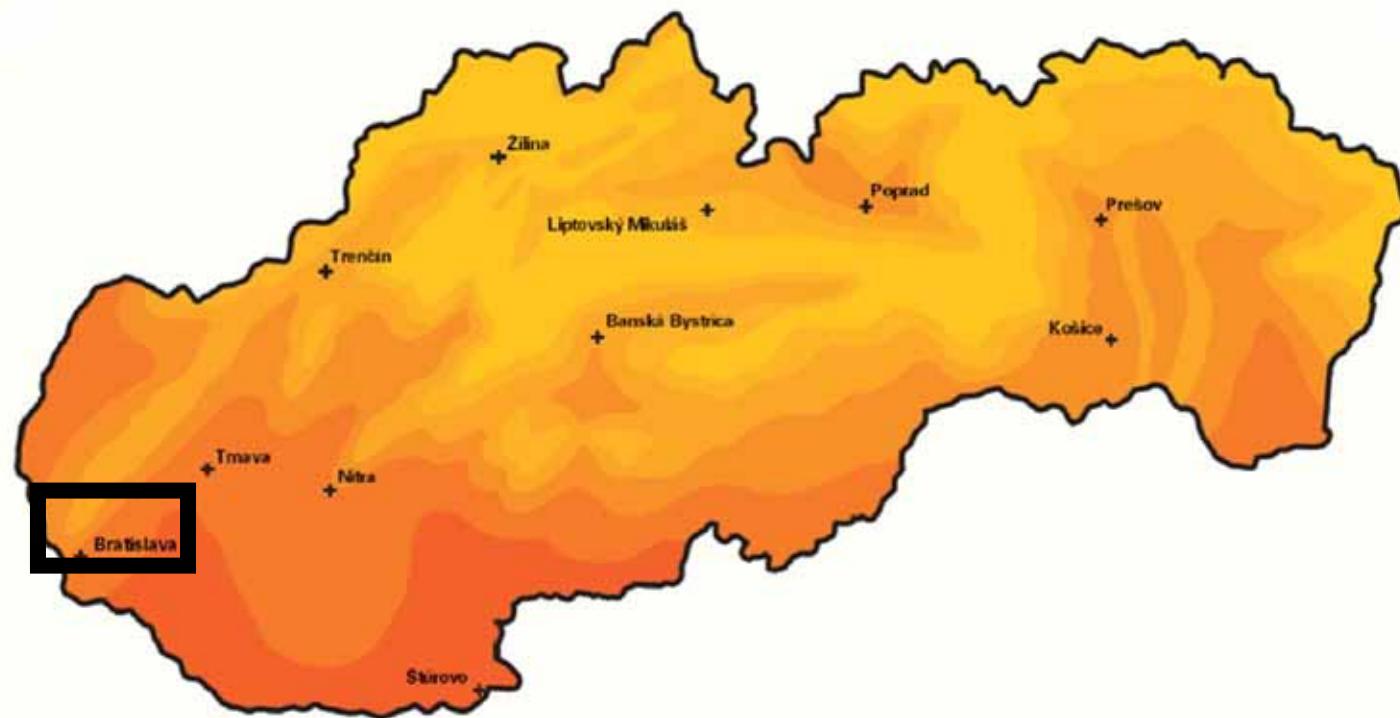




# Location

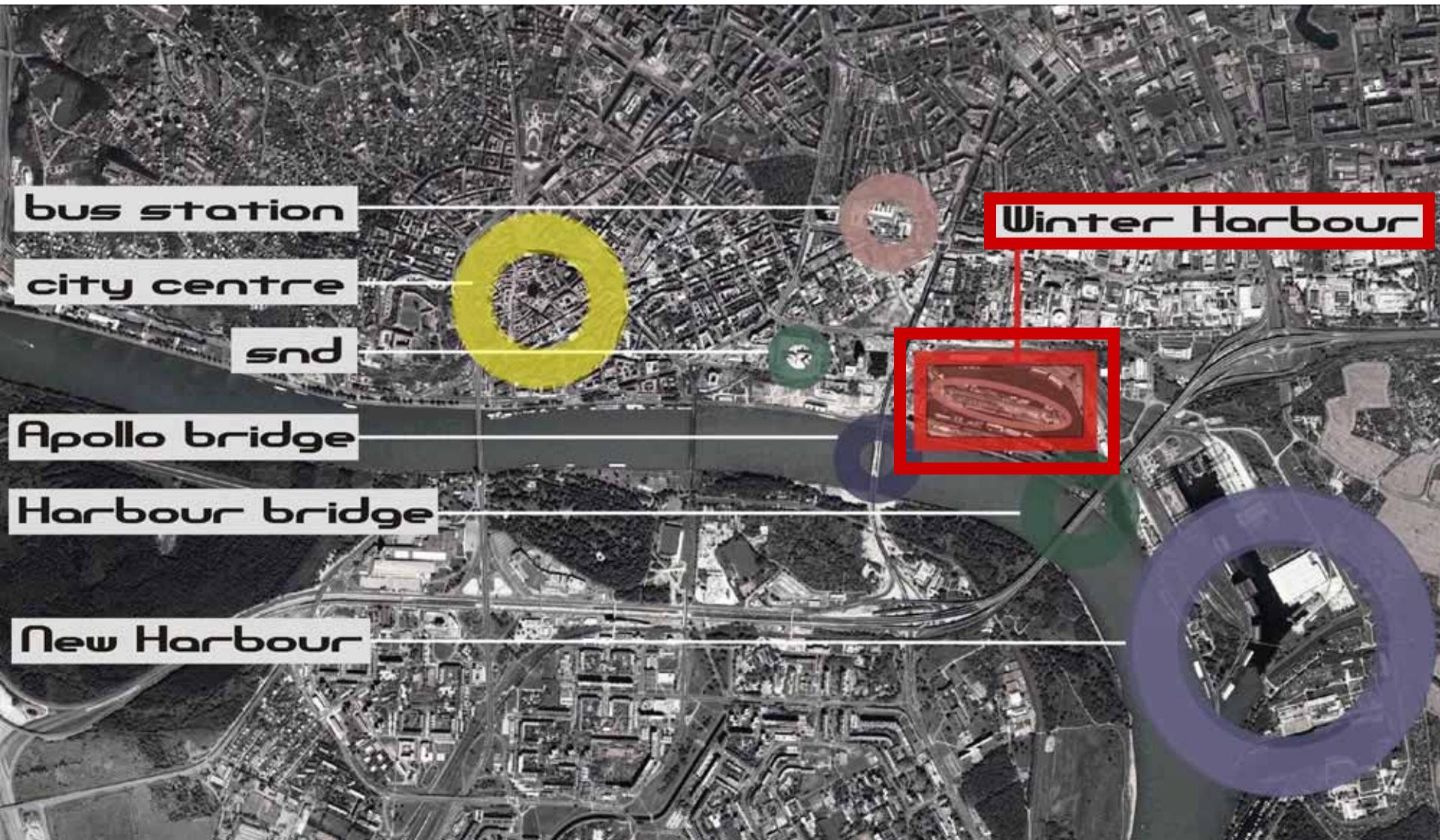


Global shine in Bratislava

kWh/(m<sup>2</sup>.a)

