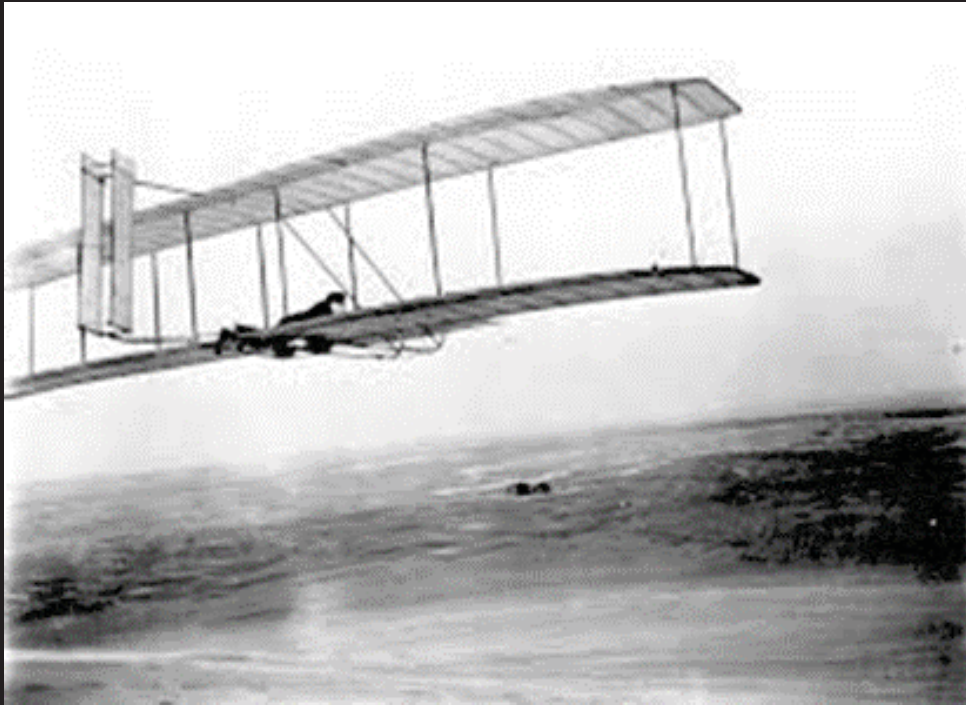


CUTTING, BENDING AND FOLDING
The infinite design possibilities of steel structures

Stålbyggnadsdagen 2025 -STOCKHOLM

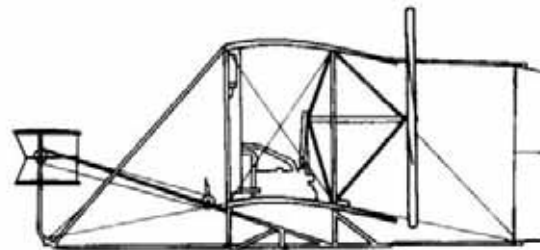
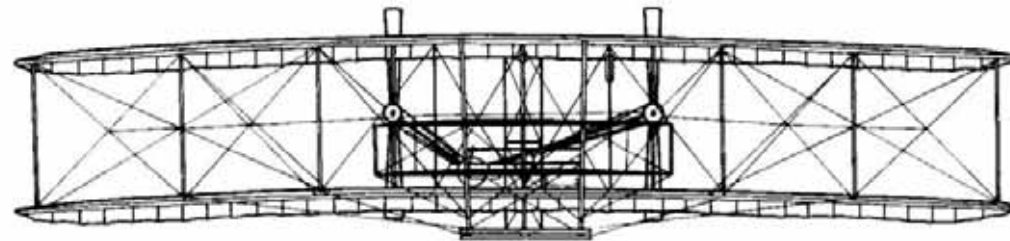
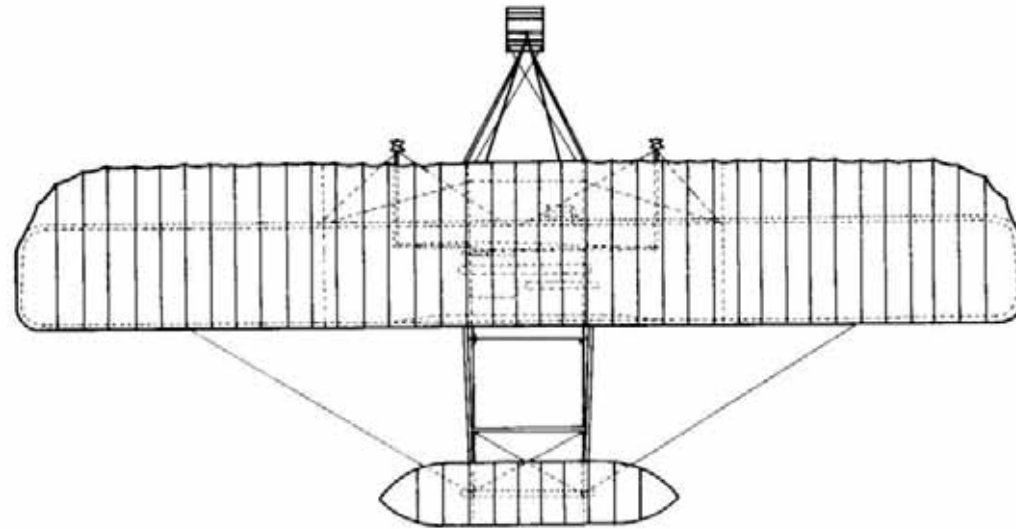
KNOKKE- Belgium 2003



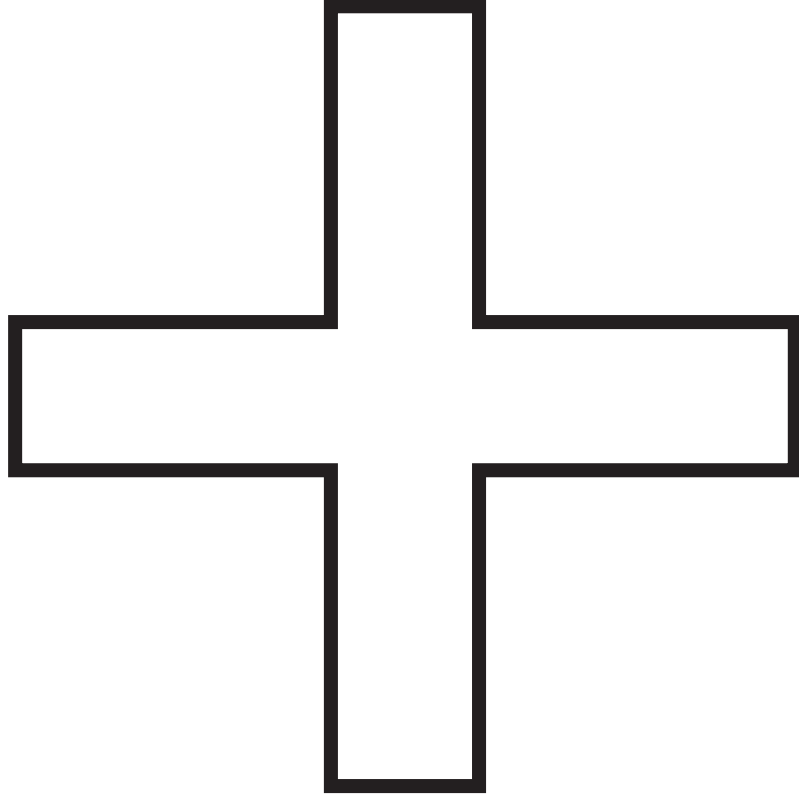


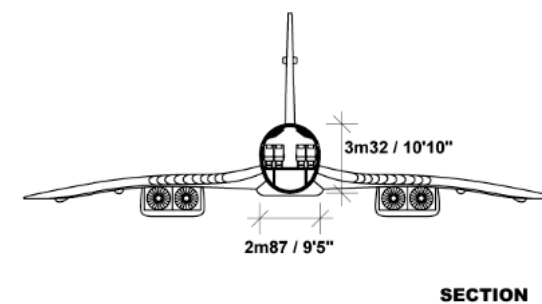
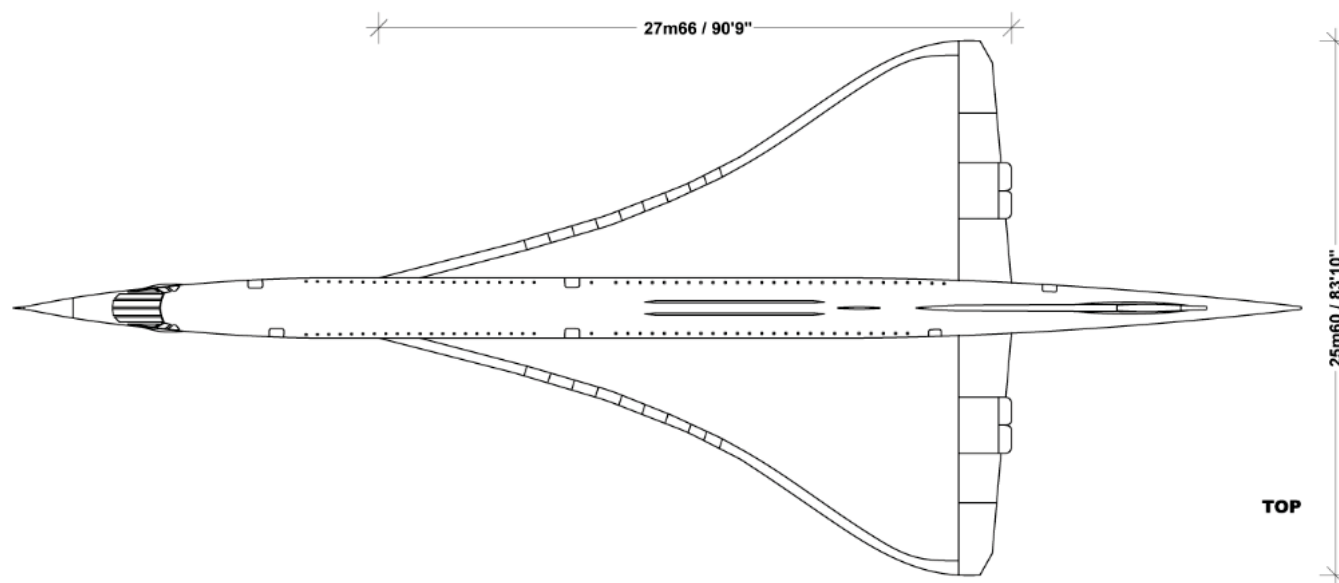
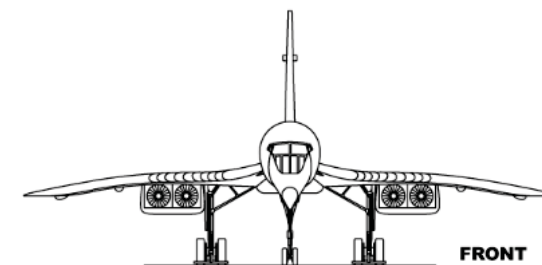
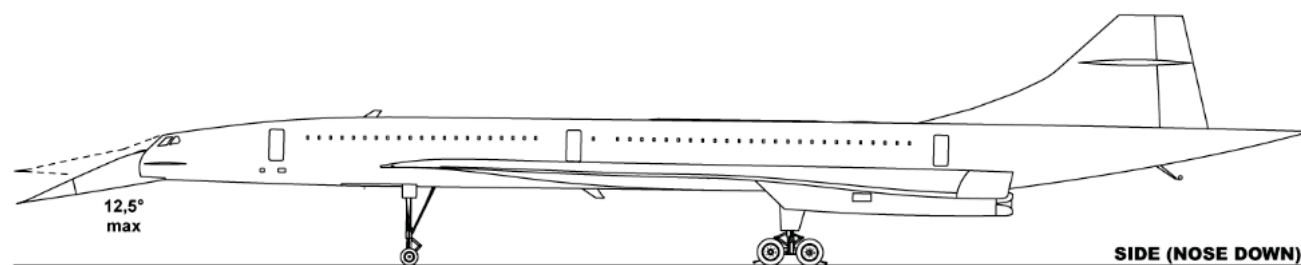
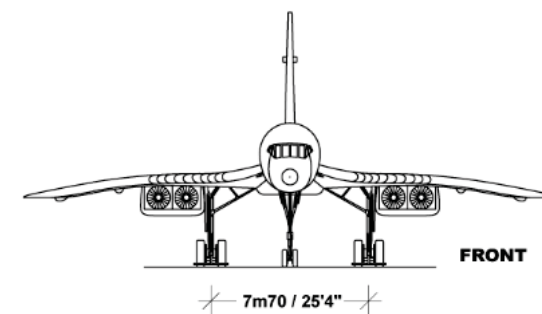
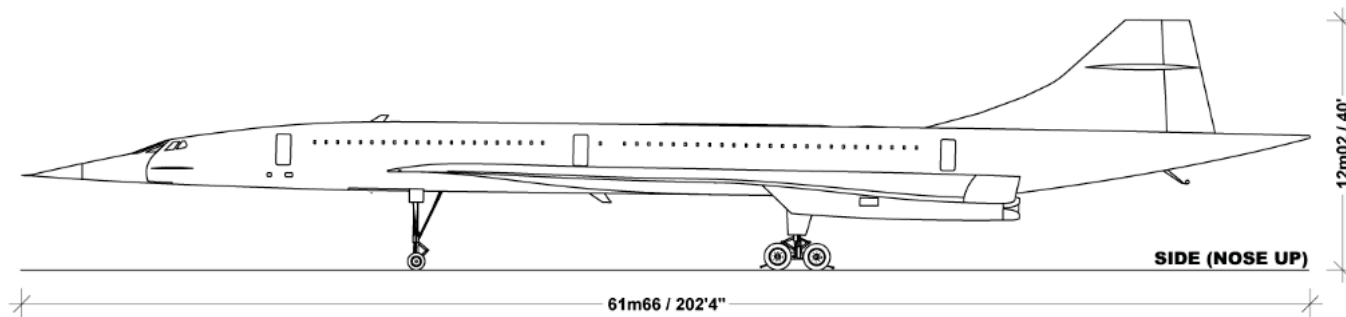
66 years

