



**AUTEXO**  
Interior Acoustics

**Cube**<sup>TM</sup>  
ACOUSTIC MULTIMEDIA

## HUSH LIGHT

by David Trubridge for IQ Commercial



A watercutter was used to create accurate shapes that connect together

# Cube™

Discover the limitless design flexibility of Cube™; a lightweight and semi-rigid panel that has sound absorbing properties. Designed with solid colour throughout, Cube™ has the potential to be used in a large array of spatial design and interior solutions.

More than just a traditional interior acoustic panel; Cube™ can be employed as a base material for creative solutions where design and aesthetics are important.

Cube™ is made from 100% polyester and manufactured in New Zealand and Australia under Autex's ISO 14001 certified Environmental Management System. Containing a minimum of 65% post-consumer recycled material (PET bottle-flake); Cube™ is completely safe, non-toxic, non-allergenic and non-irritant.

Redefine your environment with Autex Cube™.

### Key Features and Benefits

- Design flexibility without the need for edging or capping, created with solid colour throughout
- Excellent acoustic performance
- Available in a wide range of colours
- Custom colour printing available
- Limitless branding and design possibilities with custom cutting
- Light-weight and easy to handle
- Made from 100% polyester fibre without chemical binders and certified low VOC
- Manufactured using a minimum of 65% post-consumer recycled material
- Highly durable providing long-term stability and performance
- Safe, non-toxic, non-irritant and non-allergenic
- Made in New Zealand and Australia
- Manufactured under ISO 9001 and ISO 14001 certified Quality and Environmental Systems
- Does not contain any Red List chemicals

### Applications

- Decorative and functional acoustic wall covering for education, retail and commercial interiors
- Media for creative solutions
- Acoustic pin-board surface for education and commercial sectors
- Modular room divider for display, privacy and sound absorption
- Free-standing or direct fix acoustic panel

**AUTEX**   
Interior Acoustics





**Cube™** 12mm  
EMPIRE

99 DESIGNS  
MELBOURNE, VICTORIA

# Cube™

FOR COMMERCIAL INTERIORS

As modern commercial offices continue to trend towards open-plan work spaces and simplistic industrial design, the effects of sound reverberation are becoming more apparent. The simplistic but effective idea of incorporating Autex Cube™ into *Breathe Architecture's* solution for 99 Designs' new office has helped them to overcome reverberation and achieve a functional and productive workplace.

Situated adjacent to the bustling Richmond train line and housing a spectrum of working and playing spaces, this project required a robust acoustic strategy to fulfil their sound-control requirements.

To suit the project's social nature, the open-plan design also includes a communal kitchen, café and games space. With coffee machines, grinders and recreational activities contributing to excessive noise, effective acoustic absorption was imperative to the day to day functioning of the work space.

By lining the internal walls of centralised meeting pods with Autex Cube™; *Breathe Architecture* provided 99 Designs with privacy for confidential conversations as well as dampen unwanted background noise; creating a comfortable environment for client meetings. Through further lining the external walls of the meeting pods with Cube™, not only was the reverberation throughout the rest of the office space controlled but the functional pinboard surface was utilised to display upcoming projects and create a talking point in the office.

In addition to achieving ideal acoustic conditions, 99 Designs were pleased that the recycled content of Cube™ matched their views on environmental sustainability.

