

E c o w e e k 2 0 1 0



g r e e n c u b e

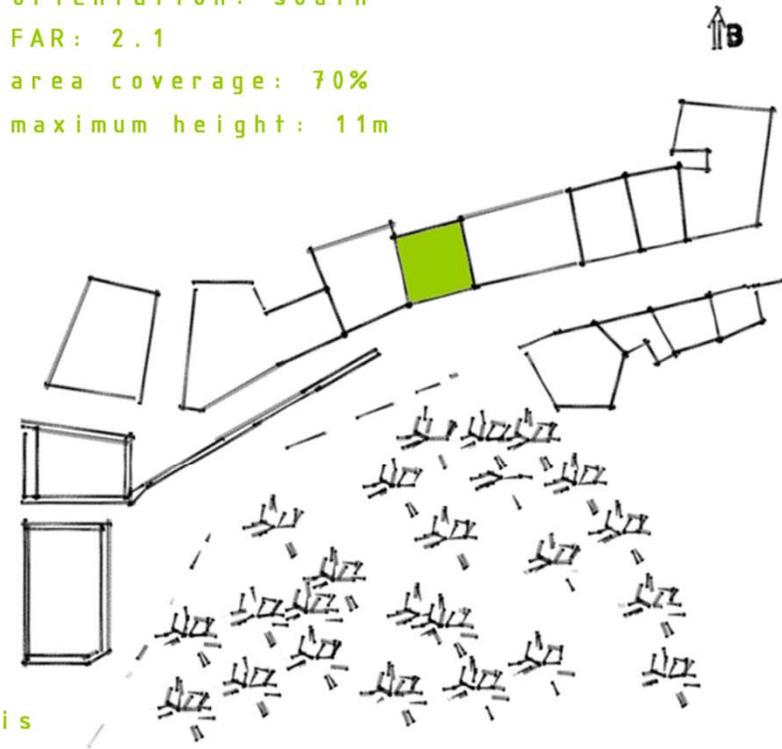
W11-workshop [Tombazis AN & Associates]

chatzi eleftheria
kekatos dimitris
kotsilini margarita
lytra victoria
michailidou vasiliki

site:thisio_akamantos 26



plot area: 120sq.m.
orientation: south
FAR: 2.1
area coverage: 70%
maximum height: 11m



location: near thisio metro station, under Acropolis

access: through central roads

view: Philopappou hill

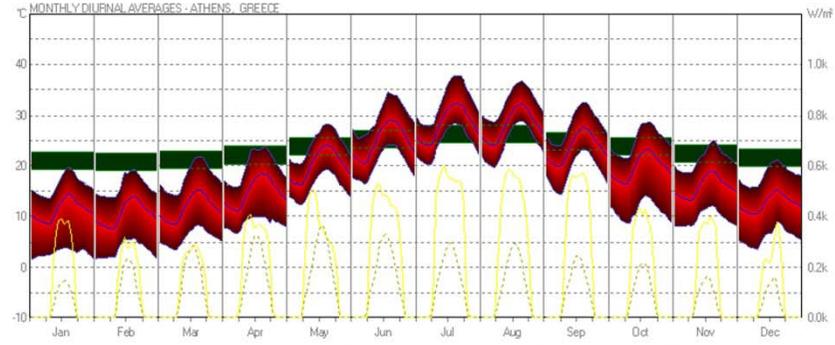
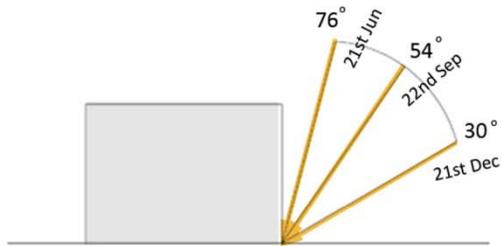
surrounding area: residences, cafe-restaurants and shops

