# Alpha Panel™

# MATERIAL DATA SHEET

## ALPHA MATERIAL SPECIFICATION GUIDE

Alpha is an ultraversatile acoustic panel used to manufacture a wide range of sustainable acoustic solutions. Alpha Panels have been manufactured using 65% post-consumer recycled fibres and is 100% recyclable. The recycled PET fibres are prominently sourced from bottles and other recyclable PET consumables. Panels are made by compressing FR oil-free PET fibres which go though a spinning, punching and baking process. We have identified the perfect density that offers a great balance between acoustic performance and rigidity.

## TECHNICAL DATA

| | |
|---|---|
| **Materiality** | 65% Recycled PET Fibre \| 35% Virgin Fibre |
| **Thickness** | 12mm or 24mm Panel |
| **Dimension** | 2800mm x 1200mm |
| **Density** | 2.4kg/m² (12mm) / 3.8kg/m² (24mm) |
| **Fire Rating** | EN13501-1:2007+A1:2009 B - S1, D0 |
| | ASTM E84-2019 B Class A |
| **Colour** | Available in 30 colours |

Our Alpha Panels are manufactured with a thickness tolerance of ±1 mm and a length and width tolerance of ±3 mm, ensuring consistent quality and precision across installations.

## FEATURED PRODUCTS
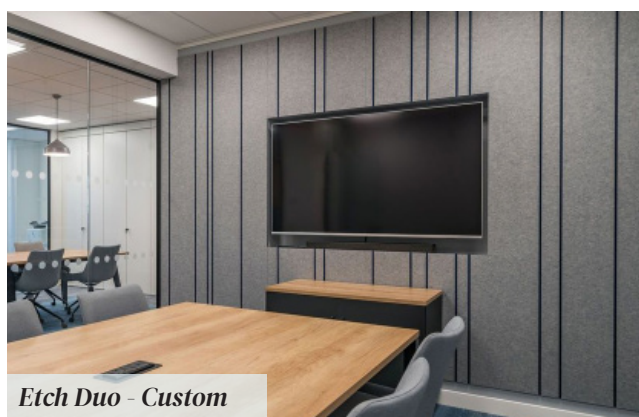


*Etch Duo - Custom*

*Etchi Duo Custom is an eye catching background drop for a lobby or studios. When paired with proper lighting, the pattern is even more highlighted revealing its daunting details.*



*Atmos - Custom*

*Just another playful Atmos circle ceiling rafts occupying the ceiling space.*

# 12mm ALPHA PANEL

## *Acoustic Performance*

The acoustic performance of materials refers to their ability to absorb, reflect, or transmit sound waves. This concept is crucial in architecture, interior design, and engineering, as it determines how sound behaves in a space. Materials with good acoustic performance can reduce noise levels, improve speech intelligibility, and create more comfortable and functional environments by controlling reverberation and sound transmission.

## TESTING STANDARDS

| | |
|---|---|
| **ISO 354** | Measurement of sound absorption in a reverberation room |
| **ISO 11654** | Sound absorbers for use in buildings — Rating of sound absorption |
| **ASTM C423-17** | Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method |
| **ACOUSTICS:** | Sound absorbers for use in buildings — Rating of sound absorption |

