Technical Data Sheet | ASSYX DuroBOARD®

The ASSYX DuroBOARD® is a high-performance board consists of a Wood / plastic-compound material.

It consists of a high quality LVL-wooden core (Laminated Veneer Lumber), which is completely and inseparable coated on a worldwide unique production machinery with polyurethane of type BAYDUR®[1], manufactured by Covestro Deutschland AG (then known as Bayer Material Science AG) in Leverkusen. Wooden cores of 3-layer glued laminated wood are used, as well.

The wood core is made from spruce/fir or pine. The bulk density of the wood core ranges from 450 to 650 kg/m³; the entire surface is bonded using a boil- and water-resistant adhesive (WBP, AW-100, or similar).
The dimensional accuracy of the wood core is ±1.0 mm in length and width and ±0.5 mm in thickness; the maximum curvature is 1.0 mm per 1 m in length and width (for panel thicknesses ≥50 mm).
The modulus of elasticity of the wood core in the direction of loading averages 10,000 N/mm², which guarantees maximum bending stiffness, flexibility, and breaking strength.

The complete, seamless, airtight, and watertight polyurethane coating is 2.5 to 3.0 mm thick. The two-component polyurethane of the BAYDUR®[1] brand, developed specifically for the ASSYX DuroBOARD®, is extremely impact-resistant and temperature-resistant from a minimum of -25°C to +90°C (laboratory-tested), chemically resistant (almost all release agents and many other chemicals can be used safely—see release agent data sheet), non-corrosive, and highly abrasion-resistant.
The ASSYX DuroBOARD® is weather- and UV-resistant. It can be stored in direct sunlight without any issues. The color may change to a honey-yellow hue, but this does not affect the product properties mentioned above. Significant temperature fluctuations may also cause temporary changes in shape.
The wood core is overmolded with polyurethane in a closed mold. Due to the production process, a so-called gate mark is visible on one end face, and four round marks are visible on one side of the board; these are caused by ejectors, which are required to remove the boards from the mold. This is not a quality defect. Since the molds are self-sealing, polyurethane overflows at the ejector points and the mold cover. If any remnants of this film-like, very short burr remain on the board, they will detach from the board on their own during the first production runs.

The working edges are enclosed for reinforcement by a 300 g/m² fibre-glass-mesh.

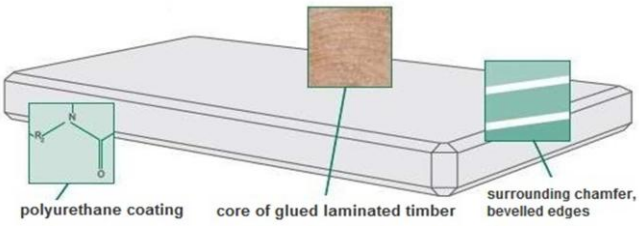
Upon request the ASSYX DuroBOARD® can be additionally provided with a RFID-Chip.

With it's bevelled edges (14x14 mm) and the all around chamfer on both sides (7x7 mm) the ASSYX DuroBOARD® has an unmistakable design. This guarantees trouble-free handling in all common transport systems.

We are at your service at all times for any further questions you may have.

The ASSYX team in Andernach, Germany

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[1] BAYDUR® is a registered trademark of Covestro Group