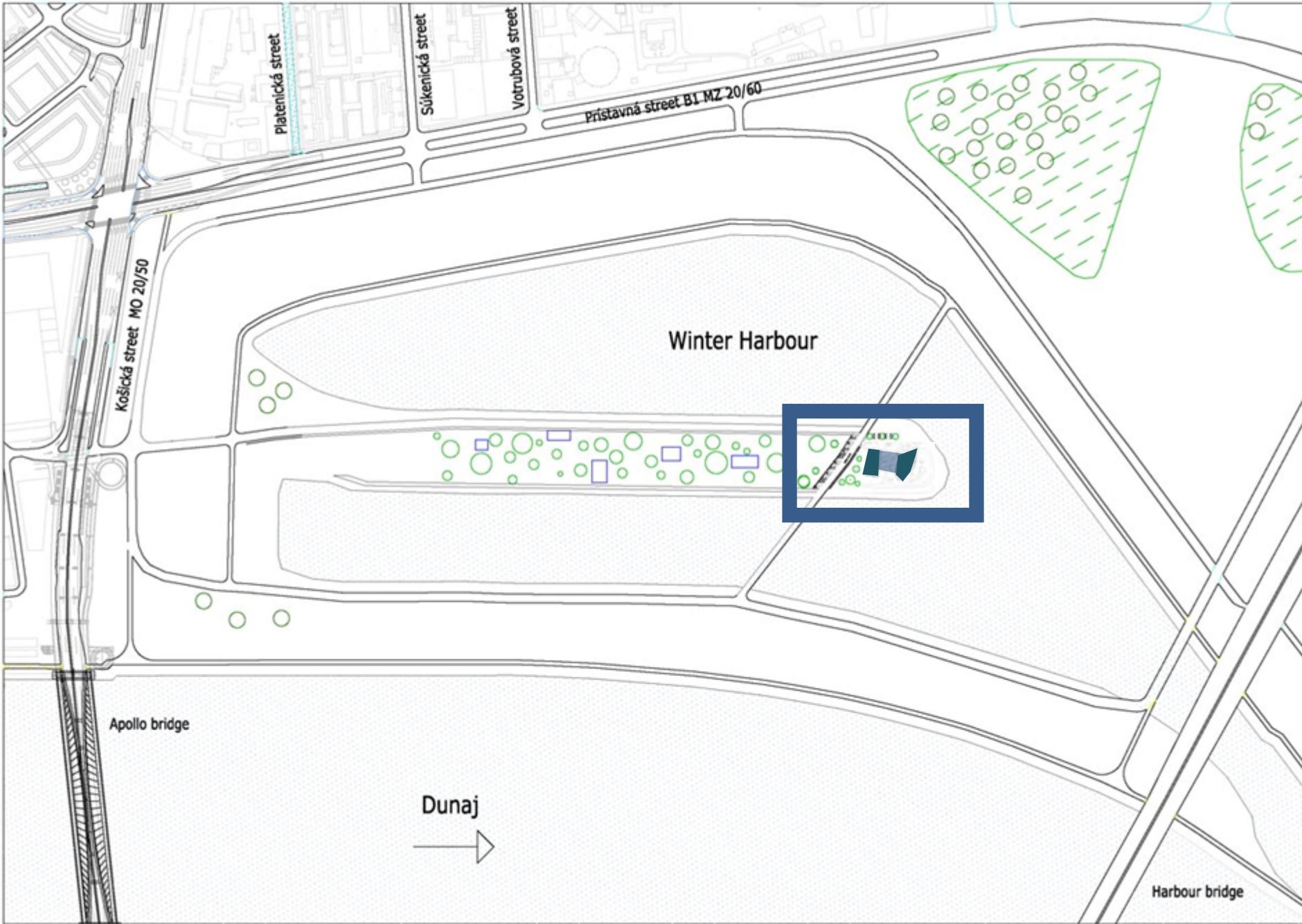


1300 1250 1200 1150 1100 1050 1000 950 900





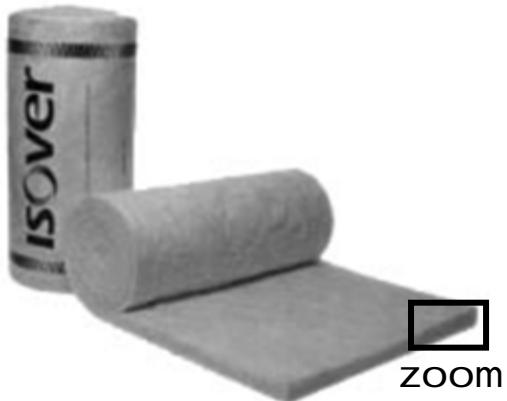
© 2009 Tele Atlas



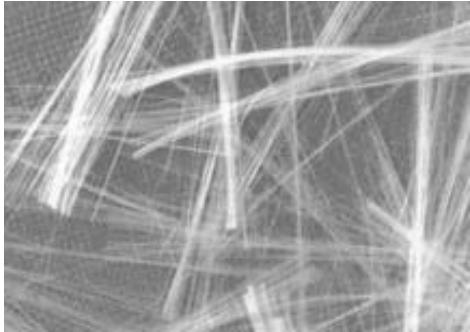


