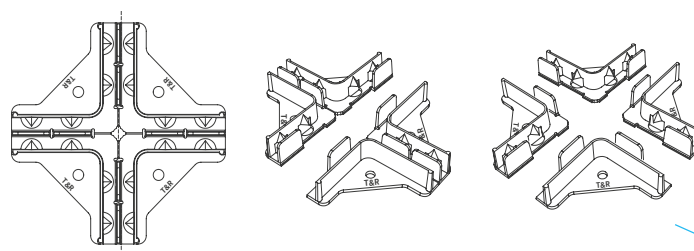
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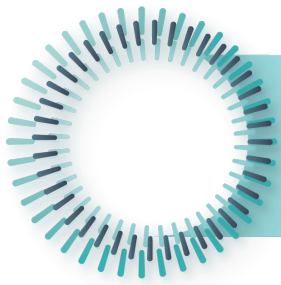
NRC	HIGH
CAC	LOW

TEST DESCRIPTION	RESULT	TEST METHOD
Absorption		
Focus 3D Direct Fix	NRC 0.6	ASTM C423 - 99
Focus 3D Direct Fix (tested with 400mm airgap)	NRC 0.8	ASTM C423 - 99
Focus 3D Direct Fix with 25mm Absorbent back	NRC 0.9	
	SAA 1.07	
Fire Test -	Group 1S	ISO 9705:1993
Cleanroom	ISO Class 3	ISO 14644.3:2015

Tested October 2018

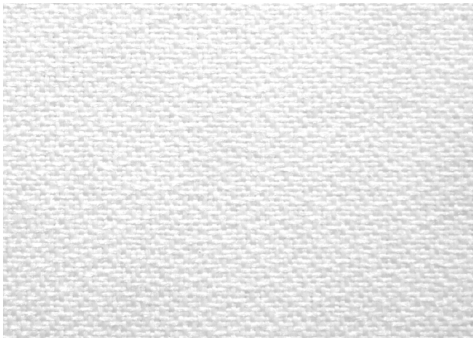
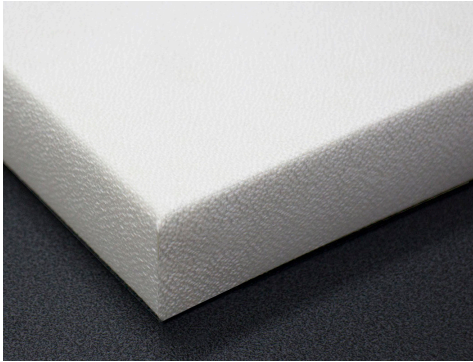
SIZE	500 x 500 (Clip System for Direct Fix)
DESIGNS	Available in various designs Contact T&R Interior Systems for custom designs
COLOUR	Available in FOCUS polyester colours.





C MAX SILENCE CLOUD

Acoustic Sound Panel



C Max Silence Cloud Sound Panel is a 40mm fabric wrapped glass wool acoustic ceiling or wall panel.

- Exceptionally high acoustic properties.
- Mid-range priced panel suitable for cafes, restaurants, offices, boardrooms, classrooms, cafes and as a retrofit solution to reduce reverberation time in most commercial and education spaces.
- Suitable to use below an existing ceiling and as wall panels.
- An architecturally attractive and acoustically effective design solution.
- Digital customisation option – print your own creative graphics onto the panel.
- Easy installation.
- Prefabricated.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, C Max Silence Cloud Sound Panels meet the Greenguard Emission Certificate standard.




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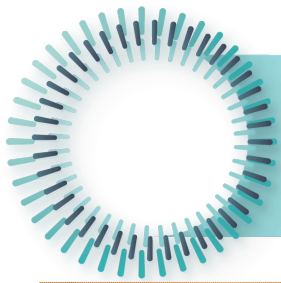
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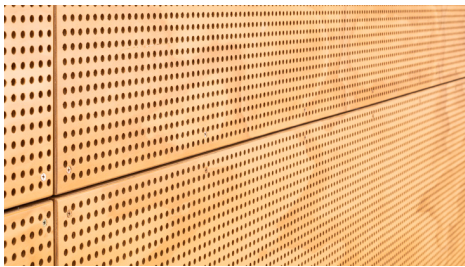
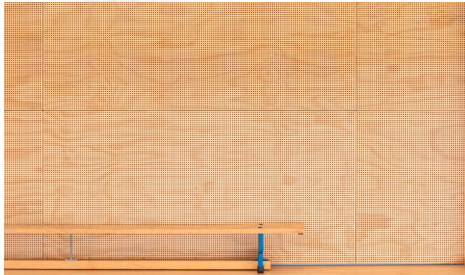
TEST DESCRIPTION	RESULT	TEST METHOD
Noise Reduction Coefficient	NRC 0.90	ASTM C423
With zero air gap (direct fix)	α_w 0.90	ISO 11654
	SAA 1.05	ASTM C423
Light Reflectance	LR 87% + (White Panel only)	
Density	120kg/m ³	
Weight	4.8kg/m ²	
Fire Test ISO 5660 Part 1		
Blank Panel		Group 1-S
Standard Fabric		Group 2-S

- SIZE**
 40mm Depth x [2200 x 1200] [1200 x 600].
 Other sizes available on request. MOQ applies.
 - COLOUR**
 White. Other colours can be colour matched.
 - INSTALLATION**
 See installation brochure for further details.
- Direct Fix
- Adhere brackets to wall by mechanical fixing and manoeuvre panel on to the fixing brackets.
- Ceiling Suspension
- Suspend from the ceiling using wires and cable locks, or use magnets to adhere directly to the structure.
- Light Fitting
- Holes may be cut to allow lighting to be suspended through panels.



BOSK PANELS

Timber Acoustic Panels

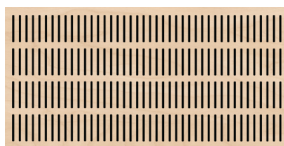


Bosk panels are perforated and slotted sheets in a variety of finishes which achieve a high level of absorptive acoustic performance. They are ideal for use in commercial interiors, lobbies, gymnasiums, restaurants, schools and residential applications. Bosk is highly durable and available in a many iterations to achieve the desired design aesthetic.

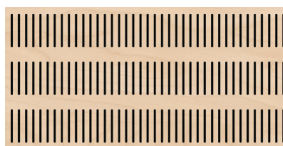
- Constructed in sheet form for easy use as a wall and ceiling lining, and also available in tile form for placement in a suspended ceiling system.
- The panels are sourced from the Prime Panel and Bestwood ranges from NZ Panels Group and all their sheet options in 12mm or thicker are available for perforation.
- Bosk Panels meets Group 1-5 fire test requirement; or Group 3 test requirements.
- The panels come with standard black acoustic backing material and additional polyester acoustic insulation is available. Variable NRC ranges from 0.25 up to 0.8 dependant on perforation.
- Bosk panels are available in a range of perforation patterns or bespoke options. Standard sheet sizes are 1200 x 2400mm for full sheets or 600 x 600mm and 600 x 1200mm for ceiling panels.



