

## ECOUSTIC® INSTALLATION GUIDE

The installation guidelines below are applicable to the following Ecoustic® products: Ecoustic® Panel, Ecoustic® Screen, Ecoustic® Print, Ecoustic® Core

### Please read the entire Installation Guide prior to installation:

- This guide contains recommendations, however it is not step-by-step guide.
- We recommend viewing the Ecoustic installation video on <http://www.Instyle.com.au/video/ecoustic.html> before installation.
- INSTYLE will not accept responsibility for installation and recommends installation by an experienced and professional tradesperson.
- If you have any questions regarding installation techniques please contact INSTYLE.

### Before you cut and install this product

- All products are inspected prior to despatch however upon receipt customers must check that the products have not been damaged during transportation and note any damage on the delivery receipt. INSTYLE is not responsible for any damage during transportation or storage of the product.
- Variations in the thickness and fibre mix are an inherent feature of this product due to the nature of the manufacturing process. Variations from panel to panel can occur and each panel should be checked prior to fabrication or installation. To accommodate these variations installation may require on-site adjustment by the contractor to achieve a flush and professional finish.
- The receiver of the goods must ensure the correct product, colour and quantity have been received against a reference sample and inspect the product for any defects immediately.
- Panels and boxes are sequenced to ensure colour matching between panels.
- Colour variation in the Ecoustic® Felt can occur. To minimise colour variation, panels must be installed in the box and panel number sequence as supplied. Failure to follow this instruction may result in an unsatisfactory finish.
- Prior to installing the panels must be laid out in order of numerical sequence to check for colour variation. By cutting and installing the panels you are accepting the panels as suitable for use. We regret that once the panels are cut and installed Instyle cannot accept responsibility for any colour variation.
- Ecoustic® Panels are supplied in box and panel numeric sequence to assist in the installation and identification process as per examples below. .

#### PANEL LABEL [ Example ]

|                      |           |
|----------------------|-----------|
| Felt Batch No #:     | 21822 LGR |
| Production Date:     | 23/07/14  |
| Production Seq No #: | 50 OF 50  |
| Roll Number:         | 00001     |

#### Panel Number

Labels are located on the back of each panel in the top right corner.

Panels are labelled and packed in production sequence to minimise variation in colour when the panels are installed.

A visual inspection of the colour match is required prior to installing the panels.

#### BOX LABEL [ Example ]

|                                  |         |
|----------------------------------|---------|
| <b>Instyle Contract Textiles</b> |         |
| <b>INSTYLE</b>                   |         |
| <b>Ecoustic Panel 13.5mm</b>     |         |
| Product Width                    | 1210 mm |
| Product Length                   | 2720 mm |
| Fabric Colour                    | L/GREY  |
| Qty Per Box                      | 5       |
| First Panel No:                  | 1       |
| Last Panel No:                   | 5       |
| Packed By:                       | Mike    |
| Box No:                          | 1 / 45  |

#### Panel Sequence Number within Box

Each panel is numbered individually, panels are arranged in order within the box.

From first panel in box

To last panel in box

#### Box Sequence Number

Install in box sequence number.

