



MULTI-COMFORT HOUSE Student Contest Edition 2017
Urban Regeneration of a community in Madrid

Aiva **DORBE**
Lauma **KALNINA**



SUN SHADE



home is not just a place,
it's a **feeling**



comfort

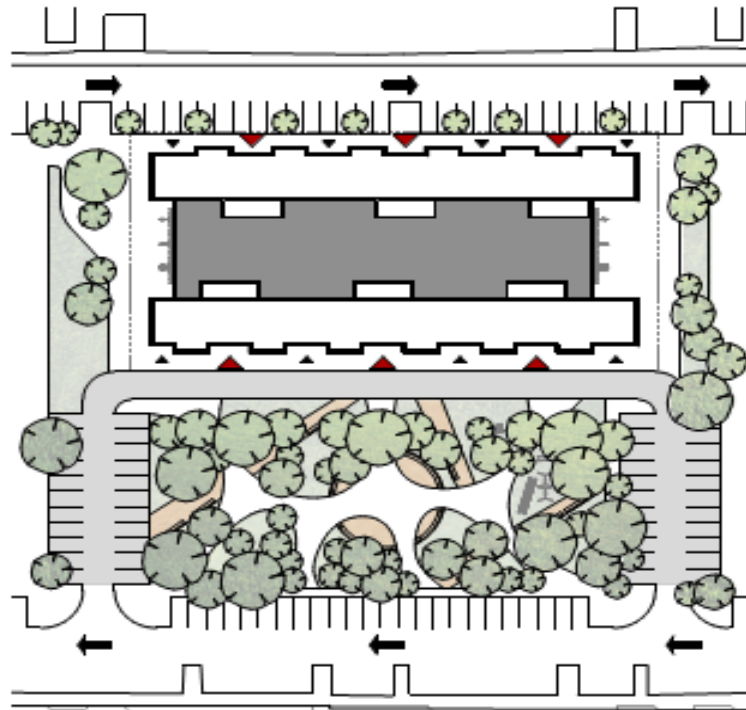


functional
use



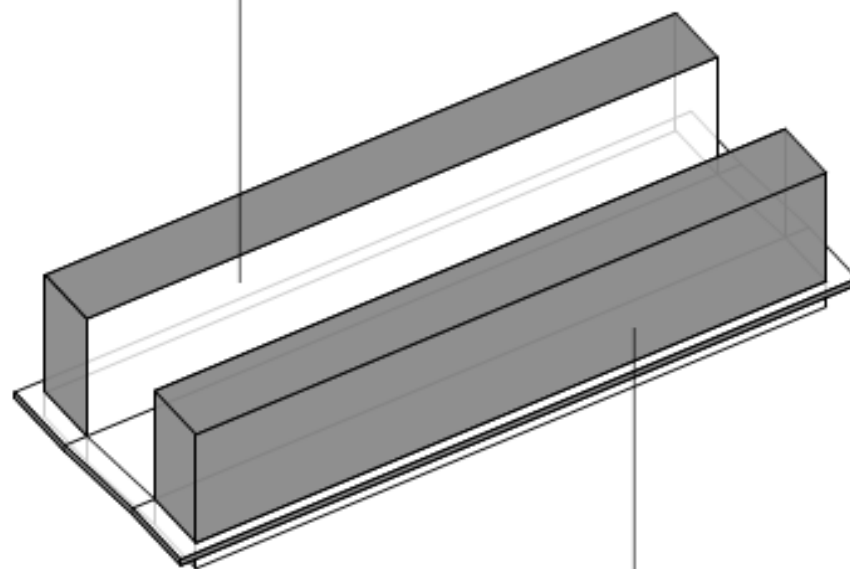