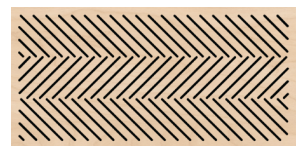
STILT NRC 0.75



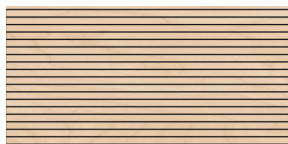
KAKA NRC 0.75



KIWI NRC 0.75



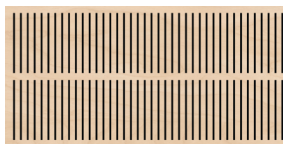
FANTAIL NRC 0.75



TAKAHE NRC 0.45



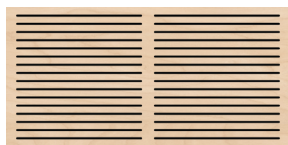
WEKA NRC 0.75



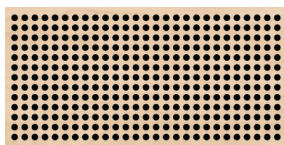
PUKEKO NRC 0.65



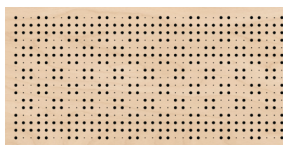
STITCHBIRD NRC 0.40



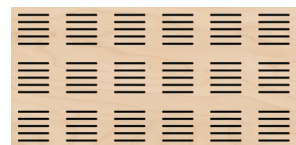
KERERU NRC 0.75



TUATARA NRC 0.75



RURU NRC 0.35



KEA NRC 0.75

For the full range refer to our website or the Bosk Catalogue.



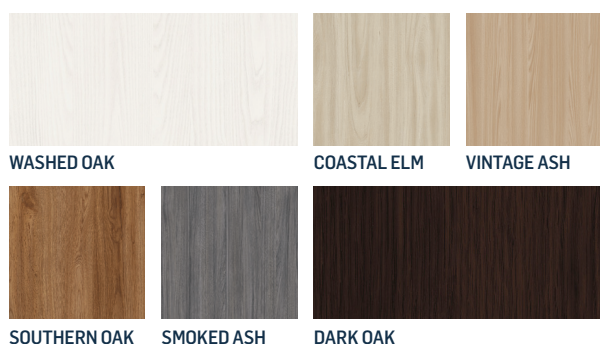
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COLOURS

Bestwood and Prime Melamine are a favourite of New Zealand interior designers, architects and joiners. Their range of easy care, pre-finished, panels are available in a large range of finishes with their iconic timber aesthetic. Inspired by the warmth and nature beauty of timber.



PrimePanels^{NZ}



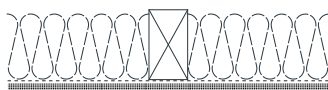
For the full range refer to our website or the Bosk Catalogue.

FIRE TEST REPORT

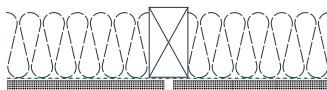
FR MDF Group 1-S Fire Rating ISO 5660: 2002



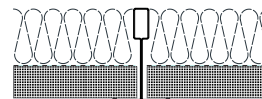
VEE JOINT



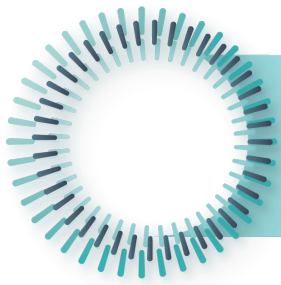
EXPRESSED JOINT



SUSPENDED CEILING



Bosk panels are a wood based product so consideration needs to be taken regarding expansion and contraction- especially over large areas.



ALUMINIUM BAFFLE

Suspended Ceiling baffle



- The T&R Aluminium Baffle is an elegant linear ceiling, made up of extruded aluminium profiles.
- Has a sleek and seamless appearance. Appropriate for airports, malls, offices, hotel foyers, museums and commercial areas.
- The baffles are aesthetically pleasing and easy to maintain. Unlike timber, the baffle doesn't warp. Powdercoating options allow for a timber look.
- Can be installed with integrated lighting options; Gridlux can be incorporated into the aluminium extrusion and the luminaires are flush with the base of the baffle.
- 500+ Resene and Dulux powdercoat colours, 15 MetWood finishes, bespoke and others available upon request. An antimicrobial coating can be applied for when used in hygiene and medical spaces.
- Unique and client specific in its suspension system options.
- Add acoustic absorption behind for good reverberation control/high NRC.

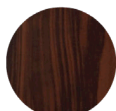
MetWood Finishes



Black Bean



Darkest Gum



Dark Riverwood



Washed Riverwood



Plywood



Washed Teak



Honey Manuka



Oak Broom



Beachwood



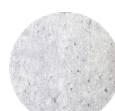
Tawa



Kahikatea



Concrete



White Concrete



Grey Marble



White Marble



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TEST DESCRIPTION

RESULT

Noise Reduction Coefficient

Depends on acoustic material behind

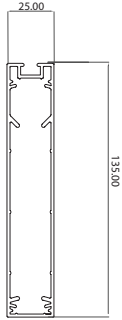
Weight

Depends on configuration

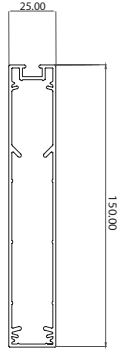
Luminaires

Able to incorporate GridLux

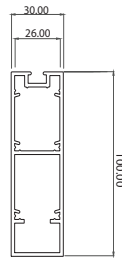
135mm x 25mm
Baffle



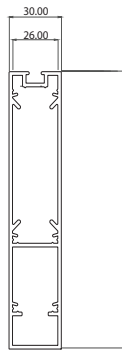
150mm x 25mm
Baffle



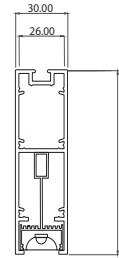
100mm x 30mm
Baffle



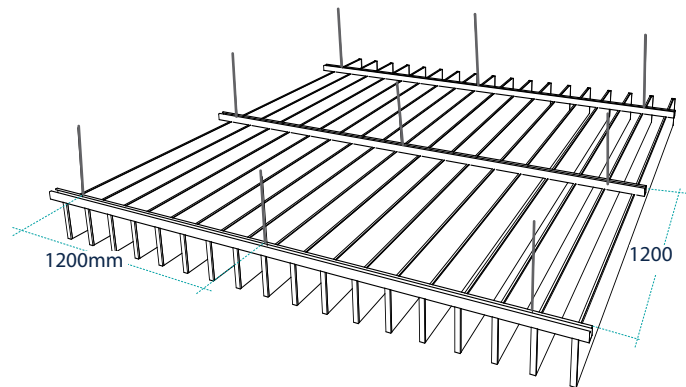
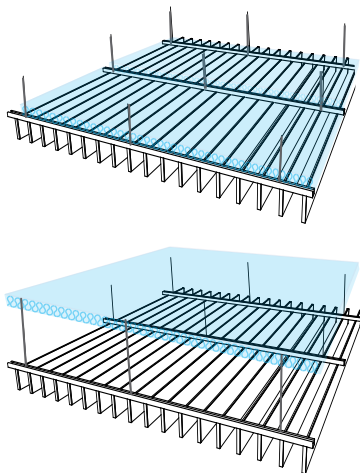
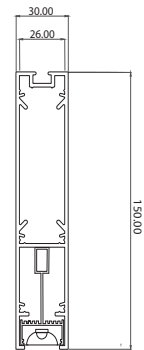
150mm x 30mm
Baffle



100mm
Baffle with GridLux



150mm Baffle
with GridLux



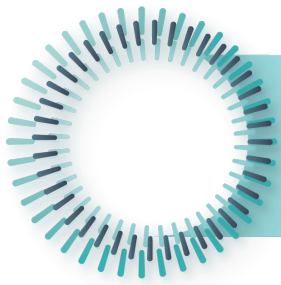
Poyester Insulation above the baffle (either directly on top or in the ceiling plenum) will create an acoustically absorbent ceiling.