From an additive logic to a subtractive logic



1903





1969

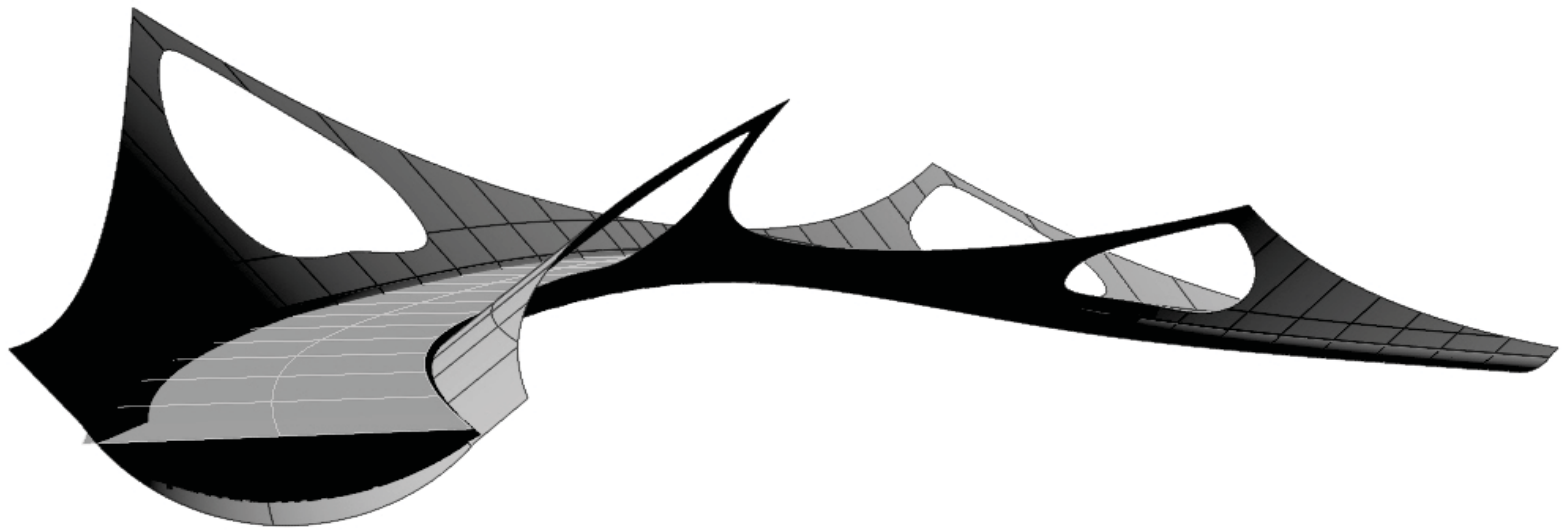


Beginning optimisation



End of optimisation





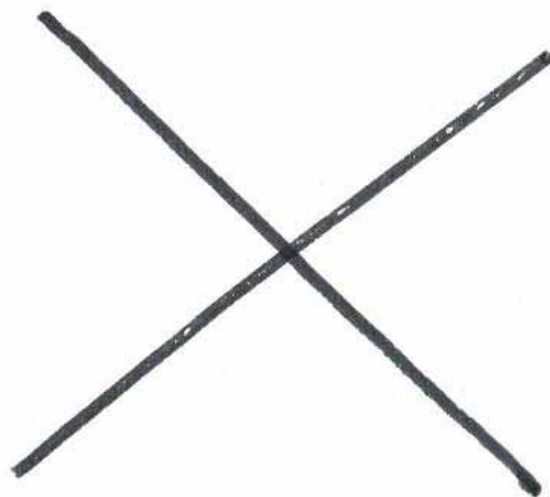
KNOKKE- Belgium 2003 Length 102m

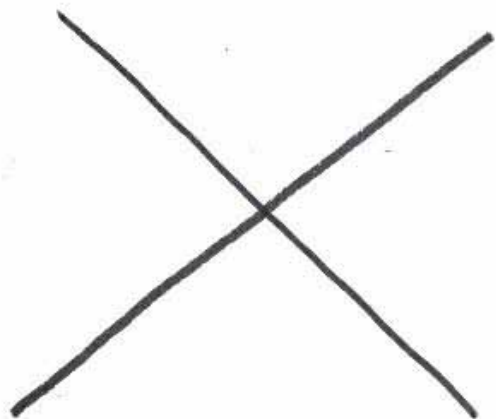




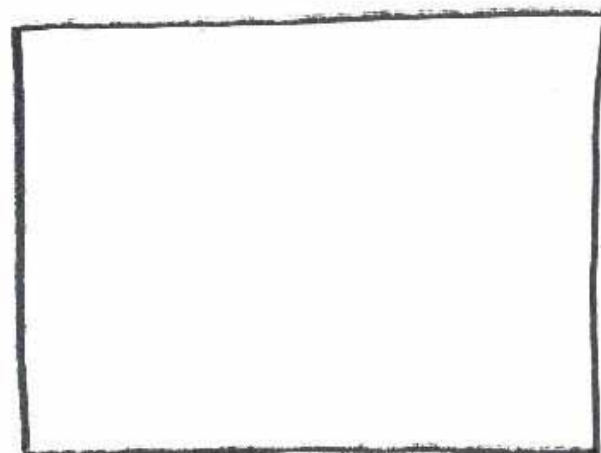




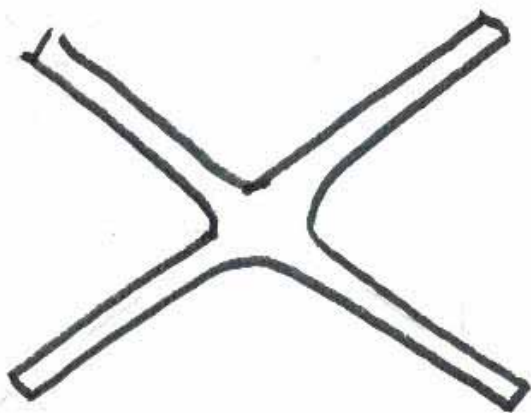




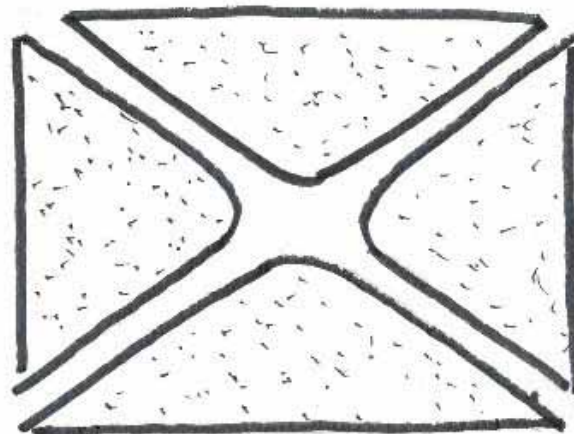
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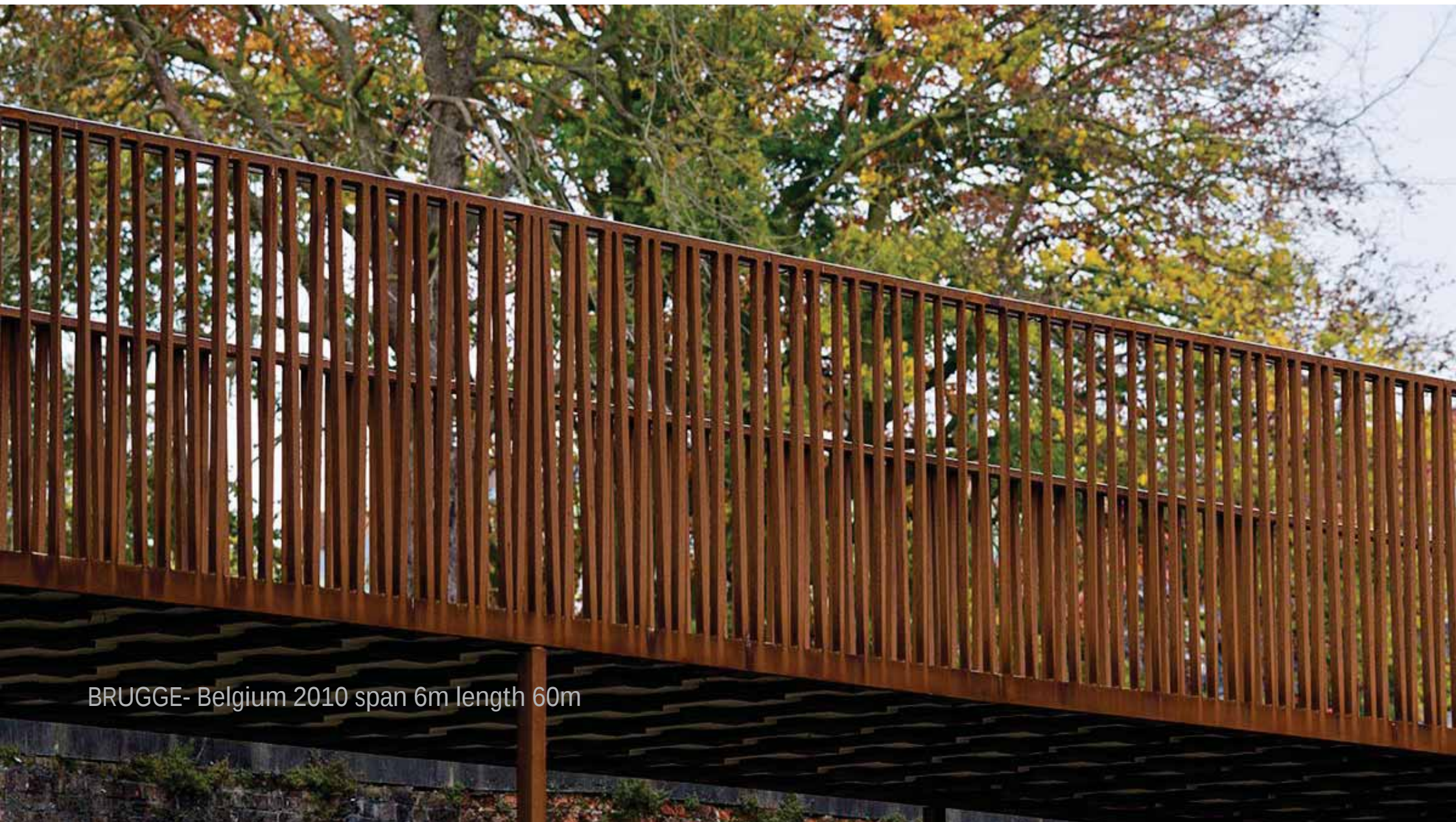
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STALLHILLE- Belgium 2002 span 26m





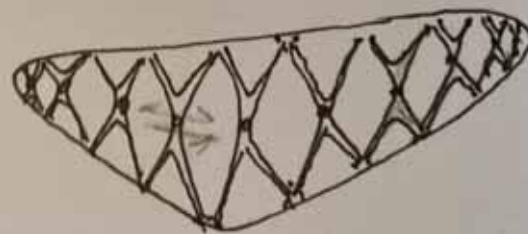
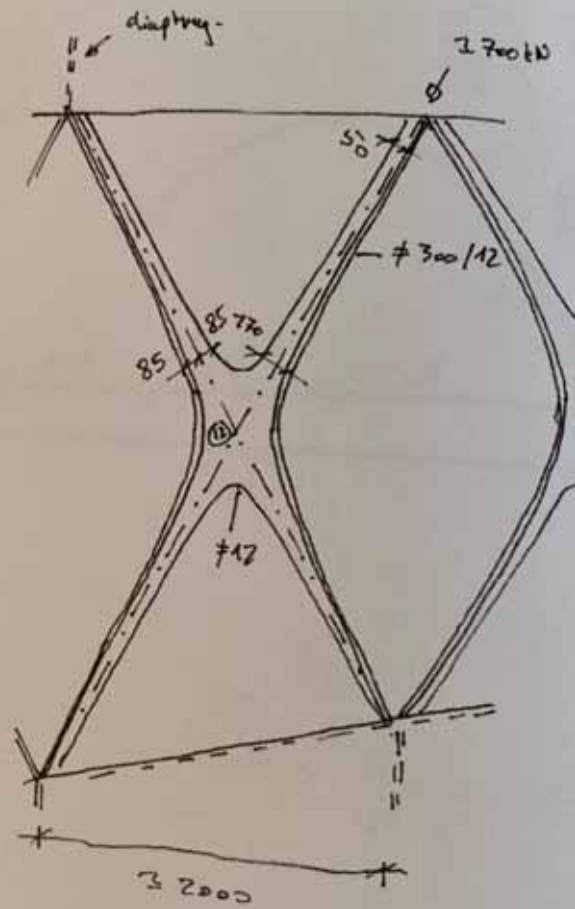


BRUGGE- Belgium 2010 span 6m length 60m





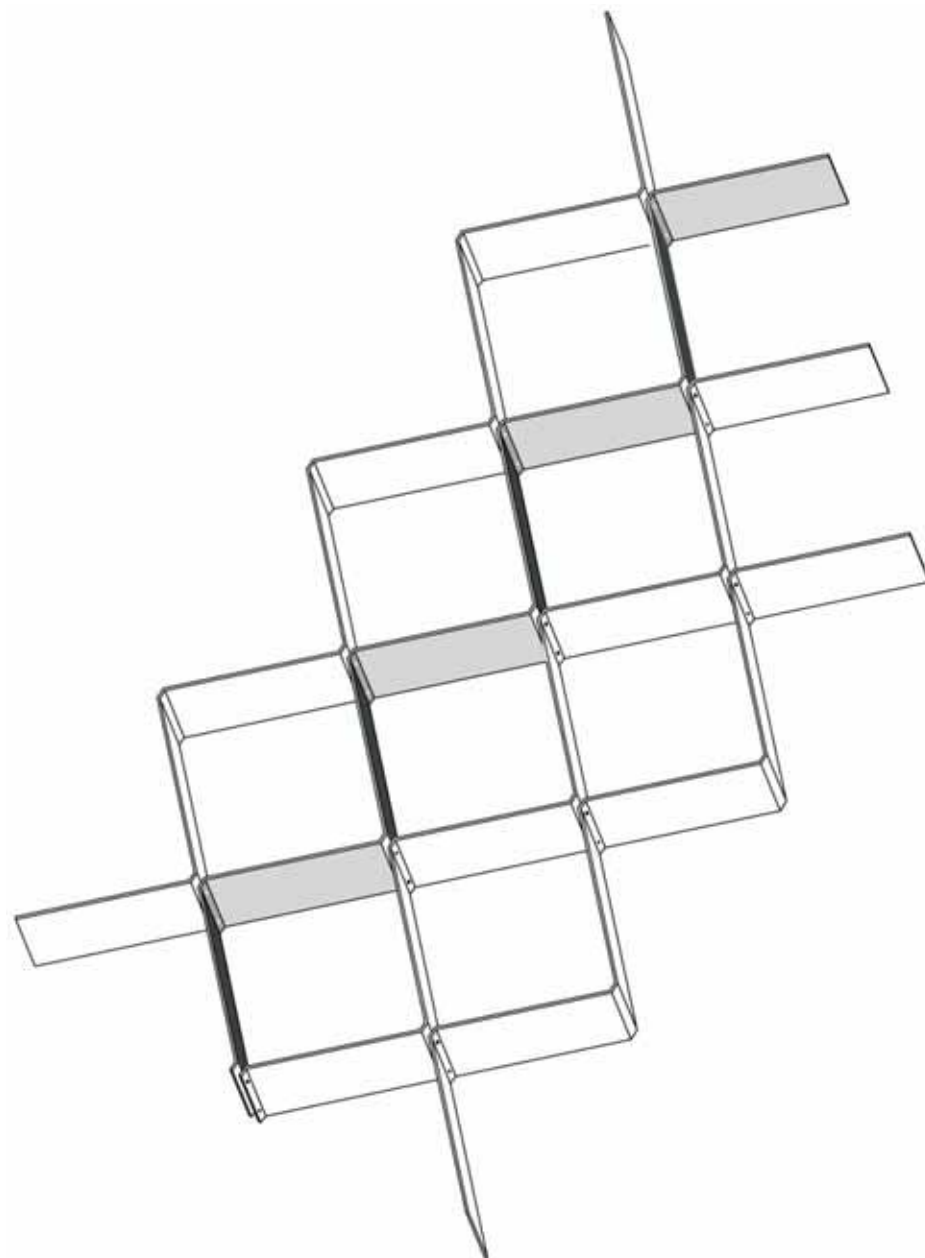
INGELMUNSTER- Belgium 2008 main span 104m length 286m



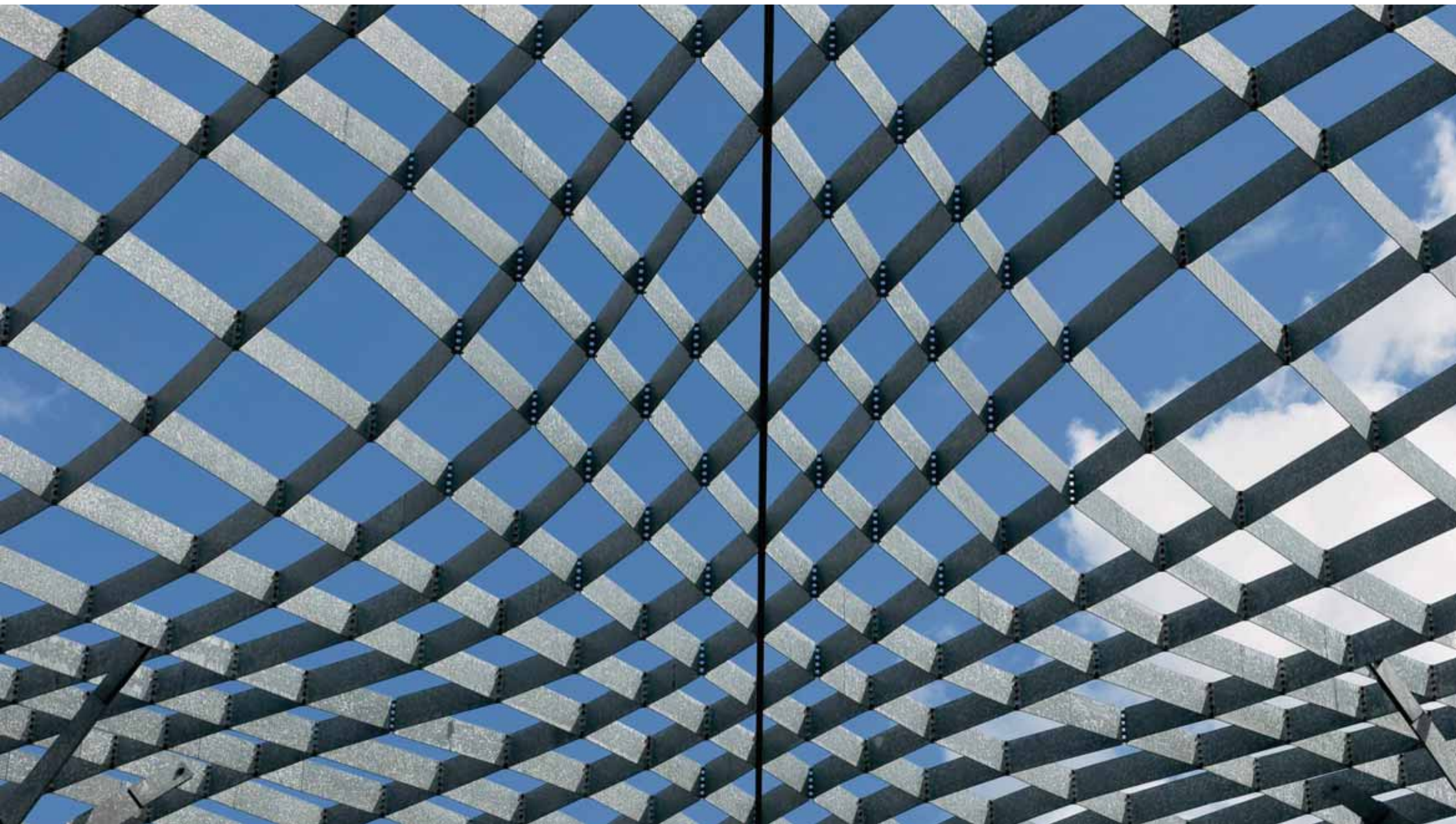


KIEL canopy
Belgium 2004



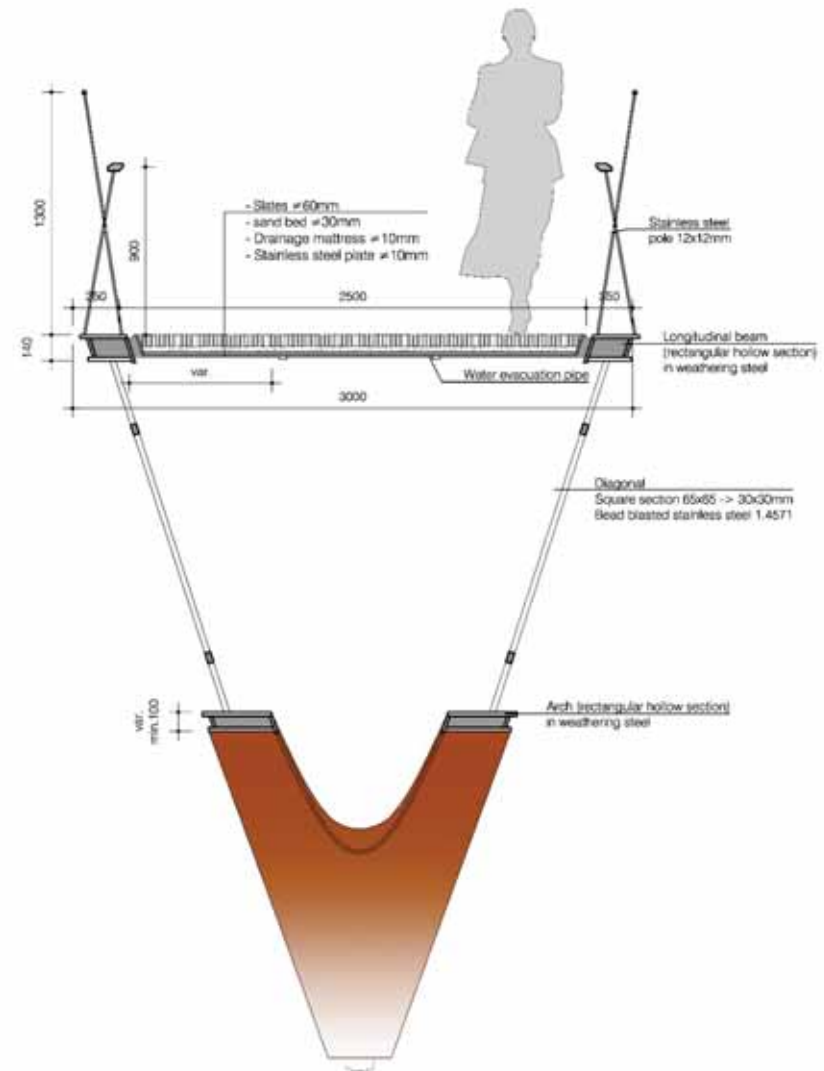
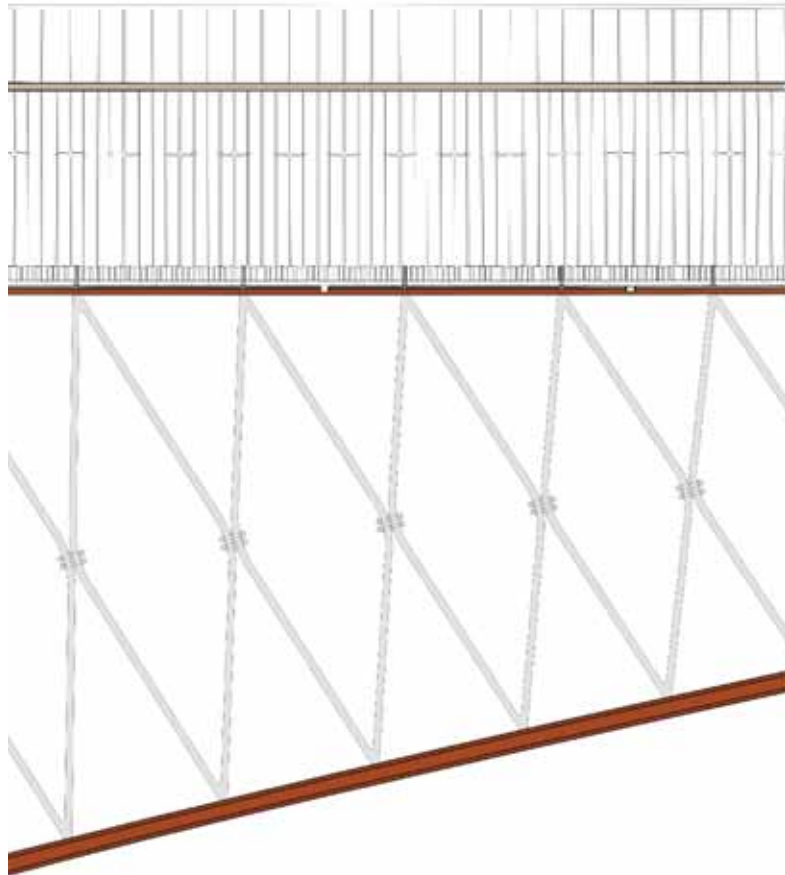






