



PASSION for our **PANECO®** Business

PANECO® is developed by Workstudio, a company whose core business is designing and production of store fixtures.

It has been three years since the launching of the textile recycling project in 2019, at that time we had no idea what could be created at first, only the fact that a huge waste clothing problem was lying in front of us.

However, with the cooperation of many stakeholders, PANECO® has developed into a "transparent and reliable recycling-oriented material".

We have been and will always continue to be committed to the following principles in our textile recycling business.

Empathy

Share the same thoughts

Collaboration

Working with the experts

Create Together

Towards circular society

Enjoy

Positively tackling the environmental issues



The first Paneco® board produced

WHAT PANECO CAN do

Almost all the clothes we collect upcycle to PANECO

Almost all textile materials can be upcycled if they are clothing. Because there is no need for sorting, we have achieved an almost 100% recycling rate of fiber, which has been difficult to achieve in the textile recycling business. Workstudio collected approximately 27 tons of waste textiles in one year from the spring of 2021 and upcycled them into PANECO®.

Recycled material with a stylish design

We developed the board under the concept of 'a nice material design which is also good for the environment', rather than just a recycled material which is often considered not stylish or fashionable. The randomly collected wasted clothing consists more than 90% so the color and patterns vary a lot. Even the same material can be expressed in completely different ways depending on the creator.