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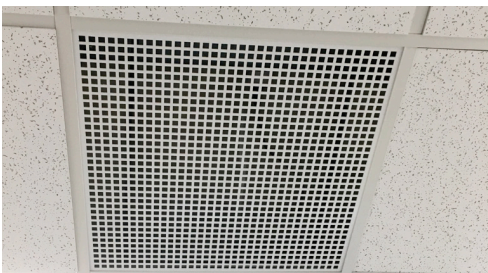
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METACOUSTIC

Bespoke Metal Ceiling Tile



The Metacooustic range offers bespoke metal ceilings. A variety of designs are available (including a perforated metal pan ceiling tile). Metacooustic offers high quality, immense flexibility with high aesthetic appeal. Tiles are made to order and have as an option black Soundtex Acoustic Cloth backing to enhance the sound absorption.

Made from high quality aluminium, they are Ideal for use in swimming pools, airports, railway stations, sports halls and other large commercial spaces due to their high durability.

- Metacooustic tiles are made to order (Indent Item) to maximise flexibility of design as well as aesthetic effect. It is possible to have the tiles manufactured in variable sizes to suit architectural requirements. A range of these tiles (square edge only) are made in New Zealand, for shorter lead times.
- The Sound Absorption Coefficient (NRC) is dependent on the size and configuration of the perforations and can be increased with additional insulation in the plenum.
- Perforation can be square or round and punched to variable densities for different aesthetic and acoustic preferences.
- Metacooustic tiles are compatible with 24mm exposed metal suspended ceiling grid systems.
- Metacooustic tiles have adequate integrity to carry approved down lights and service detailing.



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COST	HIGH
NRC	MED
CAC	LOW

TEST DESCRIPTION

RESULT

Noise Reduction Coefficient

Standard NRC of 0.6 (Changes depending on configuration and size of perforations). Can be increased to NRC of 0.8 with added insulation backing.

SIZE

Standard sizes: 600x300mm, 600x600mm, 1200x600mm, 2400x1200mm
Available in sheets up to 3000 x 1200mm

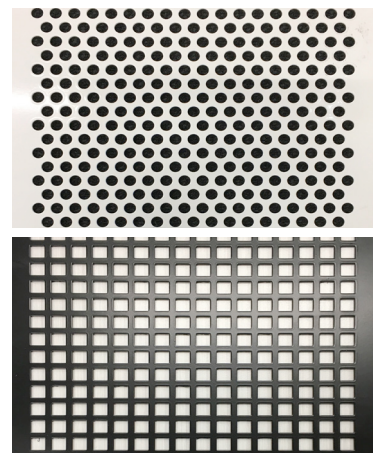
Other sizes and shapes available on request.

COLOUR

Powdercoat Colours or Mill finish

EDGE DETAIL

Fully Concealed
One way exposed
Rebated
Square Edge (made in NZ)
(20mm border non-perforated)





Commercial Bay - Warren & Mahoney



Auckland Museum Butterfly Exhibition - WORKSHOP E



Greenwood Roche - Wellington - Custance
David Hamilton - photographer



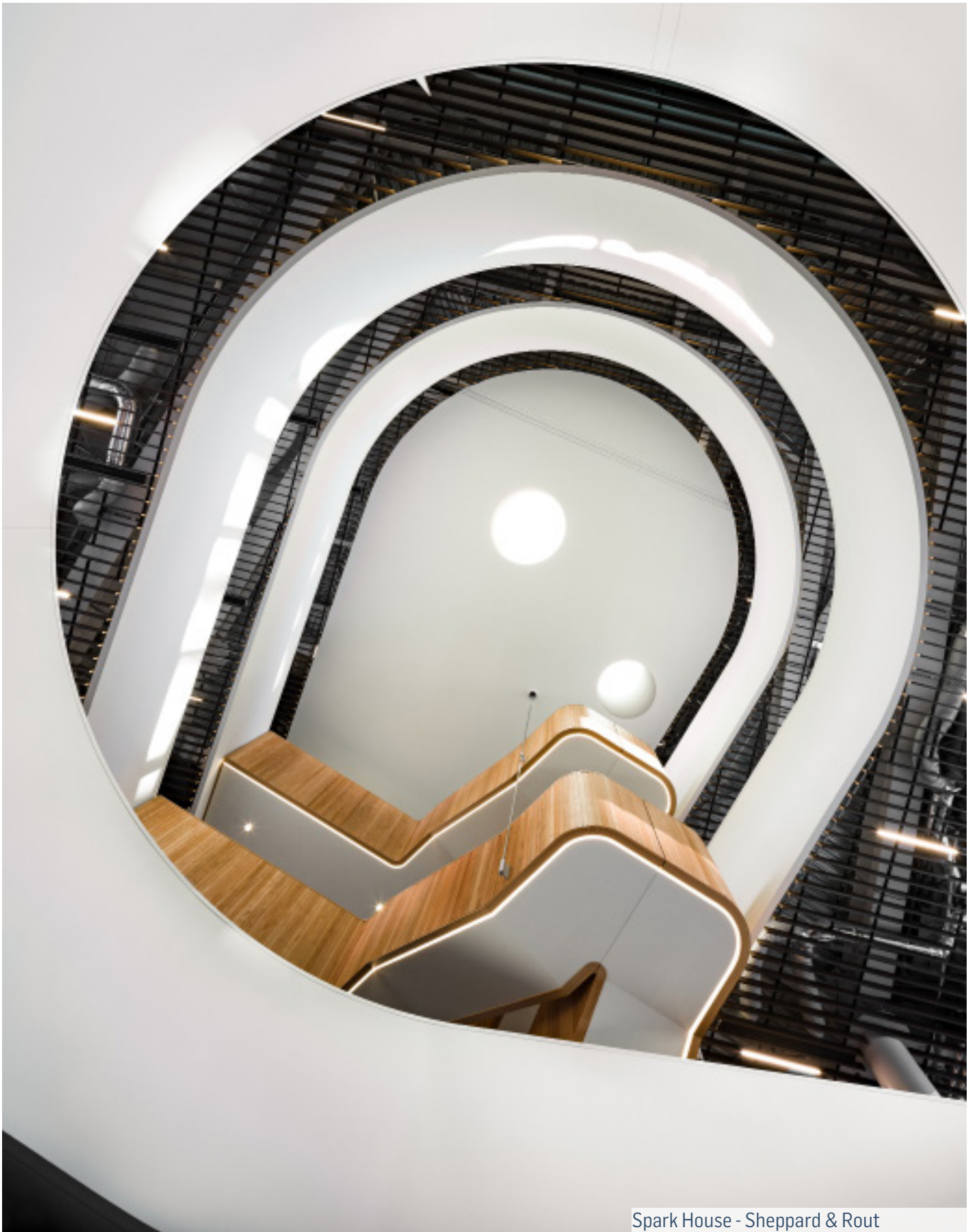
ZQ Studio - NZ Merino - Gaze Construction