area character: citizen-friendly, many pedestrian roads

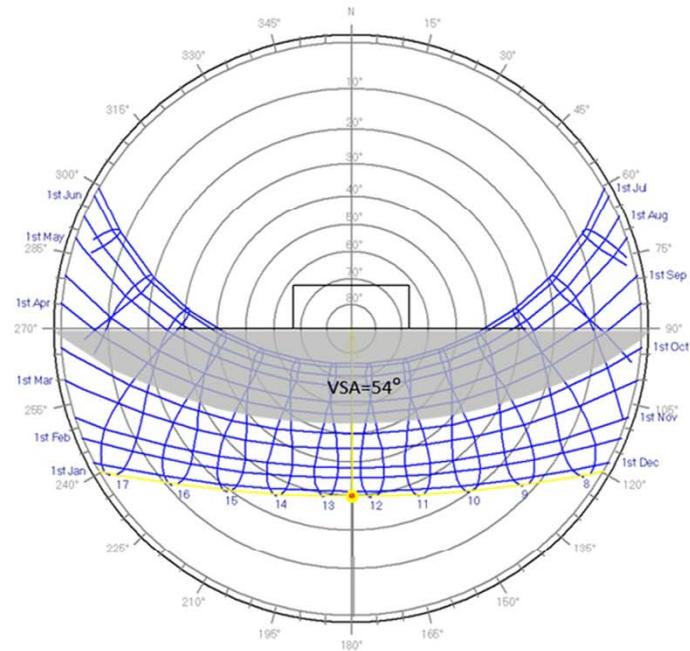
site analysis



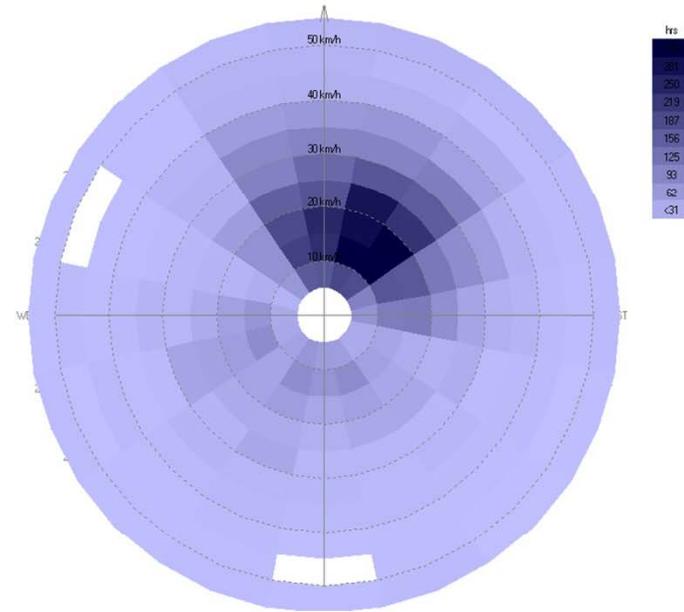
yearly altitudes



temperature:monthly diurnal averages



shading mask



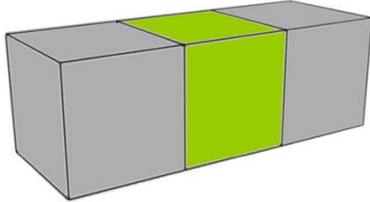
wind frequency

climatic conditions

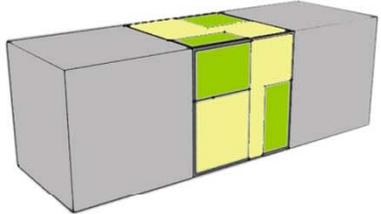


main idea

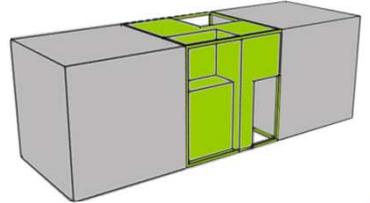
the cube



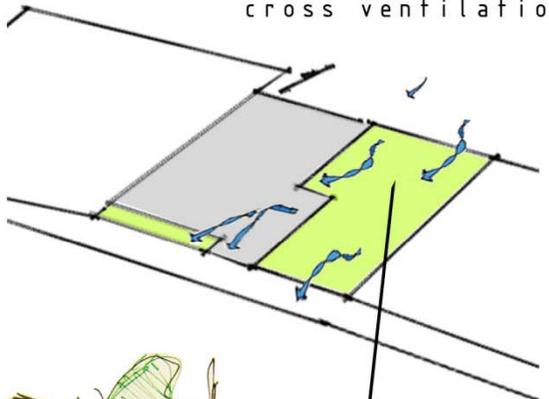
subtraction



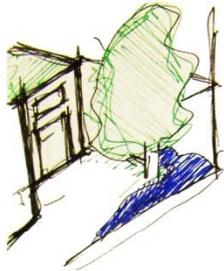
'green house'