Different functions connected with underground atrium

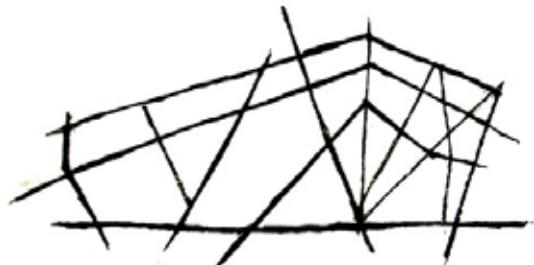
# Idea of shape

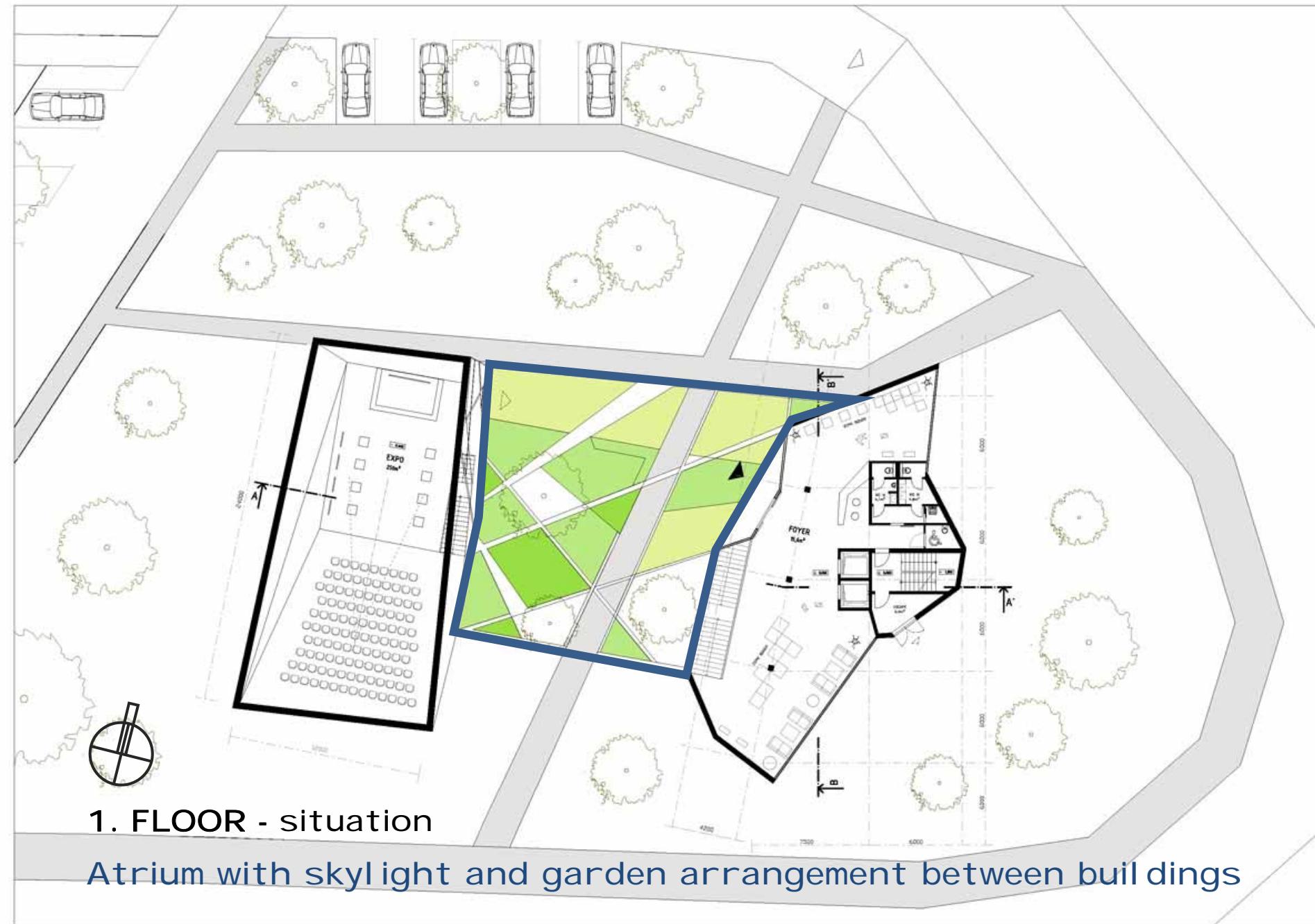


zoom