PHOTOGRAPHY  
Andrew Wuttke

ARCHITECT  
Jeremy McLeod and Fairley Batch  
of *Breathe Architecture*

CONTRACTOR  
FICUS Constructions

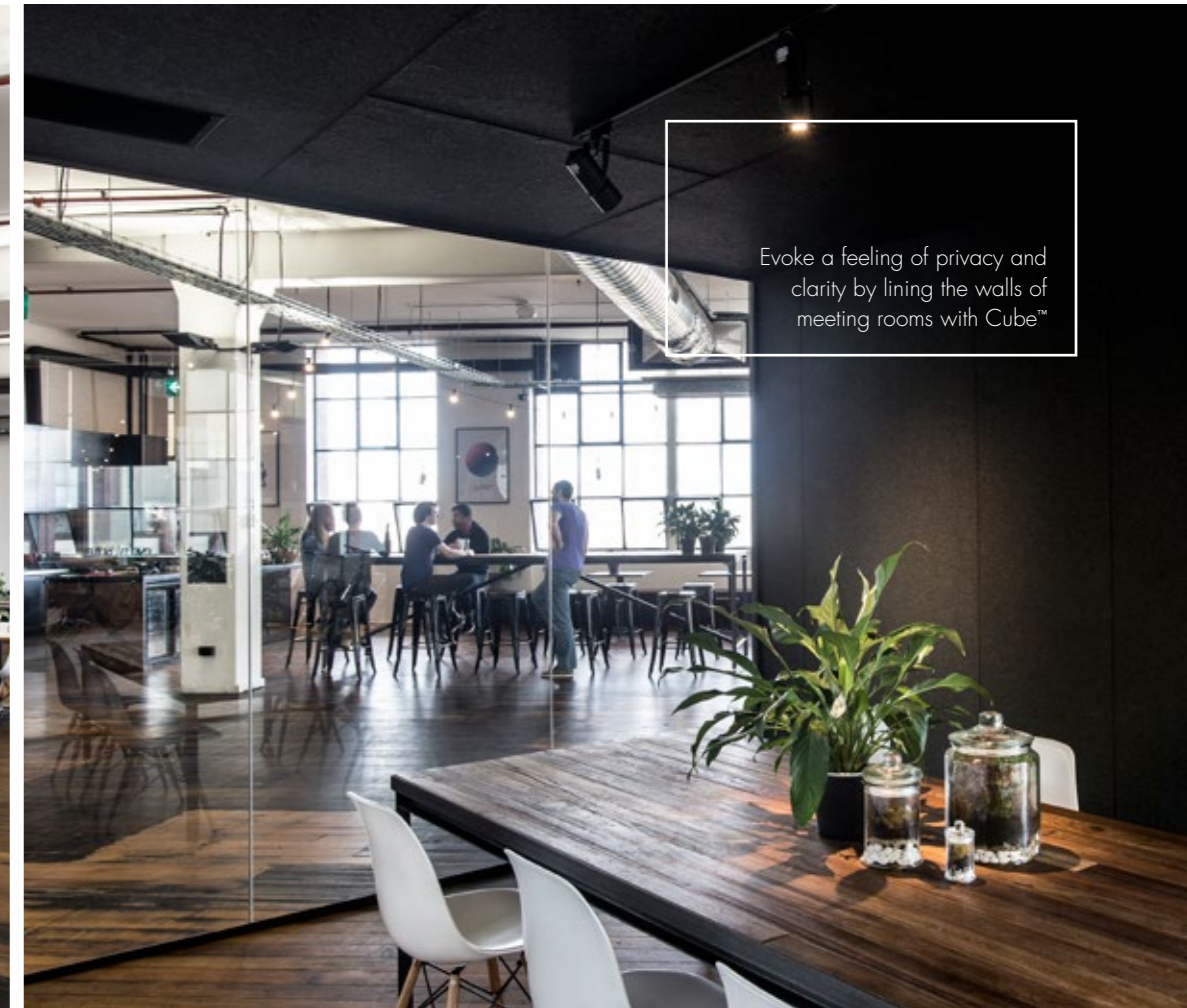




**DURABLE AND VERSATILE**  
Cube™ has been used as a pinboard surface and feature wall in the 99 Design office



**DON'T COMPROMISE ON DESIGN**  
Cube™ gives the flexibility to enhance a room's acoustics without sacrificing aesthetics