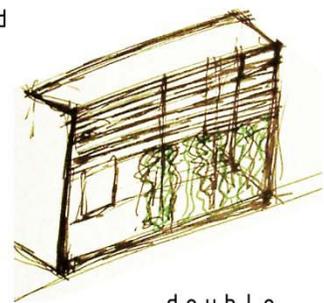
natural cross ventilation



green space with water element for microclimate

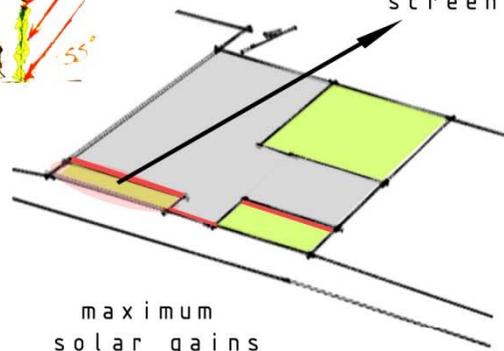
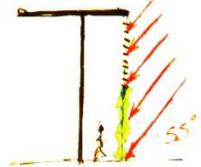


winter period

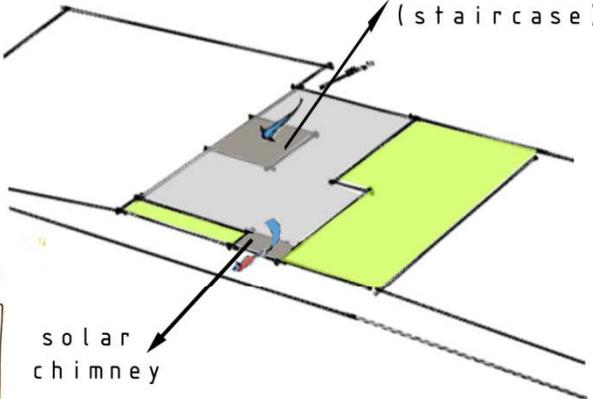


double screening

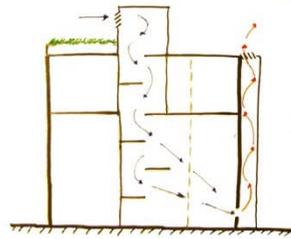
summer period



air duct (staircase)



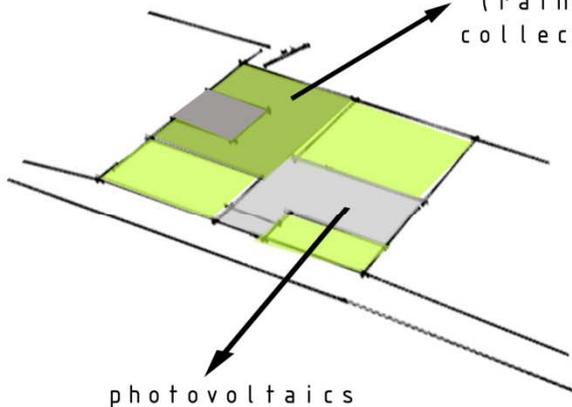
solar chimney



cooling strategy

maximum solar gains

green roof (rainwater collection)