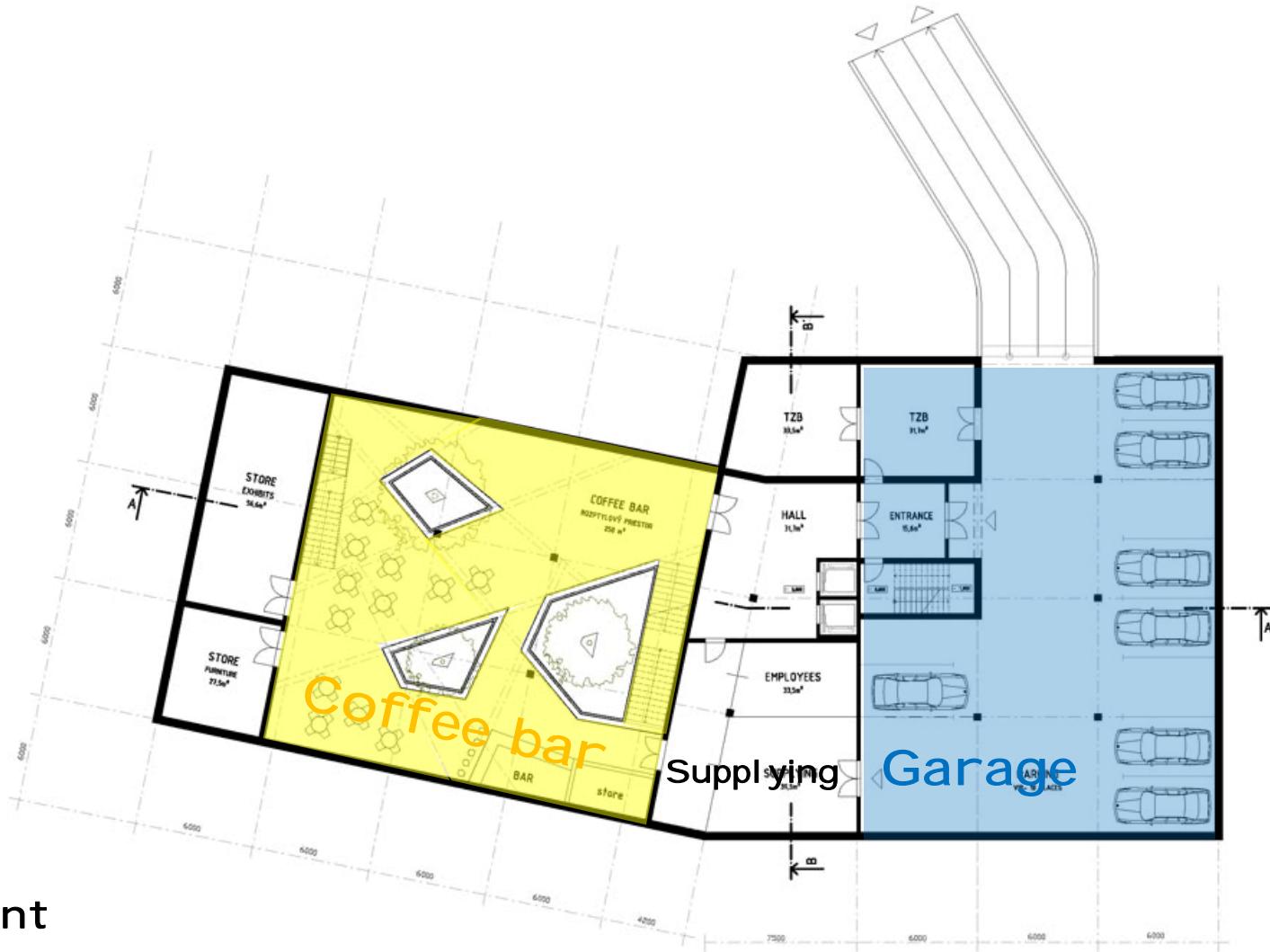
Fibre of insulation







Basement



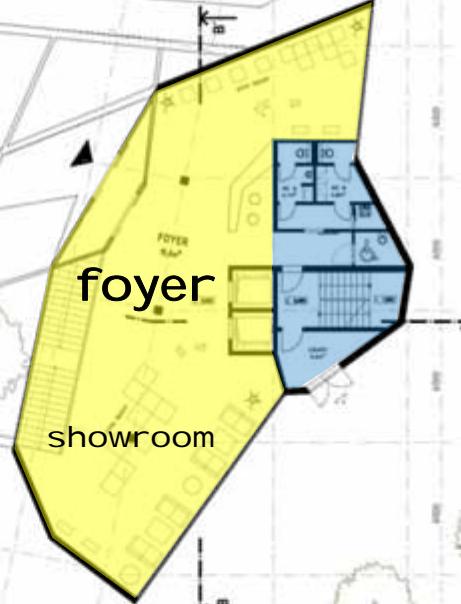
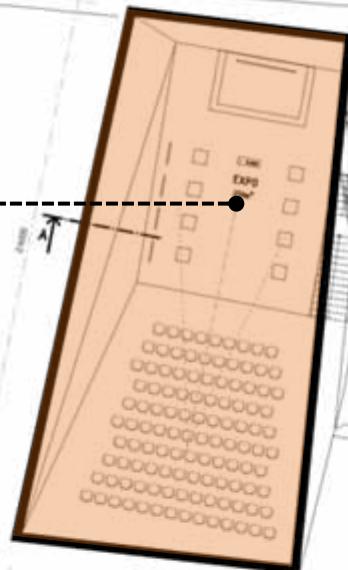
Expo hall I  
conference



