



Components & Materials

DIAB

Step Up Rail Sustainability

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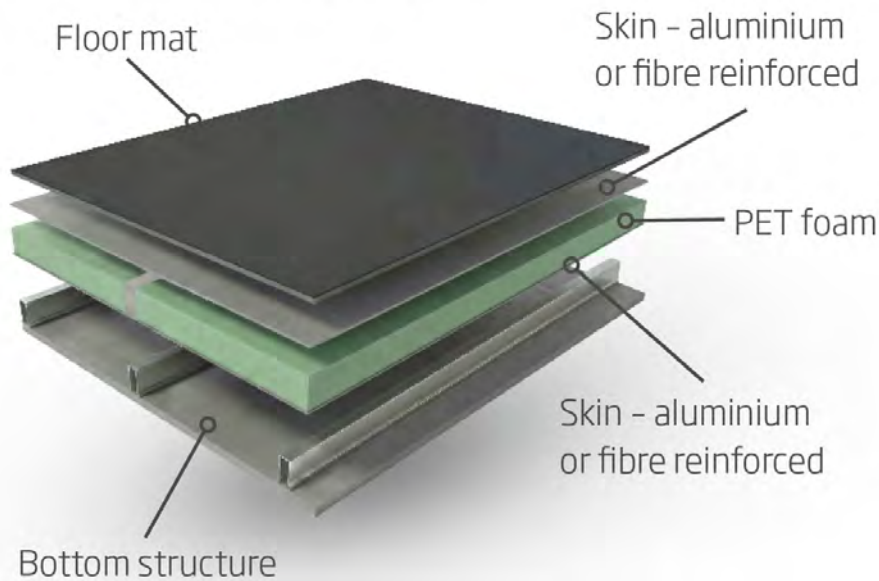


The rail industry is moving faster than ever, and efficiency is no longer just a goal; it is a mandate. To meet the demands of tomorrow, operators and manufacturers must look beyond traditional building blocks. It is time to step up your rail game with Diab's cutting-edge lightweight solutions.

The Foundation of the Next-Generation Interiors

For decades, the rail sector relied on heavy materials like plywood for interiors and flooring. While functional, these traditional materials come with heavy penalties: excess weight, susceptibility to rot and higher fuel consumption. Diab offers a definitive alternative. By switching to our advanced core materials, you can revolutionise your rail applications, from roof to floor.

LIGHTWEIGHT FLOOR DESIGN



The Definitive Solution for Flooring

The floor system is the backbone of the passenger experience, requiring immense durability and safety. Diab's Divinycell PR is a 100% recyclable PET sandwich core engineered specifically to replace heavy plywood. It provides a robust, lightweight foundation that drives down vehicle weight, directly translating to lower energy consumption and reduced CO₂ emissions.

Choose between aluminium skins or fibre-reinforced skins – the latter being our most lightweight version. Full composites are often the only way to meet the very low target weights of around 6.5kg/m² that many operators strive for.

Unlike wood-based alternatives, Divinycell PR is non-organic and rot-free, ensuring long-term durability and minimal maintenance costs even in challenging environments.

Why switch to a Diab sandwich core?

Transitioning to our thermoplastic core materials allows you to achieve significant performance gains without compromise:

- Step up sustainability: Utilise a circular solution based on post-consumer and post-industrial

- PET that is 100% recyclable.
- Step up safety: Rest assured with fully compliant materials that meet stringent EN45545-2 fire safety standards.
- Step up efficiency: Minimise weight to increase payload capacity and extend range.
- Step up comfort: Experience unparalleled thermal and acoustic insulation for a quieter, more comfortable journey.

A Partner for the Entire Journey

At Diab, we do more than supply material. We are a total solutions partner. Through Diab Engineering Services, we support you from the drawing board to the production line, whether you need assistance with fastening solutions, structural analysis, or creating ready-to-install kits that speed up your build time.

Meet Us at InnoTrans 2026

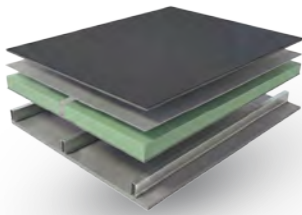
Ready to discover the next generation of lightweight rail interiors? Join us at InnoTrans 2026 to see how our solutions stack up.

September 22-25, Berlin // Hall 3.1 Stand 790

Always at the core of your solution



LIGHTWEIGHT STRUCTURES FOR RAIL INTERIORS AND EXTERIORS



Discover the next generation of rail interiors with Diab's cutting-edge PET core materials. Engineered to replace heavy traditional materials like plywood, our 100% recyclable Divinycell PR is the definitive solution for robust, lightweight structures – exterior and interior.

By switching to a Diab sandwich core, you significantly reduce vehicle weight – driving down energy consumption and CO₂ emissions while increasing payload capacity. Step up your rail game and experience unparalleled insulation, EN45545-2 certified fire resistance, and minimal maintenance costs.

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diabgroup.com