| FREQUENCY (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 | aw | NRC | Class |
|---|---|---|---|---|---|---|---|---|---|
| 12mm Direct Fix | 0.00 | 0.10 | 0.30 | 0.55 | 0.80 | 1.00 | 0.35(H) | 0.45 | D |
| 12mm + 25mm Airgap | 0.10 | 0.20 | 0.55 | 0.90 | 1.00 | 1.00 | 0.50(MH) | 0.65 | D |
| 12mm + 50mm Airgap | 0.10 | 0.30 | 0.70 | 1.00 | 1.00 | 1.00 | 0.60(MH) | 0.75 | C |
| 12mm + 75mm Airgap | 0.15 | 0.45 | 0.85 | 1.00 | 1.00 | 1.00 | 0.75(MH) | 0.85 | C |
| 12mm + 100mm Airgap | 0.15 | 0.45 | 0.90 | 1.00 | 0.95 | 1.00 | 0.75(MH) | 0.85 | C |
| 12mm + 200mm Airgap | 0.45 | 0.85 | 1.00 | 0.90 | 1.00 | 1.00 | 1.00 | 0.95 | A |
| 12mm + 300mm Airgap | 0.60 | 0.95 | 0.90 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 | A |
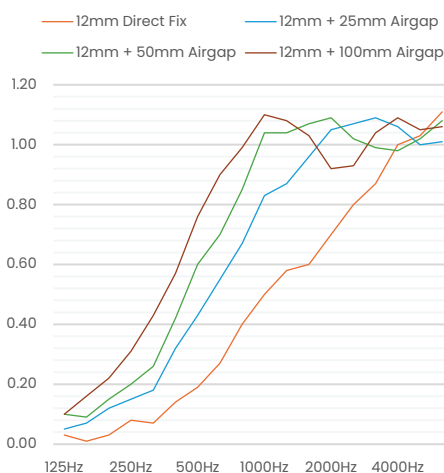


Weighted Sound Absorption Coefficient (aw) - Measured in accordance with ISO 11654. Practical sound absorption coefficient ap values at given standard frequencies are compared with reference curve aw.

Noise Reduction Coefficient (NRC) - The mean average as value at frequencies 250, 500, 1000 and 2000 Hz.

Absorption Class – Levels of comparison of absorption values against a reference curve with A as highest and E as lowest. Measured in accordance with ISO 11654.

Practical Sound Absorption Coefficient (ap) - The average of the three as values centered on the 1/3 octave band center frequency, measured in accordance with EN ISO 354.

# 24mm ALPHA PANEL

## *Acoustic Performance*

The acoustic performance of materials refers to their ability to absorb, reflect, or transmit sound waves. This concept is crucial in architecture, interior design, and engineering, as it determines how sound behaves in a space. Materials with good acoustic performance can reduce noise levels, improve speech intelligibility, and create more comfortable and functional environments by controlling reverberation and sound transmission.

## TESTING STANDARDS

| | |
|---|---|
| **ISO 354** | Measurement of sound absorption in a reverberation room |
| **ISO 11654** | Sound absorbers for use in buildings — Rating of sound absorption |
| **ASTM C423-17** | Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method |
| **ACOUSTICS:** | Sound absorbers for use in buildings — Rating of sound absorption |

| FREQUENCY (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 | aw | NRC | Class |
|---|---|---|---|---|---|---|---|---|---|
| 24mm Direct Fix | 0.05 | 0.20 | 0.60 | 0.85 | 1.00 | 1.00 | 0.50(MH) | 0.65 | D |
| 24mm + 25mm Airgap | 0.15 | 0.40 | 0.85 | 1.00 | 1.00 | 1.00 | 0.70(MH) | 0.85 | C |
| 24mm + 50mm Airgap | 0.20 | 0.50 | 1.00 | 1.00 | 1.00 | 1.00 | 0.80(H) | 0.95 | B |
| 24mm + 75mm Airgap | 0.25 | 0.60 | 1.00 | 1.00 | 1.00 | 1.00 | 0.90 | 1.00 | A |
| 24mm + 100mm Airgap | 0.25 | 0.65 | 0.90 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | A |
| 24mm + 200mm Airgap | 0.50 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.05 | A |
| 24mm + 300mm Airgap | 0.65 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | A |
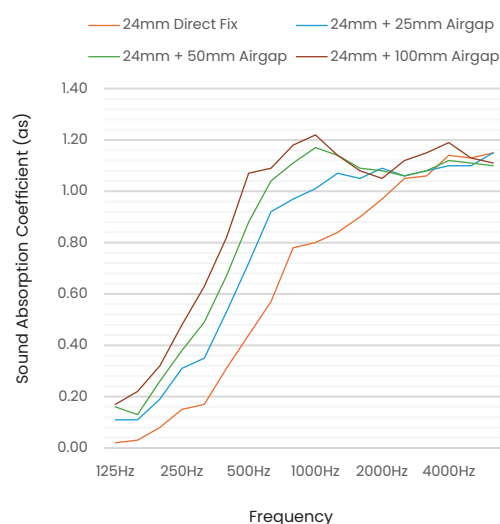


Weighted Sound Absorption Coefficient (aw) - Measured in accordance with ISO 11654. Practical sound absorption coefficient ap values at given standard frequencies are compared with reference curve aw.

