Packwall boards

GENERAL PRODUCT QUESTIONS:

Who is Upcycling Group?

Our goal is to turn waste into high-value products. We especially focus on turning various waste into construction materials. We believe that waste should be viewed as an opportunity for further development.

What is PackWall technology?

PackWall technology offers high value utilization for used beverage cartons. PackWall technology allows us through patented process, using high temperatures and pressure, to transform used beverage cartons into construction boards.

What is a composition of a PackWall board?

PackWall boards are made of used beverage cartons (e.g. milk, juice or wine cartons). Our raw material consists of used beverage cartons collected as waste and rejects from production in manufacturing. On top of that, recycled plastic, and paper is added. Absolutely no glues, chemicals or even water are used in our production process

Where can the Packwall board be used?

Boards are intended to be used in places where regular plasterboard, gypsum board, OSB, MDF and HDF board materials are used. They are intended for both indoor and outdoor use. PackWall board can be used in furniture/fine carpentry making.

What are the measurements of the boards?

We continually manufacture products with standard measurements **12x1200x2500 mm**, but we have the possibility to make thicknesses between **8** and **18 mm**. The board can be adjusted to specific size per the customer requirements. We can also add camber, edge cut-outs for joints, and other adjustments to the shape that would suit the requirements of the construction site.

What is the weight of the single board?

- 12 mm board: A bulk density of 871 kg/m3, and the board weighs 33 kg and per m^2 it is 10.56 kg/m^2.
- 15 mm board: A bulk density of 890.7 kg/m3, and the board weighs 42 kg and per m^2 is up to 13.44 kg/m^2
- 18 mm board: A bulk density of 860.4 kg/m3, and the board weighs 49.5 kg and per m^2 it is 15.84 kg/m^2

How can the PackWall board be used in construction?

The board can be used for Internal partitions and soffits, sandwich panels, perimeter walls, floors and leveling plates, temporary fillings of construction openings, construction fences, roofing base boards. Also, our board can be plastered, grinded, painted, wallpapered, tiled, or puttied.

How can the PackWall board be used in furniture making/fine carpentry?

PackWall board has numerous uses in furniture making and fine carpentry. It can be used as cladding panels, atypical design panels (DESIGN variant), skeleton of soft furniture, blackboards, shelves, countertops, cabinet doors etc. Our board can be laminated and veneered.

How can the PackWall board be used for interior design?

We manufacture the so-called DESIGN board where both sides of the board are cover with a smooth see-through silicone. Later in the process the board are cut into long strips, and they can be used to create a laminate panel that can be used as a modern wall decorating material.

How can the Packwall board be handled? Do I need special tools?

You as a customer or contractor do not need anything special to handle PackWall boards. Same tools, screws and methods for attachment or surface treatment can be used as for wood-based boards. The board can be plastered, grinded, painted, wallpapered, tiled, or puttied.

Can the board be bent into a specific shape?

Yes, the board can be bent up to 1400mm in diameter if you apply heat to it.

Is the PackWall board more impact resistance compared to other plasterboard products?

Yes, the PackWall board is extremely durable to impact and will not shatter.

What are the insulation qualities of the PackWall board?

The Packwall board is both heat and noise resistant. The raw material that we use contains a thin aluminum film which in the board reflects heat radiation back into the room, and the carton fibers that the board contains act as noise barrier as well.

Is The PackWall board water and mold resistant?

Our board is classified as semi-permeable. Liquid water does not penetrate the surface, while steam can travel through the material. This means that it's not waterproof, even though the surface is water repellent. The board can "breathe" even though less than wood and gypsum. The board can absorb water, mostly along the edges, even though it's at half the amount that wood does. The board is classified for interior usage in moist environments and for exterior usage according to Use Category 3 (above ground, protected by an outer layer for example roofing felt or façade panel). Another Important property that competing boards don't have, is a natural resistance to mold and mildew.

Can the PackWall board be recycled?

Yes, our used boards can be re-recycled. We also recycle all of our production waste.

Is the production of the Packwall board considered zero waste?

Our production process generates no waste; everything that is sawed off or doesn't meet the quality standard is used as new raw material. We even recycle the dust from our production.

How much carbon emissions are associated with your product?

Compared to existing products in the market we generate significantly less CO2 emissions. Depending on method of calculation our product contributes to 80-94% less CO2 emissions than other construction materials, which makes it an obvious choice for sustainable construction. Material made of wood is usually viewed as the greenest construction material since the wood contains CO2 absorbed from the air. Since our board consists of 75% cellulose fibers (wood) it also contains 75% the amount of bound CO2 compared to wooden products. As opposed to every other material on the

market, our production process generates 0 CO2 emissions, which makes it the most environmentally friendly choice. We also prevent the CO2 emissions that would have been generated if the composite packaging would have gone to recycling, where more than half of the content would have been incinerated. Our circular solution means it can be used, recycled, and reused repeatedly without generating any emissions

What does CE marking of the product mean?

In practical terms, the CE marking of a construction product indicates that, concerning the CPR, it has been assessed (tested) based on the applicable harmonized technical specification (harmonized standards and European Assessment Documents). The results of this assessment can thus be trusted throughout the construction value chain and be interpreted on the same basis across the EU. Furthermore, concerning the other applicable EU legislation providing for its affixing, the CE marking indicates that the product complies with all their applicable requirements

Where can I buy your products?

Please contact us on info@upcycling.group, and we will direct you to our regional partners.