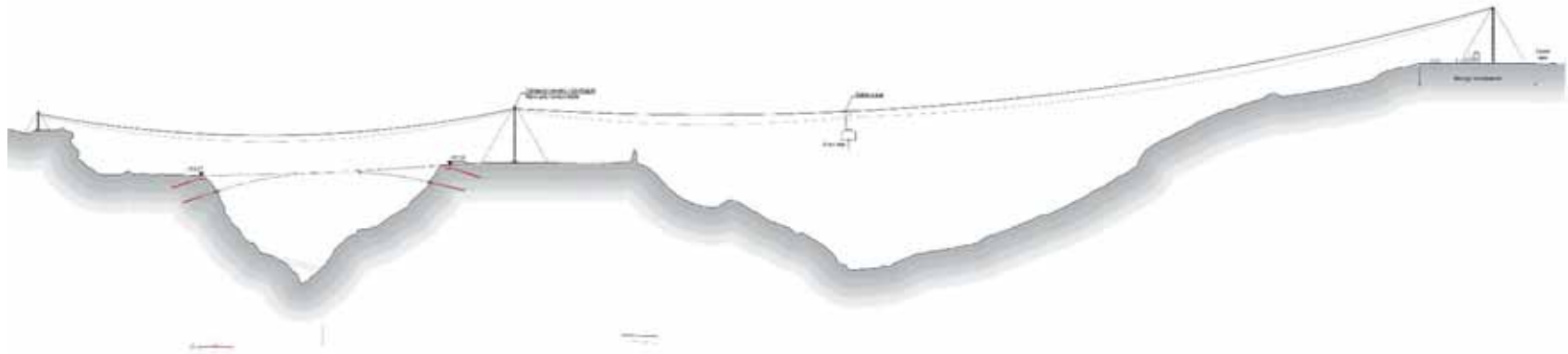


TINTAGEL - UK span 69m





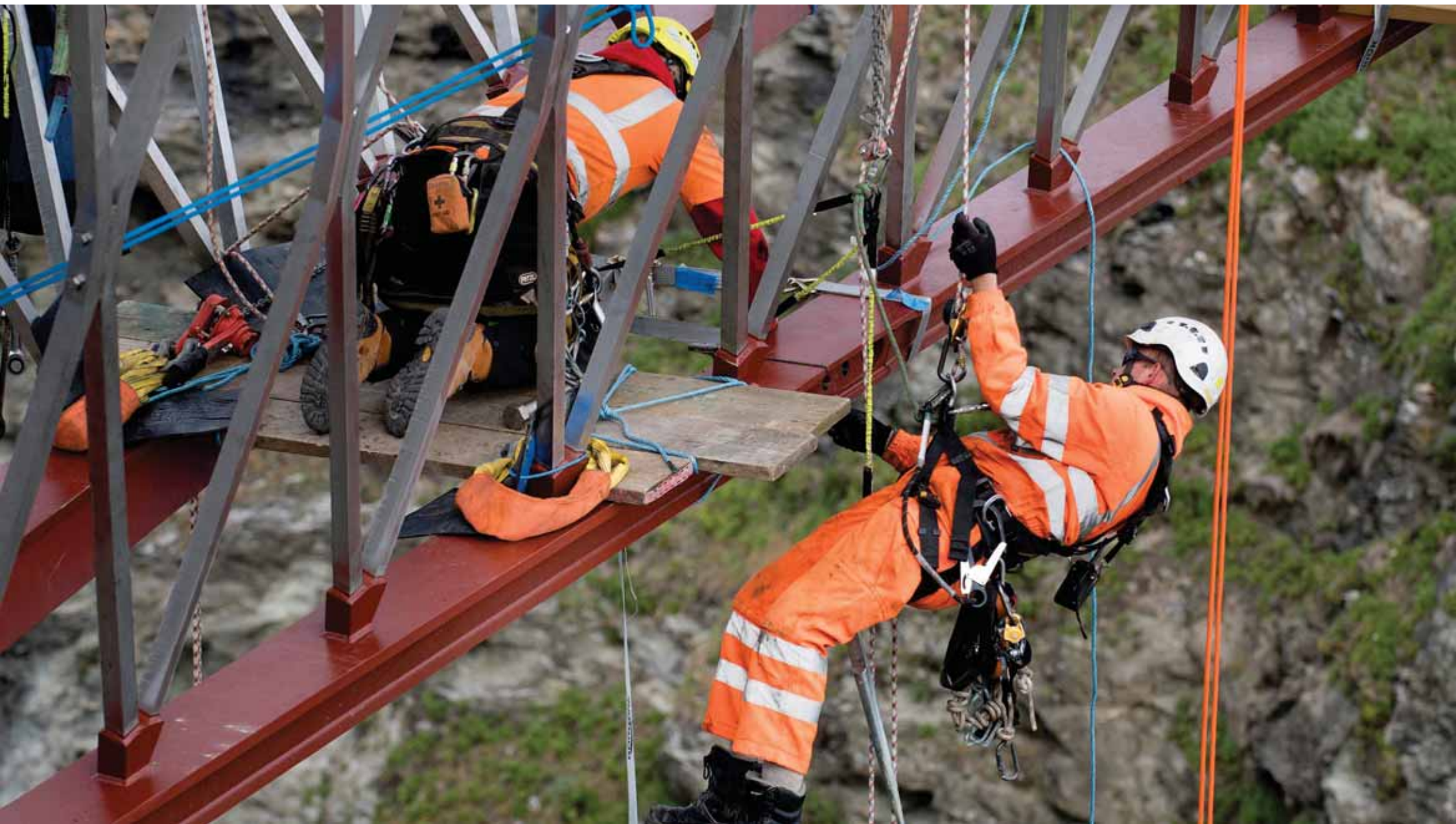
CONSTRUCTION













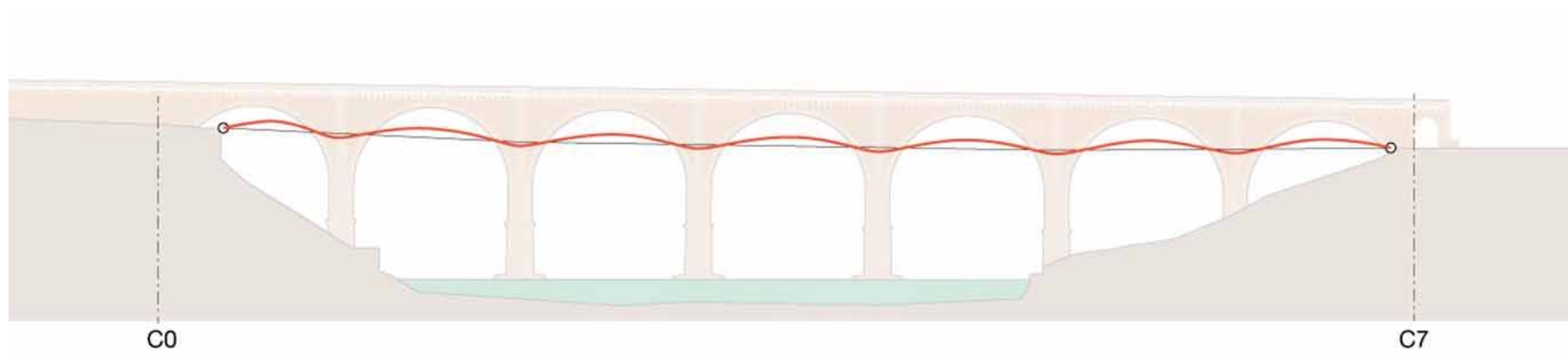
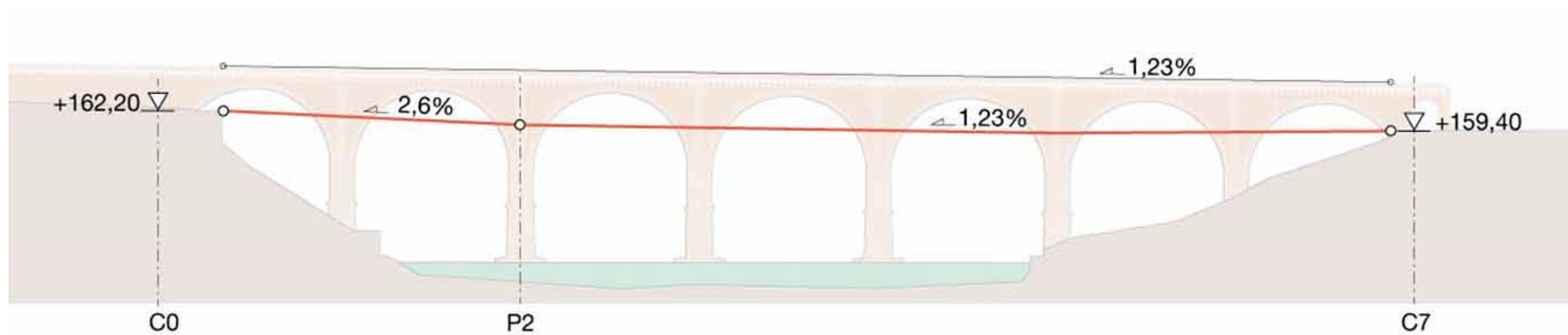


