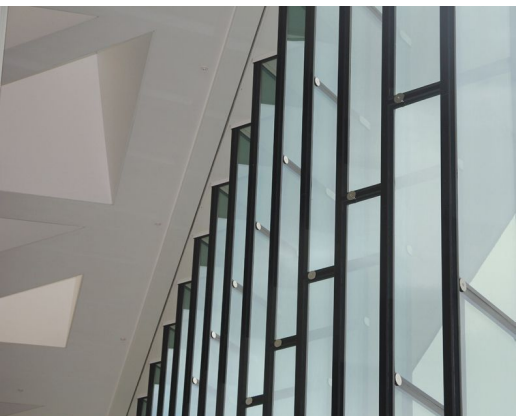


# EMC EDUCATIONAL CENTRE

Architect  
Client  
Location  
Year

CLAUS EN KAAAN ARCHITECTEN  
JP VAN EESTEREN  
NETHERLANDS, ROTTERDAM  
2012

06540



Traditionally, glass is only been used as a transparent shield for wind- and water tightening. For the zigzag facades of the EMC Educational Centre (Claus en Kaan Architecten), the glass is also used as structural element, thus making it possible to completely omit mullions. By constructing the 11 meters high facade in a zigzag shape with corners of 90 degrees, a structural depth of 650 millimeters is realised. As a result, all mullions could be eliminated.

This meant that the steel construction could be reduced to only a framework of steel bars completely disappearing in the joints of the glass panels. For compression forces the steel is stabilised by the glass (against buckling). The detailing of the system is highly optimised. In the development of this new facade system, lightness, transparency and security are the key considerations. After the engineering, Octatube succeeded to realise 2 facades (of 49 and 58 meters length), without complicating constraints.

**octatube**