TECHNICAL DATA SHEET



## ACOUSTIC CEILING PANELS

#### **DESCRIPTION**

ECOWOOL acoustic ceiling panel range includes most edge designs and 4 different finishes to create the acoustic environment that best matches your application. The acoustic ceiling panel is an aesthetical and decorative suspended ceiling system, specially designed for selective and distinctive applications, where acoustical (sound) control is crucial and paramount. The new generation of glass mineral wool has been engineered to provide the highest level of fire safety combined with excellent acoustic performance and thermal resistance for building occupants to achieve the level of indoor comfort deserved.

The acoustic ceiling panel is available in freely suspended sound-absorbing panels for creating optimum acoustic environment in the building. Several different designs give a choice of aesthetic and practical possibilities.

### THERMAL AND ACOUSTICAL SOLUTION

The acoustic ceiling panels can be used in a variety of applications that require good thermal and acoustical efficiency. The ceiling panels are designed to help improve privacy, comfort and productivity by effectively absorbing sound, blocking sound transmission and resisting thermal transfer.

### **APPLICATIONS**

Commonly used in places where acoustical performance are required as well as in high thermal performance. It is particularly suitable for offices, conference halls, meeting rooms and noisy work areas in the commercial and industrial sectors, where it helps eliminate objectionable noises, reduces the audibility of crosstalk etc. hence it makes communicative speech clear and audible.

### **CUSTOM FABRICATIONS**

Create a custom design tailored to your own space to meet your specific service conditions and performance requirements.

### **ADVANTAGES**

**Optimal fibre diameter.** Optimal fibre diameter ranging from 4-5 microns produces more air pockets which enables the insulation to provide a better and enhanced performance.

**Better fibre network.** Fine, longer and evenly distributed fibre network helps in creating better tensile strength allowing the insulation to demonstrate superior durability.

**Less dusty and less itchy.** Specifically engineered to produce a comfortable and less dusty insulation. It creates a pleasant work experience by reducing the tingling feeling during installation.

**Accessibility.** Easily demountable with minimum demounting depth according to installation guide.

**High light reflectance.** Less energy is consumed overall and per fixture by using fewer lights and lower-watt bulbs that generate the same amount of light due to higher reflectance. Fewer fixtures also mean fewer repairs and lower maintenance costs.

### Influence of climate

The panels withstand a permanent ambient RH up to 90% at 30°C without sagging.

### **Dimensional stability**

Moist indoor air can cause other panels to visibly sag. ECOWOOL ceiling panel offers very high resistance to moisture absorption which protects them against warping, buckling and sagging. This characteristics of dimensional stability helps ensure the panels maintain their originally installed appearance throughout the life of the ceiling.

### **FIRE SAFETY**

Tested in accordance with (plain/unfaced):

- B.S. 476: Part 4 Non-combustibility test for materials
- B.S. 476: Part 6 Fire propagation
- B.S. 476: Part 7 Surface spread of flame
- Comply with BOMBA Class 'O' certification and other Building Regulations

### **ACOUSTICAL PERFORMANCE**

Tested in accordance with: ASTM C423. Type 'E' mounting

## THERMAL CONDUCTIVITY

Tested in accordance with: ASTM C518 at 20°C Mean Temperature

#### **Read This Before You Buy**

Insulation's effectiveness is measured in R-Value. R stands for the insulation's resistance to heat flow, heat escapes from your building and heated air enters your building. The higher the R-Value, the greater the resistance to heat flow and the greater your potential for saving energy, natural resources and money. Compare insulation R-Values before you buy.



# ACOUSTIC CEILING PANELS

## **CLASSICTONE**

Standard board size: 603mm x 1212mm and 603mm x 606mm









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- ✓ CLASSICTONE range of panels are available in square lay in panel or recessed lay in panel. The recessed lay in panel has a recessed visible grid and a coated edge design, creating a ceiling with a shadow effect that accentuates each tile and partially conceals the grid system. The visible surface of each tile is 10mm below the grid and easily demountable.
- ✓ Recessed lay in panels are available concealed with printed glass tissue on the front and white glass tissue facing on the back.
- Square lay in panels are available faced with printed glass tissue on the front.
- ✓ Superior acoustic performance by offering excellent noise reduction coefficient.
- ✓ Superior sag resistance and dimensional stability provide a long-lasting, durable panel and the non-directional pattern ensures consistent appearance.
- ✓ Scratch-resistance surface can be cleaned easily with a soft brush or vacuum.
- ✓ R-Value 0.65 m²K/W
- ✓ NRC 0.90
- ✓ Nominal Thickness 20mm
- ✓ Composite Thickness 20.90mm