Rowdy Kitchen - Christchurch

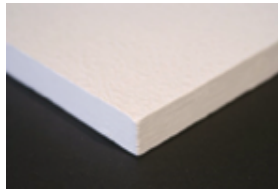


Everil Orr, Auckland - Chow Hill

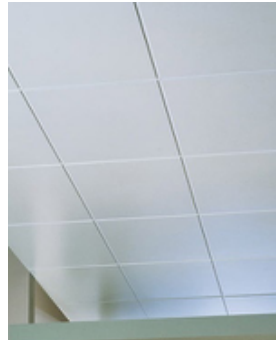
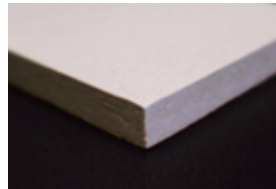


Spark House - Sheppard & Rout

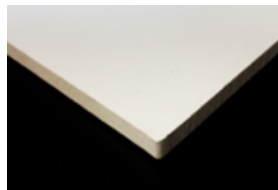
PHONIC CLEAN



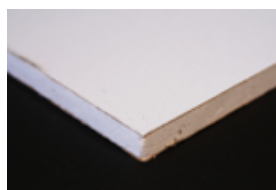
HARMONY
HOSPITONE



FENTA



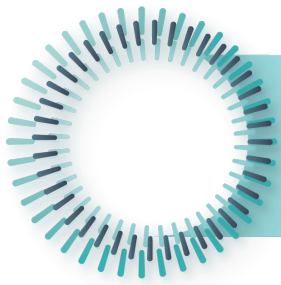
GYPSUM VINYL



Please note that in addition to the tiles listed here: Focus Panels have achieved a ISO Class 3 Cleanroom Rating and can be used in hygiene applications.

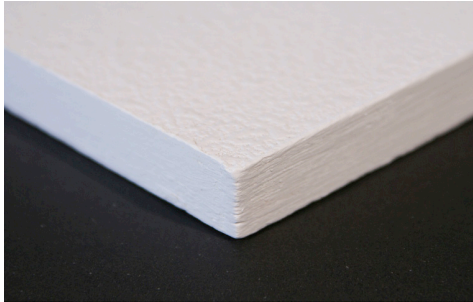
Hygiene Applications





PHONIC CLEAN

Acoustic Hygiene Ceiling Tile



C Max Phonic Clean is a Hydrophobic treatment applied to the C Max range of ceiling tiles. It is a glasswool ceiling tile with a water-repellent, white painted, monolithic, pre-finished face. Antimicrobial coating available.

- Suitable for use in medical centres, hospitals, laboratories and other commercial interiors.
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and the tile meets Cleanroom ISO Class 3.
- Water repellent face; can be wiped and cleaned, won't allow moisture penetration.
- Wipeable and cleanable face; stains don't stick.
- Optional foil backing to allow positive pressure in ceiling plenum.
- High Noise Reduction Coefficient. Reduces reverberation time and improves speech intelligibility. This is very important for patient well-being. Good acoustics promote faster recovery times.
- Lightweight tile (non-Combo) is ideal for seismic design.

5 year warranty to withstand conditions up to 40°C and 99% relative humidity without visible sag. Tiles should be installed in accordance with NZS1170.5 and the grid manufacturer's instructions

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT -
For Green Star rated projects, CMX meets the Greenguard Emission Certificate standard.




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TEST DESCRIPTION**RESULT****TEST METHOD**

For Acoustic performance for different tiles, see the relevant C Max datasheets. This test data shows 15mm with foil backer.

Absorption (ISO 354)	NRC 0.80	ASTM C423
(with Foil Backer)	SAA 0.87	ASTM C423
	α_w 0.75	ISO 11654: 1997
Attenuation (ASTM E1414-11A)	CAC 26	ASTM E413-10
	$D_{n,C,w}$ 26	ISO 717-1
Light Reflectance	LR 84%+	ASTM E1477-98
Density	100kg/m ³	
Weight	15mm: 1.5kg/m ²	
Fire Test - ISO 5660 Part 1	 Group 1-S	Cone Calorimeter NZBC C/VM2 Appendix A
Cleanroom	ISO Class 3	ISO 14644.3:2015
Moisture Rate	≤ 1 %	JC/T 670 – 2005
Thermal Resistance	≥ 0.4 (m ² -k/w)	ASTMC 423
Est. R-Value (m ² k/w)	15mm: R0.4	

COLOUR

White

SIZE

Depth: 15mm

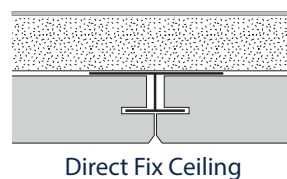
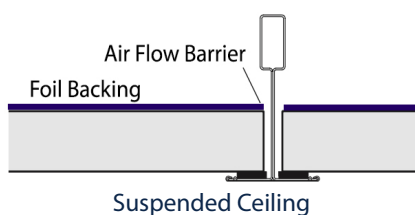
Square Edge, Concealed Edge

[1200 x 600]

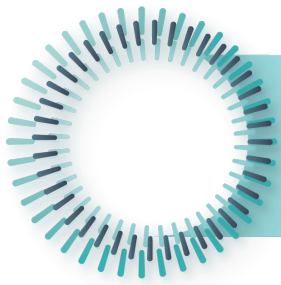
To suit 24 mm grid patterns

Available on indent as C Max Direct Fix. See C Max Direct Fix datasheet

Available on indent as C Max Combo + (with attenuating backer) See C Max Combo + datasheet

EDGE DETAIL

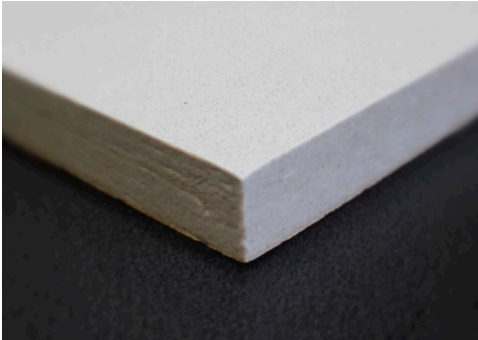
Phonic Clean also available with anti-bacterial



DAIKEN HARMONY HOSPITONE

Medical Acoustic Suspended Ceiling Tile

INDENT ONLY



Daiken Harmony Hospitone medical acoustic ceiling tiles have a monolithic white face with a very subtle sandy fibre texture. The monolithic look is an ideal aesthetic choice for many medical spaces. As well as the antimicrobial surface, the face is specifically engineered to provide high absorption (NRC) to reduce reverberation time while the density of the mineral fibre provides a good attenuation across the ceiling plenum. This versatile mineral fibre ceiling tile is able to meet most standard acoustic specifications in medical centres.