## Specifications

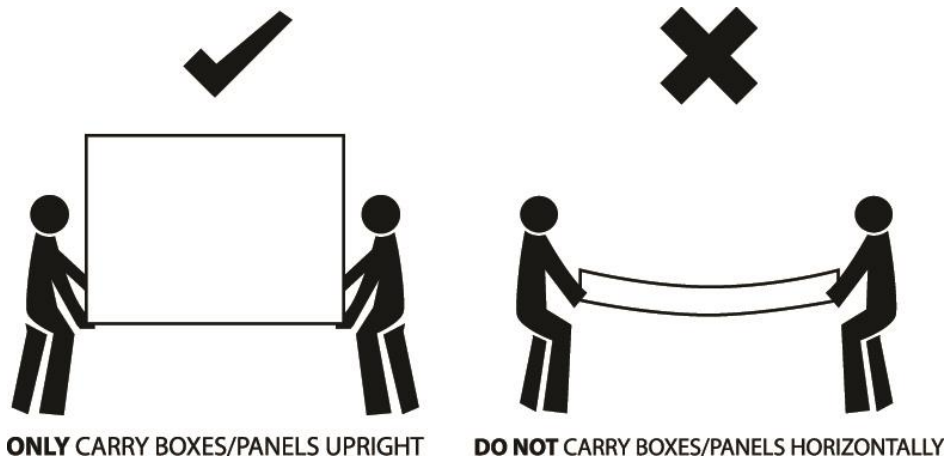
|                 | Ecoustic® Panel:<br>8mm  | Ecoustic® Panel:<br>13.5mm | Ecoustic® Panel:<br>25mm  | Ecoustic®<br>Panel: 50mm | Ecoustic® Screen                         |
|-----------------|--|----------------------------|---------------------------|--------------------------|--|
| Composition     | 100% PET (>50% recycled content)   |                            |                           |                          |  |
| Thickness       | 8mm (+/- 1mm)  | 13.5mm (+/- 1mm)           | 25mm (+/- 2mm)            | 50mm (+/- 2mm)           | 12mm (+/- 1mm)                           |
| Weight (+/-10%) | 1550gsm  | 2750gsm                    | 2650gsm                   | 4150gsm                  | 2700gsm                                  |
| Density         | 194kg/m3   | 204kg/m3                   | 102kg/m3                  | 83kg/m3                  | 225kg/m3                                 |
| Dimensions      | 1210 x 2720mm (+/- 5mm, 10mm respectively)   |                            |                           |                          | 2420x1210mm (+/- 10mm, 5mm respectively) |
| Environment     | Low-VOC and Greentag Level A Certification   |                            |                           |                          |  |
| Acoustic        | NRC 0.30<br>(Direct Fix)   | NRC 0.50<br>(Direct Fix)   | NRC 0.80<br>(Direct Fix)  | NRC 1.00<br>(Direct Fix) | NRC 0.50<br>(Direct Fix)                 |
|                 | NRC 0.40<br>(14mm airgap)  | NRC 0.60<br>(14mm airgap)  | –                         | –                        | NRC 0.60<br>(14mm airgap)                |
|                 | NRC 0.45<br>(24mm airgap)  | NRC 0.65<br>(24mm airgap)  | NRC 0.85<br>(25mm airgap) | –                        | NRC 0.65<br>(24mm airgap)                |
|                 | NRC 0.55<br>(50mm airgap)  | NRC 0.70<br>(50mm airgap)  | –                         | –                        | NRC 0.70<br>(50mm airgap)                |
| Application     | Screen, wall and ceiling panel   |                            |                           |                          |  |
| Please Note     | Variation in thickness, fibre mix, colour, as well as flecks and other slight surface blemishes are an inherent feature of this product and are unavoidable. Variation from batch to batch may occur. Printed products are screen printed by hand, using hand mixed printing paste. Care is taken to minimise print colour variation, however batch to batch variation will occur. |                            |                           |                          |  |

## Transport

- Transport horizontally and top load only.

## Handling and Storage

- Ecoustic® Panel + Screen + Core (Ecoustic® product) is a semi-rigid product and care must be taken when handling and storing the product so as not to damage the product. Boxes and panels should be handled with care and carried vertically upright by two tradespeople.



- Wear clean gloves when handling the products to prevent any soiling/markings.
- Avoid bending or flexing the panels as this can cause creasing.
- Ecoustic® product must be stored indoors, in a clean, dry, cool and well ventilated area.
- Do not store directly on a concrete floor or any other surface that emits moisture.
- The entire panel must be laid flat on a solid, horizontal, dry surface. Do not store the panels on their edges.
- Take care to keep both sides of the panels clean during storage.