visual
attraction





~15m between buildings

interior



exterior





SOUTH FACADE

for sun
protection



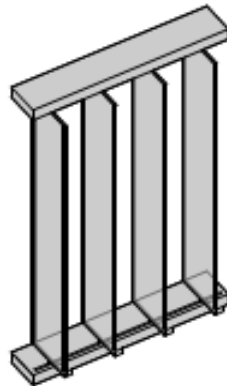
dark timber



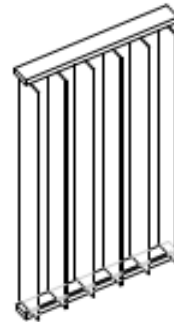
white plastic

NORTH FACADE

to ensure
privacy

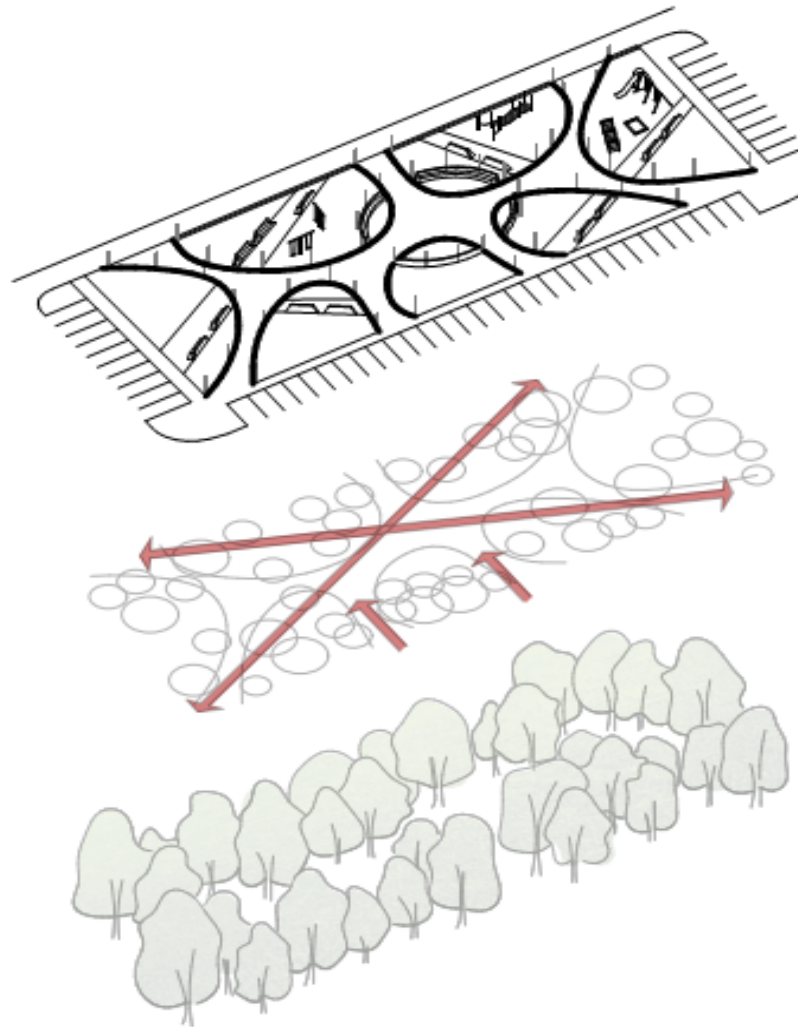


