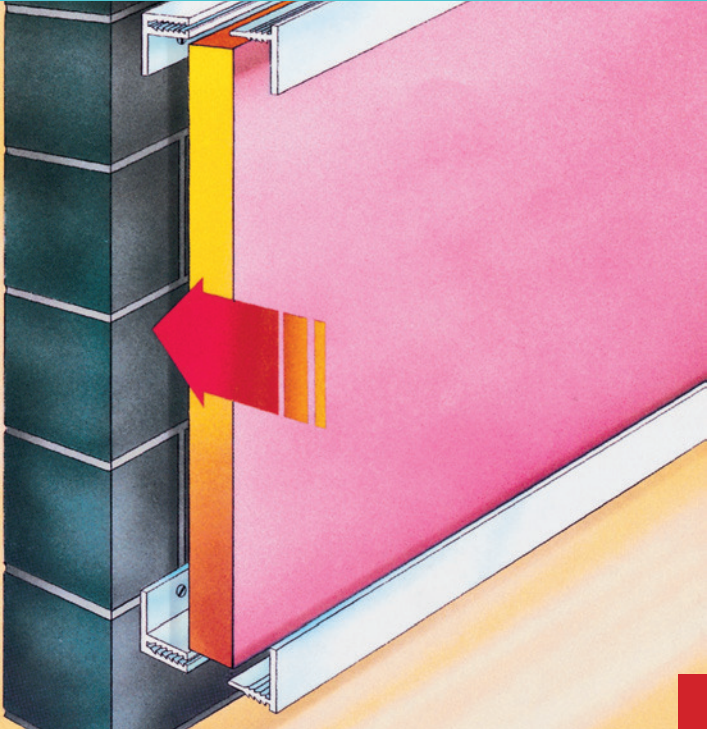


# AET.GB. Ltd

## Acoustic Panel System

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### ACOUSTIC SOLUTION FOR NOISE & REVERBERATION

**Wallcoustic Panels** are high specification acoustic panel systems. These are the most popular aesthetic sound absorbing panels. They are durable, fire rated, visually pleasing and offer excellent acoustic performance. They are the decorative solution to your sound control needs. The panels are used extensively to transform areas such as multi-purpose halls, open-plan offices, conference suites, studios and interview rooms into workable environments.

Panels are finished in high quality acoustic fabrics available in a wide range of colours.



# Wallcoustic ACOUSTIC PANEL SYSTEMS

## APPLICATION

Wallcoustic acoustic panels are used to reduce reverberant noise levels in buildings such as studios, lecture theatres, music rooms, offices, boardrooms, sports and community halls, classrooms, cinemas, interview rooms and other applications.

Wallcoustic panels transform a stark, echoing area into a warm, quieter, congenial work place.

Wallcoustic panels are pre-decorated and therefore they decorate and solve the acoustics in one operation.

If required, small display posters can be pinned to panels. As manufacturers of specialist innovative products with leading edge designs, we manufacture each order to your particular Wallcoustic order requirements ranging from your chosen colour to the particular dimensional size of the panel to specifically suit your individual project.

## FINISHES

A wide range of standard fabric colours are available, as illustrated later in this brochure. A wide range of other fabrics and colours are also available on request. Customer's individual fabrics can be used, if suitable.

The UPVC trims are available in white. However, the visible trims may be suitably spray painted on site to achieve the required colour. UPVC is the same material as used in double glazed window frames. Please state the height and width dimensions of each panel when ordering.

## WEIGHT

The 25mm thick Wallcoustic weigh approximately 3 kg/m<sup>2</sup>. The 40mm thick Wallcoustic weigh approximately 4 kg/m<sup>2</sup>. UPVC trims weigh approx. 1 kg/length.

Panels are manufactured to our standard dimensional size tolerance of +/- 3.0mm.

Walls and ceiling surfaces must be flat and level.

Type C – Wallcoustic – Available in the following shapes: Square, Rectangle, Circle, Ellipse, Triangle, Diamond, Hexagon, Pentagon, Teardrop, Cloud and Two-part circle.

There are 3 Standard Versions of Wallcoustic Panels

- Type A: Wallcoustic - Tee Joint Panel System.
  - Type B: Wallcoustic - Butt Joint Panel System.
  - Type C: Wallcoustic - Shadow Joint Panel System
- Type C: Wallcoustic - Shpaes

## CUTTING

Wallcoustic panels can be cut with a sharp kitchen or Stanley knife. UPVC trims as well as panel edge reinforcements can be cut easily with a fine tooth fret saw or strong snips.

## FIRE RESISTANCE

The recycled glasswool acoustic board provides very good fire resistant properties.

This is fire rated as Class 0 to BS476: Part 6.

Standard fabric facings comply with Class 1 to BS476: Part 7.

Class 0 fire rated fabric finishes are also available on request.

UPVC trims are fire rated as BS476 Part 7. Like normal UPVC, the trims have a maximum softening limit of 60°C.

