



ECO Freeplan[®]

Environmentally sustainable
SFRC 'Jointless' Concrete Floors





ECO Freeplan® - Better by Design

Twintec is a specialist with a worldwide track record in the design and construction of industrial concrete floor slabs, providing sustainable personalised solutions to reduce environmental impact for future generations.

ECO Freeplan® floors are designed to optimise environmental sustainability and are cast in large panels using steel fibre reinforced concrete (SFRC). NO need for sawn-induced contraction joints removes a major cause of floor problems & maintenance. Twintec uses steel armoured construction joints at the edges of each panel and, depending on concrete availability, can construct floor slabs with panel sizes up to 2,500m2.

Advantages

- + Enhanced sustainability; Twintec ECOCALC demonstrates a quantifiable reduction in embodied carbon (up to 66%)
- + Whole-life cost reduced; low maintenance costs (floor slab & MHE equipment)
- + MHE efficiency; optimum operation
- + Optimised design; value engineered personalised solutions
- + Enhanced durability; increased impact resistance
- + Faster & safer production; no mesh, continuous large panel pouring



ECO Freeplan® - offers exceptional durability and performance with no sawn-induced contraction joints.



ECO Freeplan® - Better by Design

Considering every component of an industrial concrete floor slab **ECO Freeplan®** will provide the optimum environmentally sustainable solution.

Design optimisation is key to sustainability & supports carbon neutral targets

- ✓ Optimised slab thickness & reinforcement to achieve lowest material consumption
- ✓ Use of environmentally sustainable materials to reduce embodied carbon
- ✓ Design for life cost; longevity & low maintenance to achieve carbon neutral targets

ECO Freeplan® - significant reduction in carbon footprint of the building - contributing to international certification (BREEAM, LEED, HQE)

ECO Freeplan® combines design solutions to optimise slab thickness & reinforcement, with specific materials and optimised production processes for an overall reduction in embodied carbon including:

- ✓ AFT®+ E-fibre from end of life tyres
- ✓ Cement replacement & reduced concrete consumption
- ✓ Less steel (reinforcement and joints)
- ✓ Green admixtures, dryshake & curing
- ✓ Optimised planning & material deliveries
- ✓ Advanced on-site processes & reduced manpower
- ✓ Electric concrete laying equipment

ECO Freeplan® - up to 66% reduction in embodied carbon compared to traditional concrete floor slab designs

ECOCALC - Twintec's concrete floor slab embodied carbon calculator will demonstrate a reduction in embodied carbon compared to alternative concrete floor slab designs.



Twintec Sustainability Strategy

We embrace our social responsibility and are committed to providing sustainable personalised solutions to reduce environmental impact for future generations.



- ✓ Environmentally sustainable designs to minimise CO2 impact
- ✓ Minimising waste
- ✓ Protecting natural resources
- ✓ Energy efficient initiatives
- ✓ Responsible purchasing



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