1. FLOOR

foyer

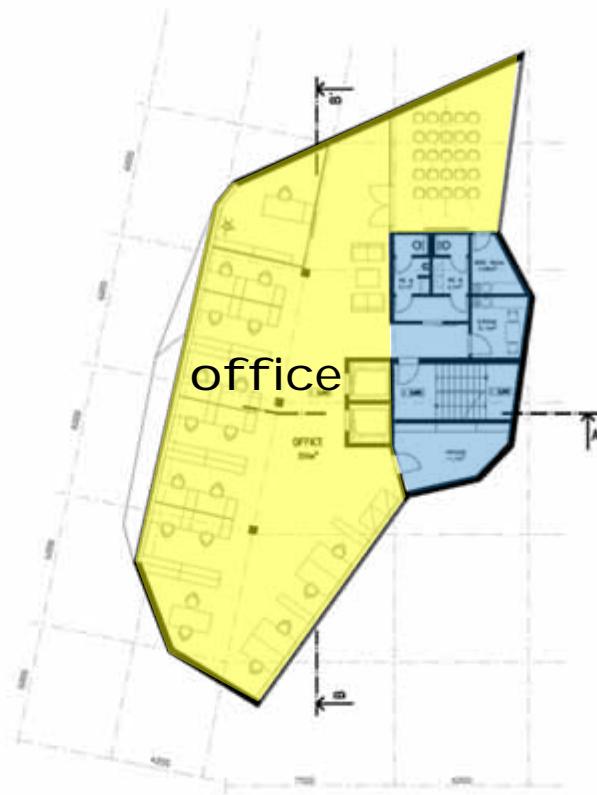
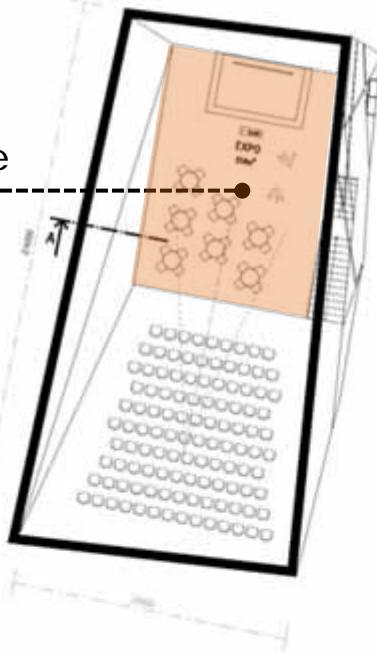
showroom