## THERMAL INSULATION

The acoustic recycled glasswool board provides an excellent heat and cold insulator. This adds to the energy saving measure in a building as well as reducing the noise levels. The panels have a thermal conductivity of  $k = 0.0377 \text{ w/m}^{\circ}\text{k}$ .

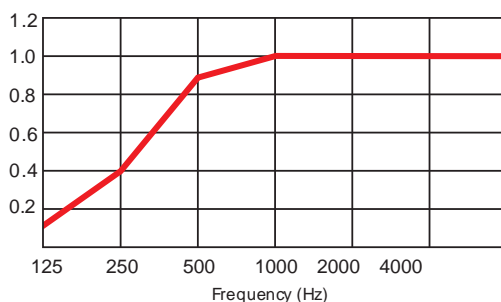
## CLEANABILITY AND MAINTENANCE

The panels are designed for long term use in building environments with minimal maintenance. However, the panels can be vacuum cleaned periodically. Any slight dirt marks may be cleaned with a damp cloth or a proprietary cleaner.

### CLASS C Acoustic Absorber - 25mm thickness

#### ACOUSTIC PERFORMANCE BS EN ISO 354:2003

Noise Reduction Coefficient 0.85 (i.e. 85%)



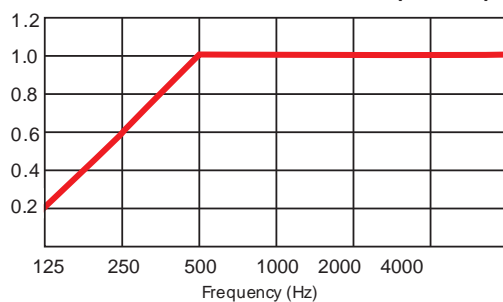
Direct fixed backing

Even higher absorption can be achieved when installed with an air gap

### CLASS A Acoustic Absorber - 40mm thickness

#### ACOUSTIC PERFORMANCE BS EN ISO 354:2003

Noise Reduction Coefficient 0.90 (i.e. 90%)



Direct fixed backing

Even higher absorption can be achieved when installed with an air gap

## KEEPING IT GREEN

AET Glass fibre sound absorbing boards consist of recovered household glass and recycled glass fibre.

The fabric range used is made from 100% recycled materials saving virgin raw materials, reducing waste to landfill and minimising our damage to the environment. Made using sustainable manufacturing techniques, including green electricity, comprehensive energy and effluent management, borehole water and on-going waste saving initiatives.

Second Nature fabrics leave a lighter environmental footprint.

Our ethos is focused on continuing to achieve the highest environmental standards for our operations, products and innovations, engaging with, and acting responsibly towards, our local community and wider interest groups.

# TYPE A: WALLCOUSTIC - TEE JOINT PANEL SYSTEM



This is the most economical panel utilising white UPVC fixing sections. The panels have cut edges on all four sides.

The UPVC sections serve two functions. One is to decoratively mask the edges and the other is as structural fixing sections. This system is the most flexible as panels can be cut on site to suit wall dimensions.