Our work examples

Interior Finish Materials



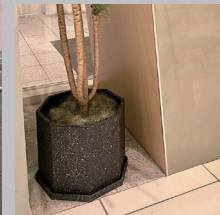
Interior



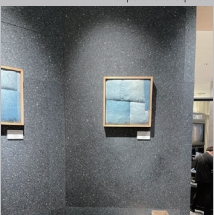
Shop Fixture



Miscellaneous

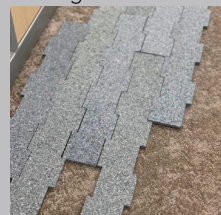


Wall



※Confirmation by fire department required

Flooring



Furniture



Novelty



Excellent processing ability like wood

Equivalent to particleboard in strength, with a warm, fabric-like feel

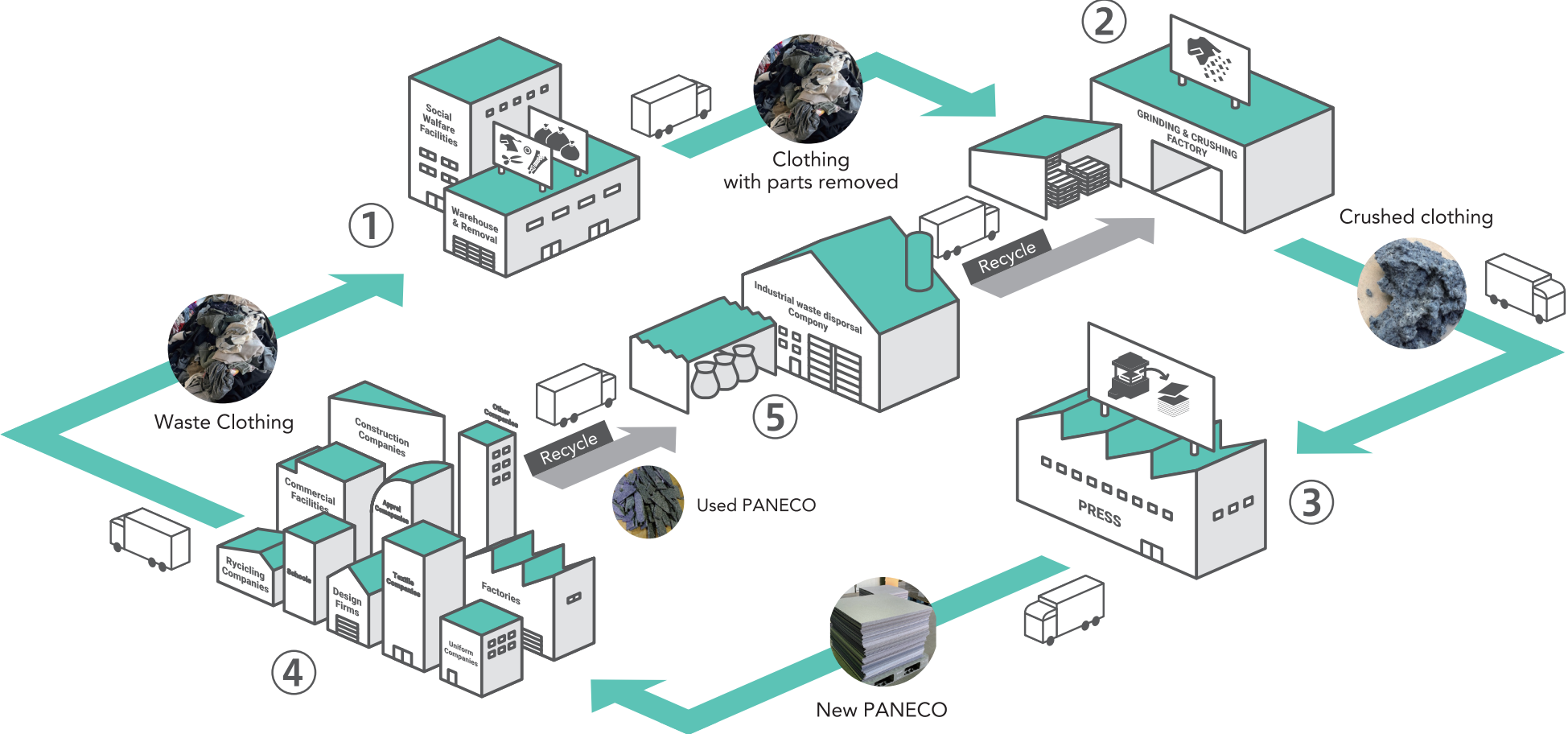
Used PANECO® can be recycled

Used PANECO® and production scraps are 100% recyclable as long as they are in raw conditions.

We have established a system that allows us to not only use recycled materials but also recycle what is left after use. If you have to dispose of the materials, please contact us.

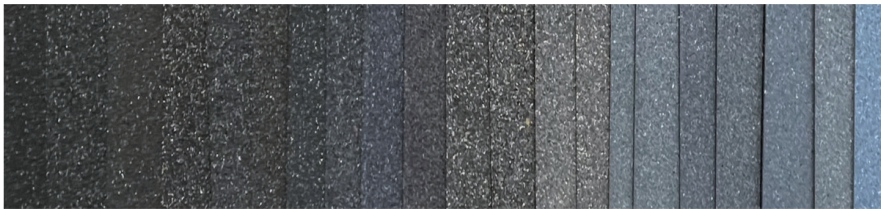
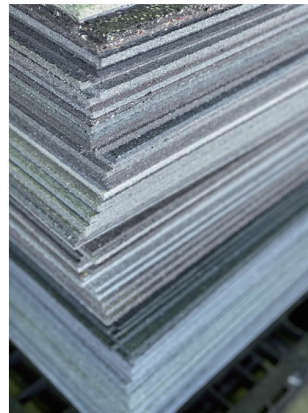
*Collection fees not included.

CYCLE MAP



PRODUCT description

(About Material board)



The color and appearance of each board differs significantly because the surface is made up of multiple shades of fiber material.

SPECIFICATION

component	91.5% waste clothing 8% binder 0.5% wax	
size	930×930mm	
thickness	t3mm/ t5.5mm/ t9mm	
price(Jul. 2023)	t3 _13,200 yen/ 1 piece t5.5 _14,800 yen/ 1 piece t9 _22,900 yen/ 1 piece (Made to order from 50 pieces)	
content of fiber	t3 _15 T-shirts 15 / per board t5.5 _20 T-shirts / per board t9 _30 T-shirts / per board	

PANECO®

Density (g/cm3)	0.70~0.77
Moisture content (%)	2~5
Bending strength (N/mm2)	18.6~23.3
Water absorption expansion rate (%)	3~8
Peel strength (N/mm2)	0.6~1.0
Formaldehyde emission (mg/L)	Average<0.1 Max<0.1

