FELTBAY
FROM PLASTIC TO PURPOSE

DOCUMENT
Technical Data Sheet

REVISION
FB-AP-03MM · EN · REV 01




3 mm

ACOUSTIC PANEL

# FELTBAY
# Acoustic Panel.

SERIES
PET Felt Panel

MATERIAL
100% Polyester Fiber

RECYCLED CONTENT
≥ 80% Post-consumer

— INTRODUCTION

# Acoustic panels, built with purpose.

FELTBAY Acoustic Panels are versatile sound-absorbing solutions designed for a wide range of interior applications. Lightweight, semi-rigid and engineered from **100% polyester fibre**, they balance acoustic performance with a refined, tactile finish.

Available in thicknesses from 3 mm to 24 mm, panels can be fully customised through printing, moulding, pressing, precision cutting, grooving and peel-and-stick application — and require no edging or capping for clean, seamless installation.

| 3 mm | 0.10 | ≥ 80 % |
|---|---|---|
| NOMINAL THICKNESS | NRC · DIRECT FIX | RECYCLED PET |

## CUSTOMISATION

Printing · Moulding & Pressing · Precision Cutting · Grooving · Peel-and-Stick. No edging required.

## APPLICATIONS

Wall lining · Ceiling panels · Acoustic features · Custom solutions.

## AT A GLANCE

THICKNESS
3 mm

DENSITY
600 g/m²

COMPOSITION
100% PET (≥80% rec.)

NRC (DIRECT)
0.10

FIRE CLASS
ASTM E84 – Class A
EN13501 – B-s1,d0*

*Majority of colours and range available to this standard, some colour/ranges achieve B-s2,d0.

— SUSTAINABILITY

# From plastic to purpose.

FELTBAY panels are engineered with a strong commitment to **sustainability, circularity** and **healthy indoor environments** — designed to meet international standards for environmental performance and material safety.

## SUSTAINABILITY PILLARS

Recycled content · Low emissions · Circular design · Healthy interiors · Long lifecycle.

### RECYCLED CONTENT

Manufactured from high levels of recycled PET — primarily post-consumer plastic bottles — reducing environmental impact and supporting a circular material economy.

### INDOOR AIR QUALITY

Low VOC emissions contribute to improved indoor air quality and healthier interior spaces.

### CIRCULAR DESIGN

Designed for a long lifecycle, reuse and recycling. Lightweight construction reduces transport emissions and overall environmental footprint.

### GREEN BUILDING CONTRIBUTION

Feltbay panels contribute to LEED®, WELL, BREEAM and ESTIDAMA certifications through recycled content, low emissions and acoustic performance.

## CERTIFICATIONS & COMPLIANCE

Global Recycled Standard · OEKO TEX® · Recycled 100 claim standard · Recycled Blended claim standard · BREEAM® · إستدامة estidama · International WELL Building Institute · U.S. Green Building Council

— SPECIFICATIONS

# Product information & performance.

## PRODUCT INFORMATION

| | |
|---|---|
| PRODUCT NAME | **FELTBAY PET Felt Panel — 3 mm** |
| DESCRIPTION | Acoustic panel manufactured from thermally bonded high-density polyester fibres, for wall and ceiling applications. |
| COMPOSITION | 100% polyester fibre (PET) . ≥ 80% recycled content |
| THICKNESS | **3 mm** (0.12" nominal) |
| DENSITY | 600 g/m² (≈ 1.8 oz/ft²) |
| PANEL DIMENSIONS | 1250 × 2800 mm (48.2" × 110.2")<br>1250 × 2440 mm (48.2" × 96.1") |
| TOLERANCE | ± 5 mm (± 0.2") |
| MATERIAL CHARACTERISTICS | Non-woven PET panel · directional fibre grain · no pattern repeat · natural batch variation may occur. |
| INSTALLATION | Adhesive fixing · Mechanical fixing · Z-clip systems<br>Install as per Feltbay guidelines. |
| APPLICATION | Wall lining · Ceiling panels · Acoustic features & custom solutions. |