- Keep workbenches clean to avoid soiling and scratching the products.
- Before cutting the products remove and inspect the entire panel for defects. Then recover to protect the panel during fabrication.
- Avoid exposure to heat 65°C (150°F) or greater. Do not store Ecooustic® product near radiators, steam pipes or in direct sunlight.

### **Tools Required**

- Gloves, cloth, sealing tape, tape measure, utility knife, Festool Saw with metal cutting guide, metal guides, marker, slow-drying construction adhesive, contact adhesive, drop sheet, smooth carpet roller, aluminium strips, drill, wall mates, screws, square, laser, rivet, paint spatula.

### **Surface Preparation**

- Before installation, ensure the walls and surfaces are clean, dust free and free of imperfections (dents and cracks should be filled and sealed with suitable interior grade materials).
- Use sealing tape (following the manufacturer's instructions) to tape all joins in the products to stop dust and foreign matter migrating from the wall cavity through to the Ecooustic® product.
- We recommend wiping down the wall surface with a clean, damp cloth.

### **Measuring and Checking**

- Before installation, measure the wall or ceiling area and check the installation plan.
- Check the length of each wall section, as most walls are not perfectly straight or level.
- Place a level to check if the wall runs out. If it's not sufficiently level, then you may need to make good the walls or mount the panels to split battens.
- All Ecooustic® Panel, Screen, Core and Print products must be measured and squared-up prior to installation. Check the panels are square and if required, cut a straight edge using a long blade utility knife or Festool Saw and metal cutting guide. Then cut panels to the appropriate length.

### **Important Notes**

- All Ecooustic® Panel + Screen products are to be fitted and installed with the correct orientation, to avoid any variation in colour and pattern. It is important that the direction of print pattern is taken into consideration when planning the installation. Mark the back to ensure all panels are installed with the correct and consistent orientation to avoid any colour and pattern variation.
- Only vertical or portrait orientation is recommended for installation of Ecooustic® panels. Due to typical lighting conditions, horizontal installation can highlight ledging / joins between panels.
- Ecooustic® Panel is supplied at 1210 x 2720mm and screen is supplied at 2420 x 1210mm to allow squaring off and trimming to size.
- Where the wall area cannot be divided into an increment of 1200mm, it is important to consider the placement of the smaller panel(s), either at one end or two equal smaller panels at each end if the panels at each end are to be mirrored either side.
- All Ecooustic® products must be installed in the correct sequence. Please refer to the box sequence number and install the Ecooustic® products according to the box sequence number and the order in which the Ecooustic® products are packed, or if labelled, install in numerical sequence as detailed on the back of the panel.

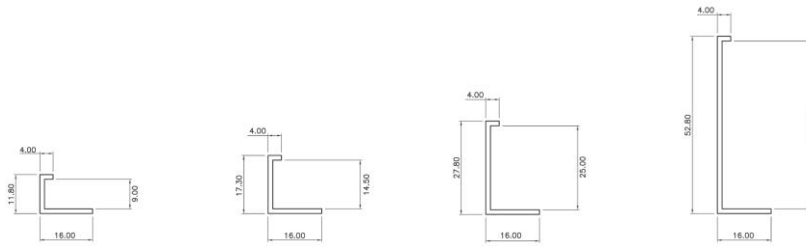
### **Installation - Ecooustic® Prints**

- Ecooustic® Prints are hand printed onto Ecooustic® Panel + Screen. All printed panel and screen products will be supplied with an unprinted border around all sides of the print and must be measured, squared up and trimmed from the print edge on all four sides, even when using the edging profiles.
- All print products will need to be trimmed according to the specific trimming instructions for each print provided with each delivery and on our website. Do not measure and trim from the edges of the panel and screen.
- On a cutting table, check prints are square and if required, take a straight edge between the pattern at both ends and trim. Then cut to the appropriate length taking the pattern repeat into consideration.
- Due to the artisan nature of the hand printed process, there may be slight variations in the prints so always check panels side by side for correct pattern matching prior to cutting and installing.