Alternative  
use

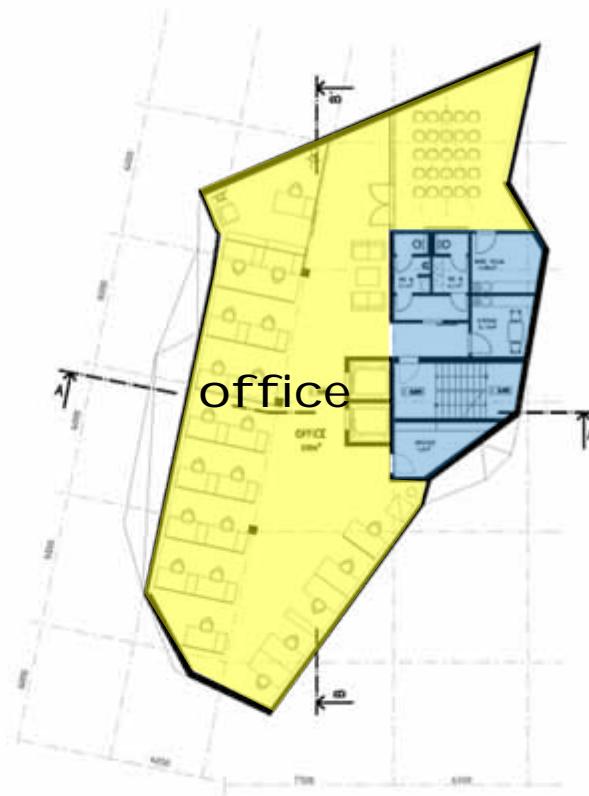


2. FLOOR



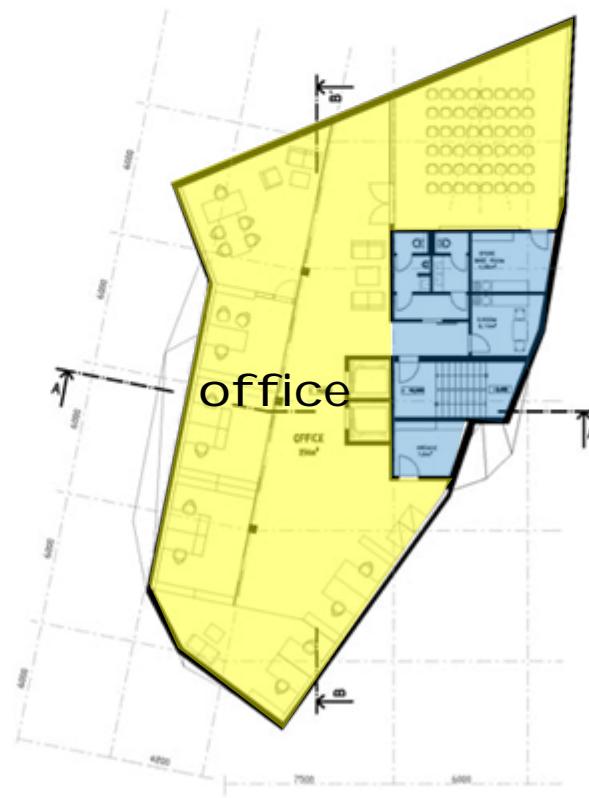


### 3. FLOOR



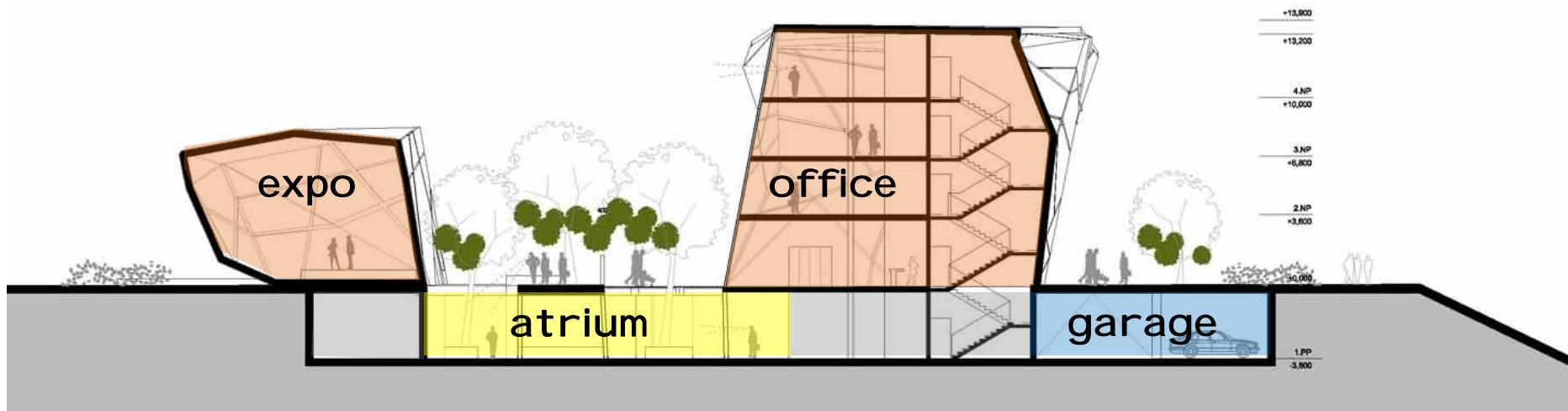


