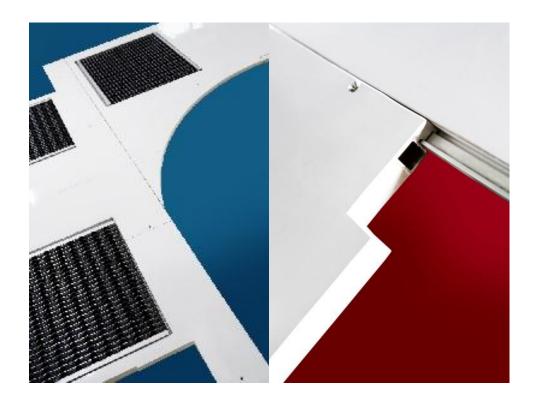
Train Flooring System





Product description

Production method

Light weight structures are manufactured on gluing lamination and assembly lines.

Different layers are connected together to create optimized structure for customer's use.

Standards and requirements

Manufacturing and and assembly under supervising of ISO 9001 and ISO 14001 and IRIS quality standards.



Adhesive Bonding process according to DIN 6701-2 Class A2 standard

ISO 3834-2 and EN15085 standards are followed in welding process.



ISO 3834-2

DIN 5510-2:2009-05 and CEN TS 45545 standards compliance for fire protection

Element structure

Large variation of different layers and materials are connected together. Thin surfaces are merged by light core material. Different kind of inserts, beams or fixing point can be added to the elements.

Optional heating, trays's and brackets are integrated to the elements structure.



Finishing

Surfaces are finished to meet customer's requirements. They can be painted, primerized or protection treated. Edges are finished and formed to be suitable for carbody. Any machinery work in the car are avoided.

Jointing

Elements are jointed together in the car by screws or glue. Minimum amount of fixing point are used.

Supporting

Supporting system to connect floor elements to carbody is part of delivery. In additional, supports will operate as a part of complete system to achieve all technical requirements.

Fixing and installation

Mechanical fixing to the carbody. Fixing is designed to enable quick installation work as well as availability for maintenance work. Special accessories, such as air ducts, seat fixing etc. are designed separately.

Coating

Elements can be ready coated by carpet according to case.

Technical characteristics

Dimensions

Typically apr. 2000 x 3000 mm. Dependant on layout and installation requirements
Thickness 8 - 40 mm, typically apr. 20 mm.

Maximum size of floor element is size of carbody.

Strenght

Structure fulfills requirements in loading according to European UIC-standards.

Weight

Typically 7 – 15 kg/m2, will be optimized together with other properties.



Noise isolation

20 - 38 dB

Heat insulation

Will be optimized together with other properties.

Water proofness

Elements are seamless can allow wet cleaning.

Thermal expansion

Operation in the carbody is taken account in floor elements and supporting system.

Natural frequency

Operation in the carbody is taken account in floor elements and supporting system.

Fire resistance

Tested according to UIC-, DIN- and UNE-standards. National special requirements are taken account in projects.

Life time

Special attention is focused to durability. Structure is designed for 40 years life time.

Sales terms

Price

Products will be offered based on request.

Delivery time

Typically 8 – 16 weeks from order. Milestones will be agreed in project schedule.

Prototypes

FAI - Delivery.



Assembly

Assembly service can be agreed to be part of delivery.

Training

Training on customer's site can be agreed to be part of delivery.

Technical support

Technical support is provided during whole build up time and warranty time.

Documentation

Product, project and testing documentation available

Spare parts

Available. Will be agreed in projects.

For more information

JOPTEK OY COMPOSITES
KERANTIE 7 81720 LIEKSA, FINLAND
Tel. +358 20 7439150
Fax +358 13 523 710
info@joptek.fi
www.joptek.fi