- Trial fit panels and check for pattern matching as well as thickness variances. To achieve a flush finish, space out any thinner panels if required (refer to Installation – Butt Joining Method pg 5).
- Joins may be obvious upon installation and there will be a panelling effect.
- Apply contact adhesive, clean off any spills and wait the drying guide time before installing panels according to the sequence number.
- Ecoustic Prints are designed to pattern match in the full width from panel to panel in the horizontal direction.  
Note: The patterns are railroaded for Ecoustic® Screen.

### Installation – Ecoustic® Edging Profiles

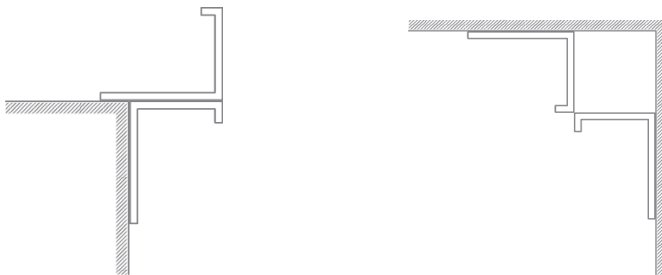
- Ecoustic Panels can be installed with natural anodised aluminium edging profiles which are available for each panel thickness (9mm, 14.5mm, 25mm and 50mm) and we recommend the use of edging with our 25mm and 50mm panels.



- The edging profiles can be used back-to-back, either butted firmly against each other or with a space between to create a shadow line detail as per the diagrams below.



- For external corners, the edging profile can be overhung from the wall corner edge as per the diagram below. For internal corners, the edging profile can be affixed by measuring the outside dimension of the relevant edging profile from the corner as per the diagram below.



- Mark position of edging according to the panel width and measure and cut edging to the same size as the wall length. If necessary, drill an extra hole so the edging can be fixed to the wall at each end. Line up the edging and mark the position for the screws. Drill holes, insert wall mates, and then drill screws to fix.
- If the wall is not level, the edging may need to be fixed firmly together, either on or off the wall.
- All Ecoustic® Panel and print products must be measured and squared-up prior to installation.
- Cut the Ecoustic® product to the required size. The panels must be installed individually and installed according to the sequence number.
- Lay a drop cloth onto the floor before applying adhesive.
- Trial fit panel to wall, then apply contact adhesive to the adhesive manufacturer's instructions and clean off any spills.
- After waiting the drying guide time, tuck the panel into the edging and lightly run your hand or a smooth carpet roller across the entire panel to ensure adequate adhesive transfer and a strong bond. Repeat this process for the next panel.

### **Installation - Butt Joining Method**

- All Ecooustic® Panel, Screen, Core and Print products must be measured and squared-up prior to installation.
- Lay a clean drop cloth onto the floor before applying adhesive.
- All Ecooustic® products must be installed in the correct sequence.
- We recommend that you install the panels individually for ease of installation. This includes the application of adhesive and rolling the panel.
- Panel thicknesses can vary by 1 – 2mm, therefore check the thickness of the panels required to fit a wall or space and trial fit a few panels by using a slow-drying construction adhesive and check for variances at the eyeline level.
- If there are variances, some panels may need spacing to achieve a flush finish. Use either double sided tape, a thick strip of construction adhesive, or alloy strips to the back of the panel to space it out.
- On a clean drop sheet, carefully spray or brush on contact adhesive to entire panel and wall installation area. Clean off any adhesive spills if required.
- To ensure adequate adhesion and a tight joint, adhesive can be applied to the wall along the butt-joints with a paintbrush. Care should be taken not to apply excessive adhesive along the joints as this can leak at the seams when pressure is applied.
- Ensure the adhesive has tacked-off sufficiently then fit the Ecooustic® Panel to the wall. Where joining panels with a butt-join it is recommended the panel is fitted firmly to the join first, then smoothed out to the edges applying even pressure to ensure adequate adhesive transfer and a strong bond.
- Gently press or use a smooth carpet roller and roll the panels towards the butt-joints, then roll the entire panel to ensure adequate adhesive transfer and a strong bond, until it is flush with the other panels.