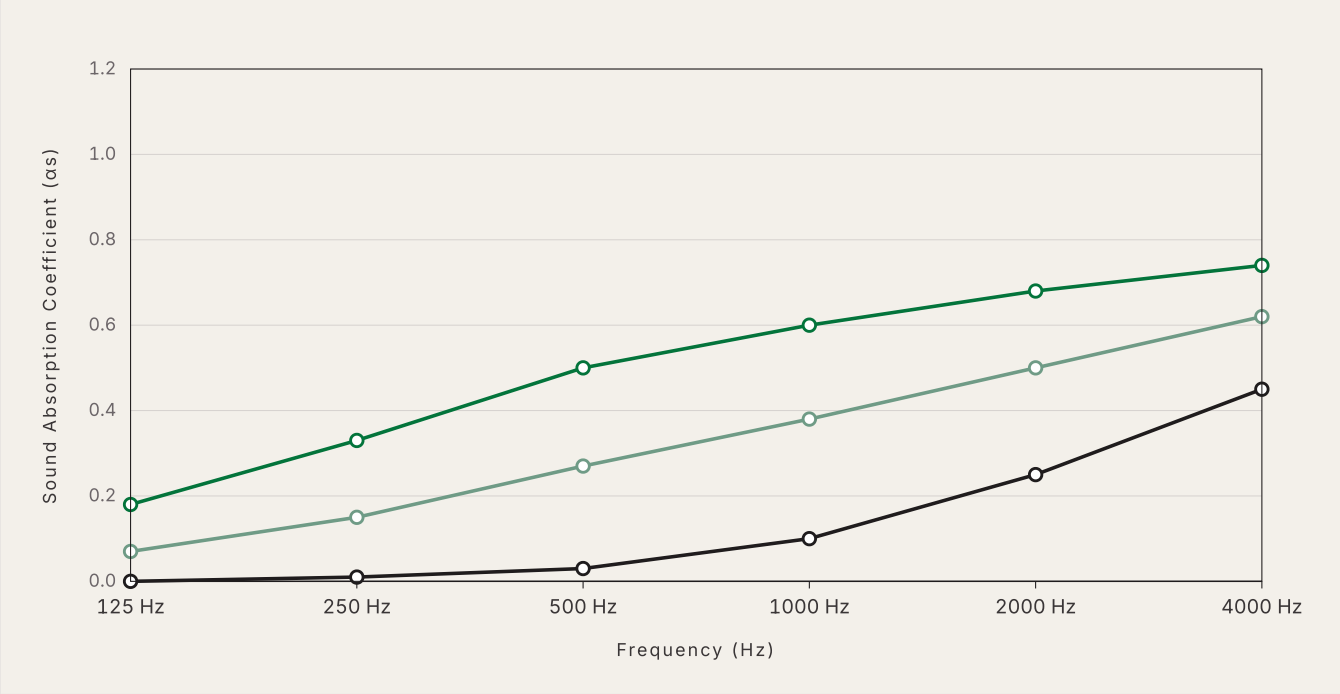
## PERFORMANCE & TESTING

| | |
|---|---|
| FIRE PERFORMANCE | **ASTM E84** — Class A<br>**EN 13501-1** — B-s1,d0 / B-s2,d0 |
| ACOUSTIC PERFORMANCE | 3 mm (direct fix): **NRC 0.10**<br>50 mm air gap: NRC 0.30<br>50 mm air gap + insulation: NRC 0.55<br>All 3 mm values are engineering estimates; not laboratory-tested. |
| MOISTURE PERFORMANCE | **ASTM C1104 / C1104M**<br>49 °C · 95% RH · 4 days — 0.4% by weight |
| IMPACT RESISTANCE | **ISO 7892:1988**<br>Hard body — no damage up to 9 J (0.5 kg / 2 m)<br>Soft body — no damage up to 70 J (50 kg / 150 mm) |
| MICROBIAL RESISTANCE | **ASTM G21** — Growth rating 0 (no growth) |
| COLOUR FASTNESS — LIGHT | **ISO 105-B02:2014** — Rating 6 (scale up to 7) |
| COLOUR FASTNESS — RUBBING | **ISO 105-X12:2016** — Dry 4–5 · Wet 4–5 |
| MAINTENANCE | Clean with damp cloth. Upholstery shampoo if required. Avoid excessive water or abrasion. |

— ACOUSTIC PERFORMANCE

# Sound absorption, across the spectrum.

FELTBAY PET Felt panels provide sound absorption across a wide frequency range, enhancing acoustic comfort in interior environments. The 3 mm figures below are **engineering estimates**; no laboratory test to EN ISO 354 has been carried out for this thickness.




FELTBAY **3 mm** · Direct Fix  FELTBAY **3 mm** · + 50 mm Air Cavity  FELTBAY **3 mm** · + 50 mm Insulation

| FREQUENCY (HZ) | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|---|---|---|---|---|---|---|---|
| FELTBAY 3 mm · Direct Fix | 0.00 | 0.01 | 0.03 | 0.10 | 0.25 | 0.45 | **0.10** |
| FELTBAY 3 mm · + 50 mm Air Cavity | 0.07 | 0.15 | 0.27 | 0.38 | 0.50 | 0.62 | **0.30** |
| FELTBAY 3 mm · + 50 mm Insulation | 0.18 | 0.33 | 0.50 | 0.60 | 0.68 | 0.74 | 0.55 |

NRC = average of α250, α500, α1000 and α2000, rounded to nearest 0.05. 3 mm values are engineering estimates only; no official laboratory test was supplied for 3 mm. The 50 mm cavity and insulation values are also estimates and must not be presented as certified Peutz test results.