toned translucent
glass

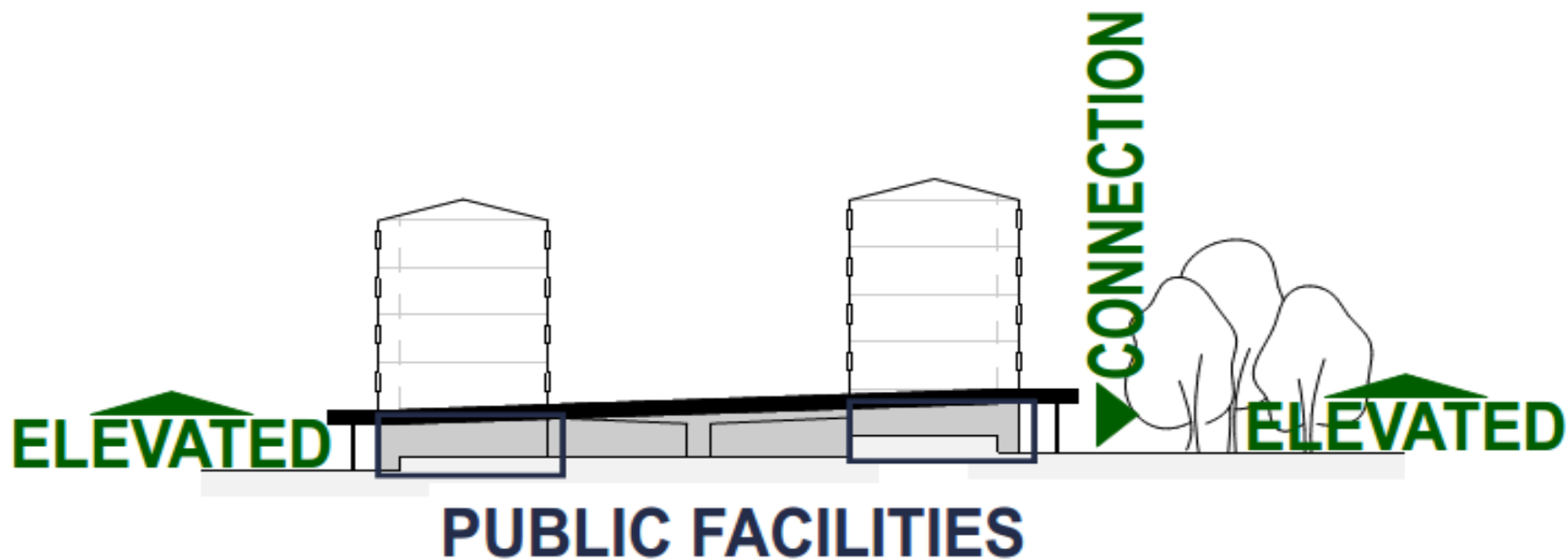


white translucent
plastic

new paths





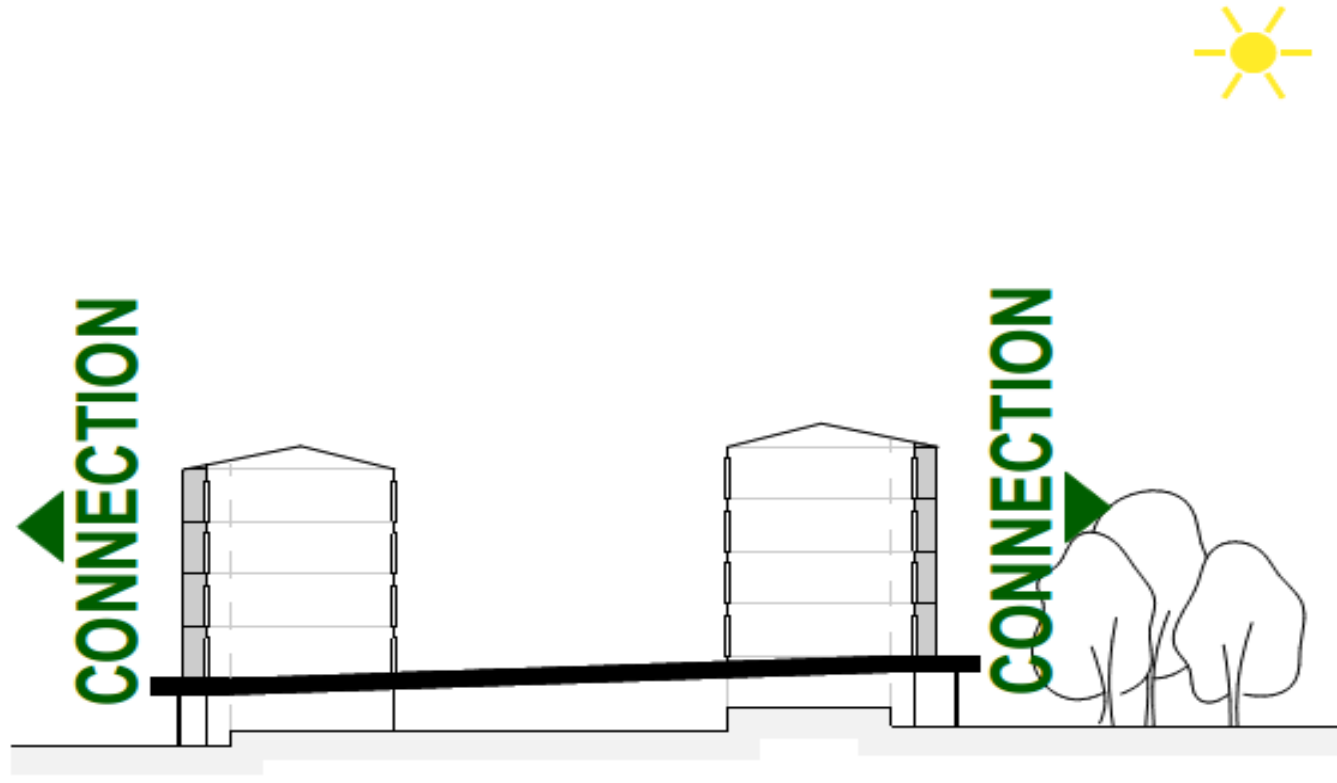


ELEVATED

CONNECTION

ELEVATED

PUBLIC FACILITIES

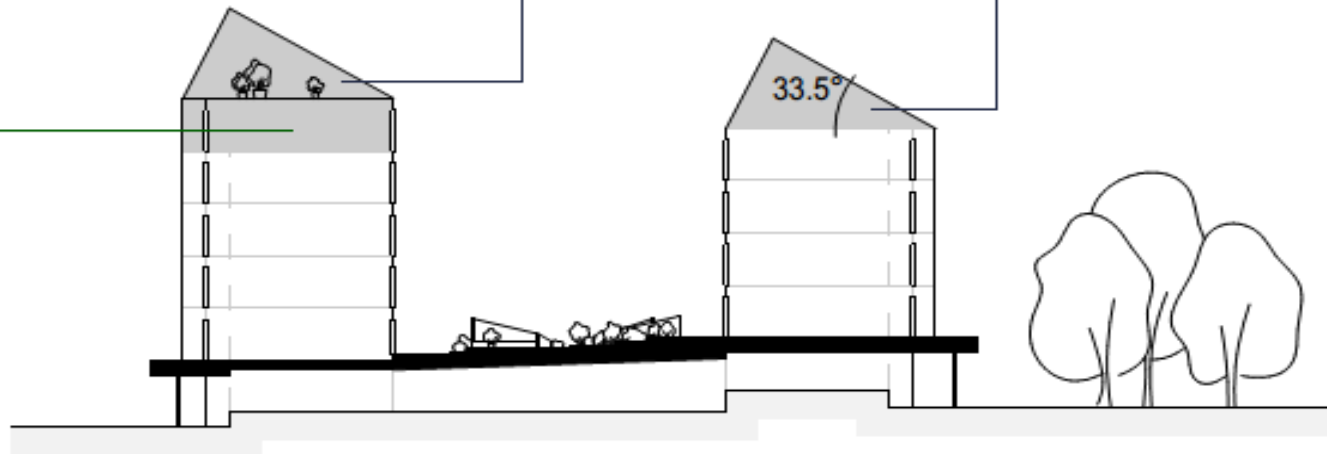




**NEW
APARTMENTS**

**ROOF
TERRACE**

