

Tropical Islands (former CargoLifter Airship Hangar) in Briesen Brand (D) 2004-2005

At present, the worldwide biggest hangar with 5.2 million m³ is modified into an indoor leisure park with tropical plants.

Size: 360 x220x107 m.

20,000 m² of the altogether 40,000 m² of the 2x2-layer membrane covering will be replaced by 3-layer ETFE cushions with an U-value of 2.0W/m²K.

The formTL suggestion has offered 4 advantages: The solution is economic, compatible with the existing steel structure, realisable within 8 months, and: the inside development can continue weather protected also in the construction phase.

The advantage of the foil covering is the transmission of UV A and UV B radiation and high light-transmission (>90%). This has a favourable effect on the plant growth.

Cushion construction:
200 my, 100 my, 200 my,
on both sides with a
forming cable net with 14
and 16 mm aluminium
coated steel cables.

General planner: CL Map
Structural design and
workshop planning of the
cushion façade: form TL
Manufacturing of the
cushions: Ceno Tec,
Greven
Proofing-engineer: Prof. Dr.
Pasternak

