kruisbestuiving | cross · pollination

1. (biology) - pollination of the pistils with pollen from another plant
2. (figuratively) - mutual positive influence
OPENING UP THE V&D
1. RESEARCH
The importance of public spaces
1. THE SHOPPING WINDOW PASSAGE OF V&D THE HAGUE.

2. THE LIGHT & AIR VOID OF V&D HAARLEM.

3. VIEW INTO THE V&D STORE AT LANGE VEERSTRAAT, HAARLEM.

4. Image from Haags Gemeentearchief
5. Image from Monumenten Advies Bureau (2017)
6. Image from Noord-Hollands archief
1. LIGHT & AIR VOIDS ARE CLOSED.
2. PASSAGES ARE REPLACED BY SHOPPING WINDOWS.
3. ESCALATORS ARE INSTALLED.

Based on analysis drawing by Mark van der Blom
Image from Chung, Inaba, Koolhaas, Leong (2001)
“How can buildings like vacant department stores be opened up to the environment to facilitate more social interaction?”
INTEGRATION
(PHYSICAL PERMEABILITY)

TRANSPERENCY
(VISUAL PERMEABILITY)

type A  
type B  
type C  
type D  
type E  
type F  

Image from Jan Gehl et al. (2006)
1. INVITING MORE NATURAL DAYLIGHT
2. ENCOURAGING THE USE OF ROOFTOPS AND TERRACES
3. INTEGRATING GREEN
4. BLENDING THE OUTSIDE WITH THE INSIDE
5. MAXIMIZING VIEWS
6. EMPLOY NATURAL VENTILATION
7. ENHANCING FLOWS AND MOBILITY
8. CREATING A MIXED AND DIVERSIFIED PROGRAMME

Based on theory of PoroCity by Maas et al. (2018)
FORUM, ROTTERDAM
Wessel de Jonge architecten

KORENBEURS, SCHIEDAM
Hanrath Architect

TUIN VAN NOORD, ROTTERDAM
Wessel de Jonge architecten

ST JOBSVEEM, ROTTERDAM
Wessel de Jonge architecten

CAIXA FORUM, MADRID
Herzog & de Meuron

BAZEL, AMSTERDAM
Claus & Kaan architecten
2. PROGRAMME
EFFECTS OF URBAN LANDSCAPE IN CITIES
Based on Mean species Abundance by PBL

DECREASE OF BIODIVERSITY.
EFFECTS OF INTEGRATING MORE GREEN IN CITY CENTRE
vertical circulation

toilets

commercial areas

educational squares

expo event spaces

butterfly garden

services

toilets

vertical circulation
VALUE 1: THE LOCATION

VALUE 2: COMPOSITION IN FACADES

VALUE 3: CONCRETE STRUCTURE

VALUE 4: OPEN SPACE PLAN

VALUE 5: THE WINDOWS

VALUE 6: THE MAIN STAIRS
3. DESIGN
1. expo
2. work spaces
3. workshop spaces
01 sliding window with walnut wooden frame
02 wall:
  - prefab concrete wall
  - waterproof membrane
03 irrigation system
04 anchor bracket
05 misting system
1. educational square
2. office
3. work spaces
4. cafe
5. green balcony
01 ceiling:
- 140 mm construction floor
- EPS 60 insulation, 100 mm
- sound-absorbing acoustic panel of MW
- open acoustic interlayer
- open acoustic finish

02 MHB profile classic iso

03 wall:
- original brick wall
- EPS 60 insulation, 200 mm
- multiplex
- wooden framing
- walnut wood panel

04 electricity socket

05 ventilation duct, 300 x 220 mm

06 floor:
- living concrete floor, 20 mm
- leveling compound, 2 mm
- Fermacell heating floor, 18 mm
- XPS insulation, 10 mm
1. butterfly breeding greenhouse
2. installations
3. terrace
01 ETFE air cushion
02 air inlet valve
03 trussed beam, 1500 mm high
04 roof:
  - floor tiles
  - PVC waterproof membrane
  - insulation panel 100 mm
  - bituminous membrane
  - construction floor 140 mm
05 insect screen
CLIMATE ZONES

- 18 - 24 °C | restaurant, auditorium, offices
- 18 - 24 °C | 40 - 60% | library, expo
- > 20 °C | 70% | atrium
- > 16 °C | storage, bicycle parking
- no climate control
translucent EFTE foil
openable windows cause chimney effect
natural cooling by green roof
extra cooling by ventilation
cold air
warm air
floor cooling
heat exchanger circuit (run around coil)
mist cooling system
WINTER SITUATION

- Exhaust air
- Warm air
- Floor heating
- Heat exchanger circuit (run around coil)
VENTILATION SYSTEM

- Fresh air
- Exhaust air
- Heat exchanger circuit (run around coil)
ventilation system

- fresh air
- exhaust air
TRANSFORMATION PLAN