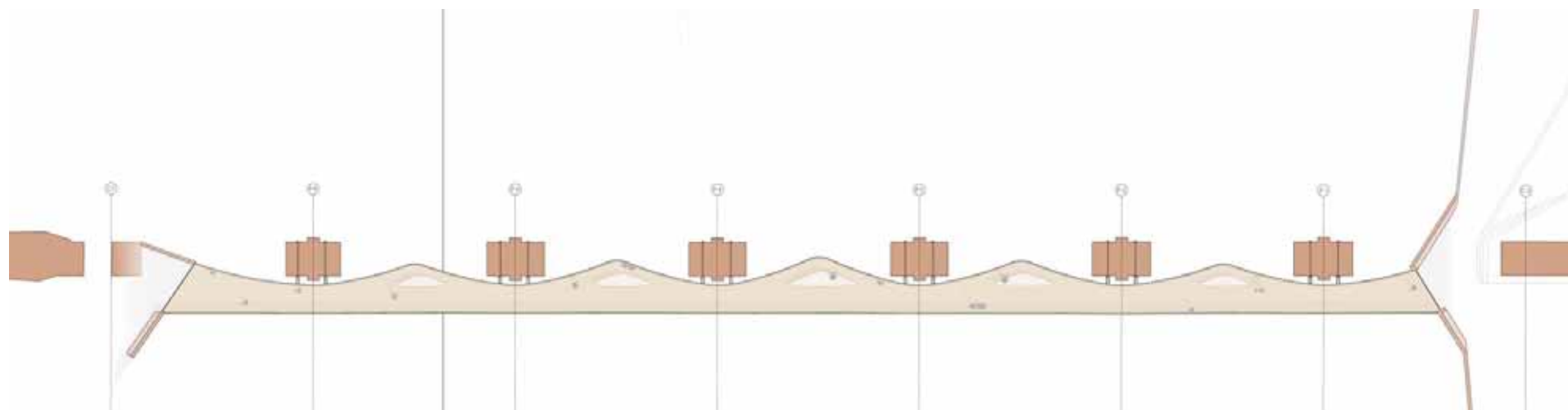


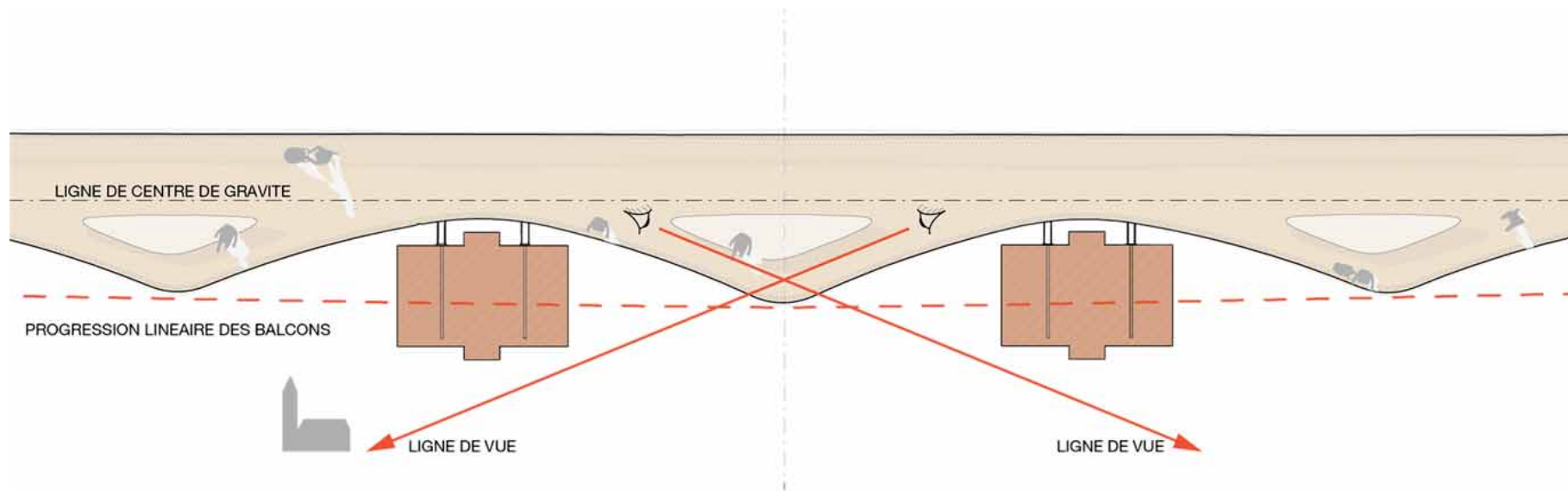


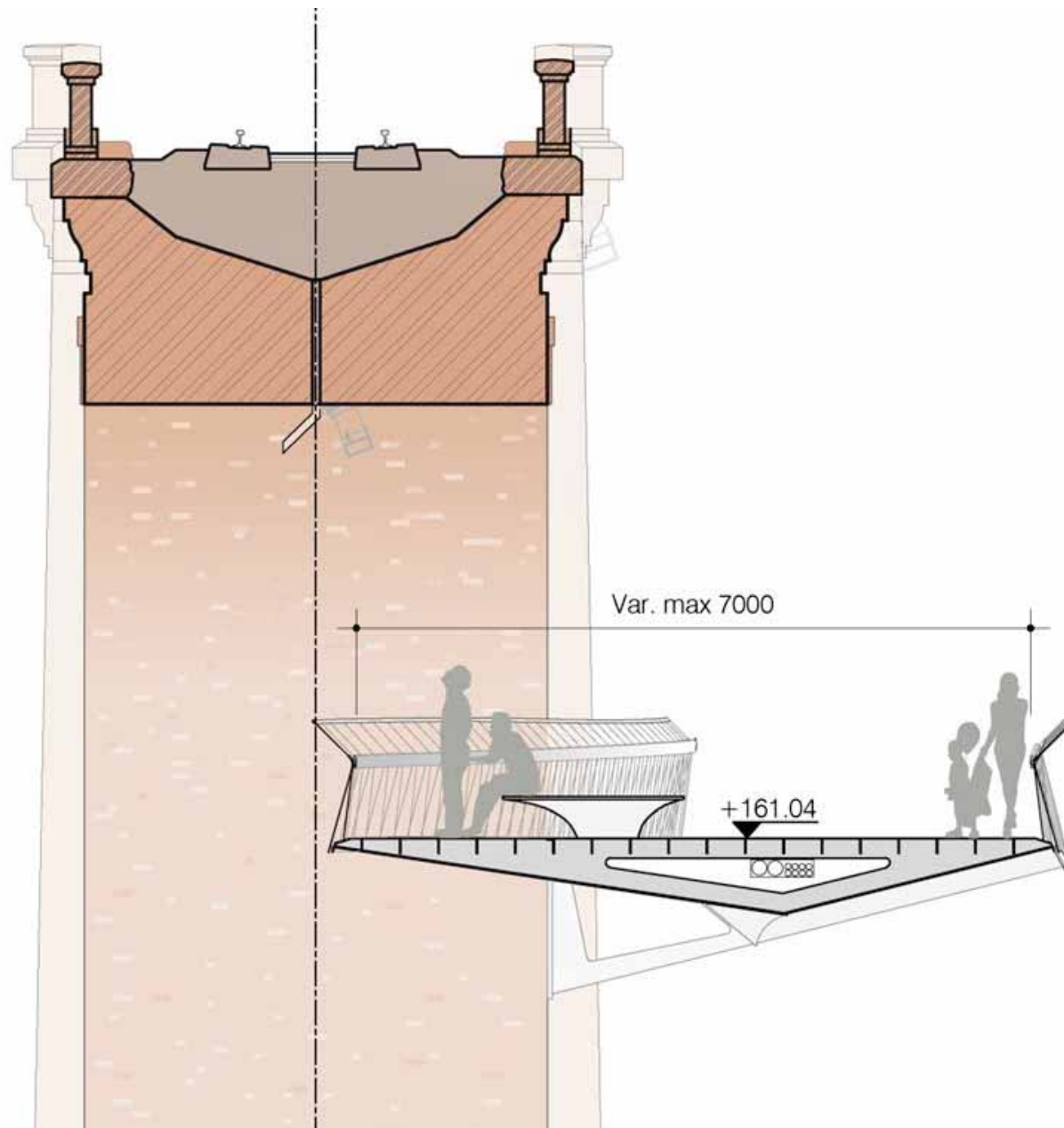
ALBI - FR 2013-2025 length 200m

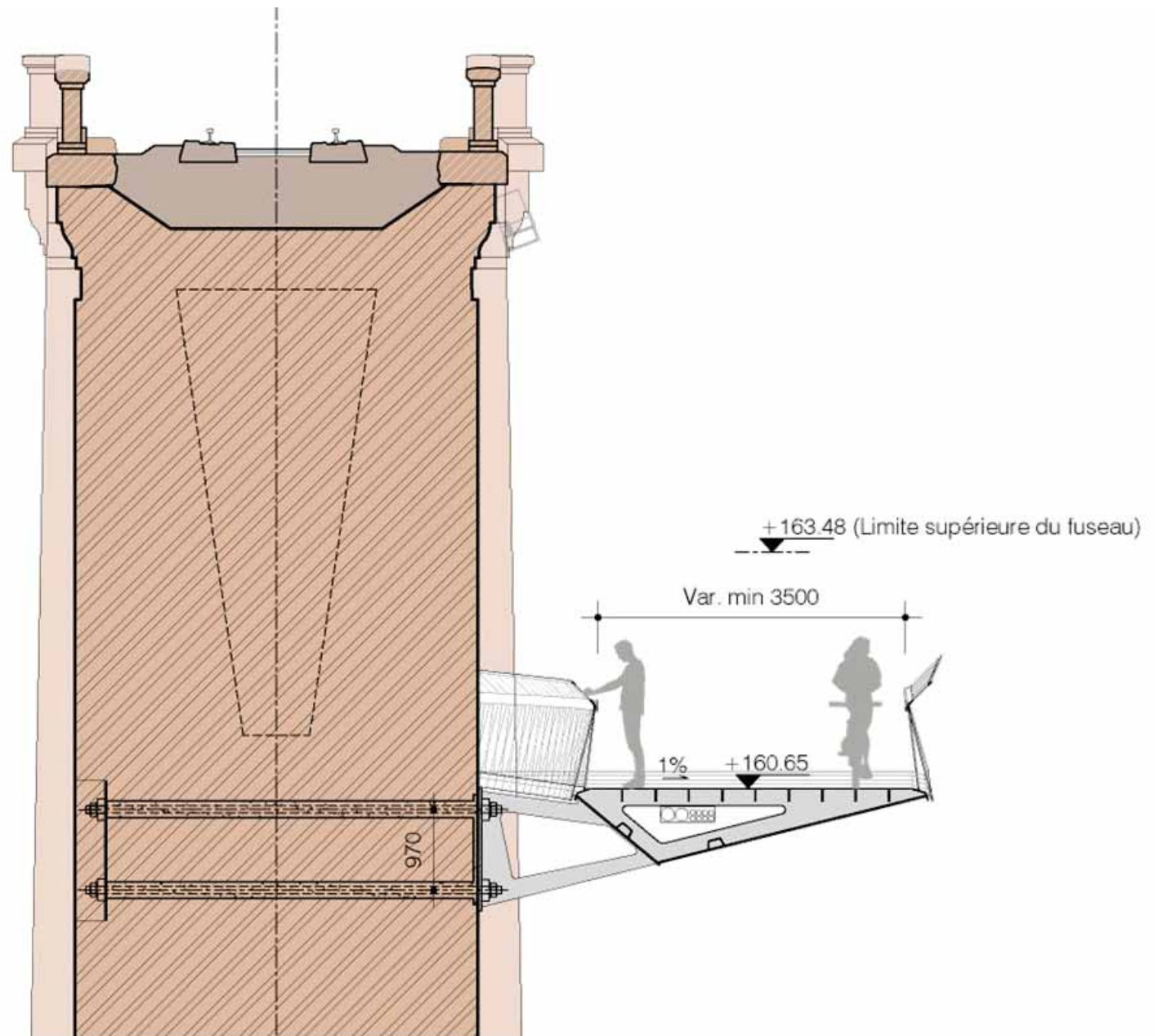


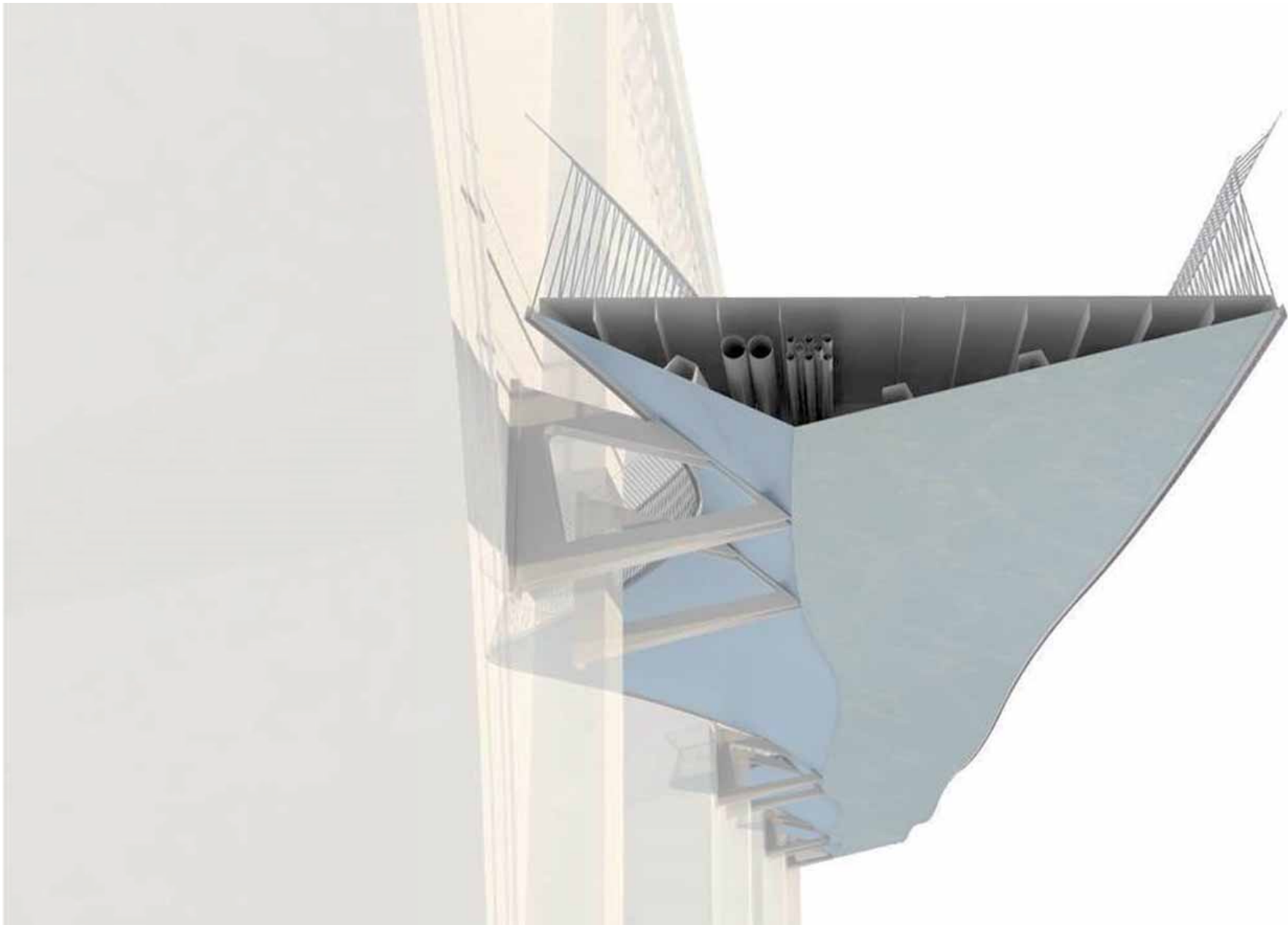


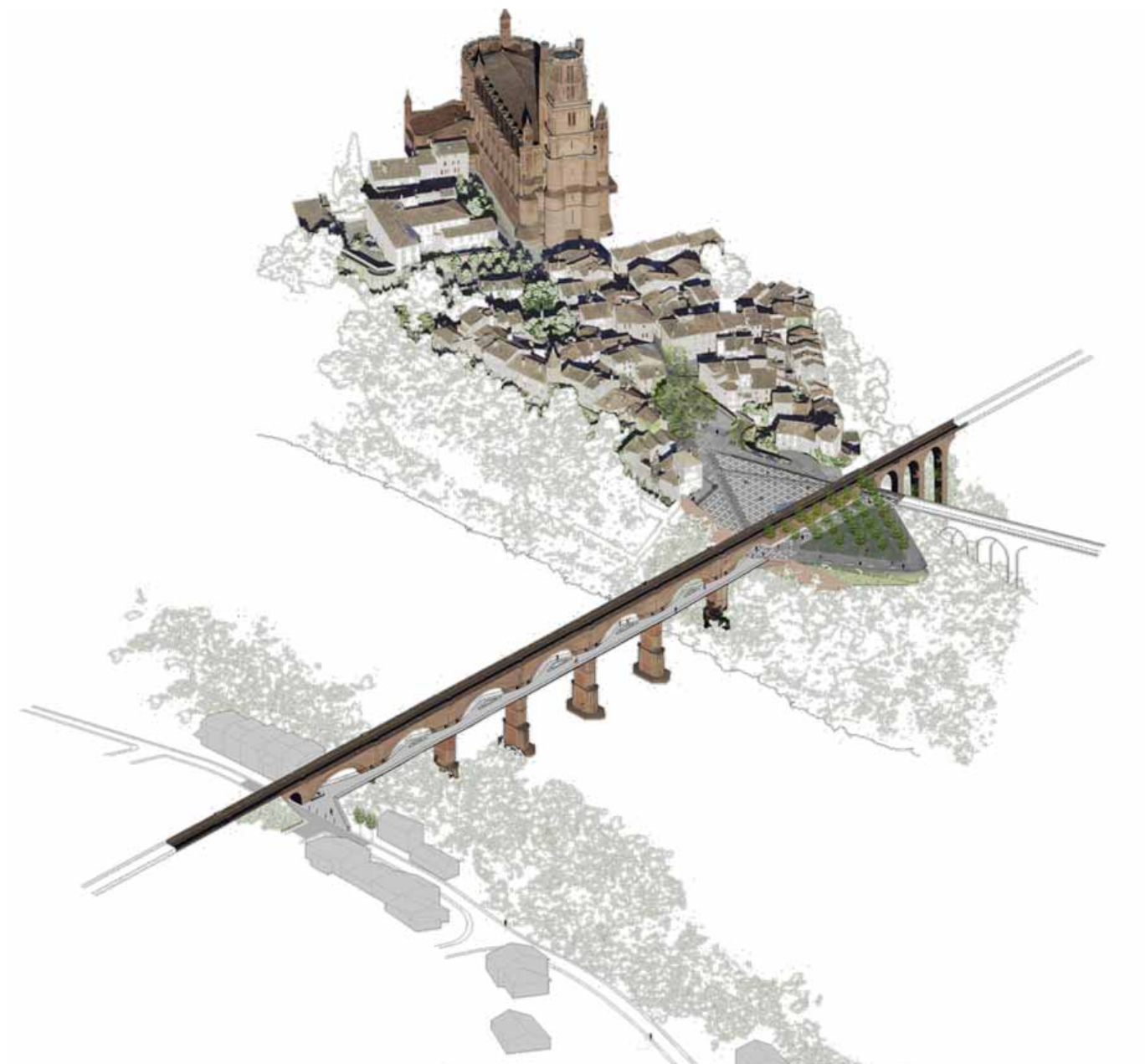




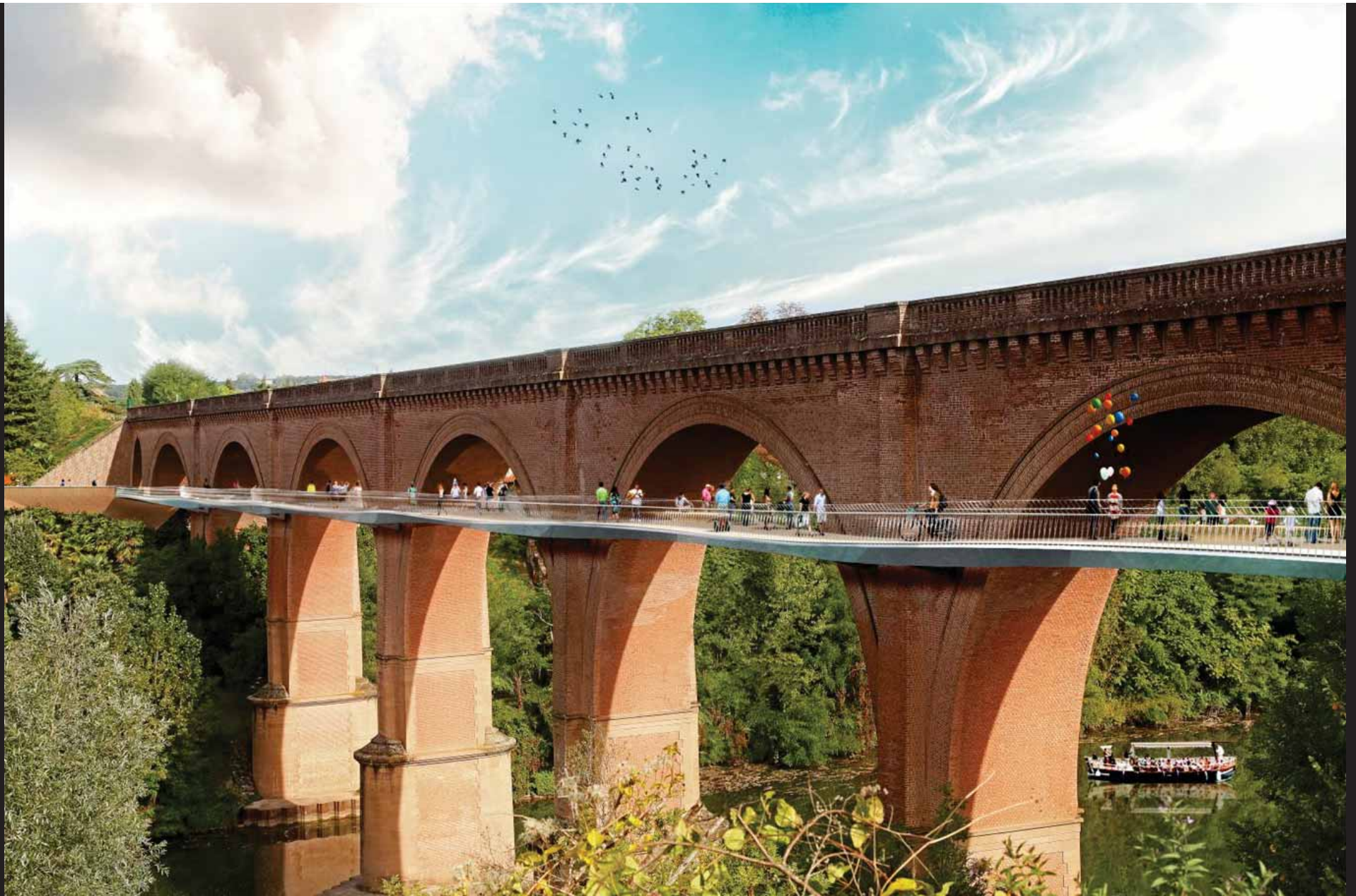












HEMPATHANE HS 55610

NCS S 1005-G90Y

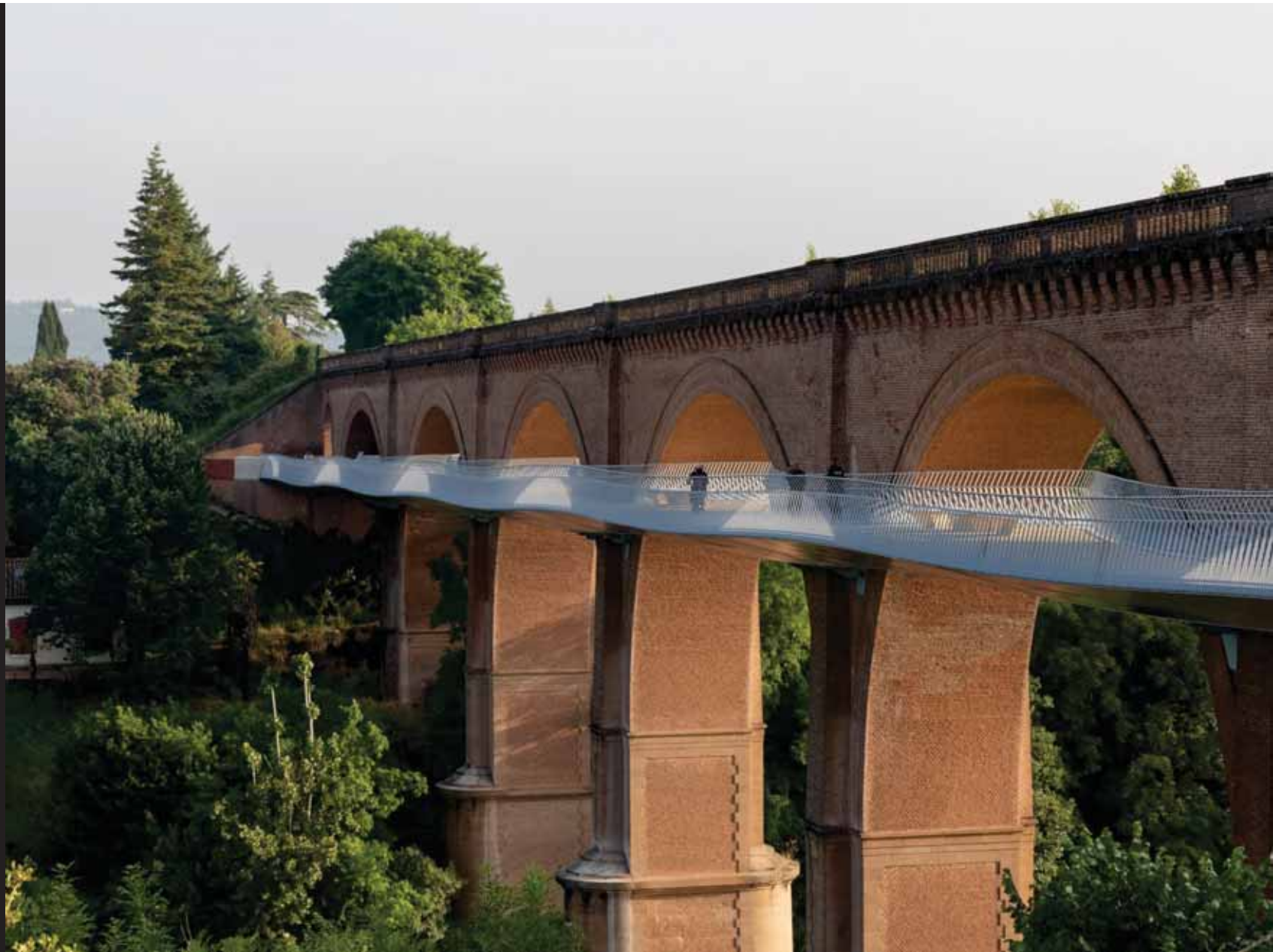