Textile rate



90% textile rate.
Unique texture at the same time
keeping the board strength

Circulate



Recycling possible
after using the board
and collecting

Processing



Excellent processing
ability like normal wood

*Important information and disclaimer about the basic product

- The color and appearance of each board will vary due to the coloration of multiple fiber materials on the surface of the board.
- Please note that you cannot specify the color or expression of the board.
- Please note that we cannot accept returns due to color or expression.
- The dimensions of this product are 930mm x 930mm, but please use the design dimensions of 900mm x 900mm, excluding 15mm on four sides.
- The thickness of this product is 5.5mm, but there may be a slight difference in the thickness of each board.
- The surface of the product is not perfectly flat and may be slightly uneven.
- This product does not have "incombustible," "quasi-incombustible," or "flameproof" properties.
- Please understand the characteristics of this product before purchasing.

TEXTURE Lineup _Regular stock

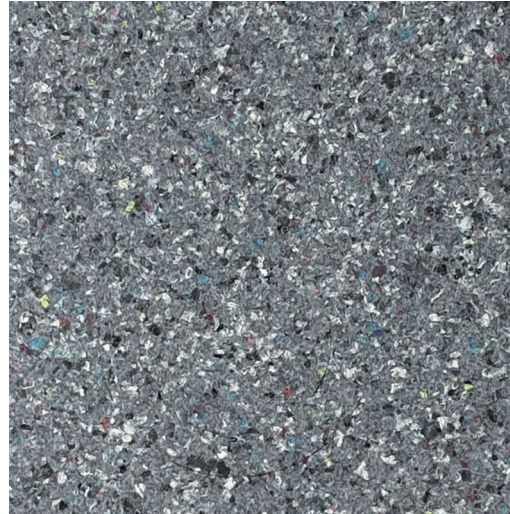
The standard line have 3 tones of color (color depth) and 2 fiber grain sizes.

SAND style
PANECO® with fine fiber grains

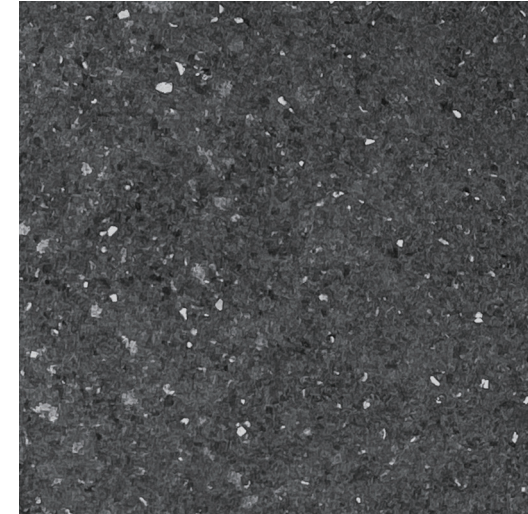
LIGHT color group



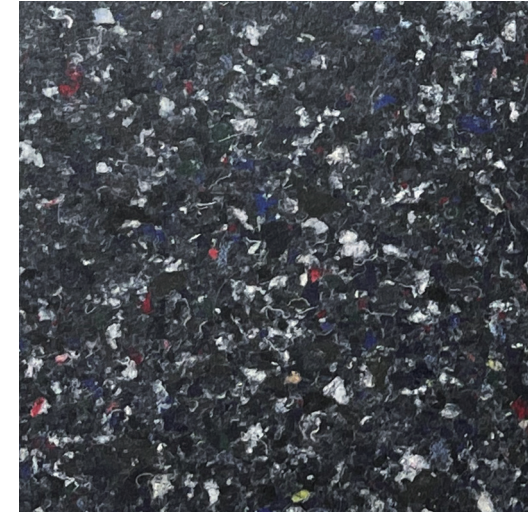
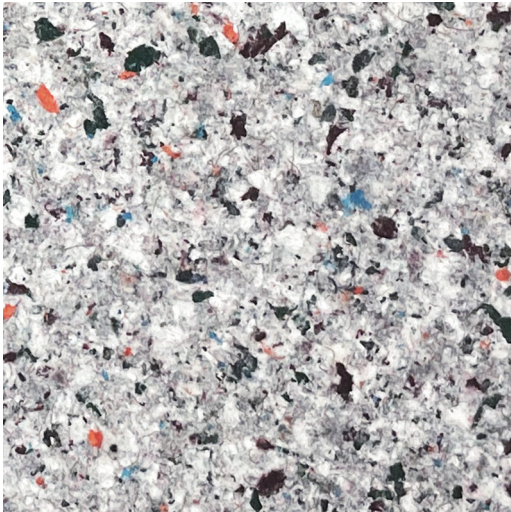
Middle color group