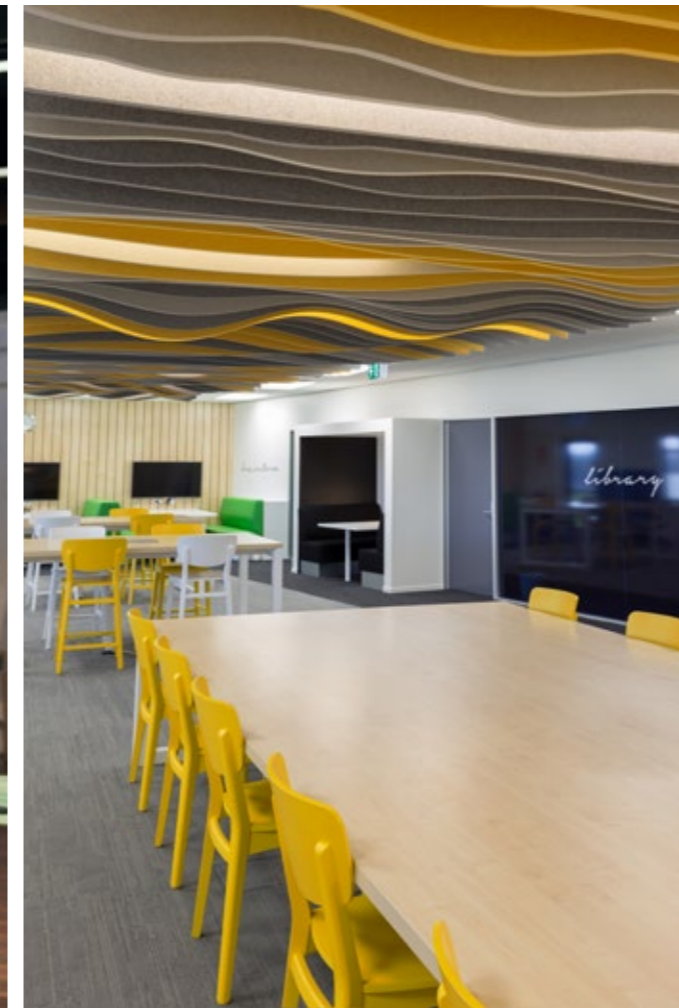


Evoked a feeling of privacy and clarity by lining the walls of meeting rooms with Cube™





**PERSONAL TOUCH**  
Autex design engineers can work with architects, interior designers and facility planners to achieve the best acoustic outcome for your environment



**DURABLE AND VERSATILE**  
Create interesting patterns and provide wall protection in educational applications due to the durable nature of Cube™





**Cube™**

12mm  
ZENITH & ACROS

TAKANINI CHILD  
AND FAMILY CENTRE  
AUCKLAND

# Cube™

FOR POSITIVE LEARNING ENVIRONMENTS

Creating a quiet and comfortable yet stimulating space for children has become an essential focus for child care centres across the country and Takanini Child and Family Centre is no exception. With a clear vision and expectations, Counties Manukau Kindergarten Association and Frans Kamermans of Kamermans & Co Architects teamed up to create a centre for not only children, but the whole family to enjoy.

The brief for the project was sustainability and presenting it in an aesthetic and educational way. From the angle of the eaves to the most of the low winter sun, to the exposed water tanks and solar panels, children will learn what it is to be green and the ways in which their centre contributes to that.

Both Autex Composition and Cube were used to enhance the acoustic properties of the centre. In the colours Acros and Zenith, a checkerboard pattern was created using Cube to form the ceiling. This effect was fun and unique and the theme was carried out across the centre. Karen Shields, Counties Manukau Kindergarten Association's general manager, found that the colours were playful enough for the kids to enjoy but soft enough to be used within the offices.

The choice in colour was very important to the centre as studies have shown how colours can affect childrens' learning. With the calming nature of green, Cube in Acros also provided a creative element to the counselling rooms and offices in the family centre.

The lively Cube ceiling was complimented by feature walls to match in Lime Composition. To not evade or distract from the childrens' work, Composition in Myst and Porcelain was also used on remaining walls allowing unlimited space for art and inspiration. Karen's first comments were towards the excellence of the acoustics were, "We had a group come in to look around over the weekend and found the sound quality within the room exceptional".

With more centres to come in the future, this project has led the way in innovation and design while creating the optimal learning space for children. While the brief and theme for this centre has set a benchmark for future centres, Frans ensures Takanini Child and Family Centre is one of a kind.

