Ferry terminal extension

Macau, China

To cope with increasing numbers of users, the New Taipa Ferry Terminal of Macau has been extended to five times its original size. Taking into account the corrosive coastal atmosphere and the mechanical loads resulting from regular tropical storms, the architects identified stainless steel grade 316 as the preferred choice for large parts of the building’s envelope. For the roofing, with an area of 100,000 m², they chose an interlocking seam roofing system. Its principle is based on coiled stainless steel that is roll-formed into profiled trays on site. The surface of the stainless steel is embossed in the profiling process, which provides additional mechanical strength and lower reflectivity. The fixing clips and the fasteners are also manufactured from stainless steel. The same material and finish were used for the facade, but with a different – trapezoidal – panel geometry. The use of identical decorative surfaces for roofing and cladding contributed to the unity of style of the complex.

The roofing system includes thermal insulation to keep air conditioning needs to a minimum.

Roof and façade cladding are made from the same material.

Details

Environment: Coastal
Designers: PAL Asiaconsult Ltd., Macau, China
Owner/developer: Governo da RAEM GDI
Fabricator: P&L Building Material (Macau) Co. Ltd., Macau, China
Stainless steel grade: 316 (EN 1.4401)
Product type: Cold-rolled sheet
Dimension: 0.7 mm
Surface finish: Embossed
More information: msmsmacau.org

Stainless steel grade 316 is used in the building envelope of the extended Macau Taipa harbour terminal.

The roof consists of Interlocking profiled trays.