HEMPATHANE HS 55610

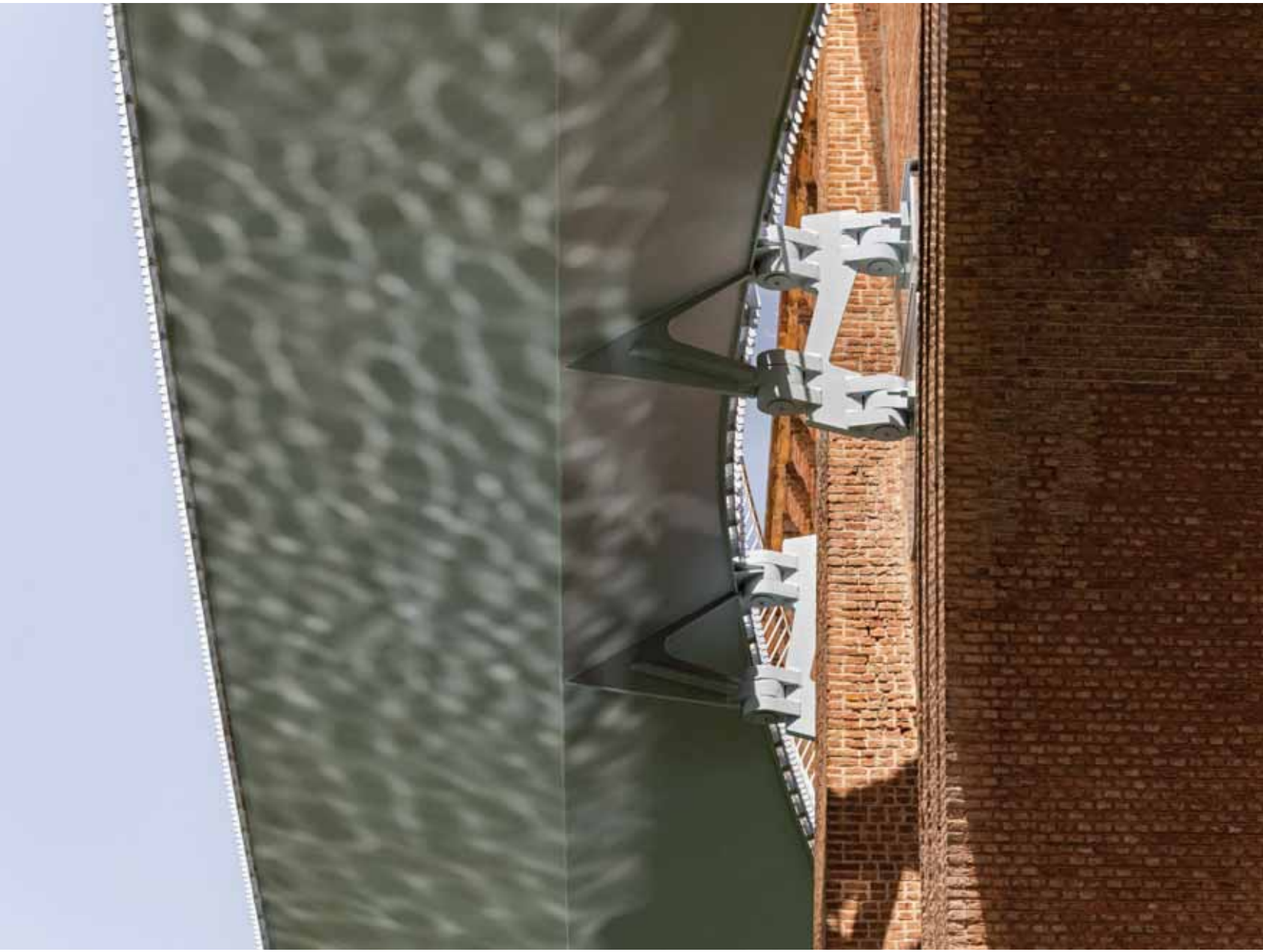
NCS 0907-R90B

















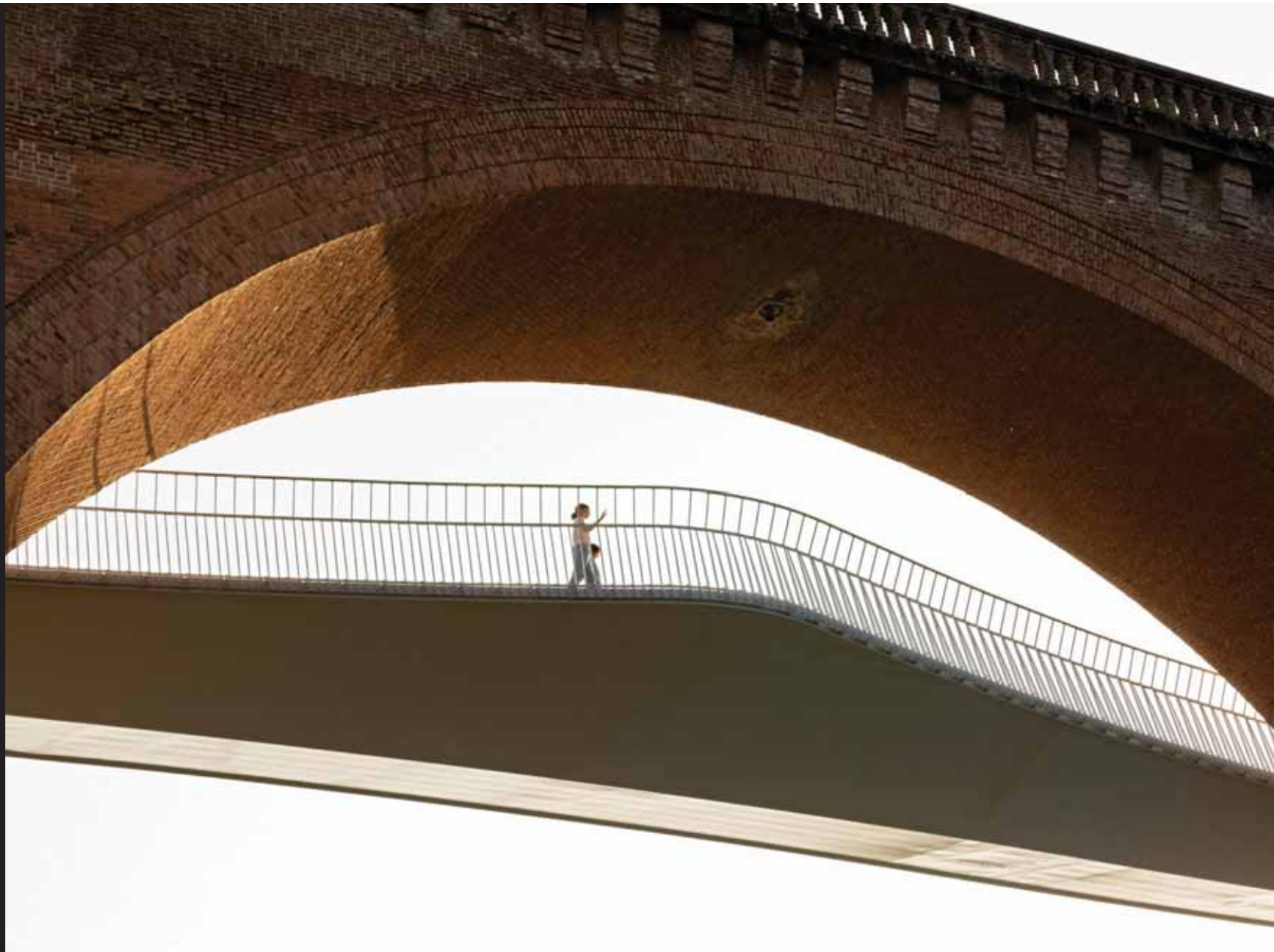






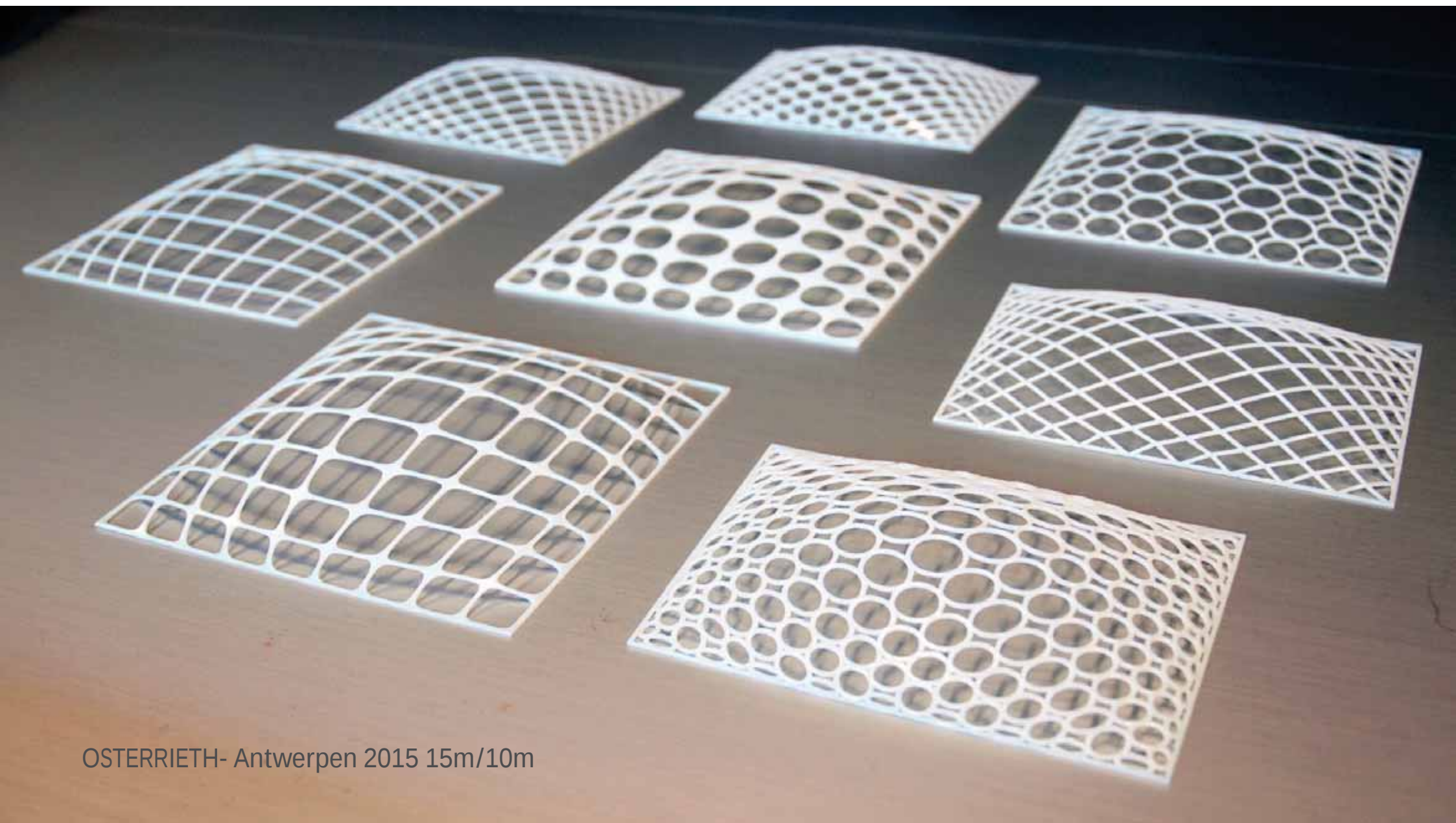








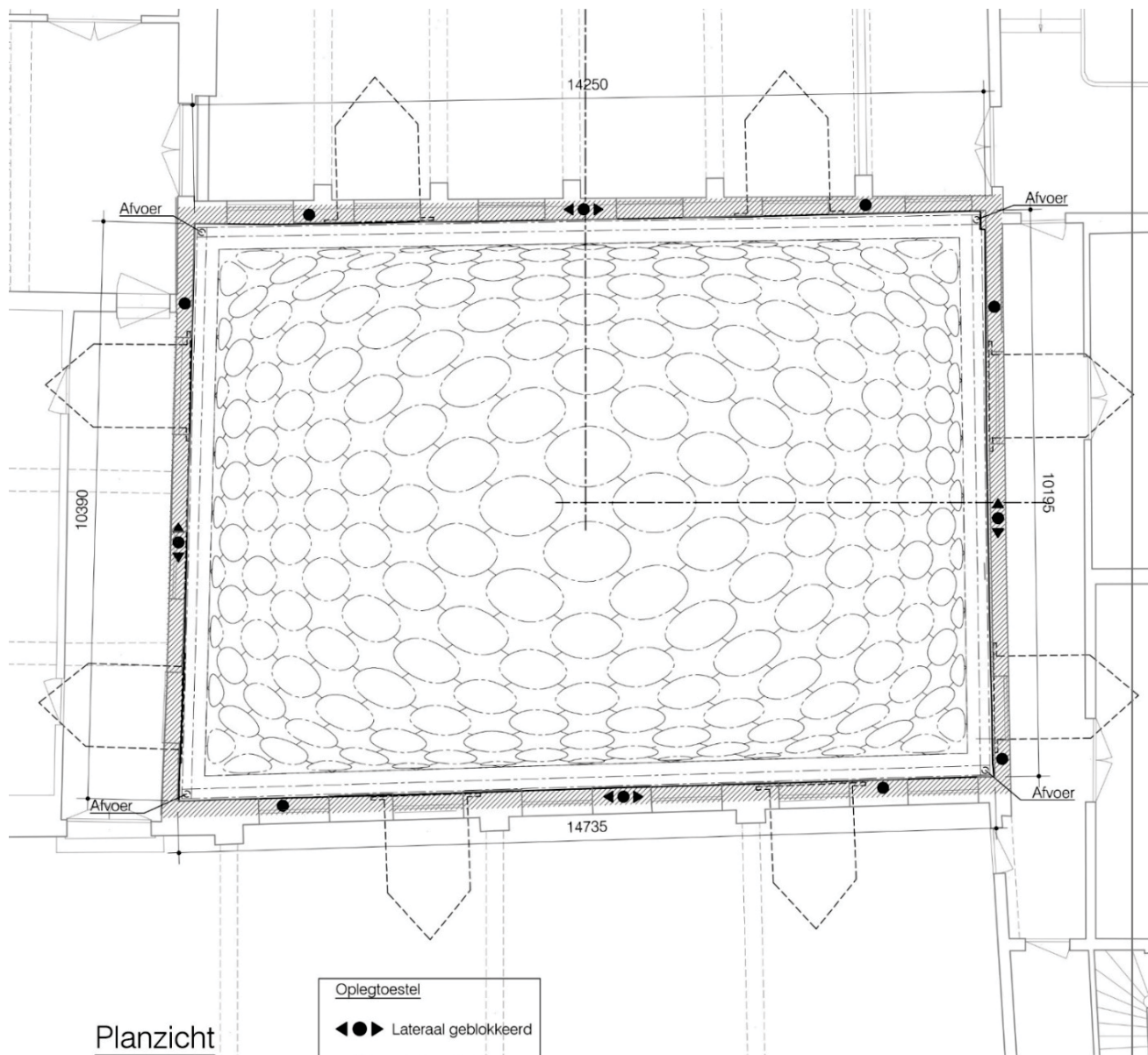




OSTERRIETH- Antwerpen 2015 15m/10m

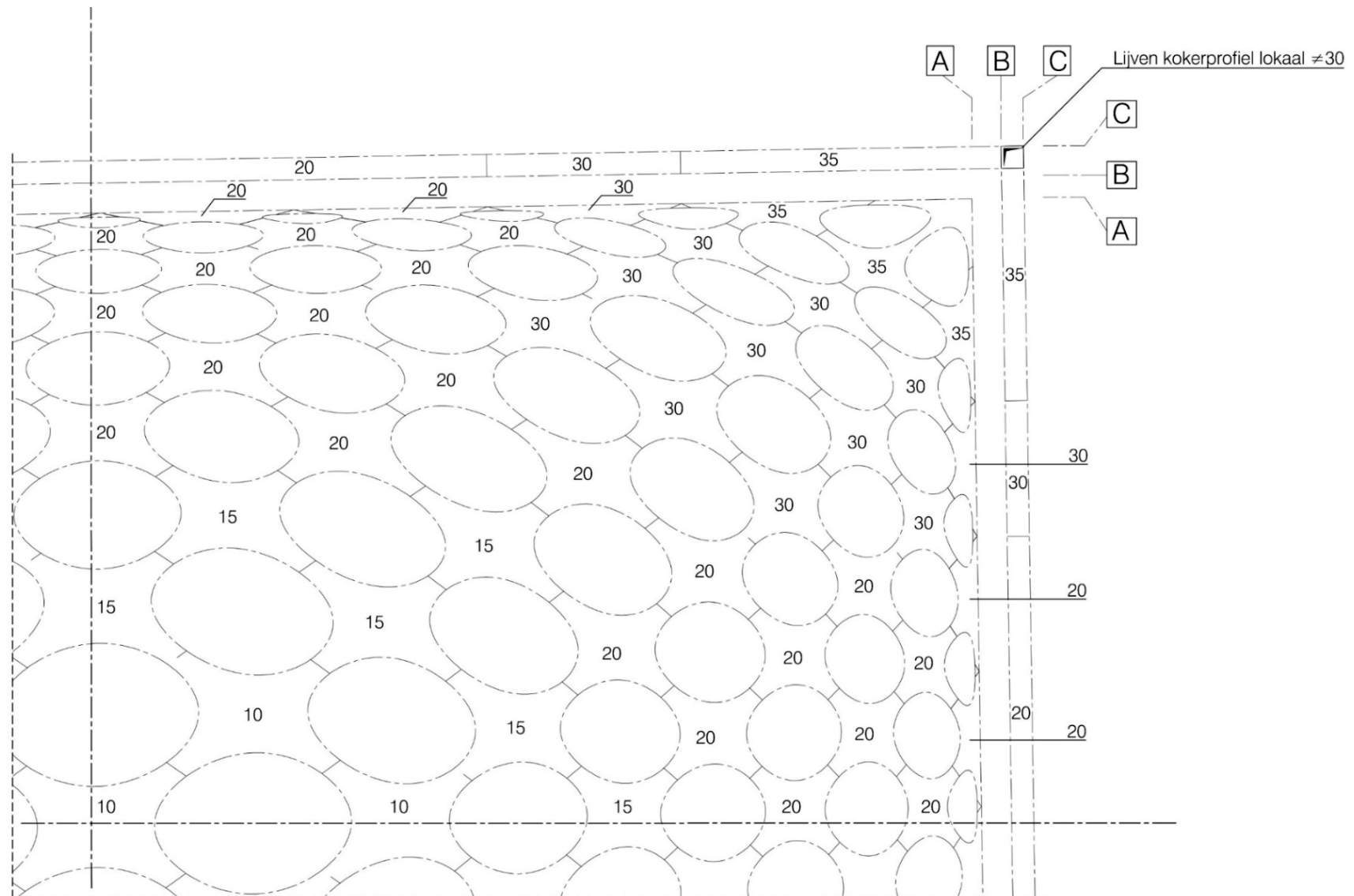


OSTERRIETH- Antwerpen 2015 15m/10m



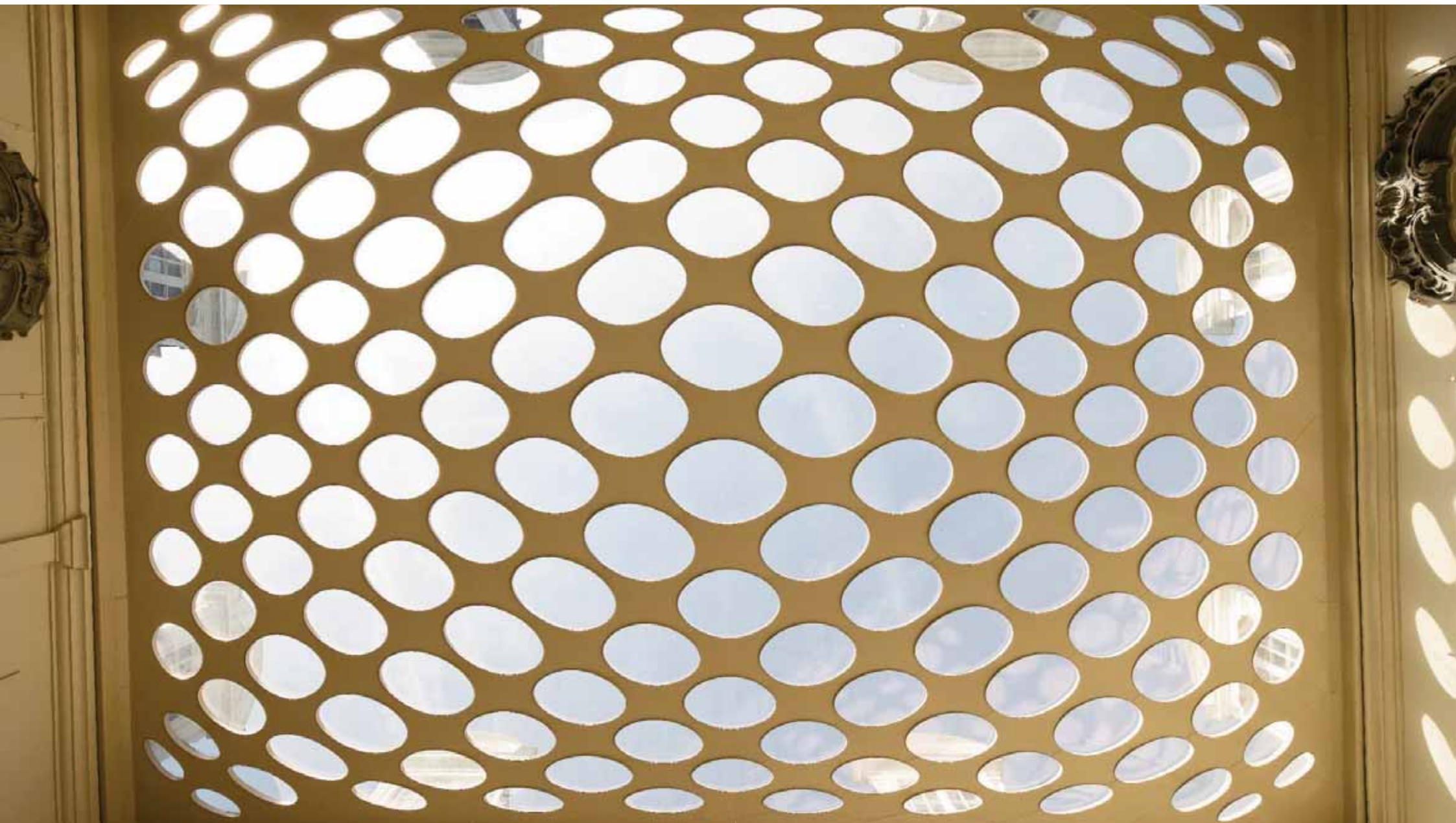
