

MICRO FELT

MICROFIBER
PROTECTING PEOPLE,
PROTECTING PLANET SINCE 1979

MICRO FELT



Product Detail

Product Name	MicroFelt
Product Category	Carved-Acoustic Panel
Material	100% Polyester Fiber
Thickness	9 mm and 12 mm
Weight	9 mm: 1500 g/sqm & 1900 g/sqm 12 mm: 2,200 g/sqm & 2,400 g/sqm
Size	1220 mm x 2800 mm

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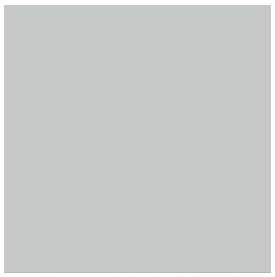
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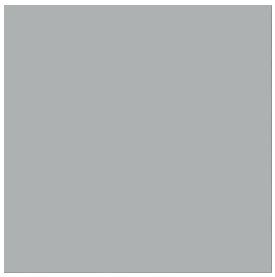
Performance

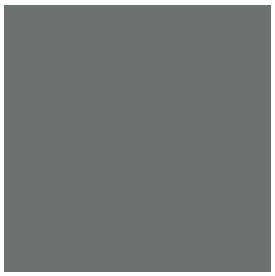
Sound Absorption	9 mm - NRC 0.3 , 12 mm - NRC 0.45
Flammability	EN 13501-1 : Class B-s1, d0
Emission Data	TVOC Emission Rate : 0.021 mg/m^3 Formaldehyde Emission Rate : 2 $\mu g/m^3$
Color Fastness to Light	ISO 105-B02 : Rating 6-7

Standard Colors // 23 Colors

Winter Snow


Rainy Cloud


Silent Morning


Mountain Stone

Winter Light

Beach Sand

Desert Sand

Desert Sunset


Summer Sun


Sunset Glow


Evening Sky


Autumn Red


Green Moss


Ocean Wave


Blue Horizon


River Stone

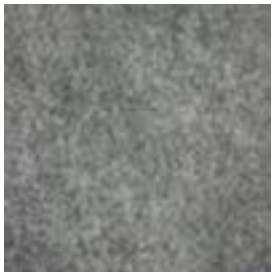

Midnight Flax


Ocean Pulse


Cloud Breath


Dust Light


Lava Rock


Storm Cloud


Deep Sea



Technical Data

Acoustic Performance

From meeting rooms to classrooms, tailored acoustic solutions make a measurable difference. Design standards such as **Noise Criterion (NC)** help guide the appropriate sound level for each environment—ensuring that the space performs visually and acoustically well.

NRC

MicroFelt 12 mm

Sound Absorption Coefficient	ASTM C423							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC	SAA
12 mm. (No Air Gap)	0.00	0.04	0.22	0.59	0.86	1.02	0.45	0.44
12 mm. (25 mm. Air Gap)	0.06	0.22	0.63	0.98	1.09	1.01	0.75	0.72
12 mm. (50 mm. Air Gap)	0.18	0.42	0.91	1.07	1.04	1.03	0.85	0.86
12 mm. (400 mm. Air Gap)	1.03	1.04	0.75	0.93	1.05	1.10	0.95	0.96

MicroFelt 9 mm

Sound Absorption Coefficient	ISO 354								ASTM C423							
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC	SAA	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC	SAA
9 mm. (No Air Gap)	0.05	0.05	0.15	0.35	0.65	0.90	0.30	0.29	0.06	0.04	0.11	0.35	0.67	0.91	0.30	0.29
9 mm. (25 mm. Air Gap)	0.00	0.10	0.25	0.65	1.00	1.00	0.50	0.50	0.05	0.16	0.45	0.83	1.05	0.98	0.60	0.62
9 mm. (50 mm. Air Gap)	0.05	0.20	0.55	0.90	1.00	0.90	0.70	0.66	0.13	0.34	0.81	1.02	1.01	0.95	0.80	0.79
9 mm. (200 mm. Air Gap)	0.25	0.75	0.95	0.80	0.90	0.95	0.85	0.86								
9 mm. (400 mm. Air Gap)									0.95	1.04	0.72	0.86	0.99	1.03	0.90	0.92

Flammability

- **Flammability** refers to how easily a material can catch fire and burn. The **EN 13501-1** standard classification system rates flammability based on how a material behaves when exposed to flame. **A Class B-s1, d0** rating indicates good fire performance

Color Fastness to Light

- **Color Fastness to Light** measures how well a coating maintains its original color and appearance when exposed to sunlight and UV radiation over time. The ISO 105-B02(**6-7**) standard provides a rating scale to evaluate whether a paint will fade, yellow, or otherwise deteriorate when exposed to light.

Emission Data

- **Emission Data** measures the volatile organic compounds (VOCs) and other harmful substances released by a product into the air during and after application. The TVOC (Total Volatile Organic Compound) emission rate(**0.021 mg/m^3**) and formaldehyde emission rate(**2 µg/m^3**) indicate how much the paint will off-gas over time. Lower emission values are preferable as they mean fewer pollutants are released into indoor air.



Installation Steps

01 — Mark Line

Gather measuring, cutting, and pressing tools, plus the recommended adhesive. Clean the wall so it's dry, smooth, and dust-free for strong bonding.

02 — Cut Panel to Required Size

Measure the installation area and mark straight guide lines on the wall for alignment. Cut the PET felt panel on a flat surface using a sharp cutter and metal ruler, making multiple light passes for a clean edge.

03 — Apply Adhesive

Apply adhesive evenly to the back of the panel (and to the wall if required). Follow the adhesive instructions, especially any "wait until tacky" time.

