

ITULA & THE ENVIRONMENT

23/2/2021

itula

Production

Itula Oy actively seeks to reduce wastage and the amount of waste generated. The aim is to use all pallets and packaging materials for the parts and materials used in the production for packing outgoing products, thus avoiding unnecessarily purchasing packaging materials and generating packaging waste.

The flow tubes in our panels are made of copper pipe. Copper arrives at our factory in cardboard coils packed on wooden pallets. The tubes are manufactured for storage with special bending machinery. The quality of the project-specific metal cassettes is checked in the assembly, after which they are assembled. If the product is perforated, felt is cut to cover the bottom of the cassette to improve the acoustic properties. The felt comes with adhesive so it is attached to the cassette as it passes through the heat source.

The graphite and copper tubes are joined together with a glue board compactor. The panel is completed when brackets that support the structure are fastened to the panel model with rivets

The finished panel is transferred through quality control cameras to the packing department, where the products are packed in the same wooden boxes in which the cassettes were delivered to the factory. Cardboard is placed between the products to prevent scratching during transport. A plastic sheet is placed on top of the box to protect the product during outdoor transport. The plastic sheet is the same one that was delivered with the cassette boxes. Plastic straps are tightened around the boxes to ensure that the packaging remains intact during transport.

Packaging

ItuGraf and ItuString+ panels are delivered in boxes made of ISPM 15 compliant wood. Individual pieces can also be delivered wrapped in cardboard on a EUR pallet. Wooden boxes are protected from the elements with a plastic film. There is a strip of cardboard between the panels to protect the surfaces. Wooden boxes are assembled using nails and screws. The delivery weight of the packages per delivery depends on the type of product being delivered.

Materials

The materials used in the panels depend on the product type. The table below shows the proportion of different materials in the ItuGraf 35x595x2990 panel (total weight 17.4 kg).

Material	Proportion
Steel	73,1 %
Copper	15,9 %
Graphite	11 %

Reuse

ItuGraf and ItuString+ panels can be removed and reused without breaking the product.

Recycling

Since 2020, the recycling rate in construction sites in the EU has been at least 70%. It is generally possible, through recycling and waste management operations, to sort hazardous waste, waste from the site office and social facilities, wood waste and wooden pallets, cardboard and plastics, metal waste, gypsum board waste, insulation material, waste that can be used for generating energy, concrete and bricks.

The table below shows the materials used in the panel deliveries.

Product	Recycling method	EWC code
Wooden packaging	Wood recycling	17 02 01 15 01 03
Cardboard in packaging	Cardboard	15 01 01
Polyolefin protective films	Plastics recycling	17 02 03
Plastic strap	Plastics recycling	15 01 03
Polystyrene foam sheets	Plastics recycling	15 01 03
Copper	Metal recycling	17 04 01
ItuGraf / ItuString+ panels	Metal recycling	17 04 05 17 04 07
Metal strap	Metal recycling	17 04 05
Insulation - recycled polyester	Plastics recycling	17 02 03
Insulation - glass wool	Residual waste or mineral wool	10 11 03

Author: Petri Sormunen, D.Sc.