Planzicht

Schaal 1:100



Partieel planzicht - Plaatdiktes

Schaal 1:50



PARKBRUG- Antwerpen 2006 span 67m h=5m
Ratio $h/L = 1/13,4$





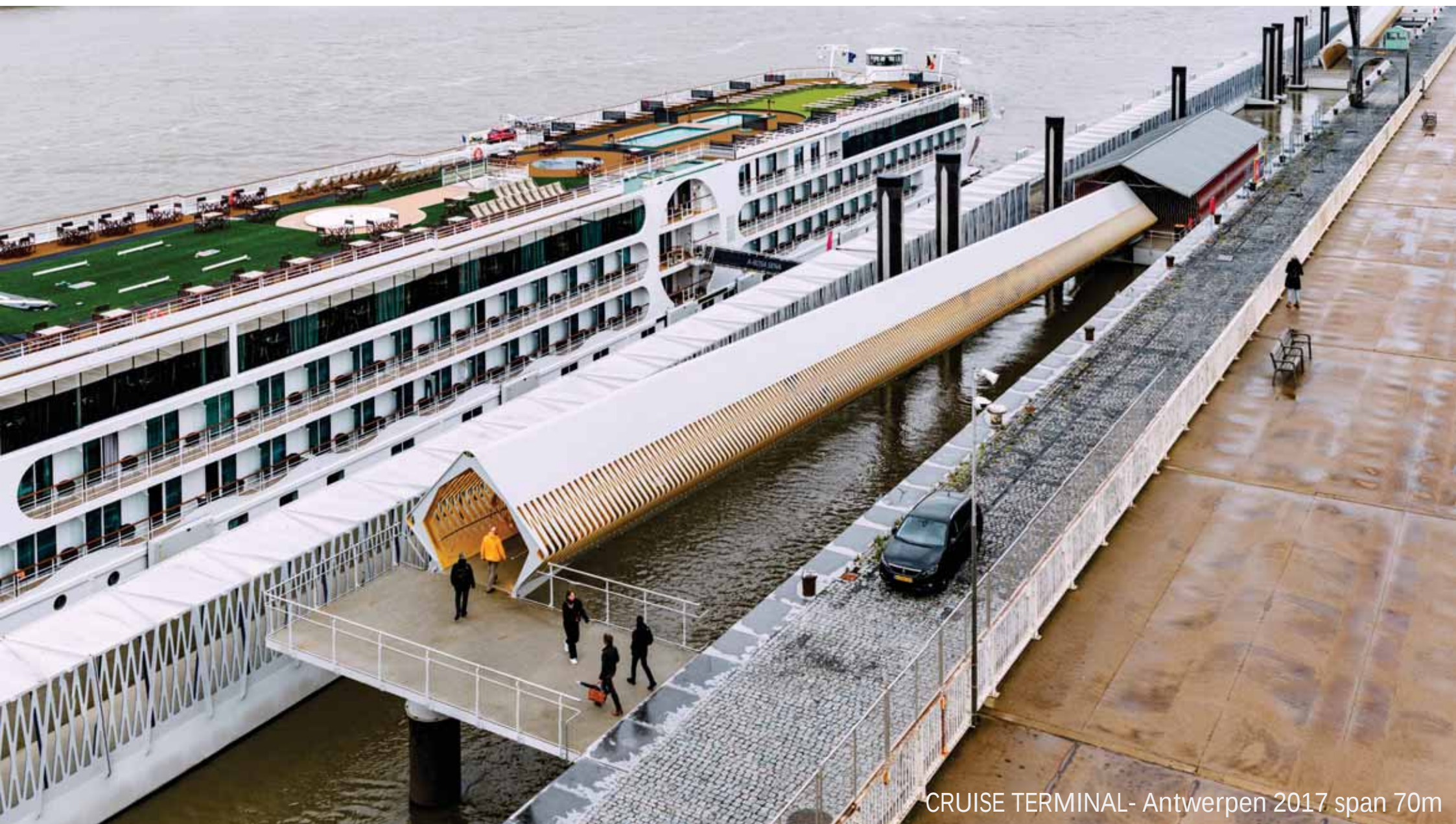






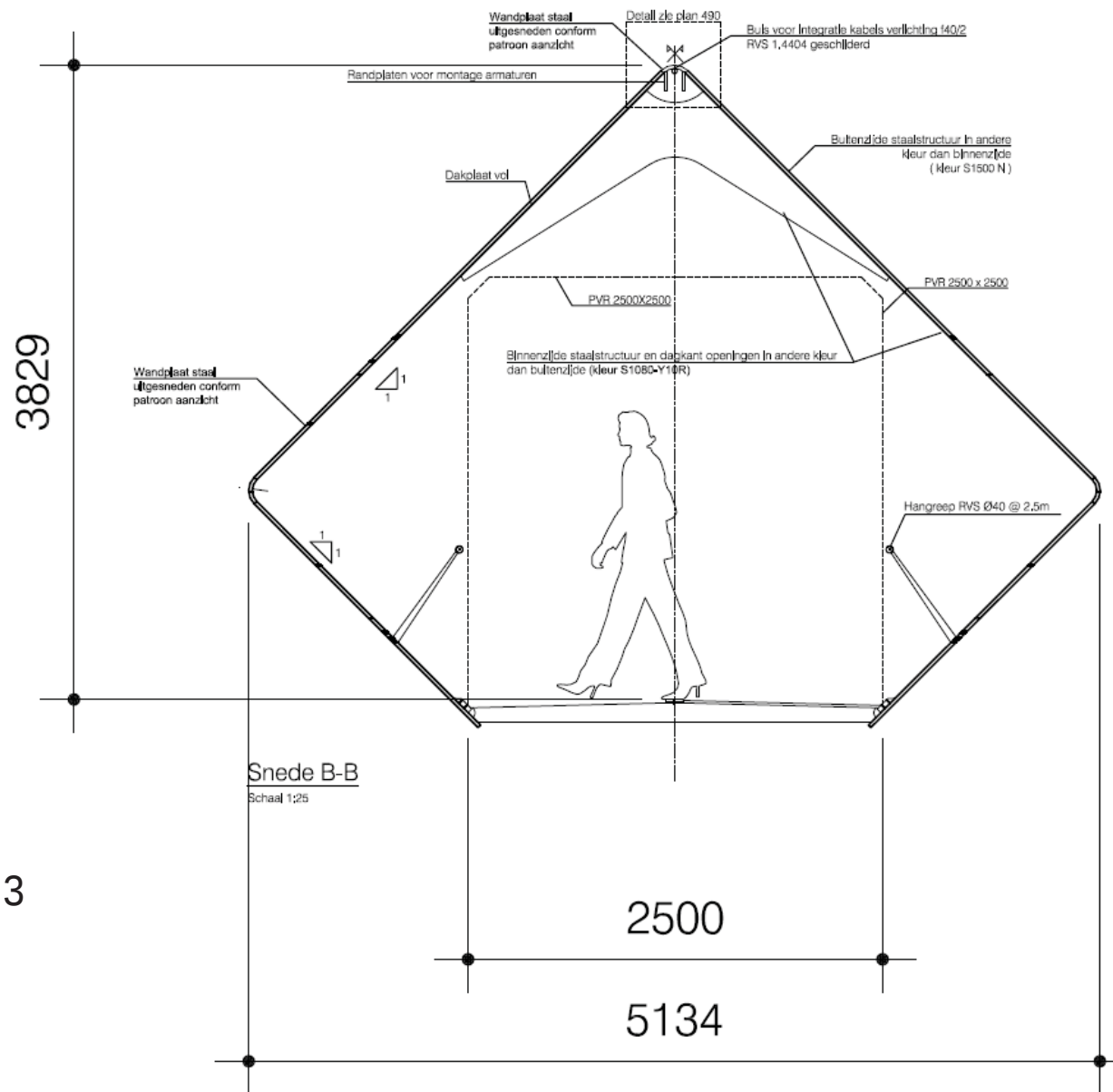
SWANSEA- UK 2015 in collaboration with ACME span 47m



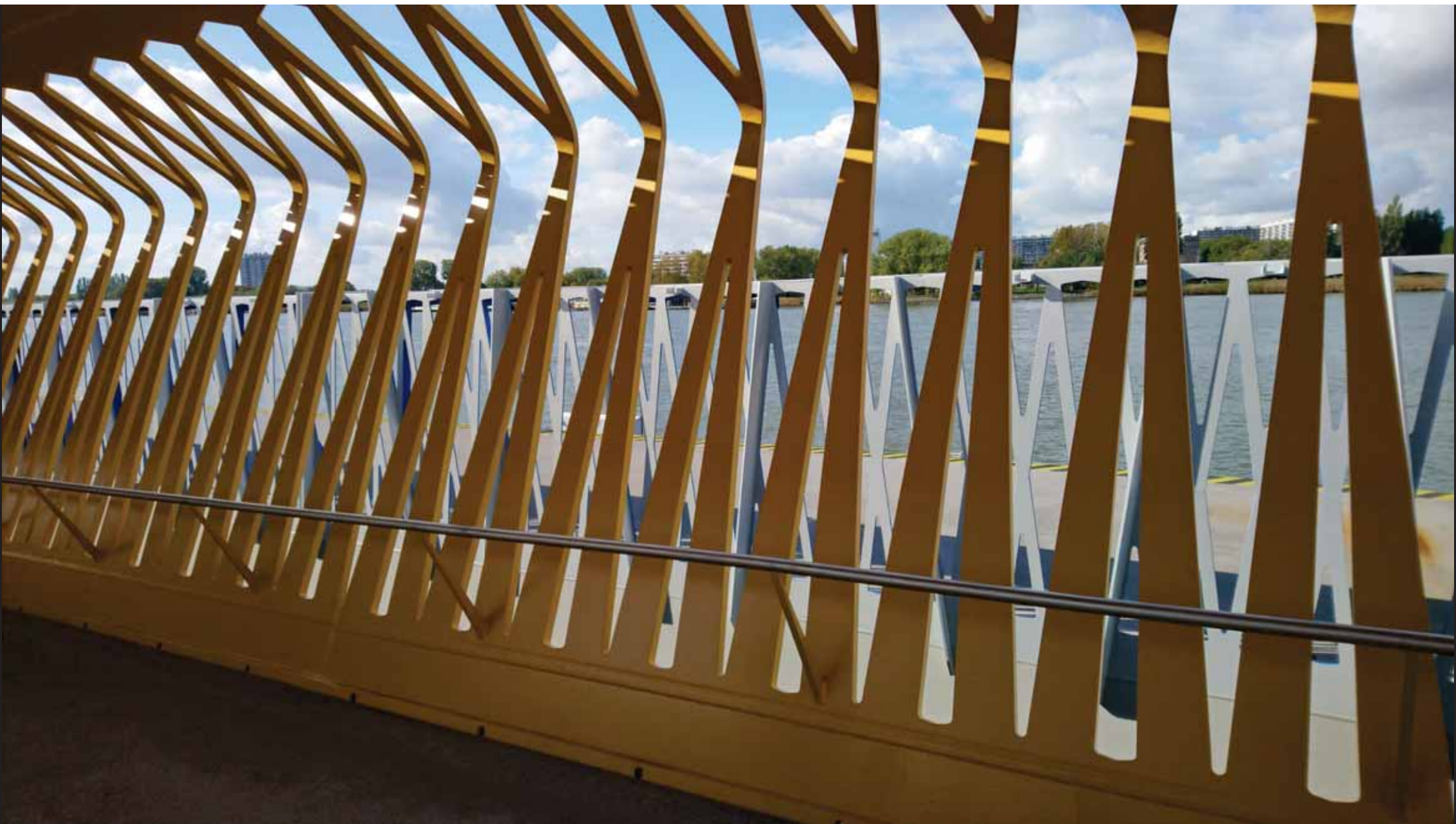


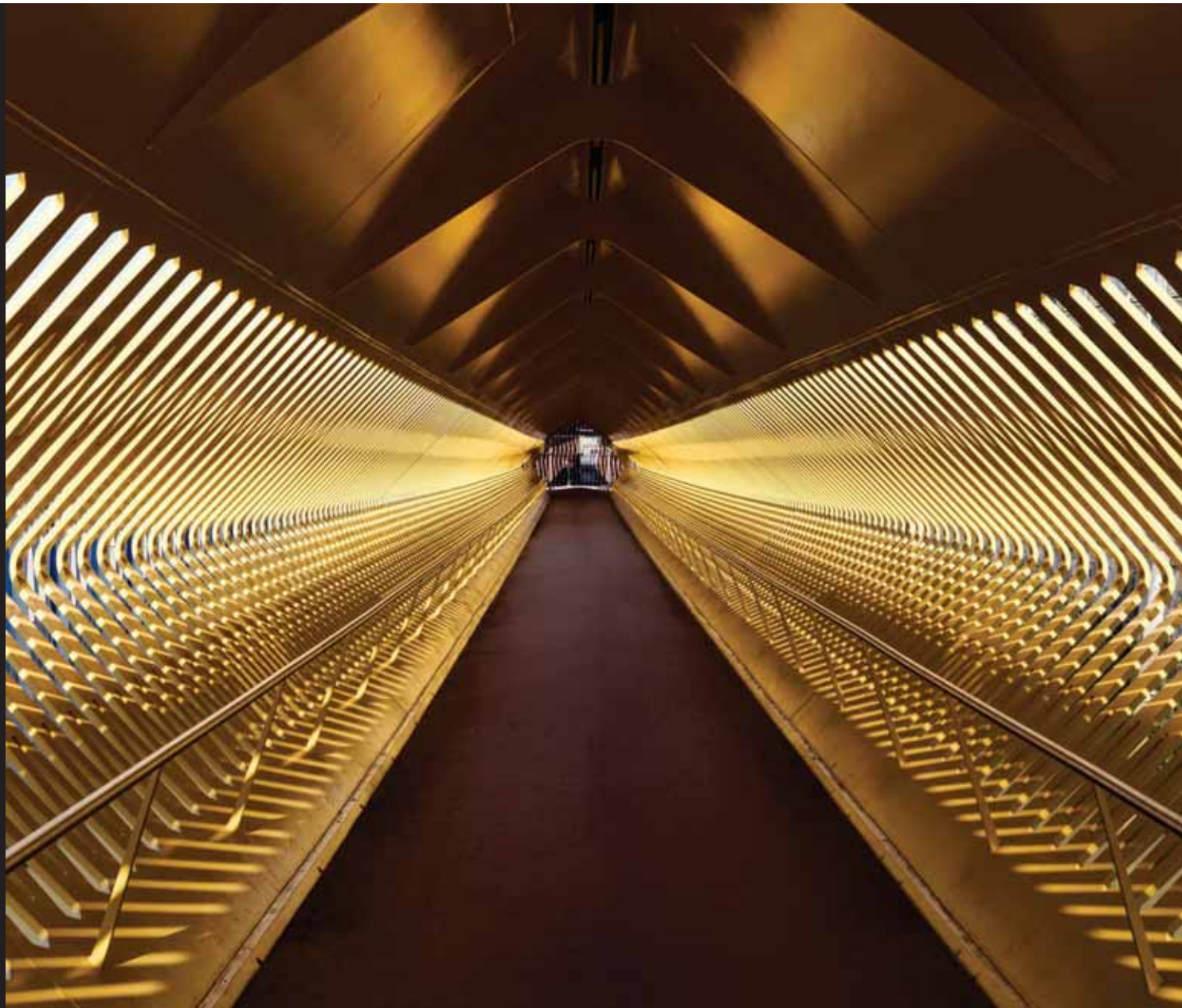
CRUISE TERMINAL- Antwerpen 2017 span 70m