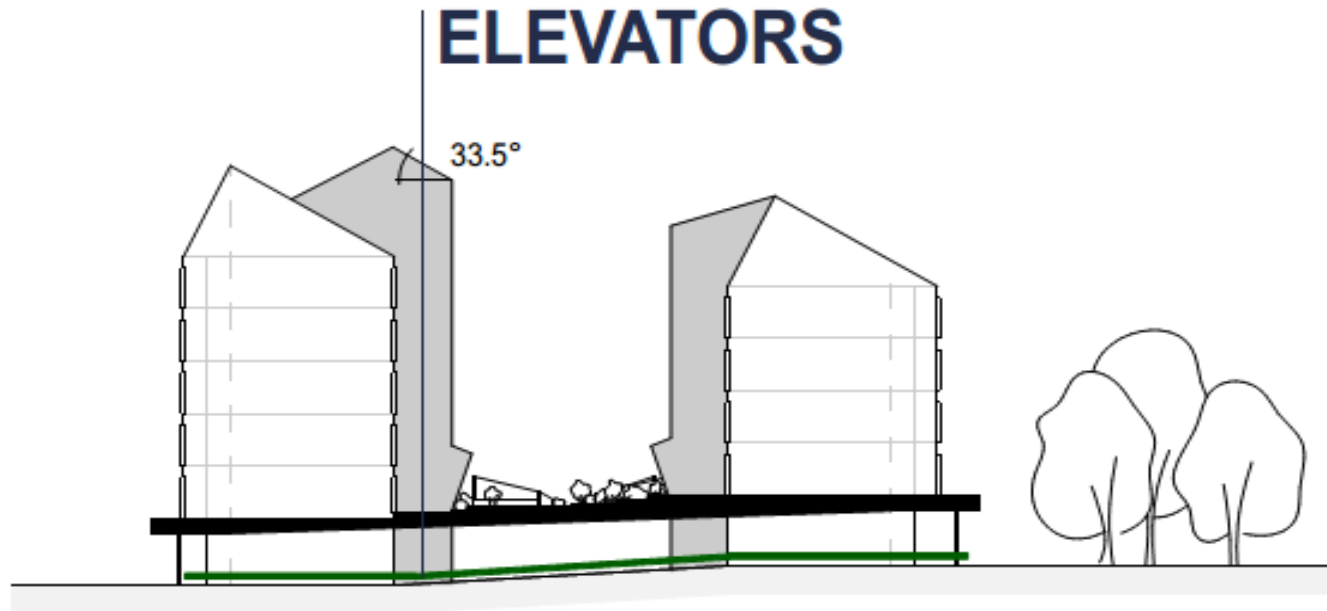
**STUDIO TYPE
APARTMENTS**





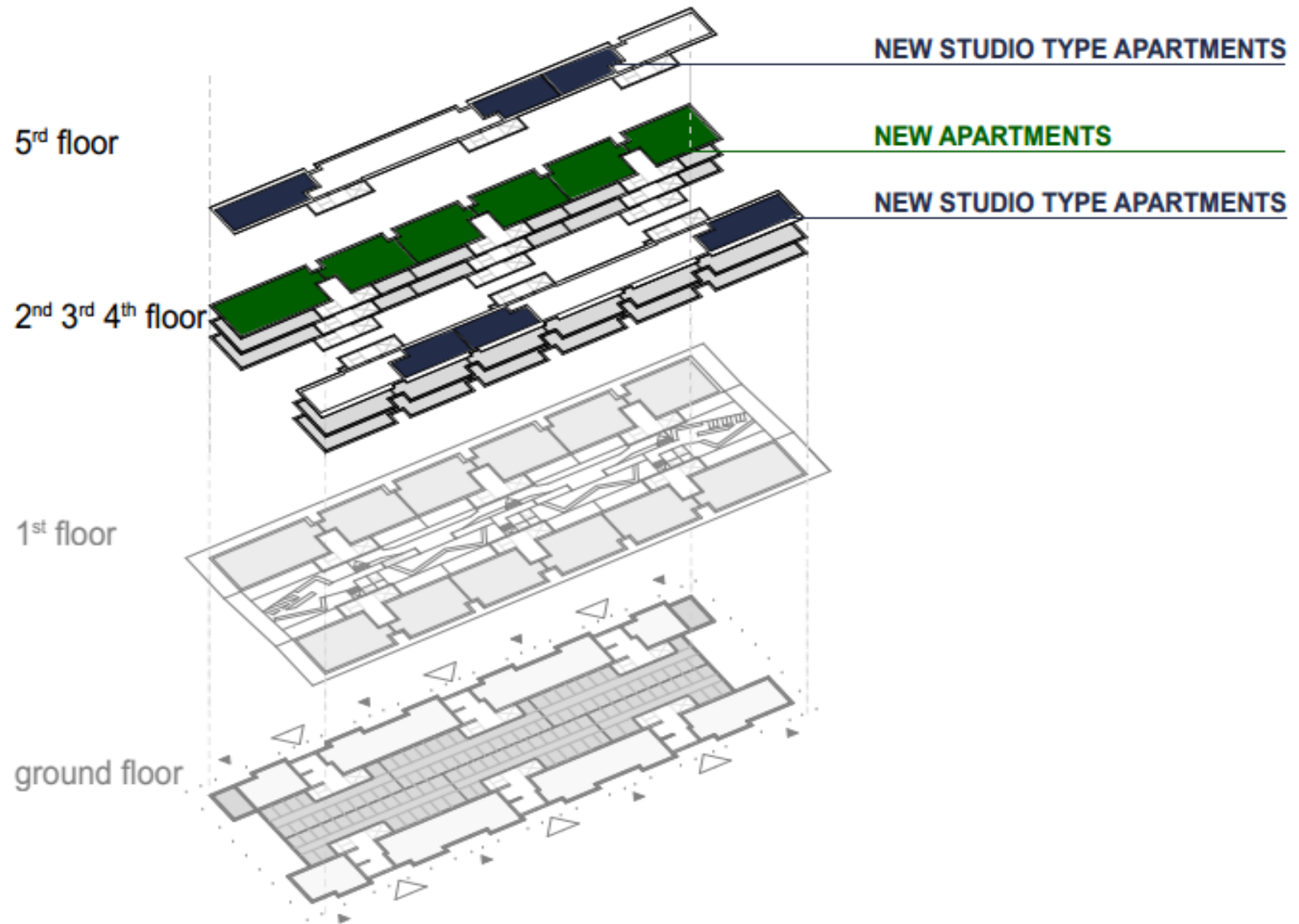
ELEVATORS

33.5°



GROUND FLOOR LEVELING



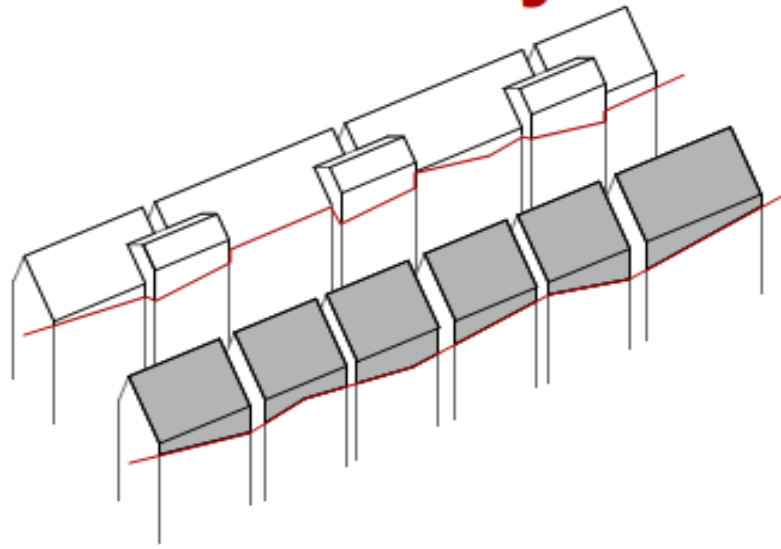






SOLAR ENERGY STRATEGY

line of solar analysis



March/September 21th

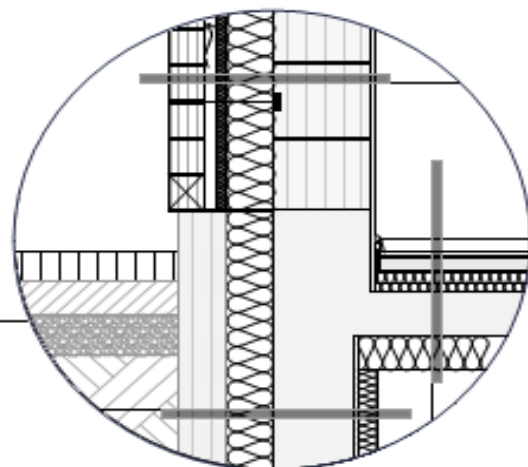