Noise Reduction Coefficient (NRC) - The mean average as value at frequencies 250, 500, 1000 and 2000 Hz.

Absorption Class – Levels of comparison of absorption values against a reference curve with A as highest and E as lowest. Measured in accordance with ISO 11654.

Practical Sound Absorption Coefficient (ap) - The average of the three as values centered on the 1/3 octave band center frequency, measured in accordance with EN ISO 354.

# ALPHA PANEL

## *Colour Guide*

A well-curated color guide offers a spectrum of hues that can complement diverse interior designs, from vibrant, energetic tones to subtle, calming shades. The selection process should consider the panel's intended environment, ensuring it enhances the room's acoustic performance while seamlessly blending with existing decor. Alpha Panel provide a durable and sustainable option, available in a variety of colors to suit any design vision.

## COLOURS

| | | | | | |
|---|---|---|---|---|---|
| BLACK | CHARCOAL GREY | SLATE GREY | ICE WHITE | WHITE | OPAL |
| SAND | OCEAN | CARAMEL | SAGE | NEPTUNE | EDEN |
| MISTY DEW | PURBECK | PEACH | RUST | YELLOW | BURNT ORANGE |
| MAGNOLIA | CYPRUS | CLOUDS | NATURAL | OYSTER | MEADOW |
| PURBECK | OLIVE | PARADISE | ALICE BLUE | NOCTURN | MARBLE |

# ALPHA PANEL

## *Care & Maintenance*

Caring for an Alpha Panel involves regular dusting with a soft cloth or vacuuming with a brush attachment to keep it clean. For stains, use a mild detergent and water, avoiding harsh chemicals. Periodically inspect the panels for any signs of wear and tear to ensure they maintain optimal acoustic performance. Proper maintenance will keep your acoustic PET panels looking and functioning well for years!

## CLEANING METHODS

**A.** Mop up excess as soon as possible with a sponge or cloth.

**B.** Remove surplus with a knife edge or appropriate Instrument.

**C.** Sponge with a solution of carpet shampoo working from well outside the stain in a circular motiontowards the centre (this avoids spreading the stain). Sponge afterwards with clean warm water and mop excess moisture with a clean dry cloth or sponge. Allow to dry then brush gently with a soft brush. If any stain remains, sponge with a solution of one part household bleach to six parts clear water.Thoroughly rinse after treatment.

**D.** Lightly sponge with household dry cleaning fluid and blot. Apply sparingly, as the substance may have an adverse effect on the adhesive.

**E.** Lubricate the stain with glycerine or petroleum jelly.

**F.** Apply nail polish remover. The nail polish remover should not include lanolin or be of a greasy nature.

**G.** Sponge with turpentine (or substitute).

**H.** Freeze with ice cubes and scrape away while cold.

**I.** Clean with regular extractive carpet cleaner (if possible).

**J.** Use circular cutter and remove damaged portion.

## CLEANING GUIDE

| CONTAMINANT | GUIDE | | |
|---|---|---|---|
| Blood | A | C | |
| Burn/Scorch Mark | J | | |
| Chewing Gum | B | C | D | H |
| Chocolate | B | C | D |
| Cooking Oils | B | C | D |
| Crayons/Markers | A | C | |
| Drinks | Vacumm, I, or C | | |
| Dust/Dirt | B | C | |
| Excrement | C | | |
| Grease | B | C | D |
| Ink | D | C | |
| Lipstick | A | C | |

| CONTAMINANT | GUIDE | | |
|---|---|---|---|
| Mildew | B | C | D |
| Milk | C | | |
| Mud | A | | |
| Nail Polish | B | C | |
| Oil | A | F | |
| Paint (Water-based) | B | C | D |
| Paint (Oil-based) | A | C | E |
| Sauces | A | C | D | G |
| Shoe Polish | B | D | D |
| Urine | A | C | |
| Vomit | A | C | D |
| Wine | A | Salt | C |

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