

CORAL

ID number: 56558

>>Coral Wall

Coral is a slight wall that proposes to divide the space in a more subtle way, allowing different types of relationships between different rooms. Reducing the density of the Troldtekt panels at specific points we can create sound, light or visual connections in a less direct way.

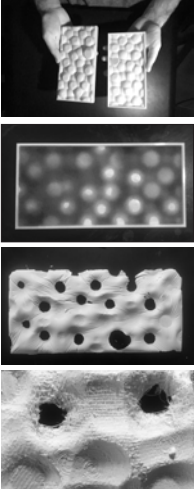
>>Inspiration

The geometry was inspired by lattice structures that can be found in nature, such as the shape of red coral, the organization of the stem of a plant or the holes made by water erosion on a rock. Other important references are the Institut du Monde Arabe in Paris, also because of the lattice in the facade and the Elbphilharmonie in Hamburg, because of the panels with geometric reliefs of the auditorium.



>>Experimentation with models

We recreate the molds with a 3D printer to get an example of what the panel could be like, using different materials such as concrete, wax or gypsum.



_matrix of radius

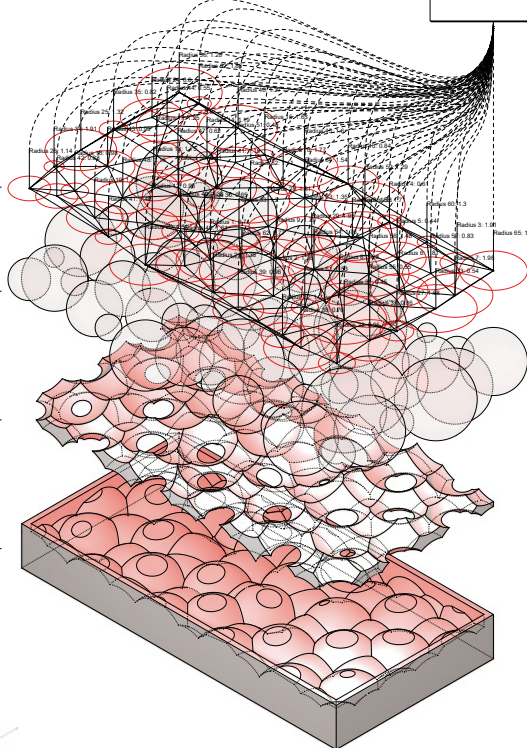
_spheres

_panel

_3D mold



INPUTS>
 ->size
 ->shape
 ->density
 ->color

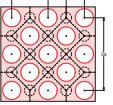


>>Diagrams

Starting from the original Troldtekt panel the idea was to partially sacrifice its properties as acoustic insulation element, particularly opening holes that will allow a slight connection between different spaces. This connection is established through the partial filtration of light (only through the holes), noise (depending on the density) and visibility (also only through the holes).

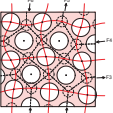
>>ALGORITHM

Code 1: the holes are displaced alternately through the panel to achieve a certain resistance.



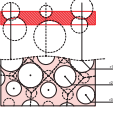
>>DEFORMATION

Code 2: following the pattern, the grid can be deformed by different forces that depend of the picture you want to achieve.



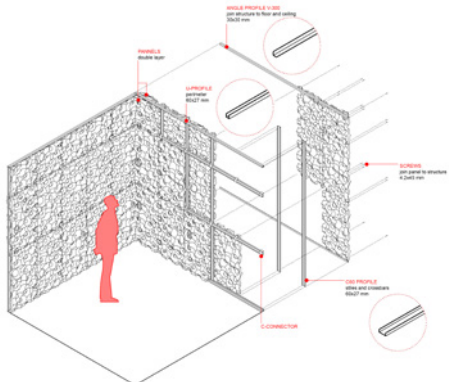
>>DENSITY

Code 3: with the variation of the radius of the spheres that compose the mold we can open holes and vary the density.



>>PICTURE

Code 4: because of the digital process you can get any picture or image on the wall.



>>>Structure
 The structure is basically the same suspended C80 steel profile system used for the installation of Troldtekt panels but with some specifications: this system is for building a wall, so instead of being suspended is fixed to floor and ceiling, and has panels on both sides.