- Antimicrobial face
- Fine, monolithic texture
- High light reflectance
- Tested to the principal requirements in accordance 14644.1:2015 and ISO 14644.3:2015 and meets Cleanroom ISO Class 3.
- High sound absorption qualities, which reduces reverberation time, and a medium Ceiling Attenuation Class (CAC) to reduce sound transfer through the ceiling plenum.
- The Smooth Faced Acoustic Ceiling materials are not only non-combustible, but also less likely to emit gas or smoke, or to melt, break or become deformed under normal fire conditions.
- 30 year lifetime system warranty to withstand conditions up to 50° - 99% relative humidity without visible sag when used with a T&R Interior Systems brand suspension system.

EMISSIONS, SUSTAINABILITY AND THE ENVIRONMENT - For Green Star rated projects, Daiken mineral fibre tiles were independently verified and meet the Greenguard Emission Certificate standard.

Made with 76% recycled content.



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TEST DESCRIPTION

BACTERIA	SPECIMEN	VIABLE BACTERIA COUNT/SPECIMEN (24 HOURS LATER)
Eschericia Coli (3.6×10^4)	Regular tile (non-hospitone coating)	1.1×10^2
	Hospitone coating	10 +
	Bacteria specimen	2.6×10^6
Pseudomonas aeruginosa (4.5×10^4)	Regular tile (non-hospitone coating)	7.8×10^6
	Hospitone coating	10
	Bacteria specimen	2.2×10^6
MRSA mejishirin methicillin resistant staphylococcus aurei (3.8×10^4)	Regular tile (non-hospitone coating)	10
	Hospitone coating	10 +
	Bacteria specimen	1.2×10^6

Test Method: drop each bacteria on specimen and stock - culture 24hrs at 36°C and measure the bacteria count: Tested by Japan Food Research Laboratories



TEST DESCRIPTION	RESULT	TEST METHOD
Absorption	NRC 0.70	ASTM C 423
Attenuation	CAC 37	ASTM E 413
Weight	19mm: 5.3 kg/m ²	
Light Reflectance	LR 1 + 85%	BS 8493:2008
Fire Test - ISO 5660 Parts 1&2	Group 1-5	BRANZ Cone Calorimeter
Relative Humidity	RH 99%	
Cleanroom	ISO Class 3	ISO 14644.3:2015
Thermal Conductivity	0.045 kcal/mh ° C	JIS A 1412
Est. R-Value (m ² k/w)	R0.5	

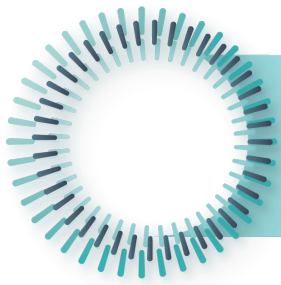
SIZE

19mm Depth Square Edge [1200 x 600] [600 x 600] [1200 x 300]*
 19mm Depth Reveal Edge [1200 x 600] [600 x 600] [1200 x 300]*
 To suit 24 mm grid patterns
 *Available on Indent. Other sizes available on request.

COLOUR White

EDGE DETAIL





FENTA

Hygiene Ceiling Tile

INDENT ONLY



Product/Technical Data **Sheet Fenta Ceiling Tiles**

PRODUCT CHARACTERISTICS

Fenta Ceiling Tiles are a 4.5 mm and 6mm thick fibre cement base tile that weigh 5.04 kg. The Tiles are coated with a two-pack white (non yellowing) polyurethane finish suitable for use in a 1200x600 modular suspended two-way ceiling grid system.

COMPOSITION

Surface Coating

- Face Surface – a primer coat and two coats Polyurethane full gloss finish.
- Reverse face and edges – sealed with primer coat

Base

- Cellulose fibre
- Portland cement
- Ground sand and water

DURABILITY

Fenta Ceiling Tiles use the patented UltraLight™ Technology – a UV curing process that coats products with a finish of premium quality and outstanding durability.

Within the normal range of applications, the life of the product is limited only by the durability of the supporting structure and the materials used in the fixing.

Fenta Ceiling Tiles have excellent durability, hardness and chemical resistance, and meet all current domestic and overseas hygiene regulations, when installed correctly.

Fenta Ceiling Tiles are:

- Hard wearing and scratch resistant
- Completely impervious to moisture and will not support mould and mildew growth.

- Will not rot and are unaffected by corrosion, borer or vermin.
- Have a high gloss surface – making it easy to clean
- More stubborn marks can be removed with a non-abrasive domestic cleaner. To remove dirt and soap build up, Fenta can be wiped down periodically with Polycell Sugar Soap or kerosene on a damp cloth.

FIRE PROPERTIES

Fenta Ceiling Tiles have been tested by the Building Research Association of New Zealand (BRANZ) to the testing procedures outlined in ISO 5660: (2002). These determine the Group Number Classification in accordance with New Zealand Building Code (NZBC) Verification Method C/VM2 Appendix A.

For the purposes of compliance Fenta Ceiling Tiles were given the Group Number classification **1-S**, the highest level possible in New Zealand Building Code Standards.

Hardiflex, the James Hardie product that Fenta Ceiling Tiles coat with its patented UV technology, will not burn and has the following "Early Fire Hazard Indices" (tested as AS 1530 Part 3 1982).

Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index.....	0
Smoke Developed	0

Maximum service temperature for the base sheet and the coating is 105°C

The Early Fire Hazard Indices of the finished painted sheet are as follows:

Spread of Flame	0
Smoke Developed Index.....	3

MASS & DIMENSIONS

Nominal Dimensions and Mass

Fenta Ceiling Tiles

Tile Length	1195 mm
Tile Width	595 mm
Thickness	4.5 mm and 6.00mm

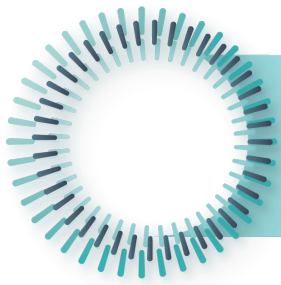
Approximate Mass at EMC = 6.3kg/m²

Note: all dimensions given are subject to manufacturing tolerances and the thickness given is the bottom of this tolerance range.

HANDLING AND STORAGE

Fenta Ceiling Tiles should be stacked on a smooth level surface. Carry ceiling tiles on edge.

It is essential to store under cover and keep dry prior to fixing. Ceiling Tiles are placed in pairs face to face with polythene interleavers.