### NOMINAL DIMENSIONS

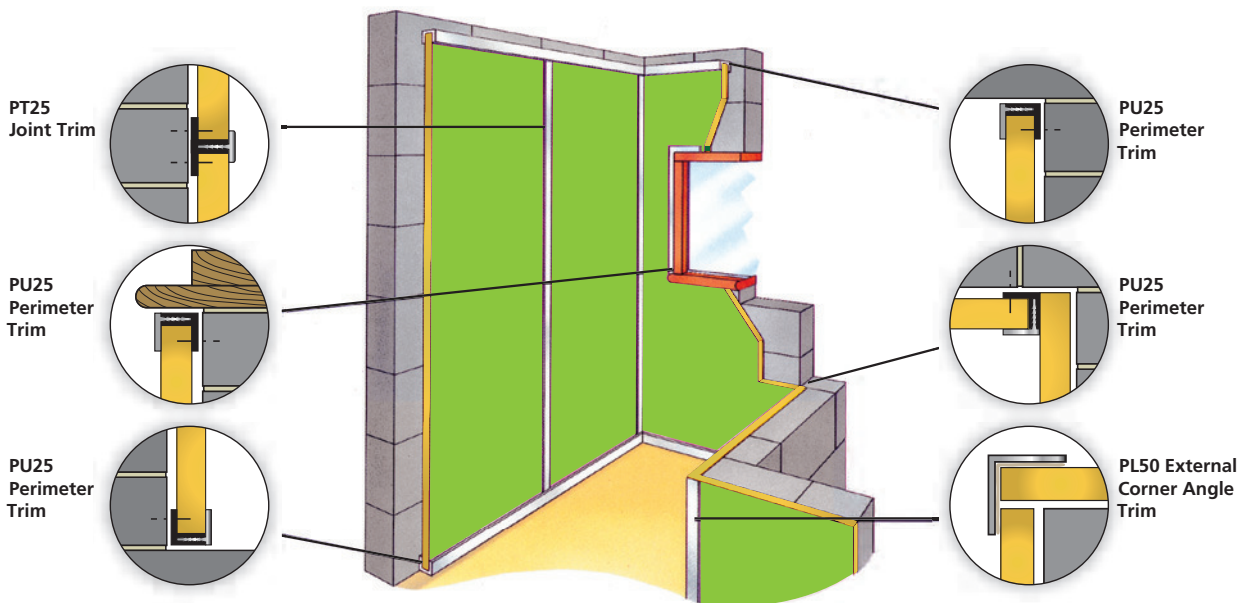
**Panel size: 2700mm x 1200mm.**

**Panel thickness: 25mm** (40mm thickness available on request).

**UPVC fixing trims: 2700mm lengths.**

### INSTALLATION

Use spirit level to align all horizontal and vertical surfaces. Drill oversized holes in UPVC female trims larger than screw shank, but smaller than screwhead. Use V line as guide. Screw fix at maximum of 400mm centres. The backing wall, to which the Wallcoustic acoustic panels are to be fixed, must have a continuous solid backing wall surface which must be flat and level.



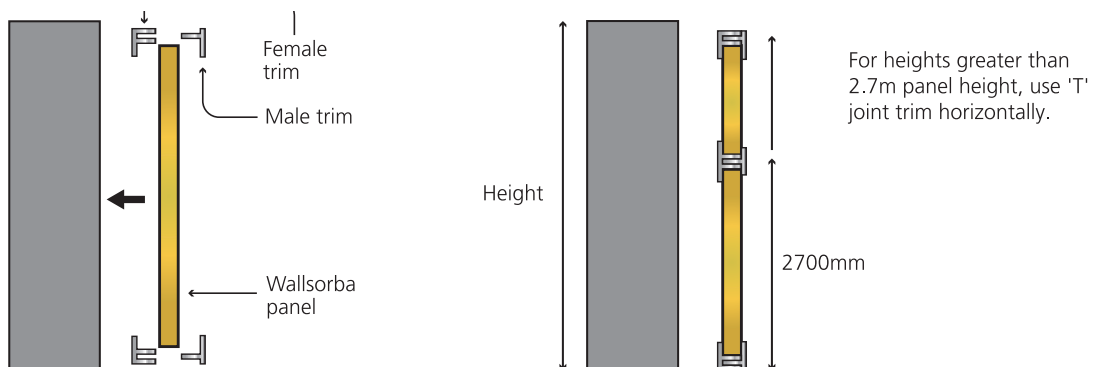
### FIXING GUIDE

**A.** Screw fix UPVC female perimeter trim to top, bottom and end of walls.

**B.** Screw fix UPVC female 'T' joint trim vertically between top and bottom UPVC female perimeter trims, allowing for Wallcoustic panel width and height.

**C.** Cut and insert individual Wallcoustic panels to fit between female perimeter and female 'T' joint trims. Push fit top and bottom male perimeter trims into female trims. Then neatly cut vertical male perimeter and vertical male 'T' joint trims to fit between the top and bottom perimeter trims and push fit together. Ensure that all trims are fully pushed in and located. On external corners, glue the PL50 angle trim as illustrated above.

### EASY FIX INSTALLATION - by using UPVC clip-in trims



## TYPE B: WALLCOUSTIC - BUTT JOINT PANEL SYSTEM



This eliminates the requirement of a tee joint section as this panel has reinforced long edges and the fabric facing is wrapped around the two long edges of the panel. This results in a neat, crisp butt joint between the panels.

### NOMINAL DIMENSIONS

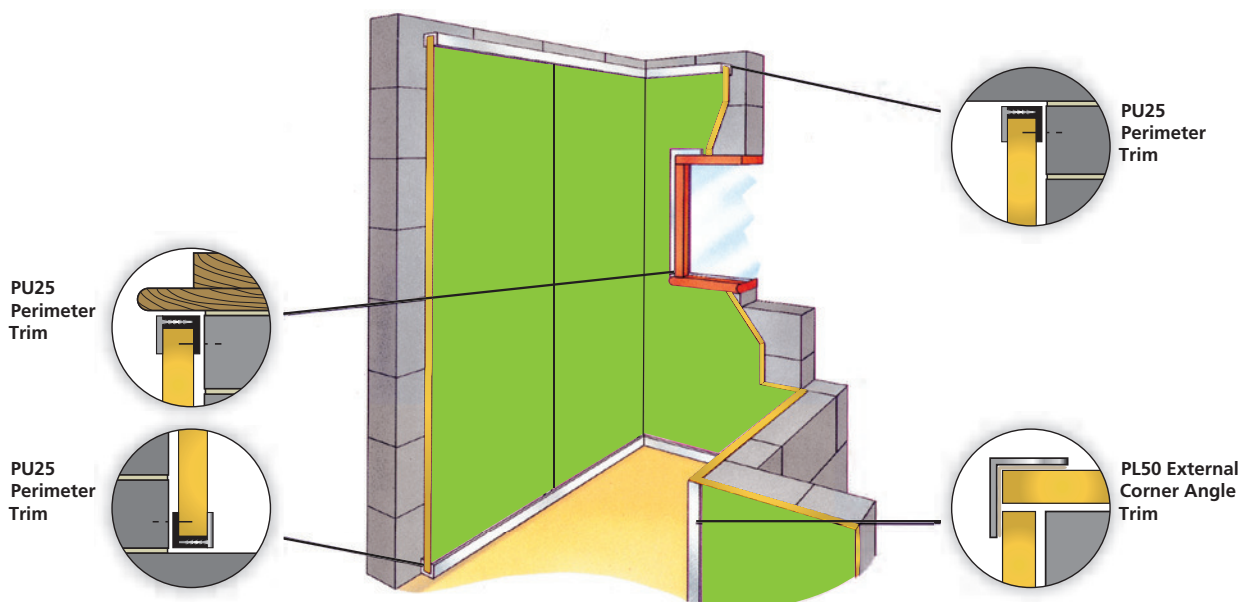
**Panel size:** 2700mm x 1200mm.