## 4. FLOOR



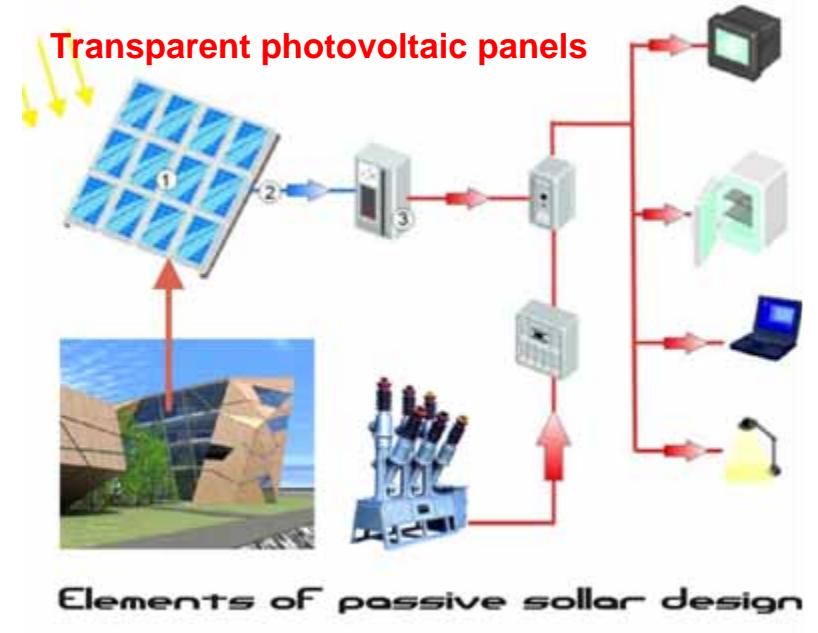
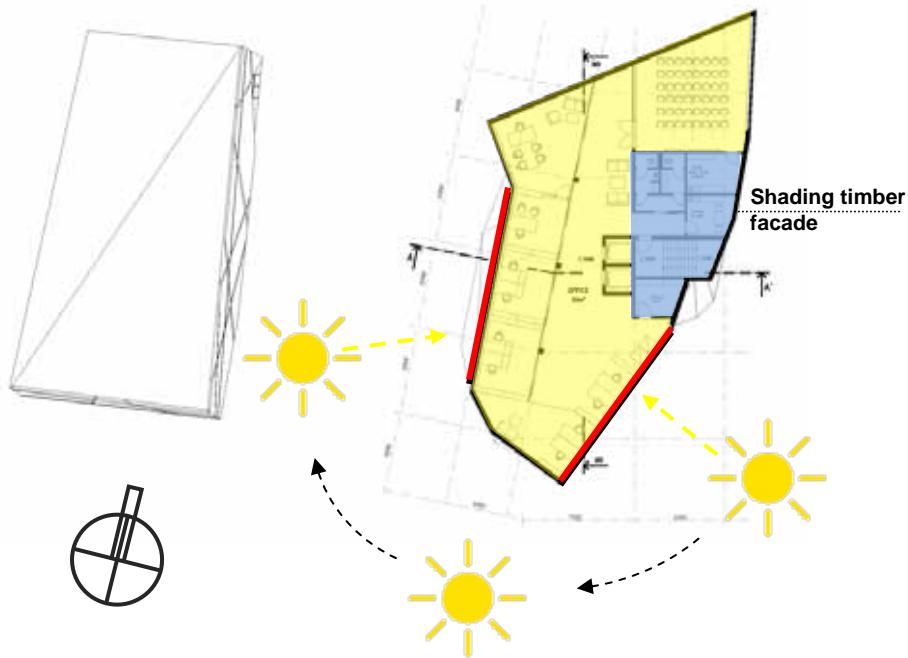
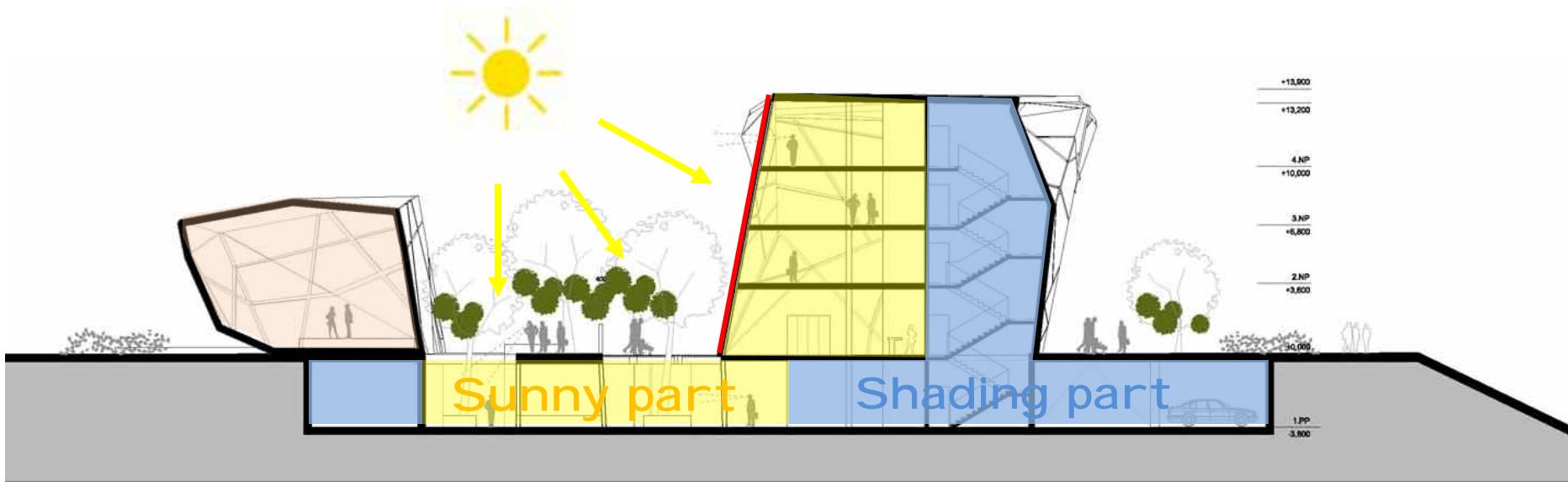