GYPSUM VINYL

Suspended Ceiling Tile



The T&R Interior Systems Vinyl Foil Gypsum ceiling tile is a versatile, cost effective product that lends itself to a range of suspended ceiling applications. The tiles are supplied in a standard white finish, in a nominal size of 1200 x 600 x 9mm.

Advantages

- Due to the durable and washable finish of the Vinyl Foil tiles they are highly suitable for a multitude of commercial and hygiene applications such as Retail, Fast Food Outlets, Medical and Sports Facilities.
- The moderately embossed facing gives a crisp clean monolithic look which ensures excellent light reflectance.
- Foil backing balances the tile, enhancing its dimensional tolerance whilst increasing thermal properties.
- Tiles should be installed in accordance with the grid manufacturers instructions.




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TEST DESCRIPTION	RESULT	TEST METHOD
Light Reflectance	LR 80% +	
Density	790kgs/m ³	
Weight	7.1	
Fire Test - ISO 5660 Parts 1&2	 Group 1-S	BRANZ Cone Calorimeter NZBC C/AS1 – AS27

SIZE

9mm Depth Square Edge.
[1200 x 600] [600 x 600]
To suit 15 or 24 mm grid patterns
Other sizes available on request.

COLOUR

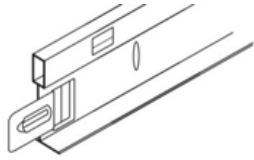
White

EDGE DETAIL

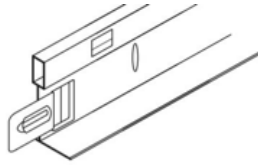


CBI CEILING

15mm

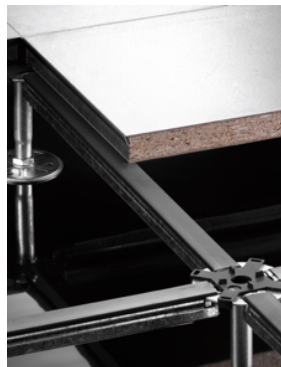
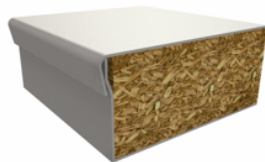


24mm

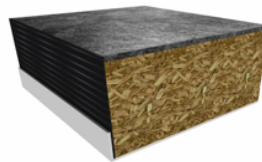



CBI FLOORING

STEEL

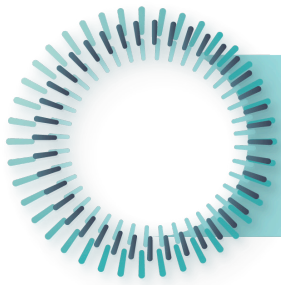


HPL



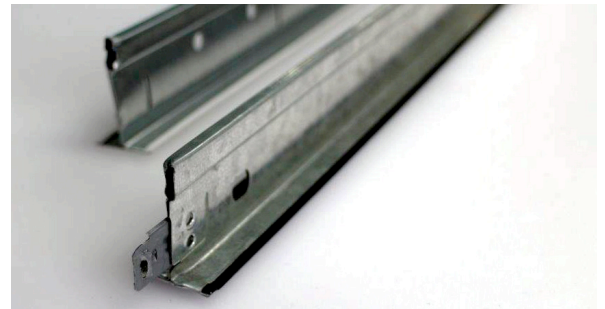
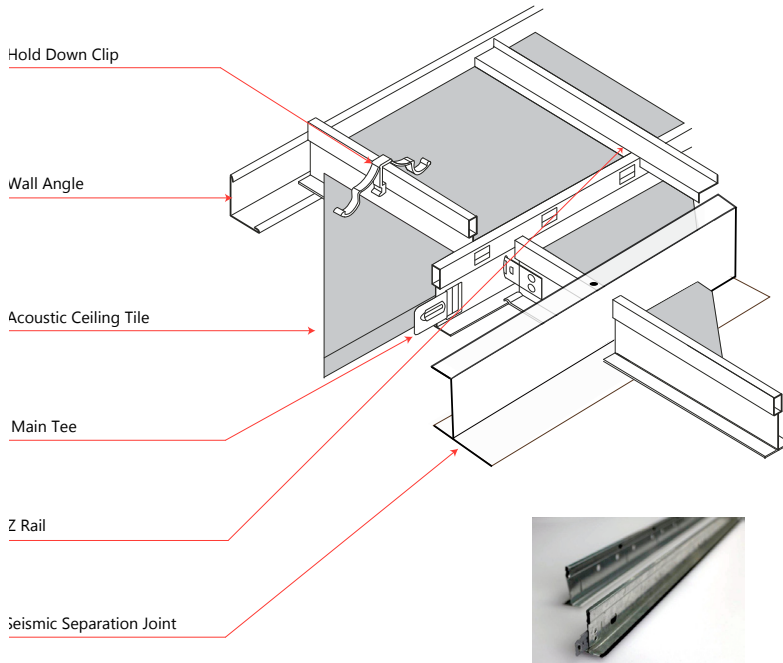


Seismic Design Solutions



CBI GRID

15mm and 24mm Two Way Exposed Grid System



- Heavy duty configuration with a 38mm web height to both Main and Cross Tees.
- Main Tees punched at 100mm centres with first punch at 50mm.
- Convenient punch out to both Web and Bulb for ease of suspension.
- Seismically tested and proven to meet current NZ Standards.
- Compatible with seismic separation joint and Cetram T Bar lighting.
- High quality Italian design and manufacture.
- PS1 and PS4 are available from our consulting Engineer as required.
- Site specific ceilings will be designed to both ultimate and serviceability limit state to meet current NZ Code.

Install main tees so that they are parallel (up/down the incline) with the slope of a raked ceiling. Do not install the main tees perpendicular to the incline as this may lead to grid failure.



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Main Tees:

The Main Tee is manufactured from hot dipped galvanised steel in a double web, balanced tee design, in 3700mm lengths. It is finished with a pre-painted steel cap. The Main Tee is conveniently punched at 100mm centres and includes suspension points in both the bulb and web. Main tees extend from wall to wall and are the primary ceiling support. End splices allow for greater lengths. Slots along the runner side allow cross tee to connect.

Cross Tees:

The Cross Tees are manufactured in the same configuration in 1200mm and 600mm lengths. Lay on edge detail for neatness of installation coupled with resistance to twist. They connect between main tees using interlocking tabs. The high tensile clips ensure a positive locking system for quick installation

Wall Angle:

L-shaped pieces that fasten to the wall and support the ends of the main runners and cross tees.

Z Rail:

A seismic support that suspends the edge of the grid without relying on the perimeter.

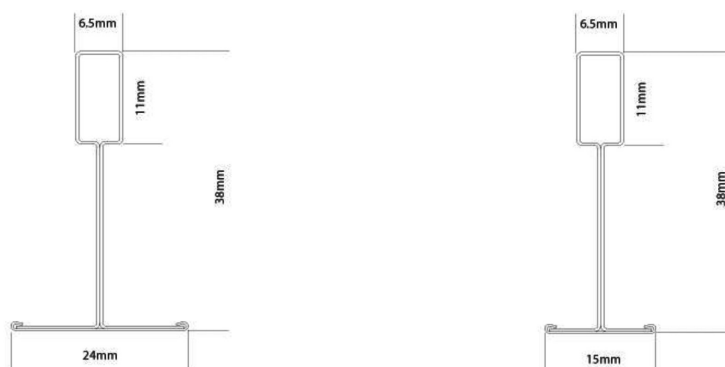
Border:

Cut panels around the perimeter of the room. They should be greater than half of a tile to maintain balance and add visual appeal.

