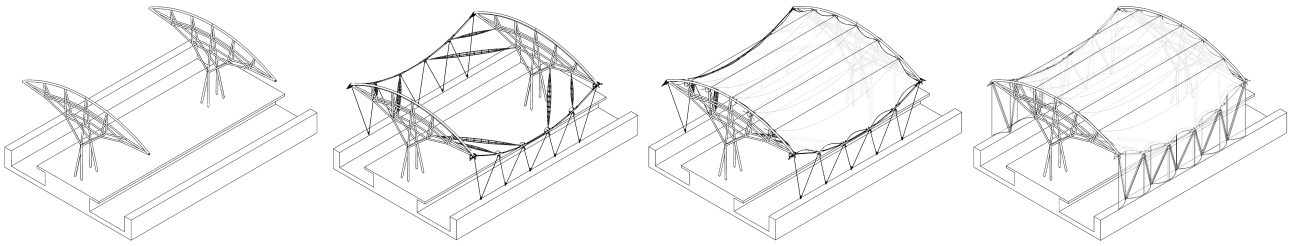
euro inox
The European Stainless Steel Development Association

Erasmus Metro Station in Brussels



Isometric projection of the frame.

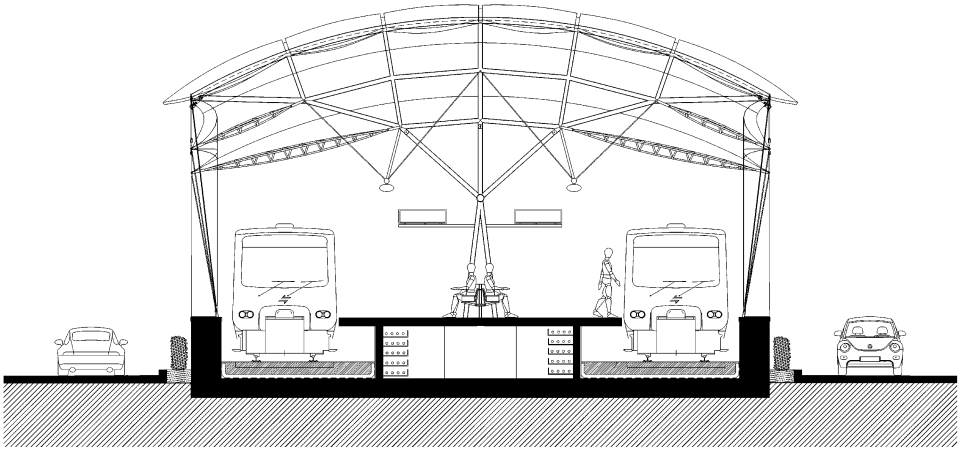
The metro station near Erasmus Hospital in the west of Brussels is the terminus for line 1B in the city's rapid transit system. A lightweight steel structure with membrane roof and translucent side panels stretches the whole length of the 170-m long central platform.

The primary load-bearing frame is made up of T-shaped tubular steel columns. The tips of the cantilevered arms are connected horizontally with stainless-steel cables. A double-curved membrane roof of fire-resistant coated fibreglass fabric stretches over the arched upper chords and the edge cables. Inward-curving panels of stainless-steel mesh (grade EN 1.4404) form the façade, protecting the waiting passengers from the wind. By day the mesh affords a view of the surroundings, and at night people outside can see into the illuminated station – a factor which enhances the feeling of security for the station's users.

The surface of the fibreglass membrane is resistant to graffiti and therefore very low-maintenance. For the station furniture – benches, information panels, etc. – stainless steel was preferred because it is a material that is robust, easy to clean and therefore cost-effective to maintain.

Stainless-steel mesh on the façades of the metro station promotes an open, welcoming impression.

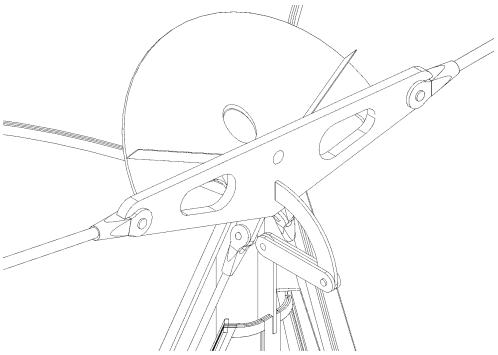
At night the illuminated interior is easily visible from the outside.



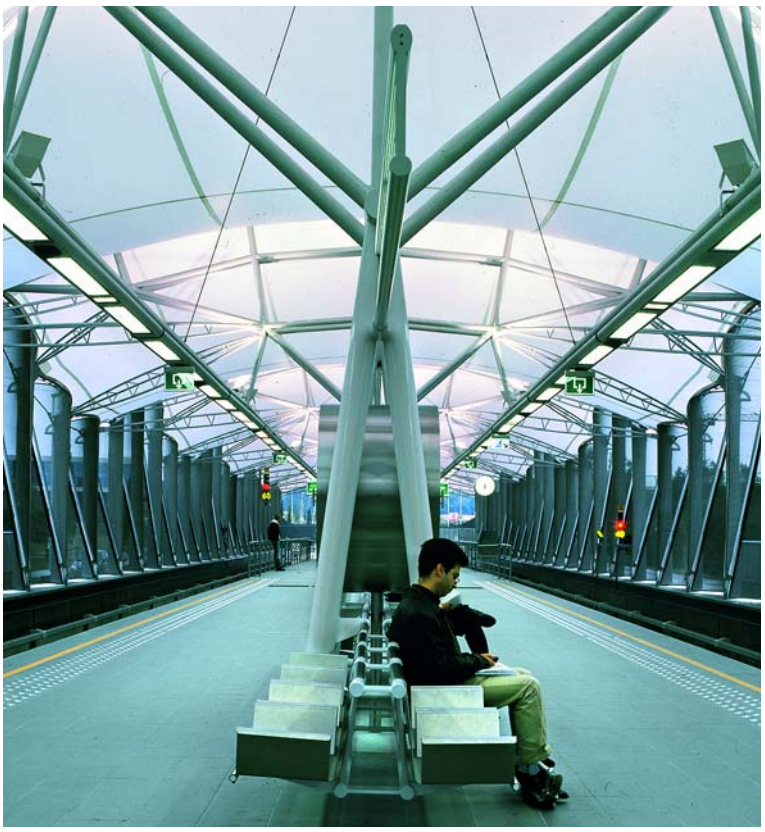
Section
scale 1:200

The façade panels are of stainless-steel mesh (grade EN 1.4404) with an open area of 27%.

The stainless-steel fixing points for the roof membrane and the tie rods are designed to take up temperature-related changes in length.



The station furniture, e.g. benches and information panels, is made of stainless steel.



Stainless steel caps over the membrane junctions promote ventilation of the spaces below.

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