


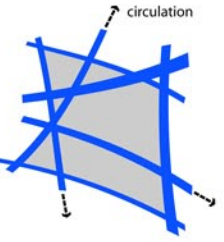
concept

The minimal skin is an all integrated solution for construction, installations and climatically separation. All these functions are integrated in one mould made of a transparent and flexible foil. The mould consists of several layers foil witch are mounted together. Filling the layers of the mould with different materials determines the overall properties of the skin.

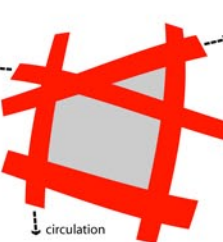
All materials are a fluid or gasiform when the mould is filled. For construction parts are hardening materials used e.g. concrete witch after hardening forms a firm skeleton. Installations and climatically separation consist of fluids or a gasiform e.g. water, air witch flow through the skin. All fillings are visible and abele to expand and shrink due to the transparent and flexible foil mould.




concrete filling
material properties: fixed
function: construction



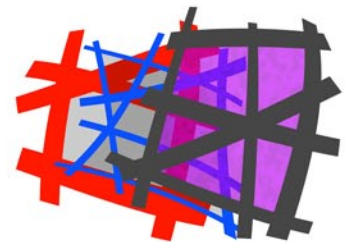
water filling
material properties: fluid
function: water-works



air filling
material properties: gasiform
function: air heating/cooling



transforming filling
material properties: slow reacting
function: interaction



combining layers
material properties: combination fixed, fluid, gasiform and slow reacting
function: construction, installations, climatically separation and interaction

interaction


Except for the materials used for construction, installations and climatically separation parts of the skin are filled with materials with a specific tactile sense. These materials transform by touching them through the flexible foil. Materials like gravel or jelly forms keep the shape they are put in to for a short or longer time depending on their flexibility. These materials are used in the walls and floor, if a person has entered the space traces are left behind. These traces give life to the building and abeles the user to have influence on the appearance of the building.

children sporting center

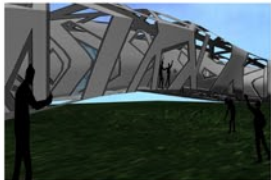
The building is made for children with a physical or mental disorder. The building should create an environment where the children can sport and develop. A place where they can learn and discover and be who they really are. Outside sporting facilities are e.g. football ground and a running track, inside facilities: gymnasium, swimming pool and meeting area.

The design of the building is not fully finished as it is a part of my graduation work which is planned in September 2006.

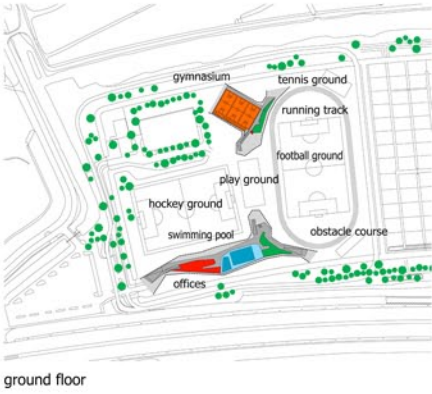
The skin is the most important part of the building; the skin is the building. It is the transition zone between inside spaces and outside space. This transition zone which varies in width from 1 meter to 4 meters is a place of playing and discovering. A place where the children can retreat and make their own so they can feel safe in their own discovered world.



facade offices



facade meeting area



outside facilities

football ground	90x120 m1
tennis ground	33x17 m1
obstacle course	350 m2

hockey ground 90x120 m1
running track 4x 400 meter
play ground 500 m2



inside facilities

gymnasium	45x28x7 m1
meeting area	500m2
dressing rooms	500m2


swimming pool 25x15x2 m1
offices 150m2



working order


shaping

The flexible foil and different filling of the mould enable the designer of the structure almost unlimited options. The shape of the building is divided in segments which are filled and put together on the building site.




mounting

Segments consist of various layer transparent flexible foil which are mounted together. A computerized mounting machine precedes the mounting.




cutting

Excessive foil around the edges of the elements is cut away. Openings in the elements which allow passing through the skin are made.




filling

The elements are filled with concrete, for transport and placing the element some parts are filled with air.




shaping

The elements are brought in to place and connections are made. Interlocking "concert fingers" connect the construction.



setting

The skin is fully filled till the determined shape is reached. When the concrete has hardened parts of the skin can be deflated.



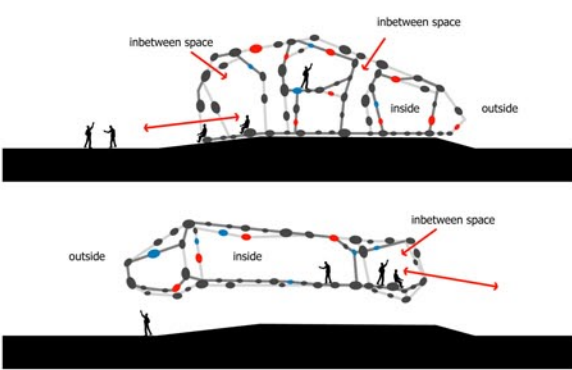
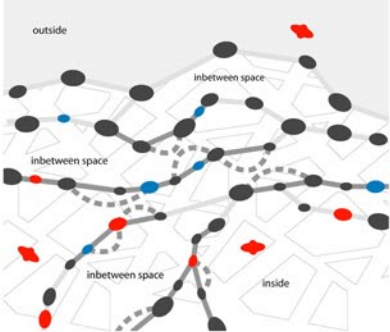
sections

Several elements of transparent and flexible foil filled with different materials form a transition zone between inside and outside climate.

By opening the layers a person can move through the open spaces in and out the skin.

Inflating or deflating parts of the elements can close parts of the skin. Interaction zones in wall and floor elements transform through touching by users of the building.

horizontal section



vertical sections

section offices

section meeting area