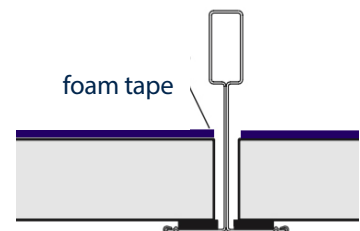
Clips:

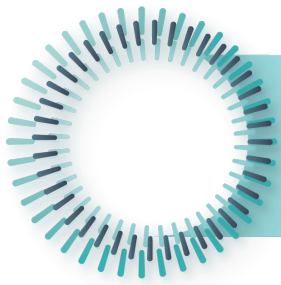
Hold down clips are available as required.

Profile



Air Flow resistance option:
Seated foam tape on the inside of the
24mm grid face.



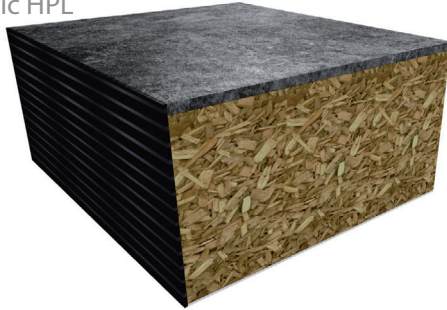


CBI

Access Flooring

Antistatic HPL

↑
38mm
↓



Fully Steel Encapsulated

↑
31mm
↓



Seismically, access floors are a very safe alternative to running heavy equipment in the ceiling plenum. They are a great solution for projects where technical flexibility and frequent modifications of electrical, telephone and/or computer wiring is required.

- Suitable for offices, banks, control stations and open plan office areas.
- The accessible inter-space created by the Access Floor allows for unobstructed alignment of all electrical, hydraulic ducts, computer cabling and telephone wiring.
- T&R standard stock component is a high density wood fibre core panel; with an external covering of Antistatic HPL or Steel Encapsulated panel. Other finishes are available on indent.
- Modular substructure systems support medium weight loads.

TECHNICAL SPECIFICATIONS

PHYSICAL DATA SUMMARY		ANTISTATIC HPL	FULLY STEEL ENCAPSULATED
High Density	720 Kg/m ²		
Fire Reaction	Class A1		
Thickness		38 mm	31 mm
fire reaction UNI EN 13501-1		Bfl-s1	Bfl-s1
fire resistance UNI EN 13501-2		REI 30	REI 30
center of panel - deflection 2.5 mm		4.2 KN	5.3 KN
center of panel - ultimate load		12.0 KN	13.4KN
loading class		6	6



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STRUCTURE

WEIGHT

0.270 kg/pcs

TECHNICAL DATA

Aspects of performance value (UNI 13964 - 2005)

FIRE REACTION

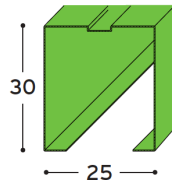
(Under structure) Class A1 DM 10/03/05 DEC. 2000/147/CE

MECHANICAL RESISTANCE

(Under structure) 548.80 N/m² Normal break load

DURABILITY

Protection against corrosion



SYSTEM COMPONENTS

Pedestal

Size

90mm

3.3 pcs/m²



PVC WASHER

Size

90mm

33 pcs/m²

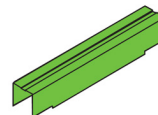


STRINGER

Size

L560mm

6 pcs/m²

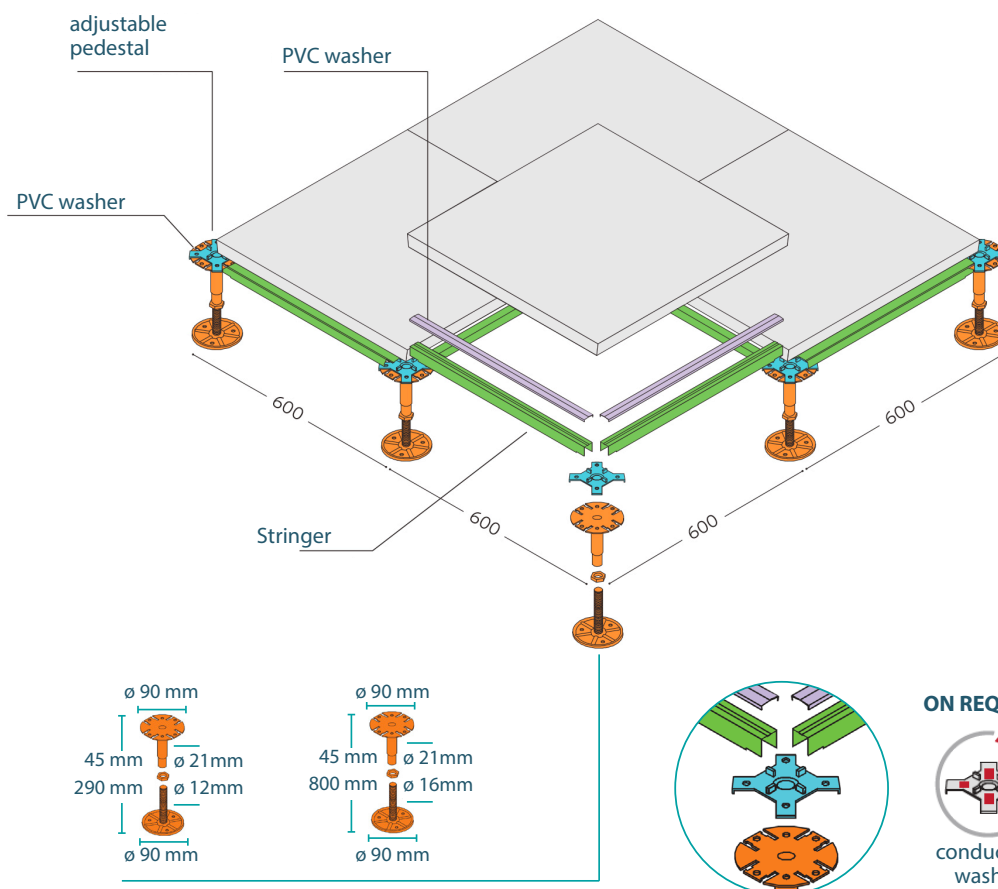
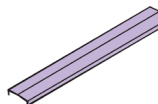