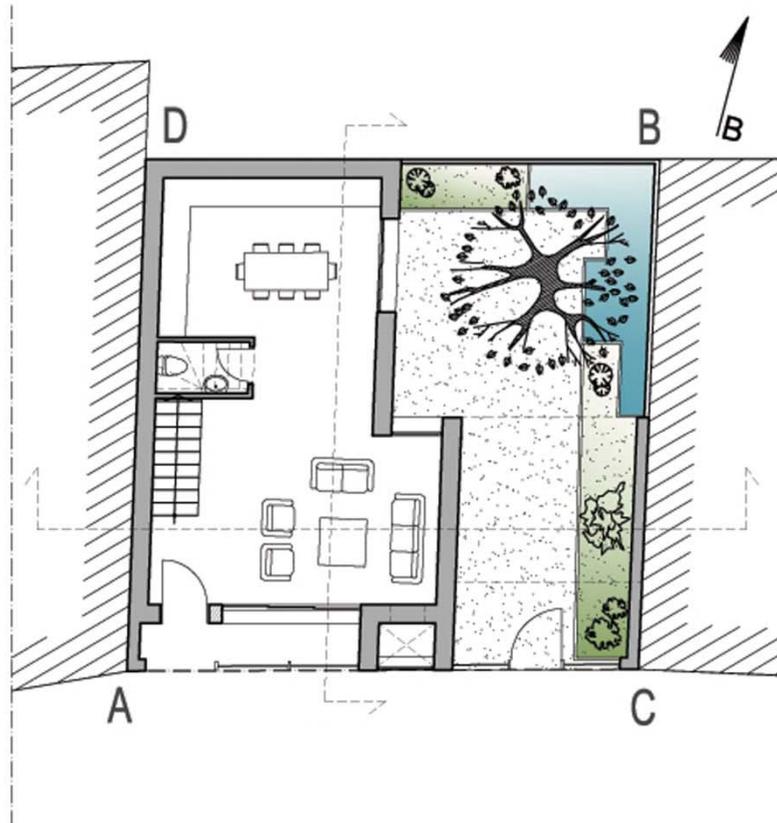


photovoltaics

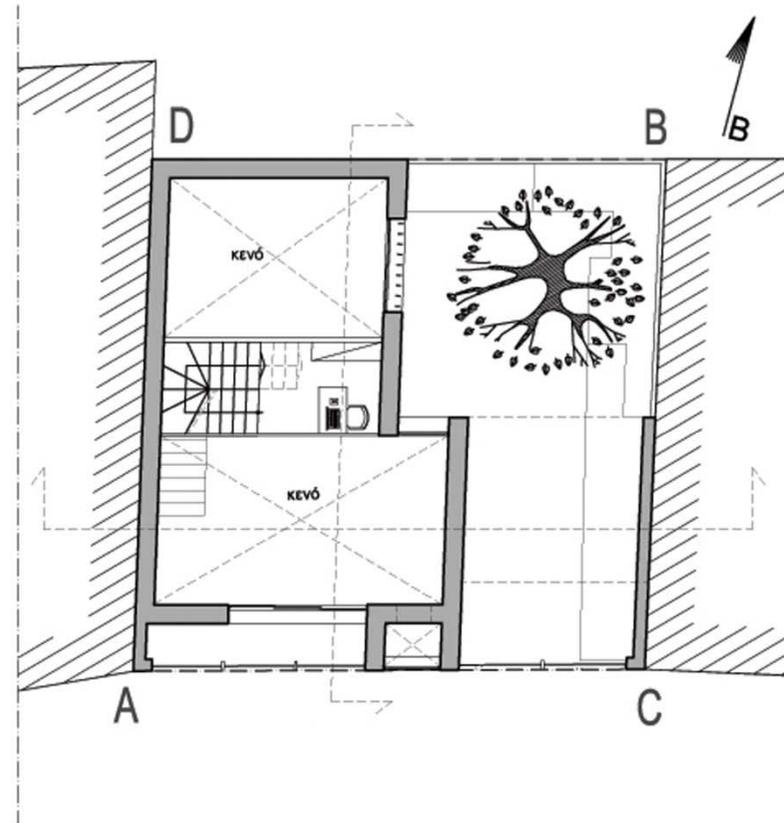
design concept



level 0



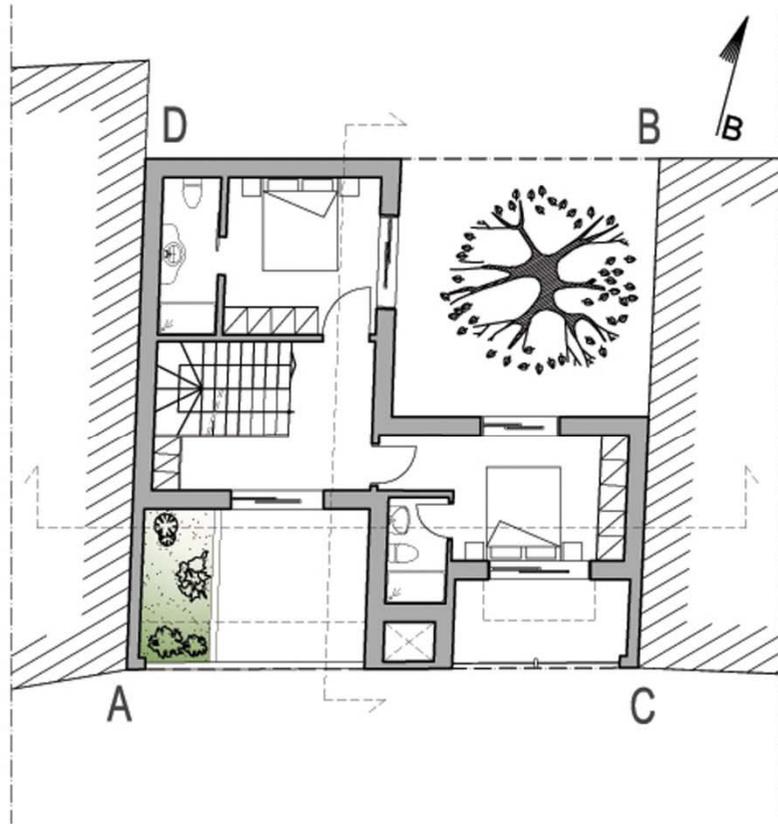