Ratio h/L = 1/18,3

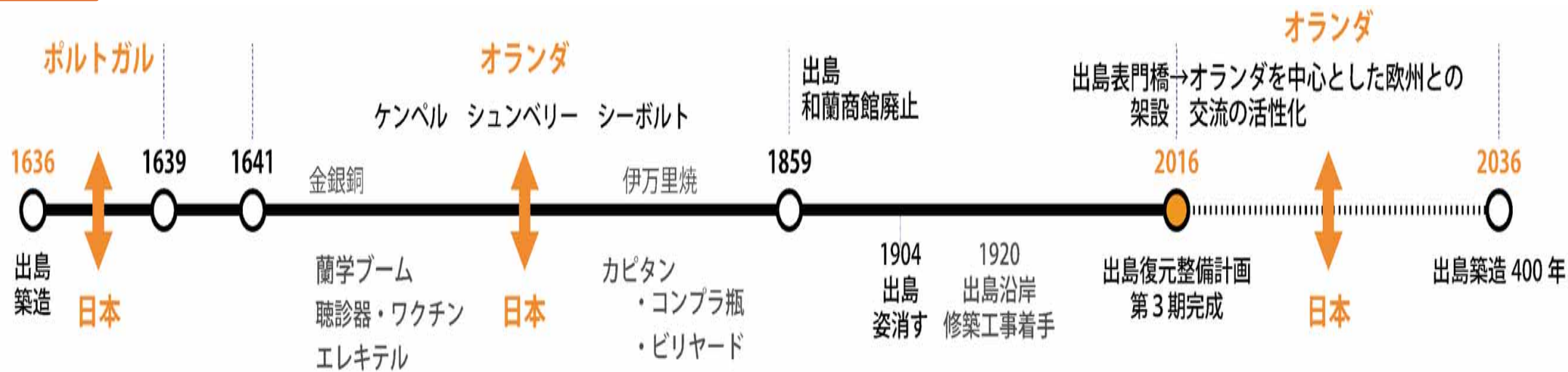






出島築造

出島築造400年





歴史的景観でのデザイン＝スケール

出島内の建築物や市内の伝統的な町屋などの持つ身体スケールに呼応

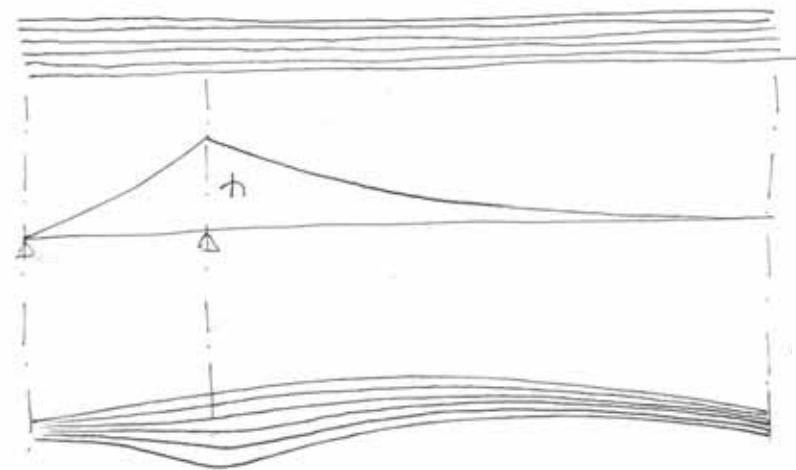




8 horizontal lines



xxx vertical lines



















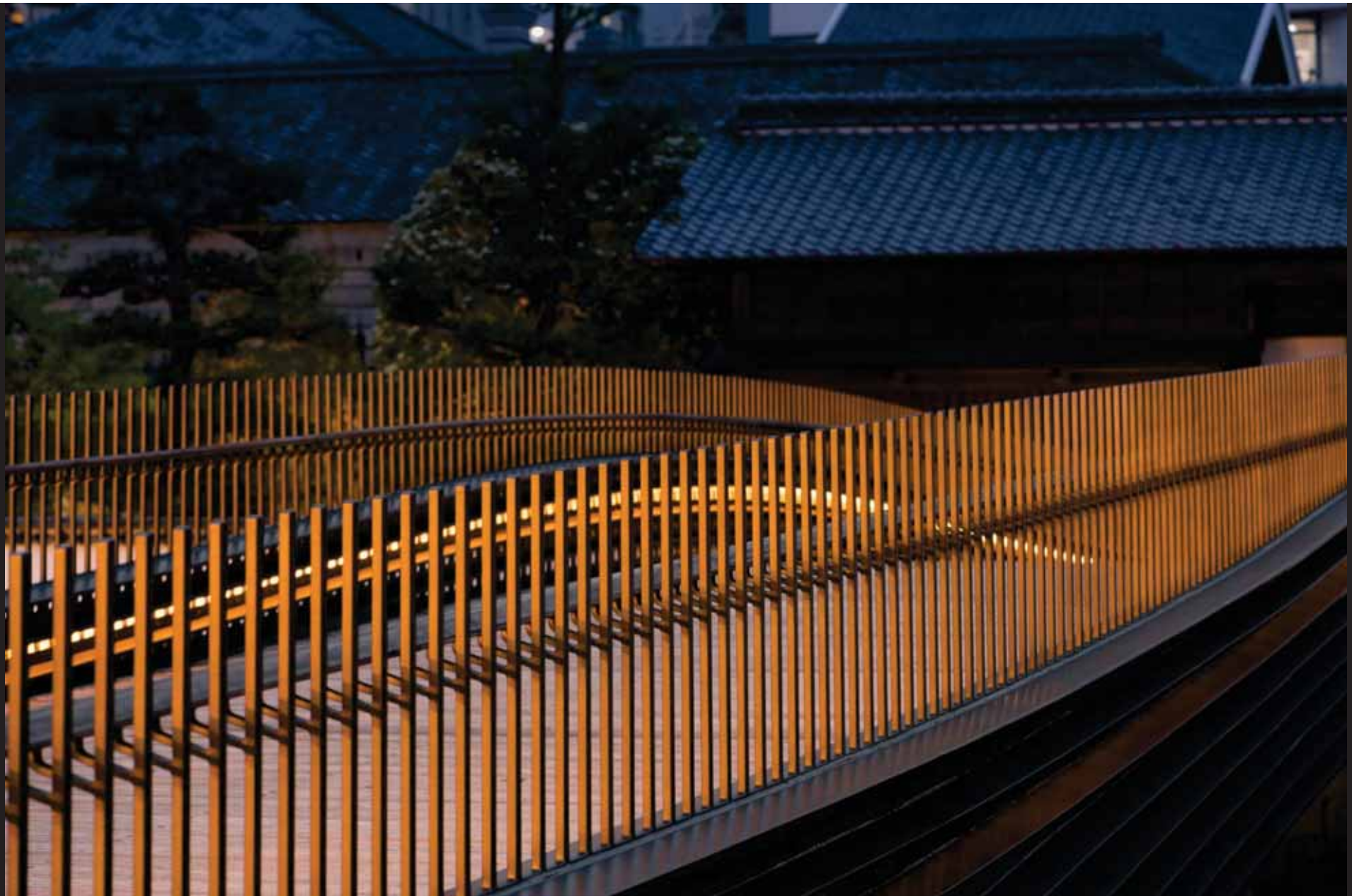








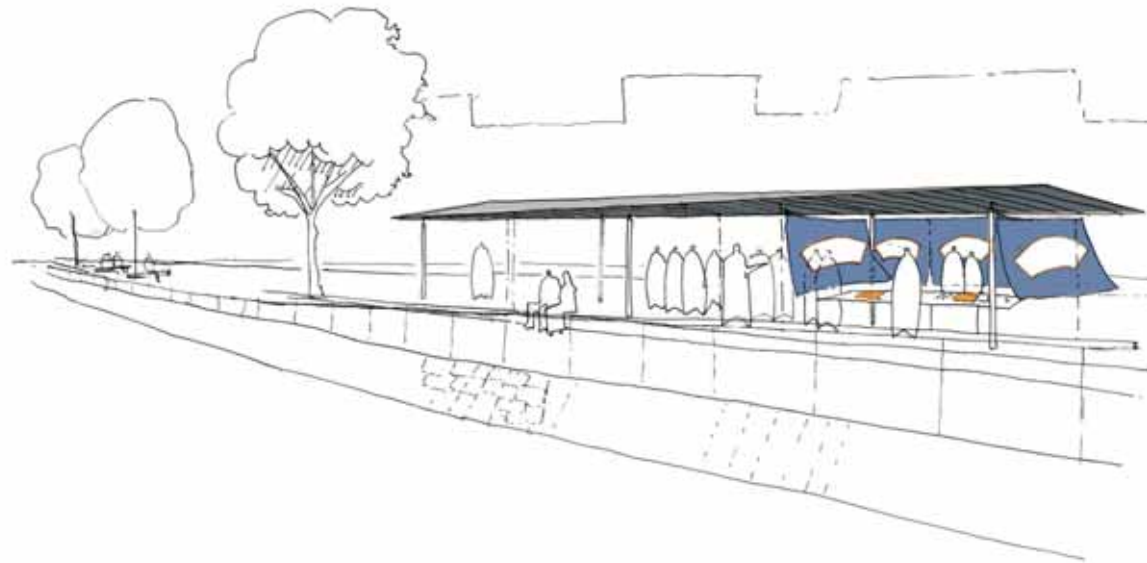


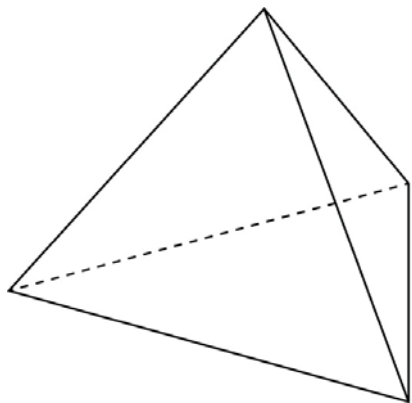




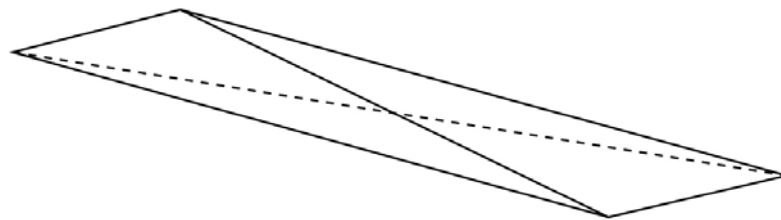
DEJIMA Canopy Nagasaki 2013 18m/4m

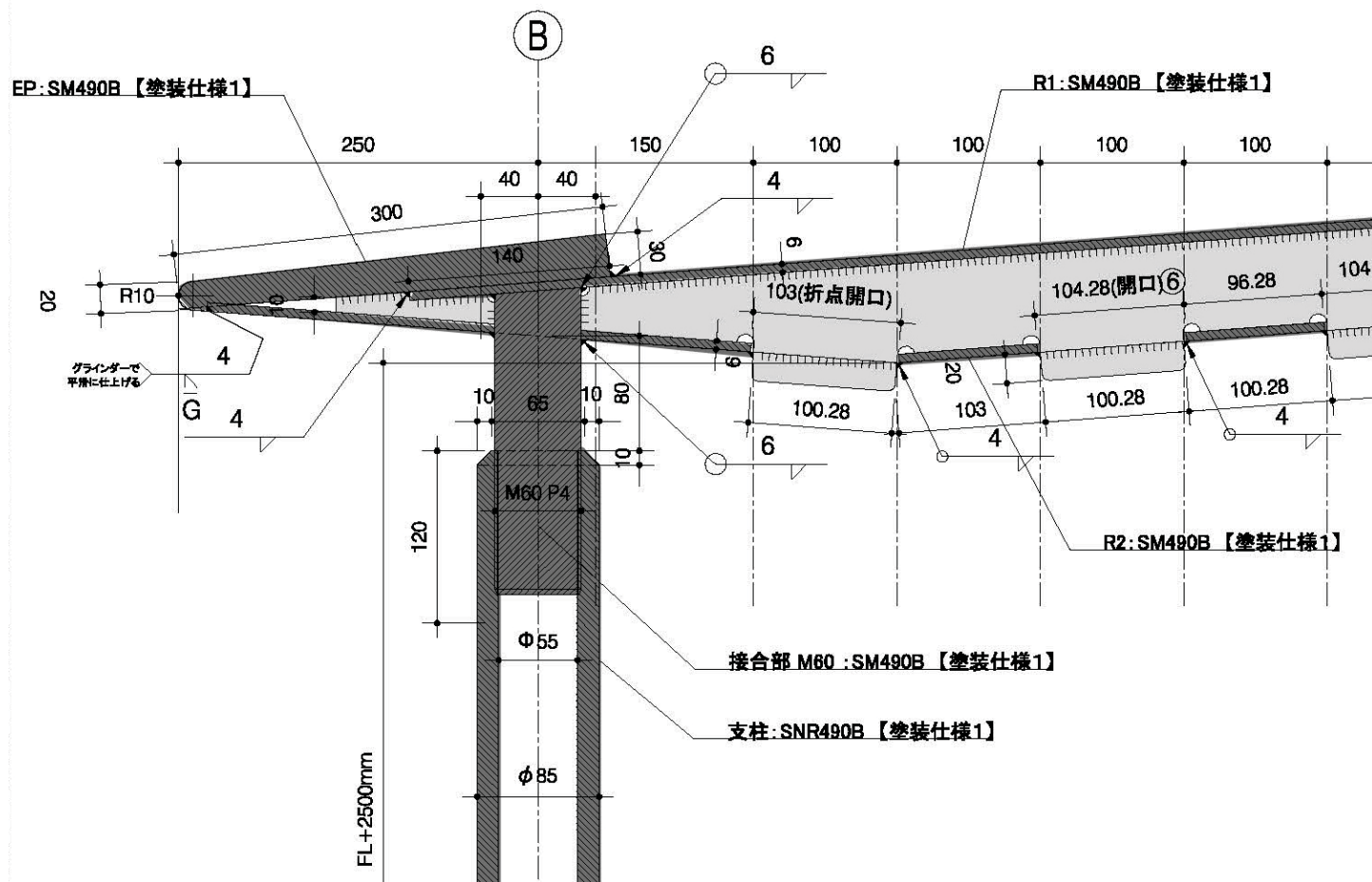






tetrahedron







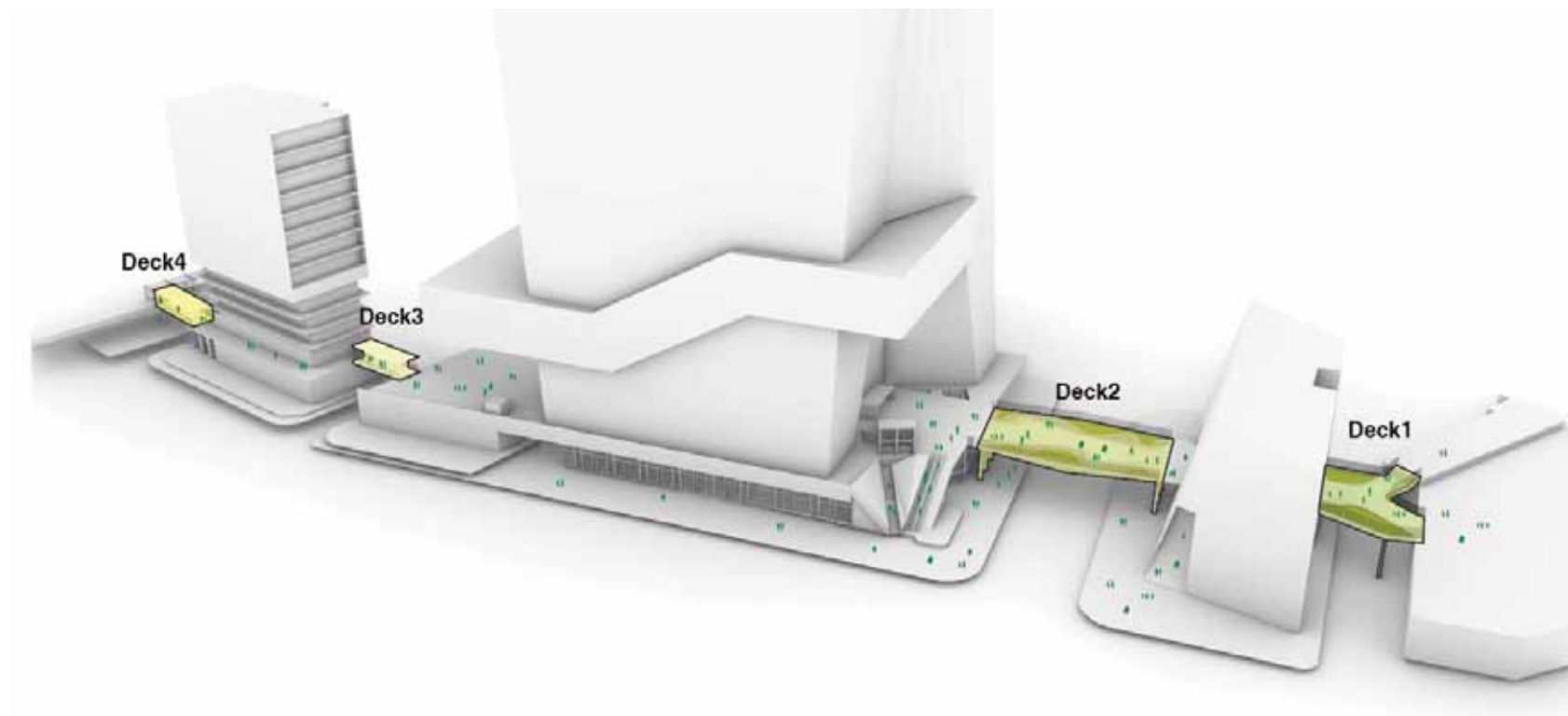






Bridge Park

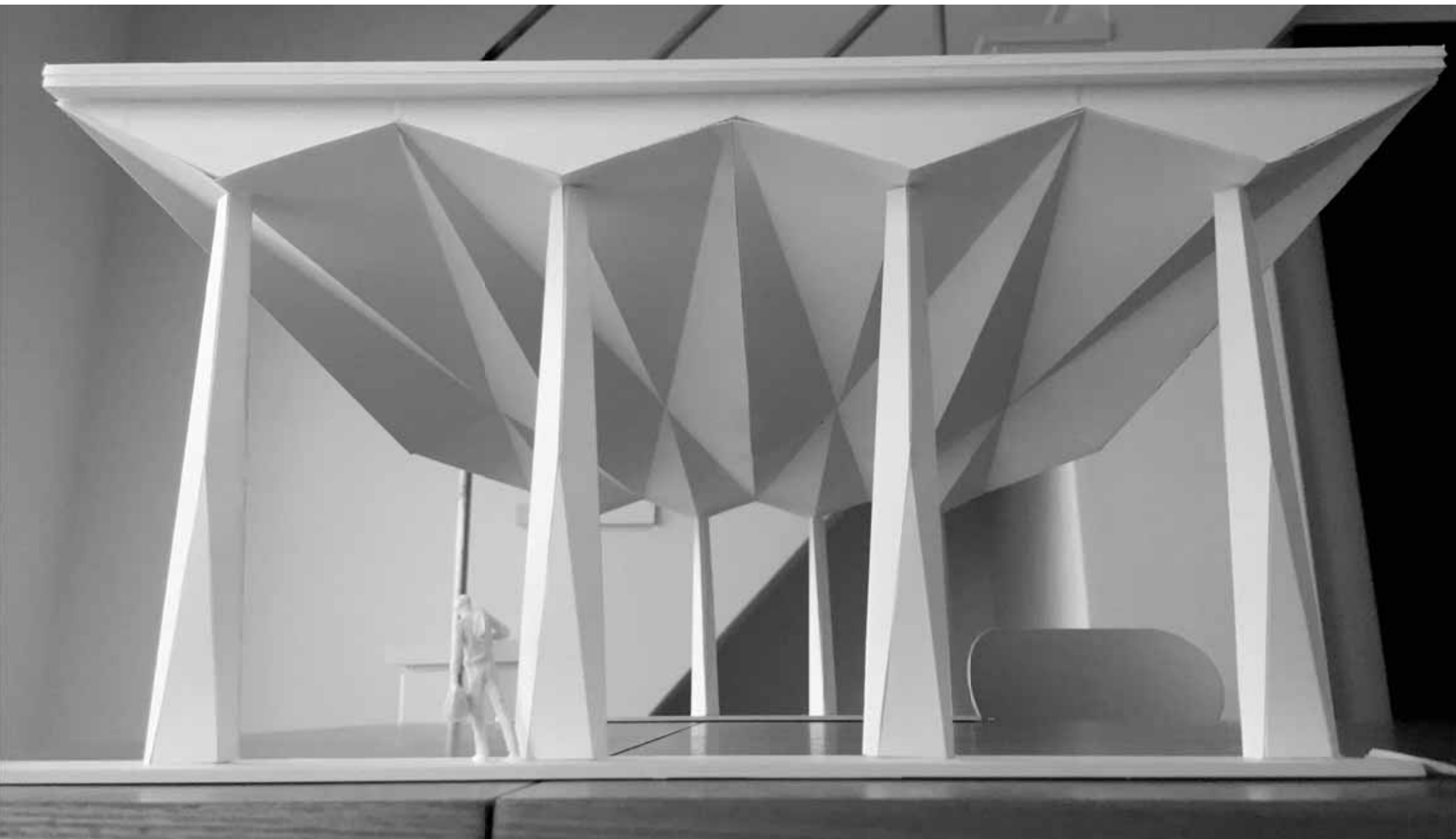
- ▶構造力学から生まれるかたち
- ▶シンプルで継ぎ目がなく、安全で維持管理しやすいディテール
- ▶都市デザインの軸をつくる彫刻のような造形