### **Cutting**

- Important: Cutting and machining techniques must be trialled on a piece of scrap prior to cutting the panel to ensure the highest possible finish.
- Always use sharp and clean blades.
- Always use slow, consistent feed rate.
- Hold sheet firmly while cutting to minimise vibration; use just enough clamp pressure to prevent vibration.
- Feed against the rotation of the blade or tool.
- Proper safety equipment must be worn at all times.
- Do not cut with a dull blade or cutter.
- Do not apply excessive clamping pressure.
- Do not use a blade with side-set teeth.
- Do not remove safety guards from equipment.

### **Machine Cutting**

- As Ecooustic® product is made from 100% PET, it has characteristics similar to plastic and overheating may cause it to melt or fuse slightly on the heated contact points. To reduce heat while cutting or trimming the Ecooustic® product, make several passes rather than trimming 'deep' through the product.
- Consider the tool speeds so that the Ecooustic® product does not melt from frictional heat. Generally, best results are achieved when using the highest speed at which overheating of the tool or product does not occur.
- Hard, wear-resistant tools with greater cutting clearances than those used for cutting metal are suggested. High-speed or carbide-tipped tools are efficient for long runs and provide accuracy and uniformity of finish. Bring the blade to full speed before starting the cut. Secure the Ecooustic® product during cutting operations to minimise vibration.

### **Sawing**

- Any of the following saw types, commonly used for wood or metal, should be satisfactory for cutting Ecooustic® product: festool saw and metal cutting guide, circular saws, band saws, saber saws or jigsaws.
- Although some saw designs are better suited than others for sawing Ecooustic® product because they produce smoother or faster cuts. Circular saws and band saws usually produce the best surfaces, and they can be used in most sawing operations.

- Blade design plays an important part in successful sawing of Ecoustic® product. A skiptooth band saw blade is preferred because the wide gullet provides ample space for the plastic chips to be carried out of the kerf (the cut made by the saw). For best results, the teeth should have zero rake and some set. For a curved cut, the blade should be narrower and have more set than for a straight cut. The blade must be kept sharp to prevent melting or chipping of the sheet, and the blade guide should be placed very near the cut to minimise vibration.
- A circular saw is preferred to a band saw for straight cuts even though it tends to generate more heat.
- A perforated saw blade will run cooler than a solid blade. It is essential that the spindle bearing be tight so that the saw will run true.
- Ecoustic® product can also be cut in other ways including traditional workshop tools such as a jig saw, router, die cutter or even using manual techniques such as guillotining or cutting with an art knife.

#### **Drilling (This applies only to Ecoustic® Panel: 8mm, 13.5mm and Ecoustic® Screen)**

- Drill bits must be sharp and clean.
- Proper safety equipment must be worn at all times.
- Do not apply excessive clamping pressure.
- Do not remove safety guards from equipment.
- Do not drill Ecoustic® Panel: 25mm and 50mm.

#### **Fixing**

- Ecoustic® product can be fixed by glue.
- There are many options with using adhesives; however these leave some residue on the Ecoustic® product that must be removed when recycling the panels.
- Water based or solvent type adhesives can be used to adhere Ecoustic® product. All common substrates including plasterboard, timber, MDF, block and concrete must be sealed prior to application of the adhesive.
- The installer must ensure that the adhesive supplier has proven that their product is suitable for fixing Ecoustic® product to the intended substrate.
- We recommend a test panel be used on the substrate to ensure a satisfactory bond.
- For ceiling applications, contact adhesive and mechanical fastening is required. Please contact Instyle for further instructions.

#### **Customisation**

- The thickness, dimensions and textile lamination of Ecoustic® product can be customised to your special requirements to reduce labour time and costs. Please contact Instyle for pricing and minimum order quantity details.