level 1



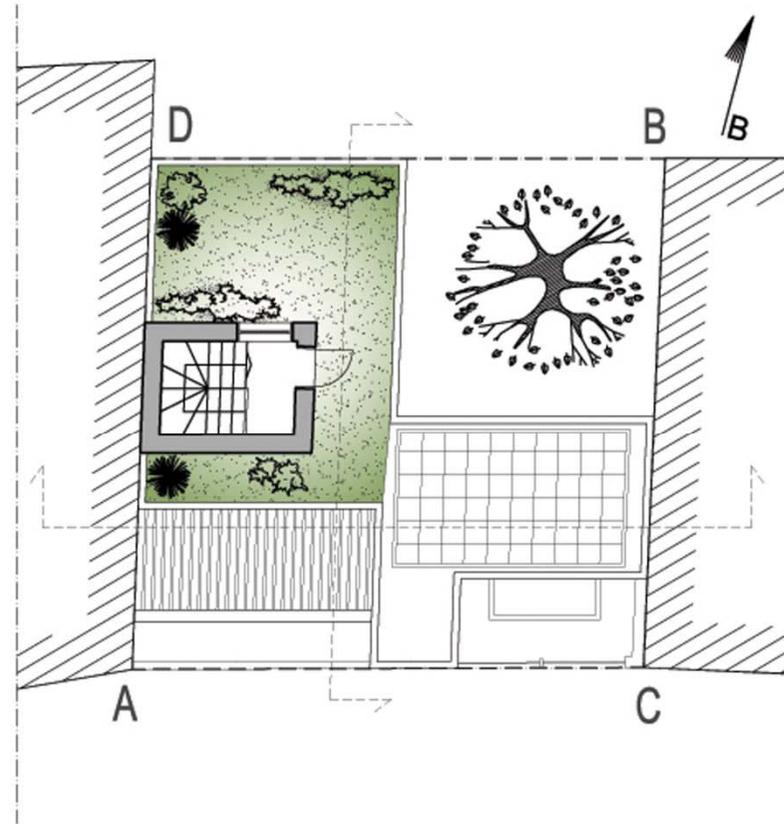
plans



level 2



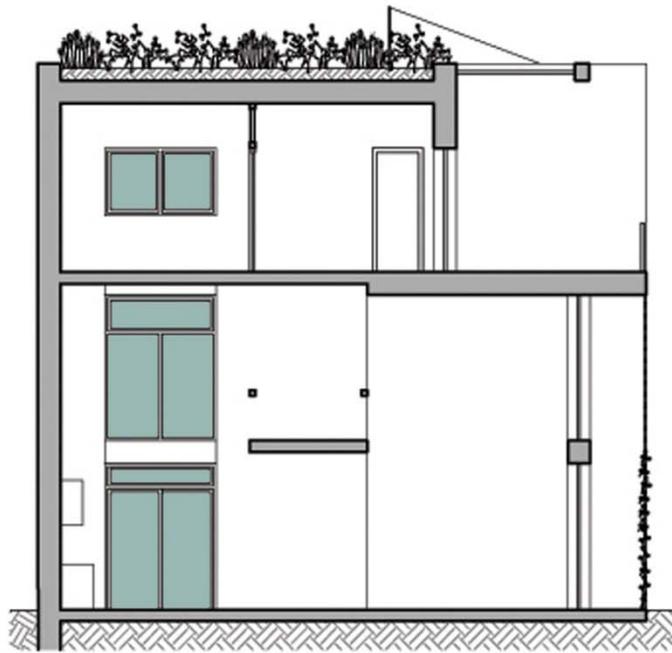
roof plan