**Panel thickness:** 25mm  
(40mm thickness available on request).

**UPVC fixing trims:** 2700mm lengths.

### INSTALLATION

Use spirit level to align all horizontal and vertical surfaces. Drill oversized holes in UPVC female trims larger than screw shank, but smaller than screwhead. Use V line as guide. Screw fix at maximum of 400mm centres. The backing wall, to which the Wallcoustic acoustic panels are to be fixed, must have a continuous solid backing wall surface which must be flat and level.



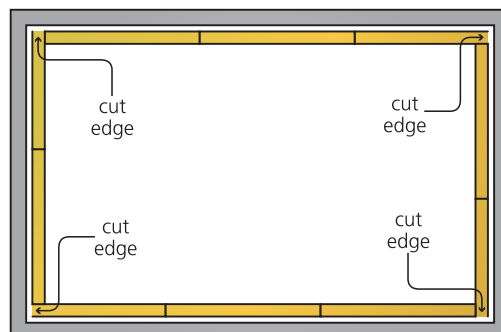
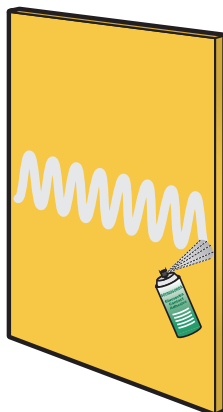
### FIXING GUIDE

**A.** Screw fix UPVC female perimeter trim to top, bottom and end of walls.

**B.** Cut panels to size. Position individual Butt Joint WALLCOUSTIC panels to fit between the female perimeter trims. Ensure that the visible panel butt joints are tight and straight.

**C.** Remove panels away from wall and spray a 12" horizontal band of instant contact Glue, spray can adhesive. This should be done about half way down the height of the back of the panel. Then spray a similar band on the corresponding position on the wall so it coincides with the glue position on the back of the panel. Allow adhesive to dry for approximately 2 to 5 minutes at 23°C. Carefully reposition the panels in the original positions. The panels must be carefully repositioned, as once contact is made with the adhesive they cannot be readjusted.

**D.** Push fit top, bottom and end male perimeter trims into female trims. Ensure that all trims and panels are fully pushed in and located. On external corners, glue the PL50 angle trim as illustrated above.



If panelling runs generally end in a corner of a room, the nearest method is shown above. Because no panel run has more than one cut edge at each end therefore all these are hidden in corners by the uncut panel. This eliminates the need for any internal corner trims hence resulting in a neater finish.

## TYPE C: WALLCOUSTIC- SHADOW JOINT PANEL SYSTEM



This panel has no visible fixing sections on any of the four sides of the panel. The panel has internal reinforced edges on all sides with the fabric bonded to the face and wrapped on all four sides. This results in a beautiful individual panel which can be used in single units or joined together to other panels or with shadow gaps as a design feature.

### NOMINAL DIMENSIONS

Standard sizes: 1200 x 900mm, 1200 x 1200mm, 1200 x 1500mm, 1200 x 1800mm, 1200 x 2100mm, 1200 x 2400mm, 1200 x 2700mm.

Panel thickness: 25mm

(40mm thickness available on request).

Custom size panels made to customers requirements are available.

*Please state the height and width dimensions of each panel when ordering. e.g. 1050mm wide x 1710mm high. The fabric has a directional weave, hence we must be notified of the height and the width of each panel.*

### INSTALLATION TO WALLS

The acoustic panels are installed using impaling clips and Glue contact spray adhesive. This method allows the panels to be fixed direct to concrete, brickwork, wood, plaster, or metal. A site installation guide is sent with each delivery.

The backing wall, to which the Wallcoustic acoustic panels are to be fixed, must have a continuous solid backing wall surface which must be flat and level.

