



JANSON FIBER REINFORCED POLYMER BRIDGES AND BRIDGE DECKS TECHNICAL SPECIFICATIONS

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| Structure: | Integral box-structure or monocoque road deck elements, closed, watertight, without divisions; no classic sandwich structure allowed, because these are not fail safe; |
| Fail Safe design: | There shall be no resin layer or glue layer along which the skins and the core can be separated ; no resin or glue line connections allowed along which the load bearing structure can be split along a vertical plane ; |
| Environment: | Environmentally friendly production process (zero emissions) by means of vacuum injection; |
| Reinforcement: | The fibre reinforcement of bottom skin, core and top skin is fully integrated; |
| Strength: | The interface between top skin and core should be resistant to debonding under an impact load equivalent to a steel ball of 50 kg dropped from a height of 1 m, followed by fatigue loading (rolling wheel loads); |
| Materials: | Fiber Reinforced Plastic, fiberglass - polyester and or carbon fiber - vinyl ester; No wooden or other core materials or inserts allowed; No rotting or rusting parts allowed in the main structure; No bolted connections allowed in the main structure; No glued joints allowed in the main structure; |
| Drainage: | Drainage shall be integral part of the structure; |
| Design: | Design according to Euro Codes, supplemented with NL CUR Recommendation 96 (fiber reinforced plastics in civil constructions) |
| Maintenance: | Virtually no maintenance required: load bearing structure shall be technically maintenance-free for at least 60 years excluding general wear and tear of anti skid surface. Adhesion of anti skid aggregate shall be maintenance-free for a minimum of 10 years; Construction easy to clean with high pressure water at 200 bar, if necessary using environmentally friendly cleaning agent |
| UV resistance: | UV resistant and color proof for a minimum of 10 years; |
| Repairs: | Material is repairable on site. |