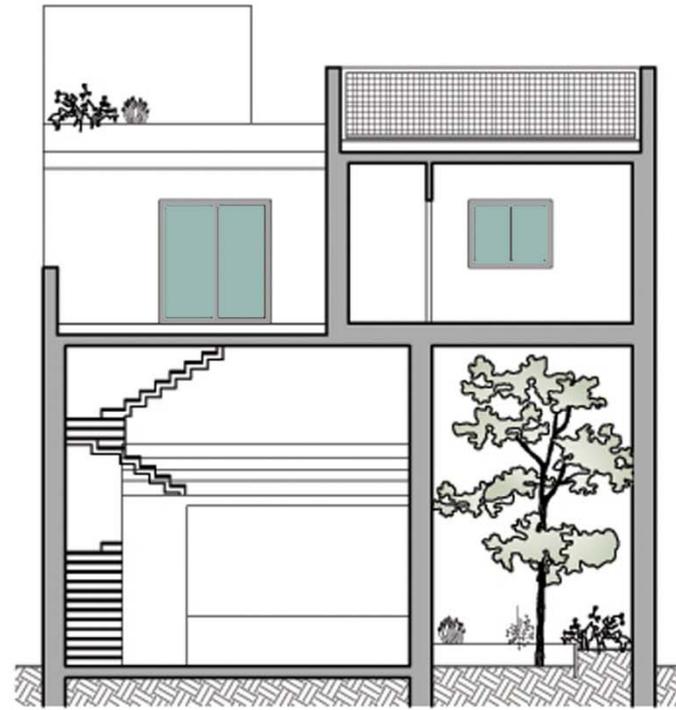
plans



longitudinal section



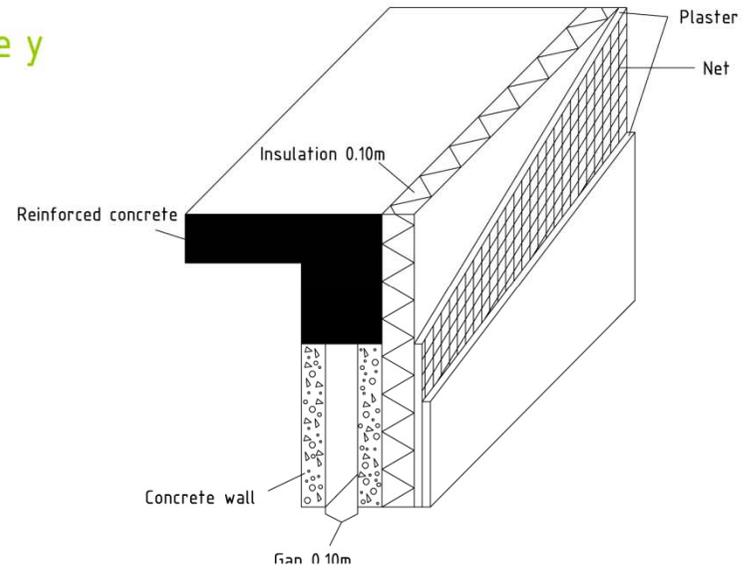
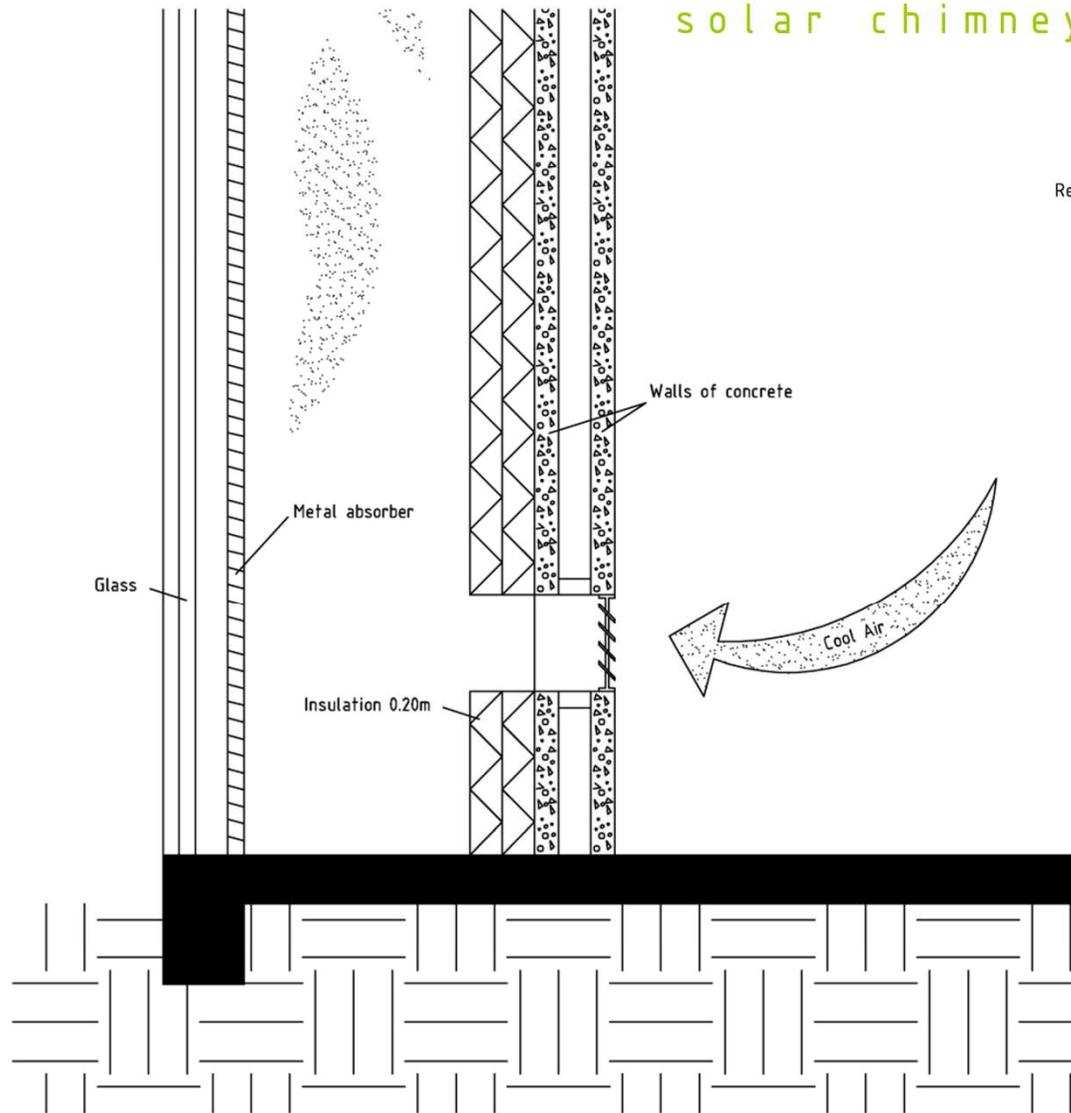
cross section



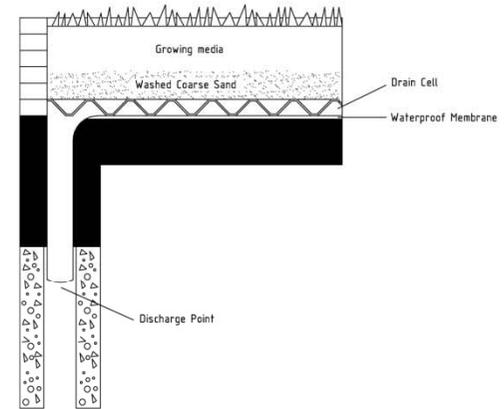
sections



solar chimney



detailed wall section



green roof detail

details





i m a g e s



t h a n k y o u