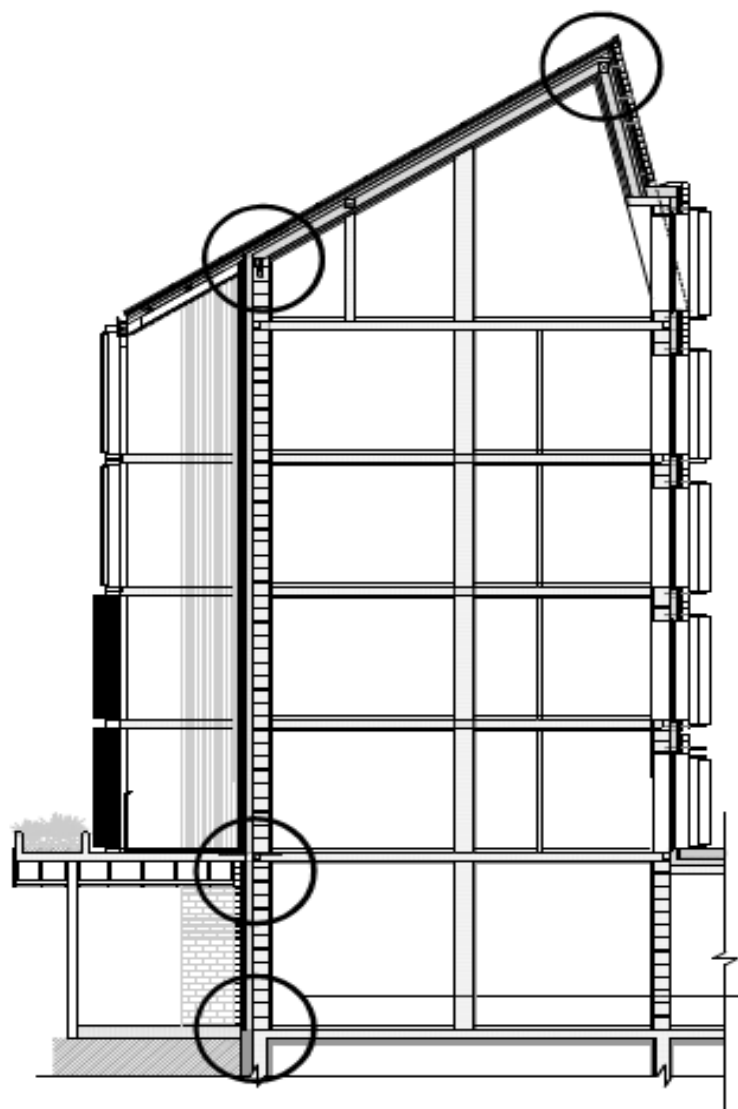


December 21th



June 21th





specific building demands

Specific building demands with reference to the treated floor area				use: Monthly method	
	Treated floor area	2971,6 m ²			
Space heating	Annual heating demand	15 kWh/(m ² a)	15 kWh/(m ² a)	yes	
	Heating load	9 W/m ²	10 W/m ²	-	
Space cooling	Overall specific space cooling demand	kWh/(m ² a)	-	-	
	Cooling load	W/m ²	-	-	
	Frequency of overheating (> 25 °C)	9,8 %	-	-	
Primary Energy	Space heating and cooling, dehumidification, household electricity	kWh/(m ² a)	120 kWh/(m ² a)	-	
	DHW, space heating and auxiliary electricity	kWh/(m ² a)	-	-	
	Specific primary energy reduction through solar electricity	kWh/(m ² a)	-	-	
Airtightness	Pressurization test result n ₅₀	1,0 1/h	0,6 1/h	no	

* empty field: data missing; "-": no requirement

* empty field: data missing; -: no requirement

SUN SHADE