#### ARCHITECT

Frans Kamerman  
of Kamerman & Co Architects

#### PHOTOGRAPHY

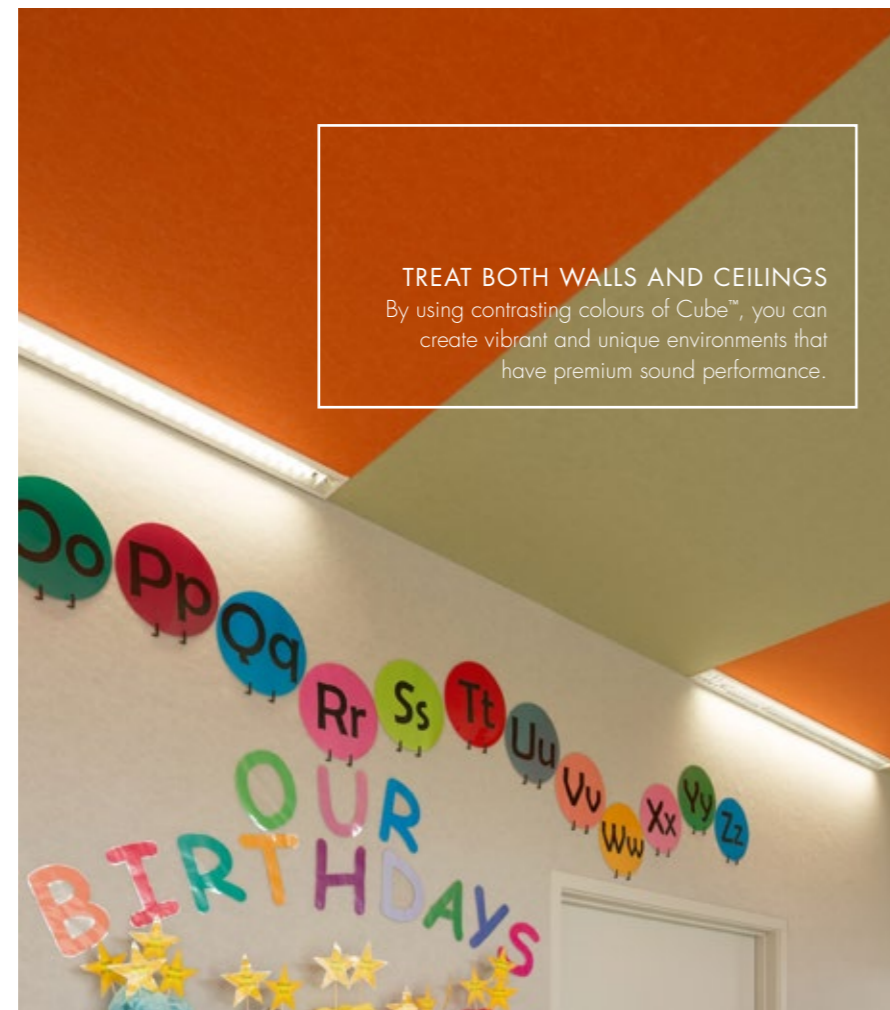
Mark Scowen  
of Intense Photography

Danielle Robinson

#### INSTALLER

NomadTika





**Product Name** Cube™  
**Composition** 100% Polyester Fibre (PET)  
**Panel Dimensions** 1200mm x 2400mm  
(+5mm) (+10mm)  
**Thickness** 12mm | 24mm  
**Weight** 2400gsm | 4800gsm  
**Density** 200kg/m³

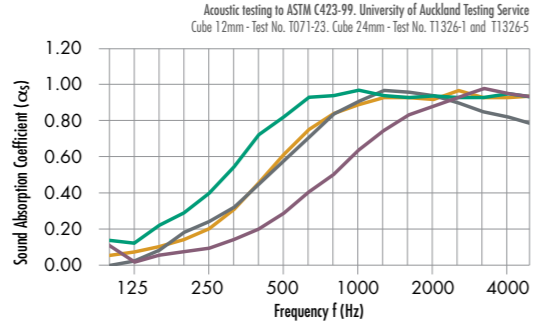
**Colour Options**



**Acoustic Performance**

Autex Cube™ is specifically designed to reduce and control reverberated (echo) noise in building interiors.