PVC WASHER

Size

L560mm

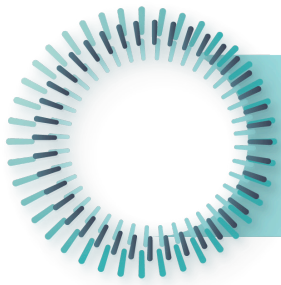
6 pcs/m²



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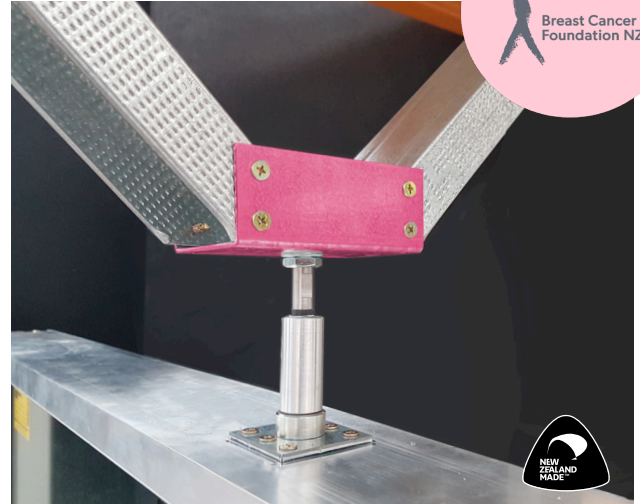
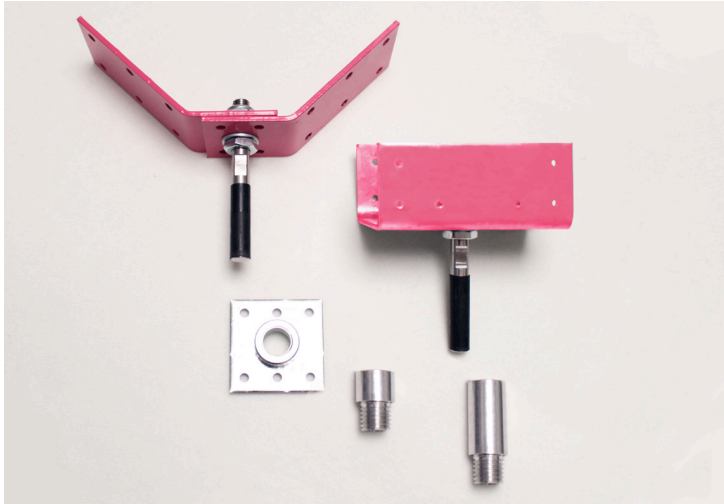
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VERTIBRACE & STRATOBRACE

VertiBrace®



SUPPORTING



All buildings are affected by vertical movement. This movement can be caused by wind and seismic events as well as live/dead loads imposed on the floor above. In large or multi-level buildings this movement can be substantial. When not considered, vertical movement can cause irreversible damage to partition walls and may endanger occupants in the event of a natural disaster.

VertiBrace provides lateral bracing for partial height partition walls and removes the need for deflection headtrack. It prevents many of the issues seen during the Christchurch, Kaikoura and Seddon Earthquakes, helping to ensure occupant safety and limit non-structural partition damage.

The VertiBrace utilises a sliding connection that separates the partition wall from the structure above meaning that any vertical deflection doesn't damage the partition system. When installed, the VertiBrace will allow for +/- 25mm deflection, 50mm total. A taller version is available to accommodate 70mm worth of movement (+/- 35mm).

The VertiBrace cylinder is fitted with an acoustic sleeve which prevents noise as the connection slides. An additional benefit is that this greatly reduces footfall vibrations transferring down through partition walls.

VertiBrace can be fitted to timber, aluminium, and steel headtracks and can be retro-fitted to most existing partitions.

Free MarkUp Service Available

VertiBrace meets the B1 structure provisions in the New Zealand Building Code.
(when designed and installed in full compliance with the Design and Installation Guide)



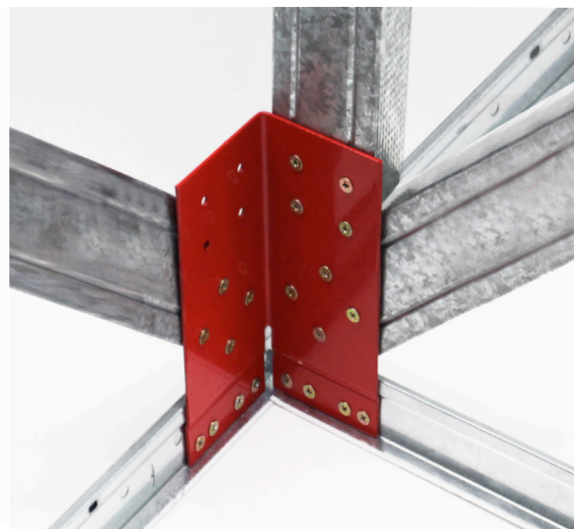
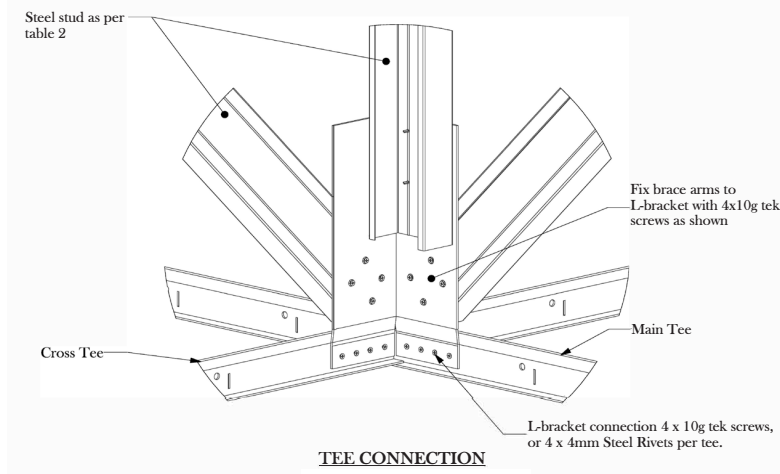
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StratoBrace®



The StratoBrace is designed to lock into a two way suspended grid system in order to increase its ability to withstand lateral loads. It is a simple system that is easy to install. If perimeter fixing is insufficient for the seismic demand, a ceiling must be restrained to the structure above using another method such as StratoBrace. This product provides a tested, strong and effective method to provide lateral restraint.

- The StratoBrace provides a proprietary bracket to attach a compression strut and two orthogonally opposing angle struts to the ceiling grid.
- Its performance has been extensively tested.
- The StratoBrace bracket uses grade 250 steel 2mm thick, its yield strength is 250MPa.
- Use the T&R Seismic Calculator to design a ceiling that complies with the requirements set out in NZS1170.5 (www.tris.co.nz/index/home/Seismic_Calculator)

Please note: The ceiling grid must not be connected to the perimeter wall or frame (See T&Rs Z Rail or seismic wall clip). The gap between the ceiling and the surrounding wall has to be sufficiently large that the ceiling is not damaged by impacts against the wall during an earthquake.

Flexible connections should be used between ceiling-supported equipment and their ducts or pipes that are supported by the structure.

The StratoBrace (when designed and installed in full compliance with the Design Guide (T&R Seismic Suspended Ceiling Calculator) will meet the B1 structure provisions in the New Zealand Building Code.





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