The AET Impaling clips have 4mm diameter holes to take pan head screws. Using appropriate screws and plugs, etc. depending on your wall substrate, fix the correct number of impaling clips needed to the size of the panel. The larger the panel, the greater the number of impaling clips. A guide is given below. Keep impaling clips about 300mm in from the perimeter edges of the panel.

Lightly mark the panel location on the desired wall area. Fix the appropriate number of impaling clips using the appropriate screw fixings. Caution: do not place hands, fingers or other parts of your body in front of impaling clips.

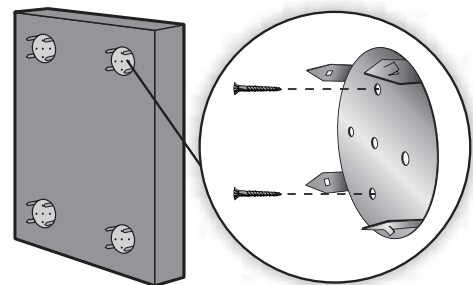
The wall must be clean, dry and free from loose paint or plaster, dust, oils, grease, etc. Wallpaper should be removed, gloss paint roughened and emulsion paint brushed with stiff brush to ensure it is firm. On absorbent surfaces an initial priming coat of Glue spray adhesive may be necessary.

Screw fix the appropriate number of impaling clips to the wall. Spray the Contact Adhesive on the back of the panel and also on the designated wall area (including the fixed impaling clips). Apply the adhesive vertically on the panel and horizontally on the wall area. Allow adhesive to dry for approximately 2 to 5 minutes at 23°C.

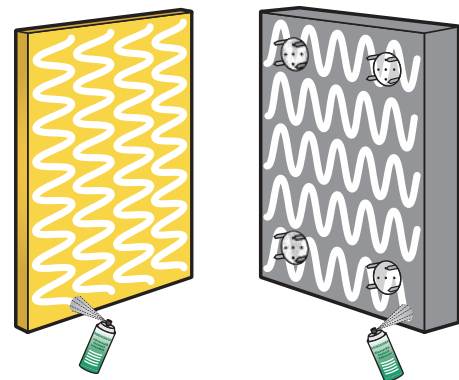
Then carefully push the panel onto the marked wall enabling the impaling clips to bite into the rear of the panel and press firmly all over the panel to ensure that glue contact has been made over all of the panel.

There are different depths of impaling clips for 25mm thick panels and for 40mm panels. You will be supplied with the appropriate depth impaling clips according to the thickness of your panel order.

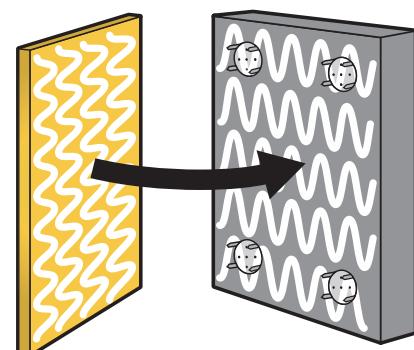
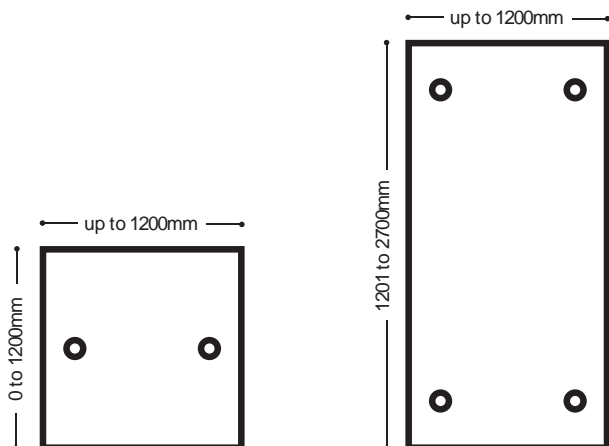
Ceilings: Panels greater than 1200 x 600mm should not be fixed to ceilings unless other mechanical methods are used such as "Z" clips (see page 6).



Fix 'impaling clips' to the wall.



Spray wall and surface of Wallcoustic panel with Contact Spray Adhesive.



Push Wallcoustic panel on to wall and 'impaling clips' and press firmly.

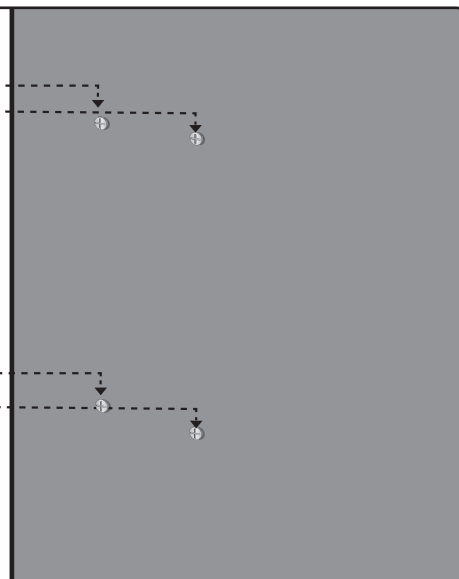
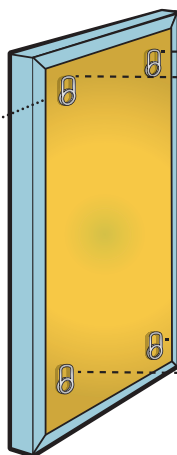
Every endeavour has been made to ensure that the information given herein is true and reliable but is given only for guidance. The company cannot accept any responsibility for loss or damage that may result from the use of the information, due to the possibility of variations of processing or working conditions and of workmanship outside our control. Users are advised to confirm the suitability by their own tests. All panels are manufactured to our standard dimensional size tolerances of +/- 3.0mm.