DARK color group



STONE style
PANECO® with large fiber grains



*There are variations in color, brightness, and texture among materials within each color group. *Please note we do not accept returns based on color or texture.

*The boards are generally achromatic in color, but there are rare cases where boards with a slight tinge of color are produced. *Because the stock situation is always changing, please ask for the availability before ordering.

MADE TO ORDER

Example of **PANECO** original production

We are challenging to convert various waste materials such as wasted clothing and used uniforms provided by our customers, wood from fixture waste, and waste flowers into PANECO®. If you want to make use of waste materials that must be thrown away, please contact us first.

ISETAN Waste denim + Uniforms = POPUP store

デニム de ミライ
Denim Project

H&M Defect products occurred during sales → 3 colored PANECO® = Store interiors

Dark color
Light color
Middle color.

NEWoman
SHINJUKU Uniform + Waste flowers = Planter cover in stores

FREAK'S STORE
Waste clothing + Waste wood = Store interior materials

WHAT YOU CAN DO with PANECO

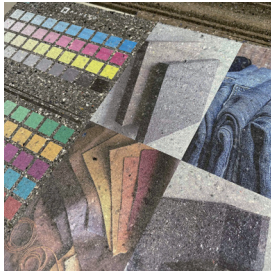


Furniture made only with PANECO

Printing



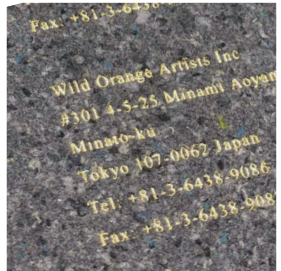
Inkjet printing



Inkjet printing



Silk printing

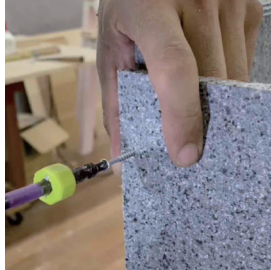


Foil stamping

Processing



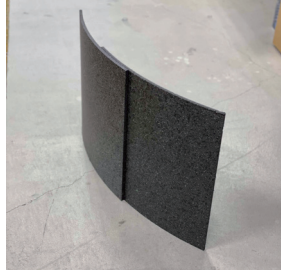
Closure adhesion



Screwing



Crimping

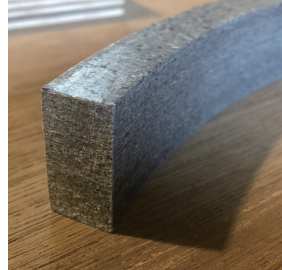


Bending

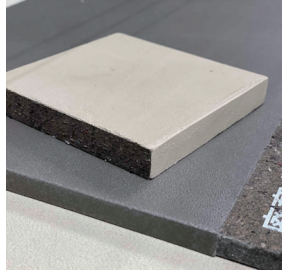
Top coat



Water-based Urethane finish
*No color change



Clear finish for flooring
*Strong durability



Plaster finish

Cutting



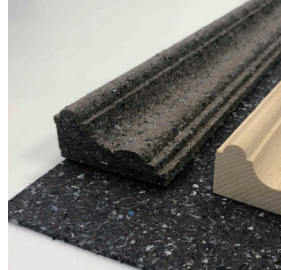
Thread saw cutting



Thompson cutting



Lathe cutting



Molding cutting