## PERFORMANCE HIGHLIGHTS

· Modest high-frequency absorption when direct-fixed
· Substantially improved with a cavity or added insulation
· Performance depends strongly on installation method
· Suitable for wall and ceiling applications

## BASIS OF VALUES

Values are **engineering estimates** derived from the tested thicknesses in the FELTBAY range. No laboratory measurement to EN ISO 354 was carried out for 3 mm, and these figures must not be presented as certified test results.

— COLOUR OVERVIEW

# Colours & light reflectance.

FELTBAY panels are presented in a carefully curated colour palette structured across **five distinctive collections —** supporting diverse architectural visions, from calm and minimal interiors to bold expressive spaces.

All colours are referenced to the **NCS (Natural Colour System)** for precise specification, with measured **Light Reflectance Values (LRV)** to support lighting design. Reflectance ρ represents the percentage of visible light reflected by the panel surface.

### HOW TO READ

**Colour name**
S 2040-B10G
LRV **45**

Each swatch shows the FeltBay theme name, the closest matching NCS code and the measured LRV value.

## COASTAL

7 COLOURS · NCS REFERENCE

Inspired by sea and shore — cool blues, deep teals and bright tonal pairings to bring calm and depth to a space.

**Alya**
S 5010-B30G
LRV **25**

**Hawa**
S 2020-B10G
LRV **50**

**Reef**
S 7020-B10G
LRV **8**

**Laz**
S 4550-R80B
LRV **11**

**Dana**
S 2040-B10G
LRV **45**

**Sama**
S 2030-R90B
LRV **49**

**Nyla**
S 8505-R80B
LRV **4**

## STONE

9 COLOURS · NCS REFERENCE

A foundation of warm and cool neutrals — calm, architectural and timeless.

**Sora**
S 1002-Y80R
LRV **75**

**Niva**
S 1002-G
LRV **79**

**Sia**
S 9000-N
LRV **3**

**Lina**
S 6000-N
LRV **26**

**Dujan**
S 7502-G
LRV **14**

**Zill**
S 8502-G
LRV **9**

**Rimah**
S 3000-N
LRV **53**

**Marmar**
S 3502-Y20R
LRV **47**

**Fidda**
S 2502-Y50R
LRV **55**

— COLOUR OVERVIEW · CONTINUED

# Desert & Forest.

## DESERT

11 COLOURS · NCS REFERENCE

Sun-baked ochres and earth tones — warmth, grounding and the patina of arid landscapes.

- **Dune** — S 5010-Y10R — LRV 34
- **Sahara** — S 3010-Y10R — LRV 53
- **Cedar** — S 6020-Y40R — LRV 18
- **Masa** — S 2502-Y — LRV 59
- **Ziya** — S 2040-Y10R — LRV 48
- **Savannah** — S 3050-Y80R — LRV 27
- **Date** — S 8010-Y50R — LRV 10
- **Nour** — S 3010-Y60R — LRV 48
- **Ivra** — S 2005-Y40R — LRV 60
- **Terra** — S 3050-Y50R — LRV 30
- **Wadi** — S 4050-Y60R — LRV 20

## FOREST

8 COLOURS · NCS REFERENCE

Living greens — from yellowed grasses to deep canopy. Biophilic palettes for restorative spaces.

- **Tala** — S 7020-G50Y — LRV 12
- **Nael** — S 5030-G30Y — LRV 23
- **Zena** — S 3005-G50Y — LRV 52
- **Maha** — S 4010-G70Y — LRV 62
- **Layan** — S 7020-Y — LRV 13
- **Rayan** — S 3060-G70Y — LRV 34
- **Lura** — S 8505-G — LRV 5
- **Asel** — S 1080-G30Y — LRV 43

— COLOUR OVERVIEW · CONTINUED

# Vibrant accents.

## VIBRANT

6 COLOURS · NCS REFERENCE

Saturated highlights — energetic accents for moments of contrast and focus.

**Nari**
S 2070-Y50R
LRV **31**

**Aven**
S 7020-Y90R
LRV **5**

**Amara**
S 2570-R
LRV **13**

**Lulu**
S 3010-R50B
LRV **47**

**Auri**
S 0560-G90Y
LRV **73**

**Rubi**
S 2570-R
LRV **10**

### COLOUR INFORMATION & DISCLAIMER

**NCS Colour Matching —** The indicated NCS colour codes represent the closest visual reference and may not be an exact match due to the natural blending of fibres.

**Recommendation —** It is recommended to request a sample set to verify colours prior to specification or installation. Slight variations in reflectance may occur due to the natural composition of PET fibres and the textured surface of the material — these nuances contribute to the product's authentic finish.

— GET IN TOUCH

# Made in the UAE.
# Enhancing spaces worldwide

For technical specifications, sampling, or custom-fabrication enquiries — please contact your FELTBAY account manager or reach out below.

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