# TYPE C: WALLCOUSTIC - SHADOW JOINT PANEL SYSTEM

## TYPE C - ALTERNATIVE FIXING METHODS

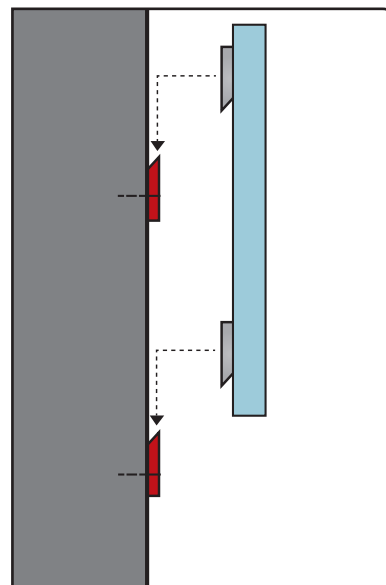
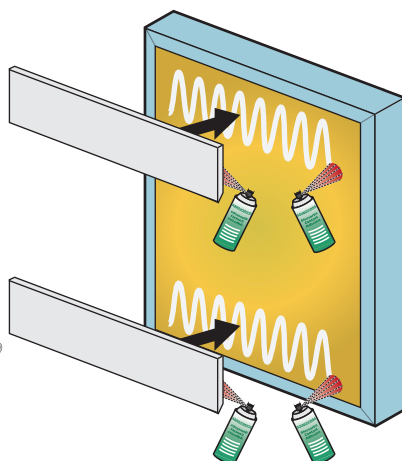
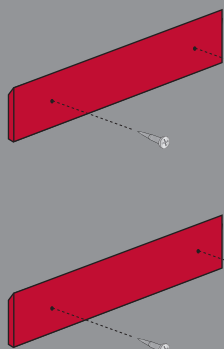
For all Type C Wallcoustic panels, we recommend the application of Contact Adhesive as the primary means of installation to walls to maximise acoustic insulation properties. However, in circumstances where Contact Adhesive is not a viable option, below are 3 alternative means of install to consider when choosing Wallcoustic Type C panels. Please carry out your own tests by installing a trial panel before proceeding with the full installation to ensure that the installation is satisfactory for your application.

### 1. SPIRAL HOOK FIXING



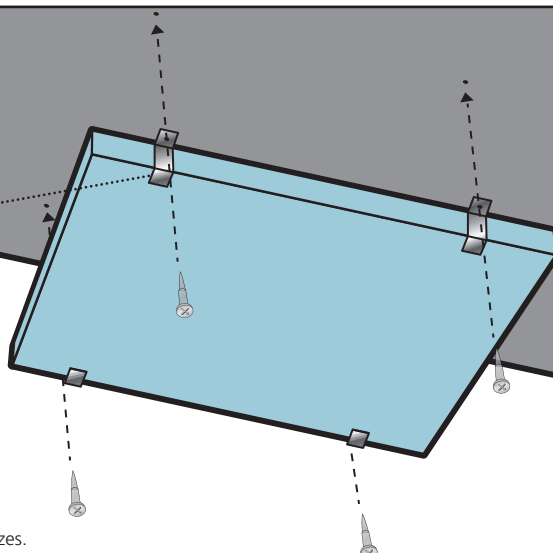
Total number of hooks used will differ depending on panel sizes. Please request a full installation guide

### 2. UPVC SPLIT BATTEN FIXING



Please request a full installation guide. Split batten to be used on panels not larger than 1200x1500x25mm. The split battens should not be used on 40mm thick panels.