DECK02

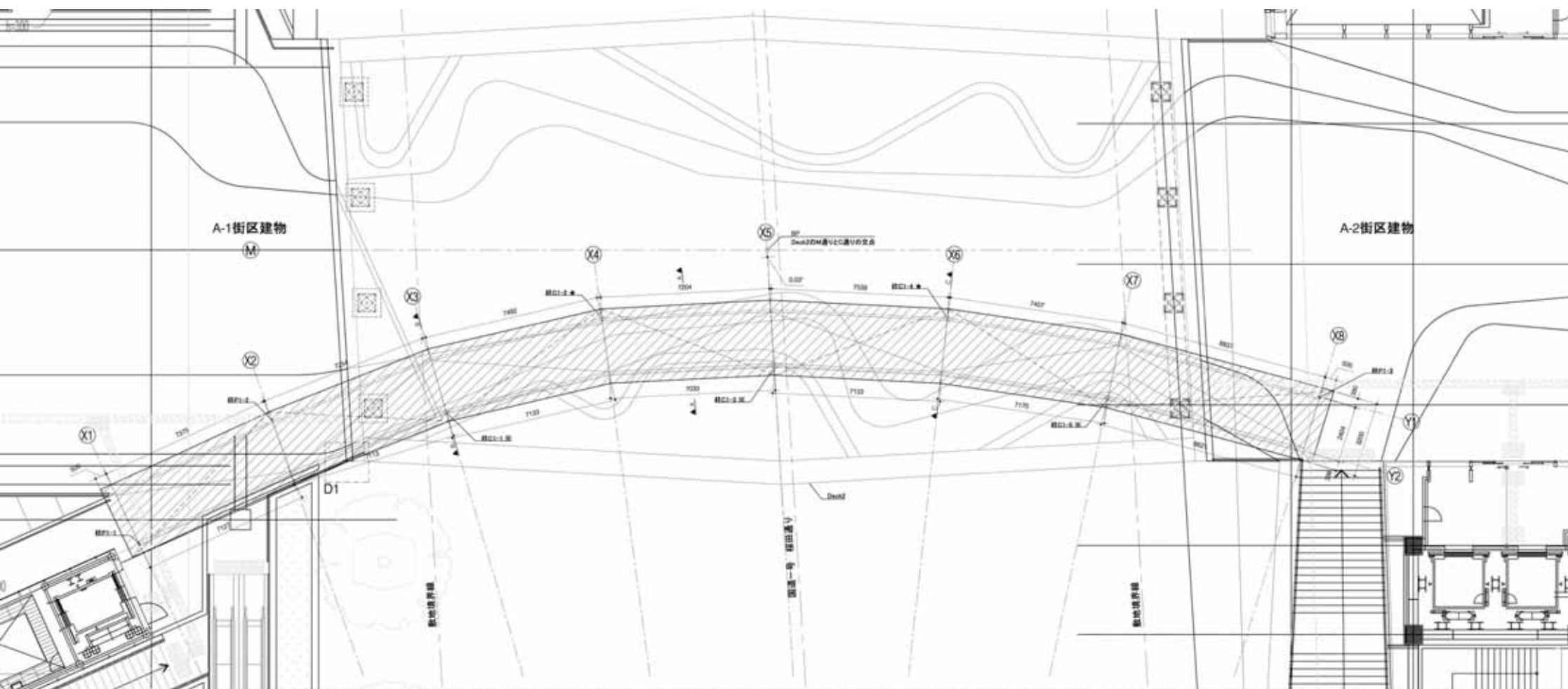


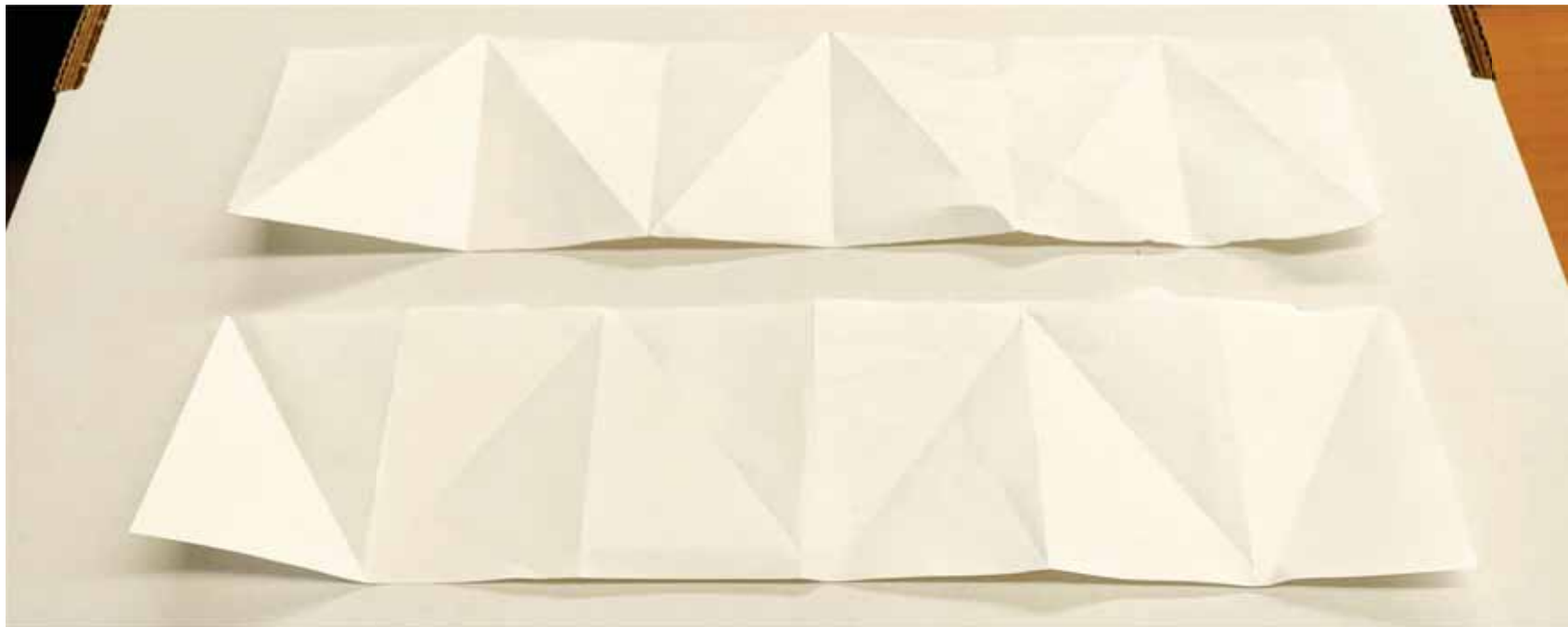
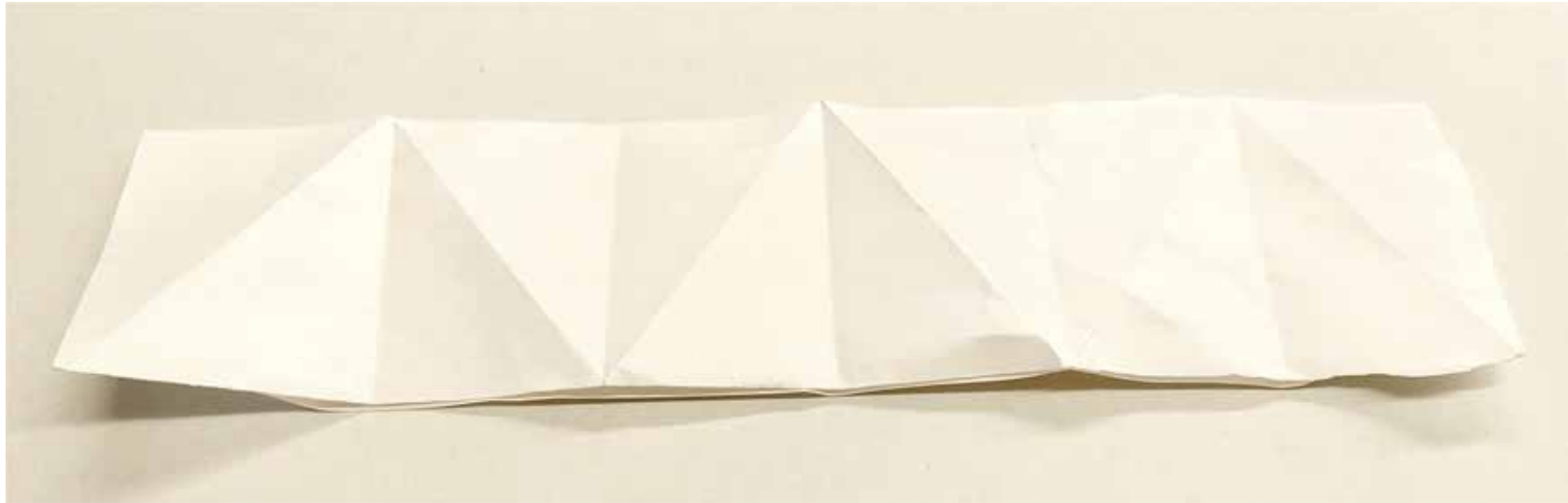


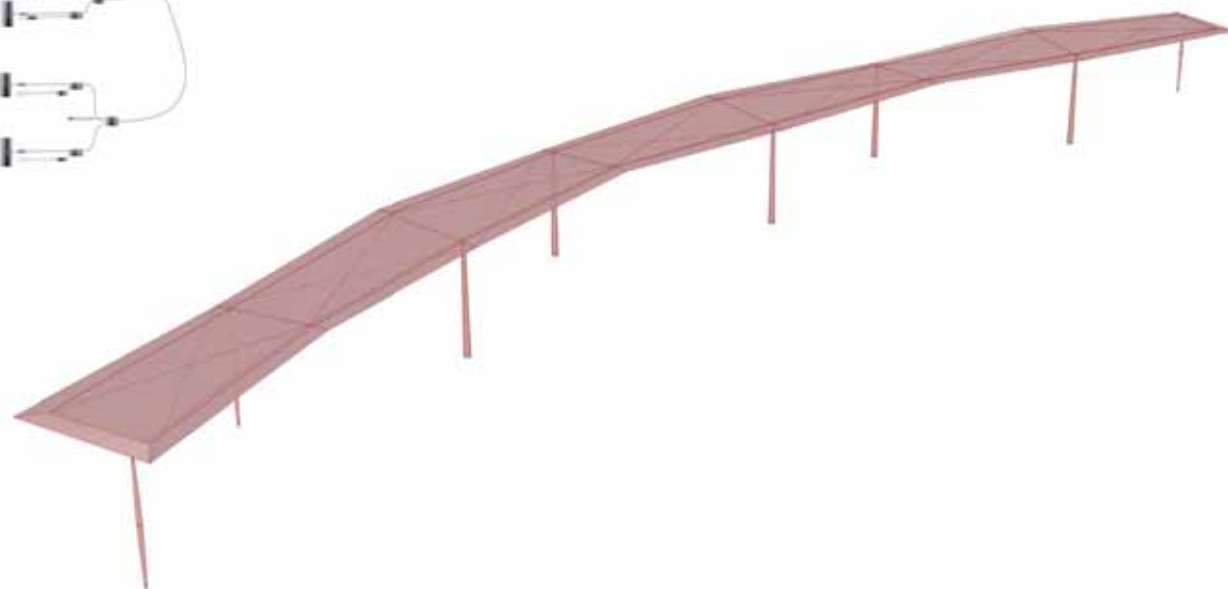
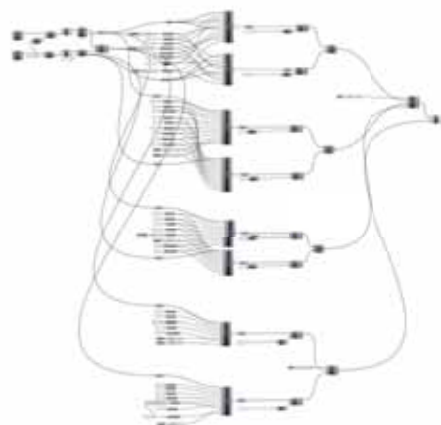
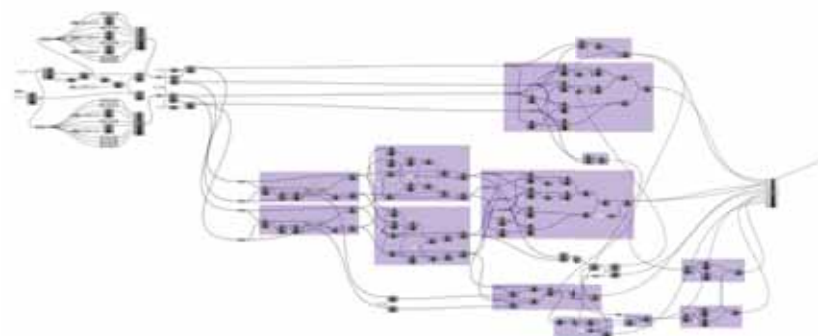
















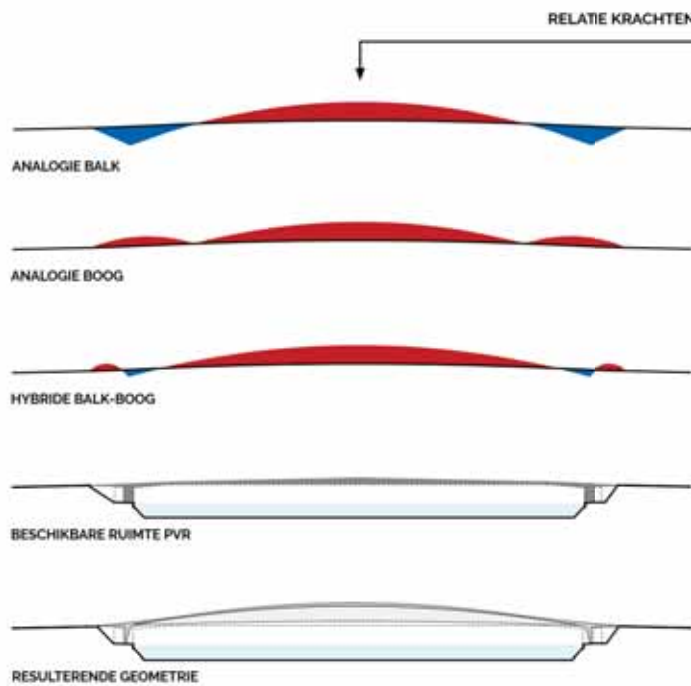




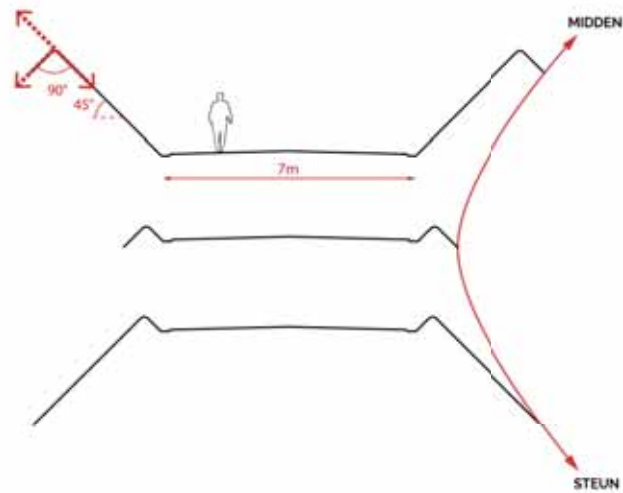
GENT Belgium 2018 span 78m length 90m
Ratio $h/L = 25$



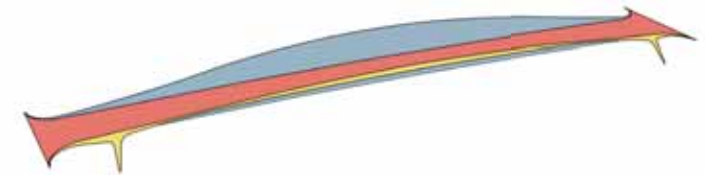




Bending moments and needed material height distribution



Topology and shape strategy



Simple plate geometry



















crossing aside

The film *crossing aside* is conceived as a phenomenological portrait of the Annie Vande Wiele pedestrian and bicycle bridge. It approaches the bridge not only as something people live with and use, but as something that itself lives and makes a space. Through details and fragments, the camera traces its surfaces and textures, as well as its living surroundings: birds in flight, spiders weaving webs, rippling water, passing shadows. The bridge emerges as a meeting point of technology, materiality, and environment—anchored in the landscape, the city, and time.

The moving images are accompanied by a composition from Ben Bertrand, whose use of ‘*gammes symétriques*’ extends the film into sound, echoing the bridge’s layered presence and rhythm.

Visual artist(s): Mira Sanders and Cédric Noël

Music: Ben Bertrand



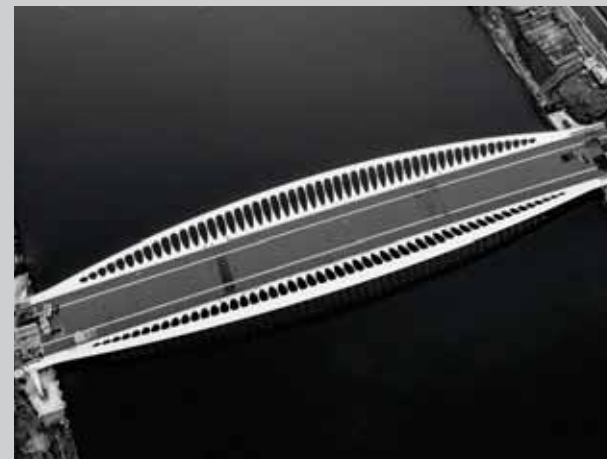
693 kg CO₂ / m² > 123 kg / m²



660 kg CO₂ / m²



645 kg CO₂ / m²



1210 kg CO₂ / m²

