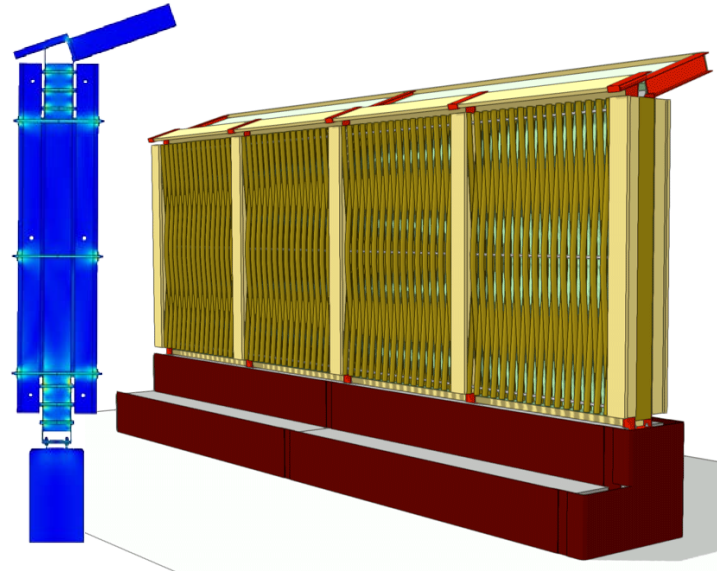


INNOVATION AT TL-Engineering **Urban Rain Drainage System**

Using a simulation-driven design process, a team in Copenhagen transformed urban fencing into a sustainable drainage system that disperses rainwater collected from the roofs of nearby apartment buildings.

To better manage rainfall overflow in densely developed parts of Copenhagen, a team of engineers, architects, and citizen stakeholders collaborated to create a new kind of infrastructure.



The result was a willow-sheathed “green screen” that could act as a sustainable urban drainage system, capable of dispersing rainwater and enabling better evaporative action while improving the neighborhood’s aesthetics.

Structural simulations were critical for verifying the design’s ability to withstand wind pressure, water saturating its mineral wool core, and varying loads from water flowing through its porous exterior.



Since its installation, the green screen has become an urban amenity that offers more benefits than originally intended — it not only disperses moisture and provides urban greenery, but it also mitigates traffic noise.