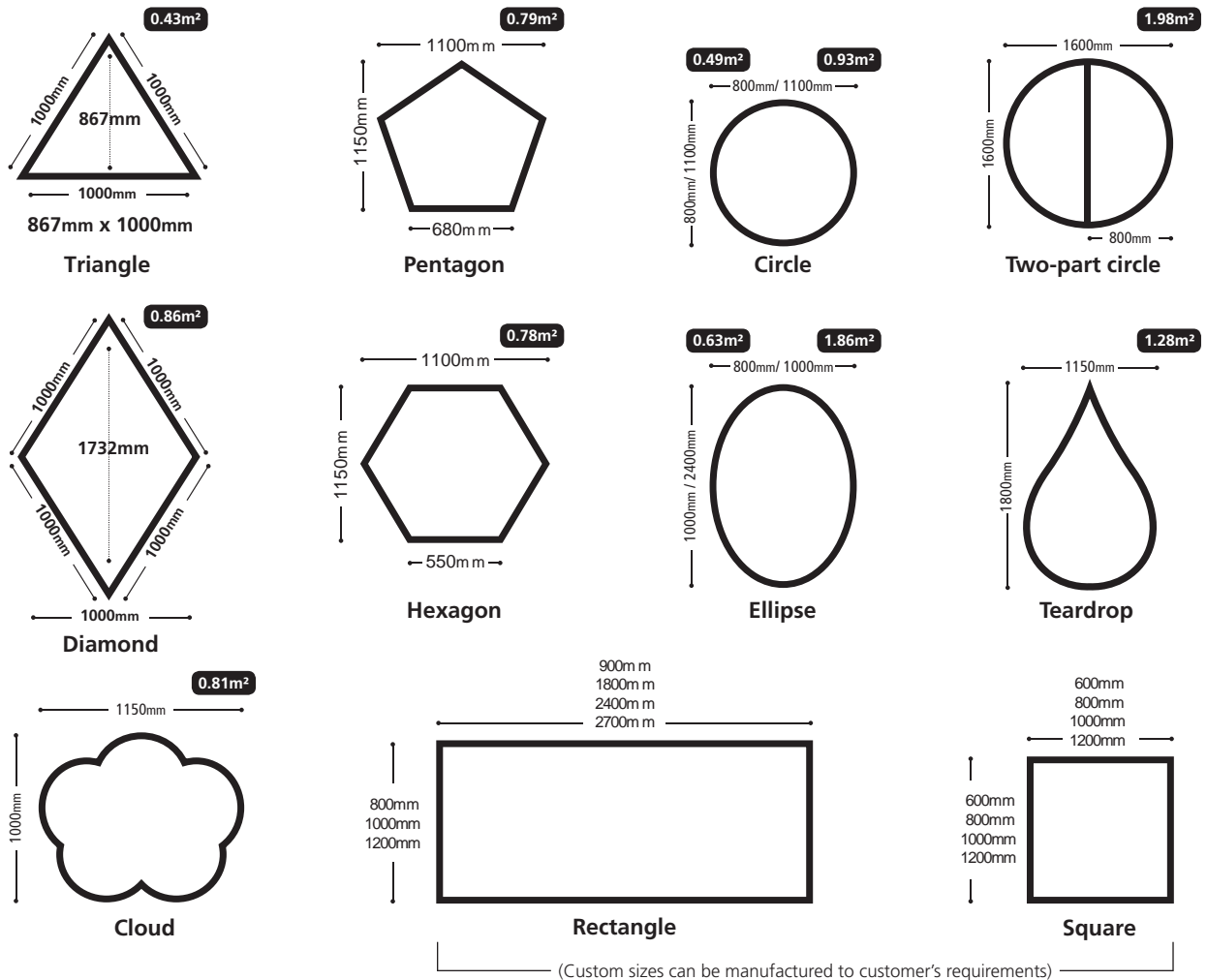
### 3. Z-CLIP "CEILING" FIXING



Total number of Z Clips used will differ depending on panel sizes. Please request a full installation guide

## TYPE C: WALLCOUSTIC SHAPES

All Type C Wallcoustic panels are designed to be manufactured in the following shapes. Panels are installed by using Contact Adhesive and metal clips. Panels are manufactured to our standard dimensional size tolerance of  $\pm 3.0\text{mm}$ . Walls and ceiling surfaces must be flat and level. Some fabric facings have a directional grain therefore it is important to specify the height and the width of each panel when ordering. The backing wall, to which the Wallcoustic acoustic panels are to be fixed, must have a continuous solid backing wall surface which must be flat and level.



Wallcoustic Type C - Shadow Joint Panel System used in a lecture hall.



Wallcoustic Type C - Shadow Joint Panel System used in a class room.



Wallcoustic Shapes - Circles and ellipses applied creatively to an atrium area.



Wallcoustic Type A - Tee-Joint Panel System with multicoloured panels in a community hall.





Wallcoustic Type A - Tee-Joint Panel System applied to the upper wall in a sports hall.



Wallcoustic Type C - Shadow Joint Panel System used on the walls of a school canteen.



Wallcoustic Type A - Tee-Joint Panel System using a range of different shades in an office environment.



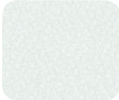



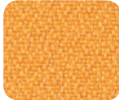




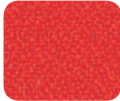
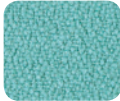
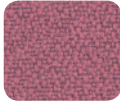
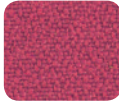
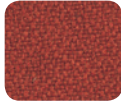

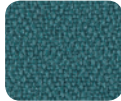

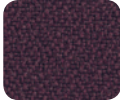
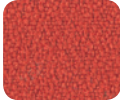
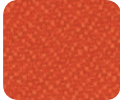


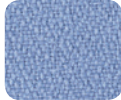


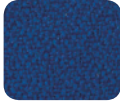
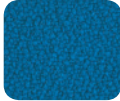

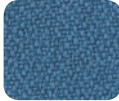

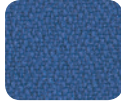



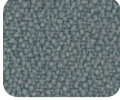





Wallcoustic Type B - Butt Joint Panel System using colours to complement the furniture colour in this board room.