If you have any queries please contact your local distributor.

## SAFETY DATA

### Description

Nonwoven and/or thermally bonded and laminated 100% polyester panel type products used for sound absorptive linings for commercial fit out applications, wall and ceiling panels, workstation screens, partitions and pin board substrates

### Product Range

The Ecooustic® collection is available in various densities and thicknesses of 8mm, 13.5mm, 15mm, 25mm and 50mm.

### Composition

Organic long chain synthetic polymer

### Hazards

Classified as Non-Hazardous according to the criteria of the Australian Safety and Compensation Council ASCC. Approved criteria for classifying Hazardous substances. [NOHSC: 1008] 3rd edition

### First Aid

Swallowed / Eye / Skin / Inhaled: No special precautions

### Storage and Transport:

Refer to Transport, Handling and Storage Guidelines in this document.

### Disposal

Product is recyclable through INSTYLE's Revive® program. If necessary product can be disposed of in an approved landfill.

### Personal Protection

No Precautions necessary.

### Ecological Information

Product does not contain any ozone-depleting chemicals. 100% Recyclable

### Fire/Explosion Hazard

Relatively low flame response. Will not explode. Use any fire fighting appliance. Like most organic materials gives off CO, CO<sub>2</sub> and H<sub>2</sub>O during combustion.

### National Construction Code Fire Compliance

Individual product fire test results are included on product descriptions and copies of the reports are available from INSTYLE.

Fire Fighting Measures: The material will melt if exposed to temperatures above 250°C. Plastic packaging and facings used may decompose or burn at or below this temperature. If subject to fire, evacuate area and contact emergency services. Use water fog to cool affected packs.

### Physical and chemical properties

Appearance: White rigid and semi rigid panel board

Odour: None

Alkalinity: pH: 7.8 (pH 7 is neutral)

Boiling Point: N/A

Melting Point: 250 °C

Vapour Pressure: N/A

Specific Gravity: 1.38

Solubility: N/A

Percentage Volatiles: None

Flash Point: N/A

Decomposition Temp: > 250 °C

Lower/Upper exposure Limits: N/A

Moisture Absorption: Exposure to an atmosphere of 50°C and 95% RH for four days gives a moisture absorption of less than 0.2% by volume.

The information in this guide is believed to be true at the time of publication. INSTYLE reserves the right to change specifications without notice, and has no obligation or liability for persons misrepresenting or misusing this information in any manner whatsoever.



## **ECOUSTIC® CARE INSTRUCTIONS**

The care instructions below are applicable to the following Ecoustic® products:

Ecoustic® Felt

Ecoustic® Panel

Ecoustic® Screen

Ecoustic® Print

### **Please Note**

Consideration must be given to any possible effect of the cleaning regime on the underlying glue or backing board. It is recommended that spot cleaning only is used and that it is carried out by a professional cleaner.

### **Regular Care**

- Protect from direct heat and sunlight.
- To prevent dust build up, lightly dust with a soft cloth or vacuum with a soft brush attachment.

### **Spot Cleaning**

- Professional cleaning is always recommended.
- Always test any cleaning products on an inconspicuous area prior to commencing cleaning.
- Blot any excess spills from the material with a dry clean sponge or cloth.
- Treat all stains and spills as soon as possible.
- Most marks can be spot cleaned by lightly wetting the affected area with a mild detergent and warm water solution.
- Do not saturate the panel, screen or felt.
- Do not scrub or abrade the fabric as this will affect the surface finish.
- Once the stain or mark has been loosened then blot the excess solution out with a dry clean cloth.
- Sponge afterwards with clean warm water and mop any excess moisture with a dry clean sponge or cloth.
- The fabric can also be spot cleaned with dry cleaning fluid. Lightly sponge a small amount of dry cleaning fluid and blot.
- Dry away from direct heat and sunlight.
- Avoid the use carpet shampoos.