04 — Position Panel

Place the panel gently against the wall and align it to the guide lines before pressing fully. Make small adjustments immediately to keep seams straight and consistent between panels.

05 — Press to Secure

Press from the center outward to remove air gaps and ensure full contact. Roll across the surface and edges, then allow the adhesive to cure fully.

Maintenance

A: Blot excess immediately with a sponge or cloth.
B: Scrape off excess with a knife or suitable tool.
C: Use carpet shampoo, sponge from outside to center, rinse afterward.
D: Lightly sponge with dry cleaning fluid and blot.
E: Sponge with methylated spirits, blot dry.
F: Apply glycerine or petroleum jelly before cleaning.
G: Use nail polish remover (non-greasy).
H: Sponge with turpentine or substitute, blot dry.
I: Freeze the stain, scrape away when cold.
J: Clean with carpet cleaner (if available).
K: Use circular cutter for damage, re-glue new piece.

Creating Better Sound Environments Through Thoughtful Acoustic Design.

What is Noise Criterion?

From meeting rooms to classrooms, and wellness areas, tailored acoustic solutions make a measurable difference. Design standards such as **Noise Criterion (NC)** help guide the appropriate sound level for each environment—ensuring that the space performs not only visually, but acoustically as well.

Echoes

Uncontrolled echoes and sound reflections can make even the most well-designed spaces uncomfortable and difficult to use. Good acoustic design enhances clarity, reduces distractions, and improves the overall experience within a space.

Sound & Noise Generation

When an object vibrates, sound waves are compressed and expanded then travel through air, creating the sound that we hear. Sounds that are unpleasant to our ears are what we called “noises” which comes in varying amplitude (dB) and frequency (Hz).

The Negative Impacts of High NC (Noise Criterion)

01

Decrease Speech Clarity

Excessive background noise can make speech difficult to hear clearly in space where communication is frequent and essential.

02

Impacts Sleep Quality & Health

Spaces such as hotels, hospitals or private rooms, NC levels that are above standard can disturb sleep and cause long-term fatigue & health issues.

03

Affects User Satisfaction

Excessive noise can lead to discomfort, negatively impact the overall experience of visitors or guests.

04

Increase Stress & Reduce Concentration

Prolonged noise exposure can disrupt brain function, especially in work environments, leading to reduced productivity & impaired learning.

05

Downgrades Overall Environmental Quality

Areas with noise levels exceeding advised standards are unsuitable for professional work, realaxation, or strategic meetings.

Noise Criterion Guidelines By Room Type

NC 15-20

- Recording Studio
- Auditorium

NC 20-25

- Music Room
- Home Theater

NC 25-30

- Classroom
- Lecture Room

NC 30-35

- Quiet Room
- Yoga Studio



EXAMPLE USAGE

CARVED ACOUSTIC PANEL







Carved acoustic panels combine precise sound absorption with sculpted surface detailing, delivering both acoustic control and a distinctive architectural statement in a single integrated solution.

Examples & Room Types



Home Theatre

NC 30-35

This private home theater features acoustic wall panels that absorb echo and reduce noise, enhancing sound clarity and delivering an immersive movie-watching experience.

Hotel Lobby

NC 30-35

The hotel lobby is elegantly adorned with light-toned MicroFelt acoustic panels, enhancing a luxurious ambiance while reducing sound reverberation—creating a calm, welcoming atmosphere that leaves a lasting impression from the very first step.



EMBOSSED &
3D ACOUSTIC PANEL



Embossed and 3D acoustic panels enhance sound absorption while introducing texture and dimensionality, transforming plain walls into acoustically effective design features that elevate the overall spatial experience.

Examples & Room Types



Study Room

NC 30-35

In the study room, the acoustic panel minimizes echo and external noise, creating a quiet, focused atmosphere that supports concentration and prolonged productivity.

Rehearsal Studio

NC 25-30

This dance or rehearsal studio features checkered acoustic ceiling panels that absorb echo from hard surfaces like wood floors and brick walls—creating a balanced, distraction-free acoustic environment ideal for movement and performance training.



PRINTING ACOUSTIC PANEL



Printing acoustic panels allow you to integrate custom graphics or branding directly onto sound-absorbing surfaces, turning functional acoustic treatment into a powerful visual design element.

Examples & Room Types



Learning Hall

NC 35-40

This versatile learning hall supports reading, discussions, and relaxation in one open space. MicroFelt acoustic panels help reduce echo and reverberation, creating a calm, focused environment that enhances comfort and concentration throughout the day.

Waiting Area

NC 30-35

The waiting area is equipped with acoustic ceiling panels to reduce noise and create a calm, healing atmosphere—offering both comfort and clarity in every conversation.



BAFFLE & CEILING PANEL





Baffle and ceiling panels work together to control noise and reduce reverberation while adding architectural depth, creating spaces that are both acoustically balanced and visually refined.

Examples & Room Types



Office Space

NC 30-35

The acoustic ceiling in an office space absorbs excess noise and reduces reverberation, creating a calmer, more focused environment that supports productivity and clear communication.

Cafè

NC 35-40

The ripple acoustic ceiling reduces echo and background noise, allowing conversations to feel more intimate and comfortable while enhancing the café's overall ambiance.





inquiry@microfiber.co.th
ฉนวนกันความร้อนไมโครไฟเบอร์
+66 2315-5510
+66 2312-4658, +66 2750-1429
54 หมู่ 12 ถนนกิ่งแก้ว ต.ราชาเทวะ อ.บางพลี
จ.สมุทรปราการ 10540

inquiry@microfiber.co.th