Wallcoustic Shapes - Hexagon panels used as a design feature in a cafeteria.

# FABRIC COLOUR RANGE - LUCIA



 <b>Adobo</b> YB165 LR = 85.8	 <b>Oyster</b> YB107 LR = 64.8	 <b>Turtle</b> YB098 LR = 39.14	 <b>Apple</b> YB096 LR = 37.16	 <b>Solano</b> YB088 LR = 36.13	 <b>Madura</b> YB156 LR = 43.08	 <b>Sandstorm</b> YB302 LR = 22.78	 <b>Reef</b> YB085 LR = 45.6
 <b>Aruba</b> YB093 LR = 37.39	 <b>Belize</b> YB105 LR = 10.49	 <b>Campeche</b> YB301 LR = 27.43	 <b>Bridgetown</b> YB102 LR = 11.34	 <b>Diablo</b> YB101 LR = 6.99	 <b>Jamaica</b> YB027 LR = 7.2	 <b>Calypso</b> YB106 LR = 6.4	 <b>Windjammer</b> YB047 LR = 9.02
 <b>Taboo</b> YB045 LR = 4.15	 <b>Tobago</b> YB030 LR = 3.11	 <b>Lobster</b> YB087 LR = 11.55	 <b>Tortuga</b> YB168 LR = 30.46	 <b>Montserrat</b> YB011 LR = 7.94	 <b>Arecibo</b> YB099 LR = 45.31	 <b>Bermuda</b> YB084 LR = 32.9	 <b>Mauve</b> YB069 LR = 14.64
 <b>Tarot</b> YB090 LR = 3.01	 <b>Ocean</b> YB100 LR = 3.56	 <b>Scuba</b> YB089 LR = 6.37	 <b>Bluebell</b> YB097 LR = 16.91	 <b>Martinique</b> YB004 LR = 12.79	 <b>Steel</b> YB095 LR = 23.03	 <b>Bluefield</b> YB021 LR = 8.27	 <b>Marianna</b> YB157 LR = 33.48
 <b>Tequilla</b> YB038 LR = 14.56	 <b>Slip</b> YB094 LR = 27.94	 <b>Blizzard</b> YB108 LR = 12.23	 <b>Havana</b> YB009 LR = 2.26	 <b>Sombrero</b> YB046 LR = 4.36	 <b>Costa</b> YB026 LR = 3.38	 <b>Buru</b> YB170 LR = 24.37	 <b>Rum</b> YB086 LR = 38.32

LR = Light Reflectance

Due to printing reproduction restraints, differences may appear between colours printed above and the actual product. Sample fabric colour charts are available on request. Colour shade differences may occur between different production batches.

**Please state the height and width dimensions of each panel when ordering. e.g. 1050mm wide x 1710mm high. The fabric has a directional weave, hence we must be notified of height and width of each panel.**

## GUIDE SPECIFICATION

### A. GENERAL

1. All Wallcoustic panels should be installed in accordance with the manufacturer's recommendations.
2. All necessary hardware and accessories for a complete job installation are to be furnished by the contractor.
3. Installation of panels should not begin until all wet work, such as plastering, concrete etc. is completely dry. The panels are designed for storage and installation under standard occupancy conditions from 10°C to 20°C and not more than 75% R.H in an enclosed building.
4. The contractor shall be responsible for the examination and acceptance of all surfaces and conditions prior to the acoustic panel installation.
5. Install a trial panel and ensure that this is satisfactory before proceeding with the full installation.

### B. PRODUCT

#### 1. Install

Type A: Wallcoustic - Tee Joint Panel System with UPVC perimeter and Tee Joint fixing trims.

Type B: Wallcoustic - Butt Joint Panel System with UPVC perimeter fixing trims and Contact Spray Adhesive.

Type C: Wallcoustic - Shadow Edge Panel System with Contact Spray Adhesive and fixing clips or specified alternative method.

Panels size.....mm wide x.....mm high.

Type C: Wallcoustic - Shapes Panel System with Contact Spray Adhesive and fixing clips or specified alternative method.

#### 2. Finish

Wallcoustic panels to be in ..... (..... colour)  
AET standard fabric colour.

### C. Supplier

1. Wallcoustic panel systems as supplied by AET.GB. Ltd, 9 City West, 67-71 Millbrook Road West, Southampton, SO15 1AH  
Tel: 044 (0) 8453 700 400 Fax: 044 (0) 8453 700 401  
Email: sales@aet.gb.com      www.aet.gb.com

#### Prices and Conditions of Sale

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