Minimum Noise Reduction Coefficient 0.45



Frequency (Hz)	125	250	500	1000	2000	4000	NRC
12mm Cube	0.05	0.10	0.30	0.65	0.90	0.95	0.45
12mm Cube (with 25mm air gap)	0.02	0.27	0.61	0.91	0.97	0.85	0.70
24mm Cube	0.10	0.25	0.60	0.90	0.95	0.95	0.65
24mm Cube (with 25mm air gap)	0.15	0.40	0.85	0.95	0.95	0.95	0.80

**Fire Ratings** (Conducted on 12mm Cube™)

**ISO 9705: 1993**  
 Classification: Group 1-S  
 Smoke Production Rate: <5.0m2/s  
 As required by NZBC C/VM2

**AS ISO 9705 - 2003**  
 Classification: Group 1  
 (SMOGR<sub>arc</sub>): <100m2/s2  
 As required by BCA C1.10  
 FI 4974 dated 16th September, 2012

**EN13501-1:2007+A1:2009**  
 B - s2, d2  
 WF 336911 dated 25th February, 2014

**ASTM E-84-14**  
 Class A, FS:0 - SD:45  
 RJ4479-2 dated 25th January, 2015

**Thermal Performance**  
 Cube™ 12mm R0.41 (@15°C)  
 Cube™ 24mm R0.82 (@15°C)

**Impact Resistance**

Cube™ has been tested for impact resistance to EN13964:2004 and meets the criteria of Class 1A; not adversely affected at impact velocities over 16.5m/s.

**VOC Emissions**

Autex polyester has been tested by Cetec Pty Ltd (Report: CV080408) for chemical emission and is classified as low VOC.  
 VOC concentration: 0.01 mg/m³

**Moisture Absorption**

Polyester fibre when exposed to an atmosphere of 50°C at 90% relative humidity for four days showed moisture absorption of less than 0.03% by weight. Polyester is not affected by moisture, mould or mildew and will not rot or deteriorate in intended use situations.

**Environmental**

Autex is committed to best practice through our ISO 9001 and ISO 14001 certified Quality and Environmental Management Systems.

Cube™ products contains a minimum of 65% previously recycled polyester fibre (from PET bottle-flake) ensuring comparatively low embodied energy. Off-cuts and manufacturing waste is re-used or recycled wherever possible.

Untaminated Cube™ can be recycled.

Cube™ is manufactured from 100% polyester fibres and does not contain formaldehyde binders. Autex polyester fibres support safer indoor air quality and will not become a potential airborne pollutant.

**Service**

For further information about Cube™ or any other Autex product, please contact your Autex Account Manager or visit our website.

Cube™ is a trademark of Autex Industries Limited and Autex Pty. Cube™ is proudly manufactured in New Zealand by Autex Industries Ltd and in Australia by Autex Pty Ltd.



Founded in New Zealand in 1967; Autex is a manufacturer and distributor of 100% recyclable polyester products. From our humble beginning of manufacturing carpet underfelts, Autex have led the way in developing innovative, high-quality polyester products in a range of solutions designed to meet their customer's needs.

Pioneering new materials and systems; Autex's range of interior acoustics have enhanced the sound clarity in schools, theatres and commercial buildings in over 25 countries including New Zealand, Australia, South East Asia, the United Kingdom and United Arab Emirates (UAE).

As well as a dedicated focus to proactive and innovative product development, Autex are committed to best practices and are proud to be certified in ISO 9001 and ISO 14001 Quality and Environmental Management Systems. Autex continue to achieve new environmental standards on the global stage and strive to improve efficiency and transparency at every step of the production process.

Autex manufactures an expanding range of interior acoustic products made from 100% recyclable polyester, designed to reduce echo and reverberated sound. With unlimited design potential, Autex's range of interior acoustics and wallcoverings can be printed on, custom cut to shape and specified to fit any application where both sound control and design aesthetic is crucial.

Incorporating Autex's interior acoustic products into architectural design greatly diminishes reverberated noise by absorbing sound and creating a comfortable and productive environment. For acoustic solutions where both form and function are paramount, the Autex Interior Acoustics range can fit any architectural approach and add a unique finishing touch to your project.





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