- ✓ THERMALTONE range of panels are available in square lay in panels and it is easily demountable.
- ✓ Lightweight acoustic panels are ideal for nearly any applications including offices, buildings, schools, churches, warehouses, conference rooms, entries and lobbies.
- ✓ Faced ivory vinyl with micro perforation.
- Enhance sound absorption with micro perforated surface while the embossed ivory vinyl offers a smooth, elegant surface finish.
- The ceiling panels are both humidity and sag resistant; meaning that your panels will not buckle or
- Ivory vinyl surface of the panels make it easy to be cleaned with a soft brush or vacuum.
- ✓ R-Value 0.68 m²K/W
- ✓ NRC 0.80
- Nominal Thickness 22mm
- Composite Thickness 22.60mm

Frequency(Hz)	125	250	500	1000	2000	4000
Sound Absorption Coefficients	0.87	0.82	0.78	0.92	1.02	1.09

Frequency(Hz)	125	250	500	1000	2000	4000
Sound Absorption Coefficients	0.70	0.70	0.81	0.90	0.75	0.37



# ACOUSTIC CEILING PANELS

## **POLYTONE**

Standard board size : 603mm x 1212mm and 603mm x 606mm



- ✓ POLYTONE ceiling panels provide an attractive 'dropin' system ideally suited to commercial 25mm Tsection grid systems.
- Recommended for ceiling applications in commercial buildings where the textured perforated facing offers good sound absorption and light reflectance properties.
- ✓ Enhanced sound control to help improve privacy and comfort.
- ✓ Sag-resistant acoustic panel designed to meet the need for a lightweight sag resistant ceiling panel.
- ✓ Faced with embossed PVC vinyl.
- ✓ The panels feature extraordinary ease of maintenance, moisture-resistant, vinyl surface is cleanable; making them suitable for high-humidity areas.
- ✓ Features inherent performance which means that due to the glass fibre substrate these panels inherently resist the growth of mould and mildew.
- ✓ R-Value 0.49 m²K/W
- ✓ NRC 0.62
- ✓ Nominal Thickness 15mm
- ✓ Composite Thickness -15.60mm

### **CINEPLEXTONE**

Standard board size:
603mm x 1212mm and 603mm x 606mm



- CINEPLEXTONE acoustic ceiling panels provide an attractive 'drop-in' system ideally suited to commercial 25mm T-section grid systems. Specifically developed to meet acoustical and aesthetic requirements for theatre applications.
- ✓ Recommended for ceiling applications within the theatre hall where the rich matte black colour enhances theatre esthetics.
- ✓ Enhanced sound control to help improve privacy and comfort.
- ✓ Sag-resistant acoustic panel designed to meet the need for a light weight sag resistant ceiling panel.
- ✓ Faced with rich matte black colour acoustic material.
- ✓ The panels feature extraordinary ease of maintenance, moisture-resistant and is cleanable; making them suitable for high-humidity areas.
- ✓ R-Value 0.65 m²K/W
- ✓ NRC 0.85
- ✓ Nominal Thickness 20mm
- ✓ Composite Thickness 20.46mm

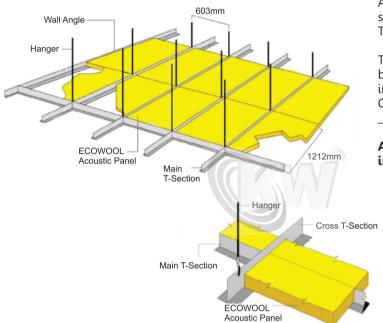
Frequency(Hz)	125	250	500	1000	2000	4000
Sound Absorption Coefficients	0.52	0.41	0.40	0.77	0.74	0.65

Frequency(Hz)	125	250	500	1000	2000	4000
Sound Absorption Coefficients	0.58	0.56	0.67	0.88	0.82	0.58



## **ACOUSTIC CEILING PANELS**

## PICTURE 1: LAY IN / DROP IN CEILING PANEL



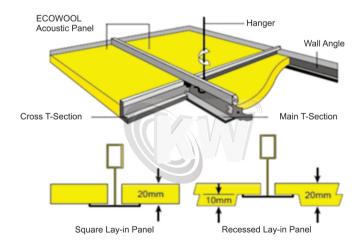
### **SHORT FORM SPECIFICATION**

All acoustic ceiling panels shown on drawings or specified herein shall be \_\_\_\_(CLASSICTONE, THERMALTONE, POLYTONE, CINEPLEXTONE).

Thermal conductivity 'K-Value' of the insulation shall be K\_\_. Thermal resistance 'R-Value' of the insulation shall be R\_\_. The Noise Reduction Coefficient (NRC) of the acoustic insulation shall be

Also available in a full range of formaldehyde free insulation - BROWNIE

### **PICTURE 2: RECESSED EDGE CEILING PANEL**



Technical specifications as shown in this literature are intended to be used as general guidelines only. The physical and chemical properties of glass mineral wool insulation listed herein represent typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

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