**South elevation**



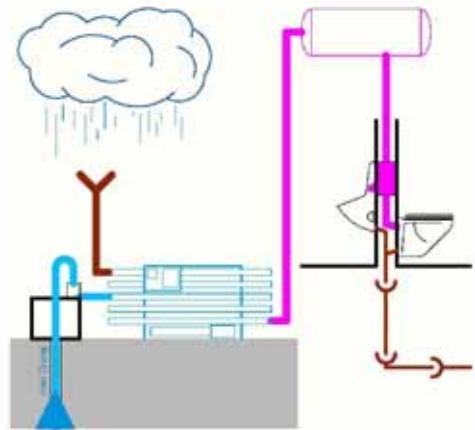
**Section A-A'**

# Eco logical aspects

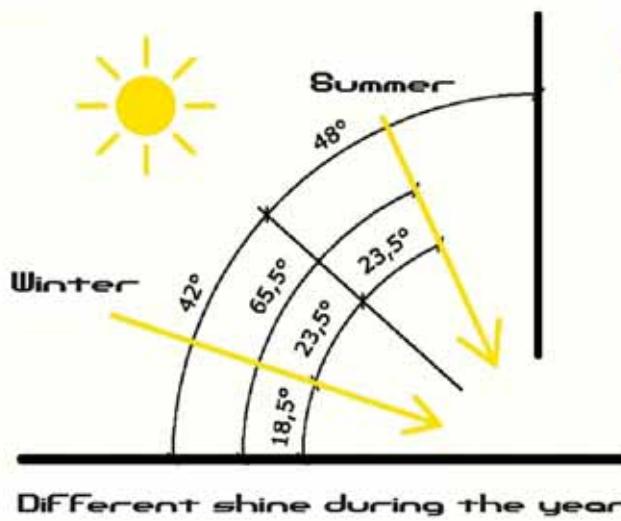




aj



Scheme of water system



Different shine during the year

## Energy calculation

**Termal loss** –  $Qv = 48,7 \text{ kWh}/(\text{m}^2 \cdot \text{a})$

**Insolation** –  $Qs = 25,4 \text{ kWh}/(\text{m}^2 \cdot \text{a})$

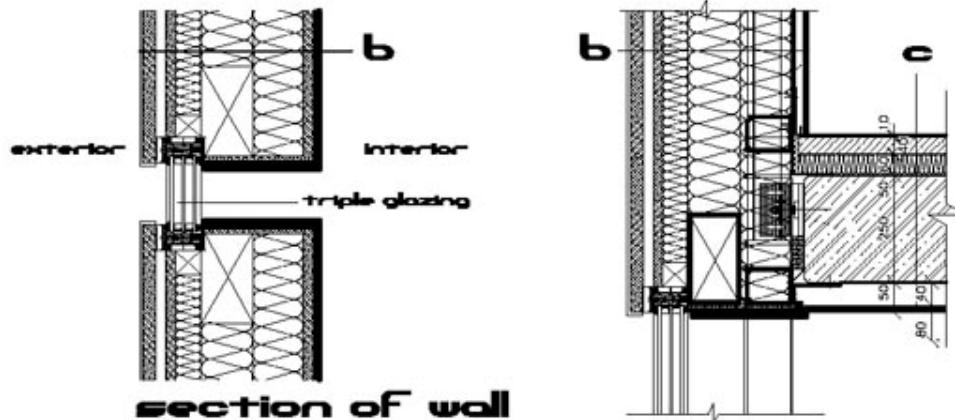
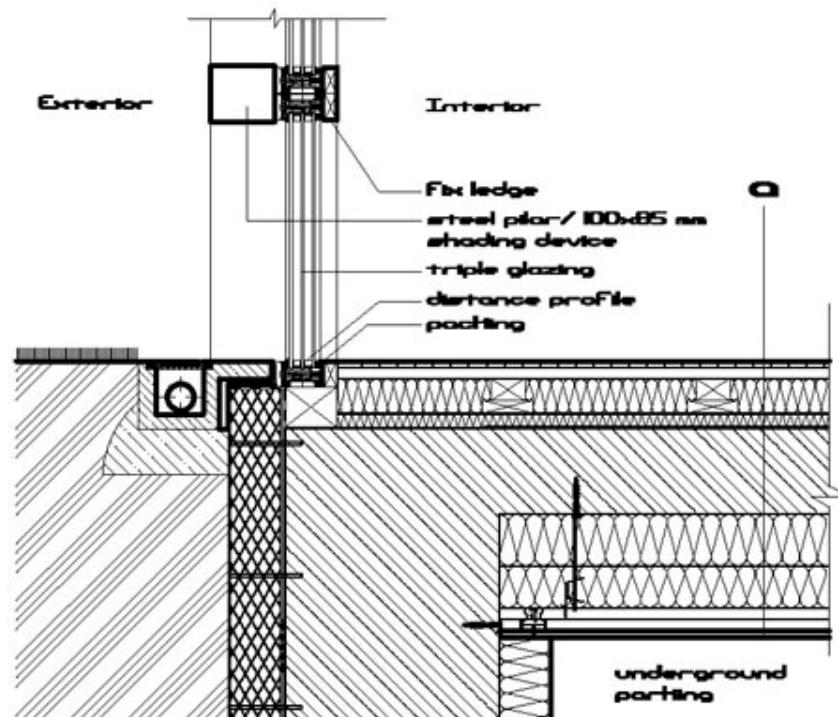
**Indoor heat** –  $Qi = 17,8 \text{ kWh}/(\text{m}^2 \cdot \text{a})$

**Heat profit** –  $Qg = 38,0 \text{ kWh}/(\text{m}^2 \cdot \text{a})$

## Need of term

$$Qh = 10,8 \text{ kWh}/(\text{m}^2 \cdot \text{a})$$

# Detail of construction and composition facade



## composition a

|    | mm  | parqueta                                              |
|----|-----|-------------------------------------------------------|
| 1  | 15  | chipboard (V100) layer (2x49 mm)<br>glued and screwed |
| 2  | 38  | water vapour barrier                                  |
| 3  | 0,2 | ISOVER thermal insulation                             |
| 4  | 80  | separation layer                                      |
| 5  | 60  | ISOVER impact sound insulation board 60               |
| 6  | 5   | separating layer (vapour barrier)                     |
| 7  | 200 | reinforced concrete slab                              |
| 8  | 120 | ISOVER thermal insulation                             |
| 9  | 100 | ISOVER thermal insulation                             |
| 10 | 54  | suspended construction with metal profile             |
| 11 | 15  | plaster board - fire protection board                 |

## composition c

|   | mm  | parqueta                                              |
|---|-----|-------------------------------------------------------|
| 1 | 15  | chipboard (V100) layer (2x49 mm)<br>glued and screwed |
| 2 | 38  | water vapour barrier                                  |
| 3 | 0,2 | ISOVER thermal insulation                             |
| 4 | 80  | separation layer                                      |
| 5 | 60  | ISOVER impact sound insulation board 60               |
| 6 | 5   | separating layer (vapour barrier)                     |
| 7 | 200 | reinforced concrete slab                              |
| 8 | 15  | plaster board - fire protection board                 |

## composition b

|   | mm  | timber segment with glass layer on the top<br>air separation layer |
|---|-----|--------------------------------------------------------------------|
| 1 | 40  | chipboard                                                          |
| 2 | 24  | ISOVER thermal insulation                                          |
| 3 | 22  | chipboard                                                          |
| 4 | 300 | ISOVER thermal insulation                                          |
| 5 | 22  | chipboard                                                          |
| 6 | 20  | plaster                                                            |





Thank you for your attention



**Thank you for your attention**

Music by Wim Mertens – Struggle for Pleasure