



4th PRIMARY SCHOOL



2nd PRIMARY SCHOOL

W4_GREEN SCHOOLS_ ENCOURAGING SUSTAINABLE LIVING IN METAMORFOSI

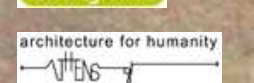
WORKSHOP LEADER:
BENJAMIN GILL

WORKSHOP TEAM:
ANGELIDOU MARIA
VANDOROS NIKOS
FRANCESCO BRUTTO
TZIMA EFTYCHIA
FARANTATOU EIRINI
CHARALAMPAKI GEORGIA



COLLABORATION WITH DIMOS METAMORFOSIS

COLLEAGUES:





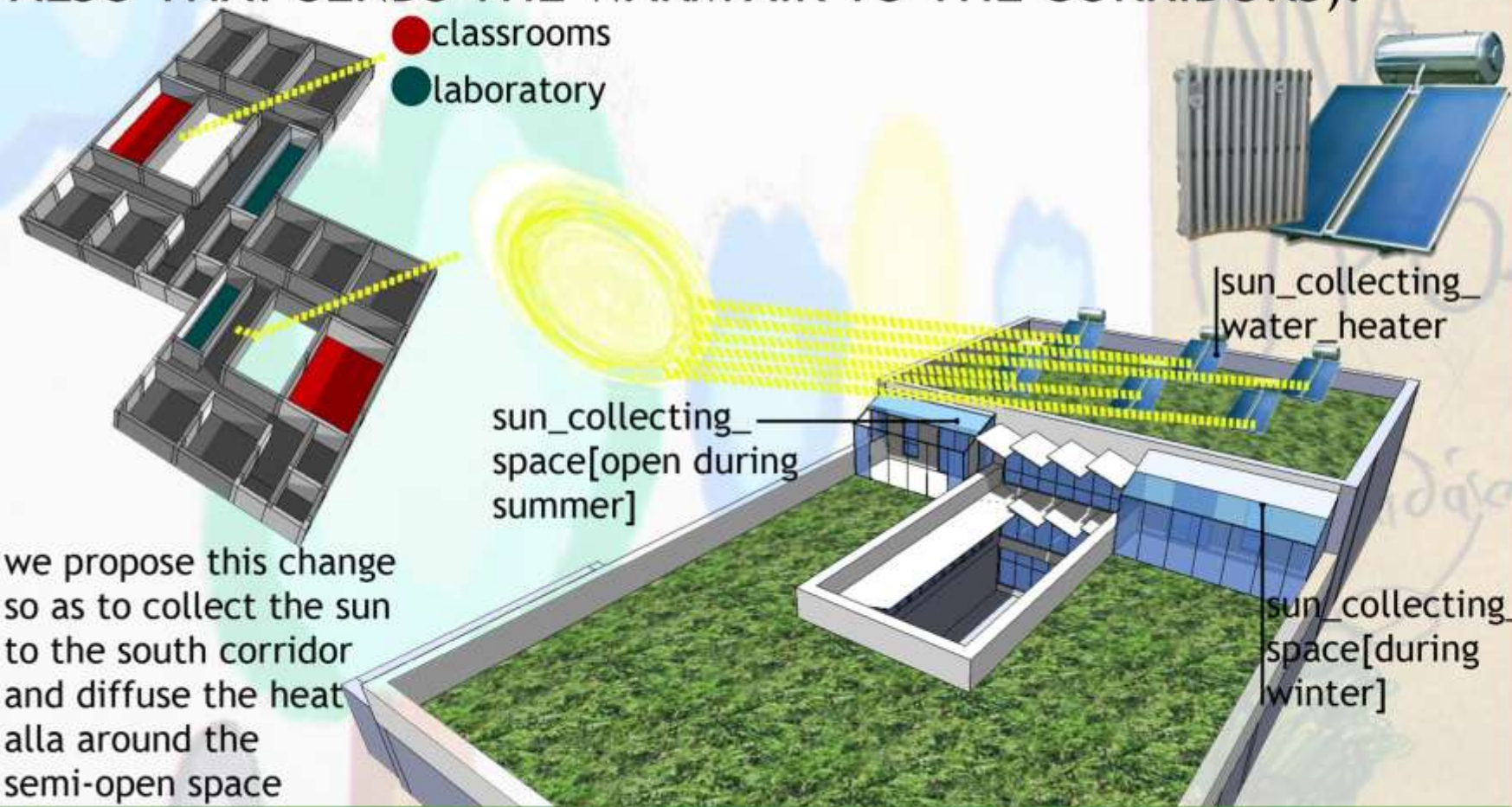
- damaged building
- lack of heating
- lack of insulation
- overheating during summer
- unexploited nature

**P
R
O
B
L
E
M**

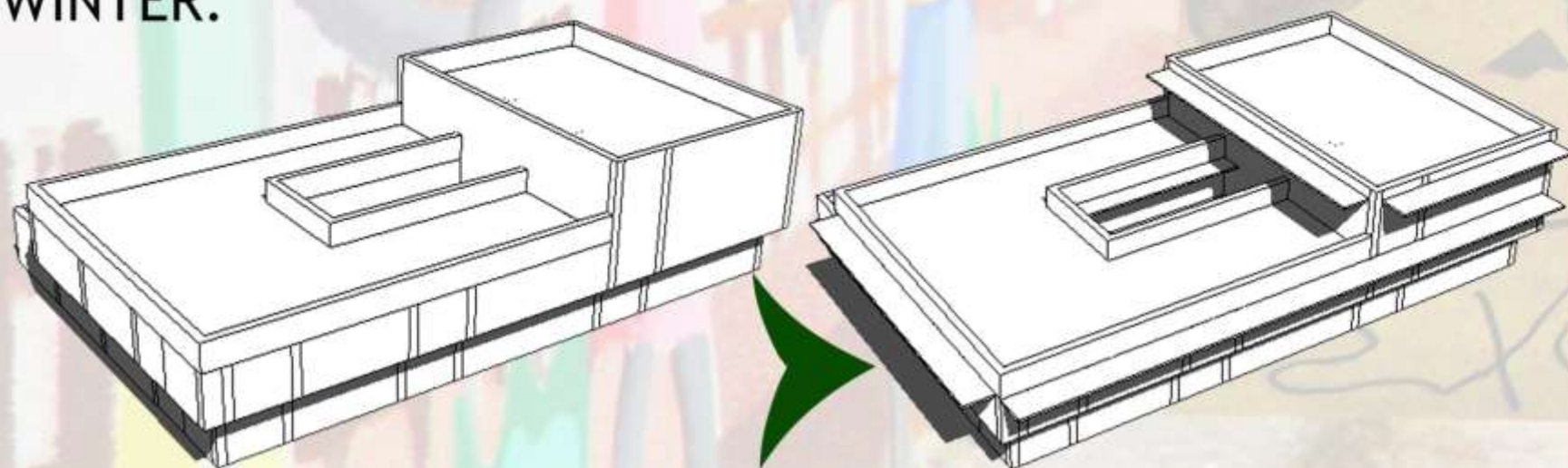
- concrete domination in/outside building
- students' unawareness about protection of environment



heating. WE TRIED TO COLLECT AS MUCH SUN AS IT IS POSSIBLE (WITH SUN COLLECTING WATER HEATERS THAT ARE NOW CONNECTED WITH THE CENTRAL HEATING SYSTEM AND AN ADDITIONAL SPACE ON THE ROOF FOR SUN COLLECTION ALSO THAT SENDS THE WARM AIR TO THE CORRIDORS).

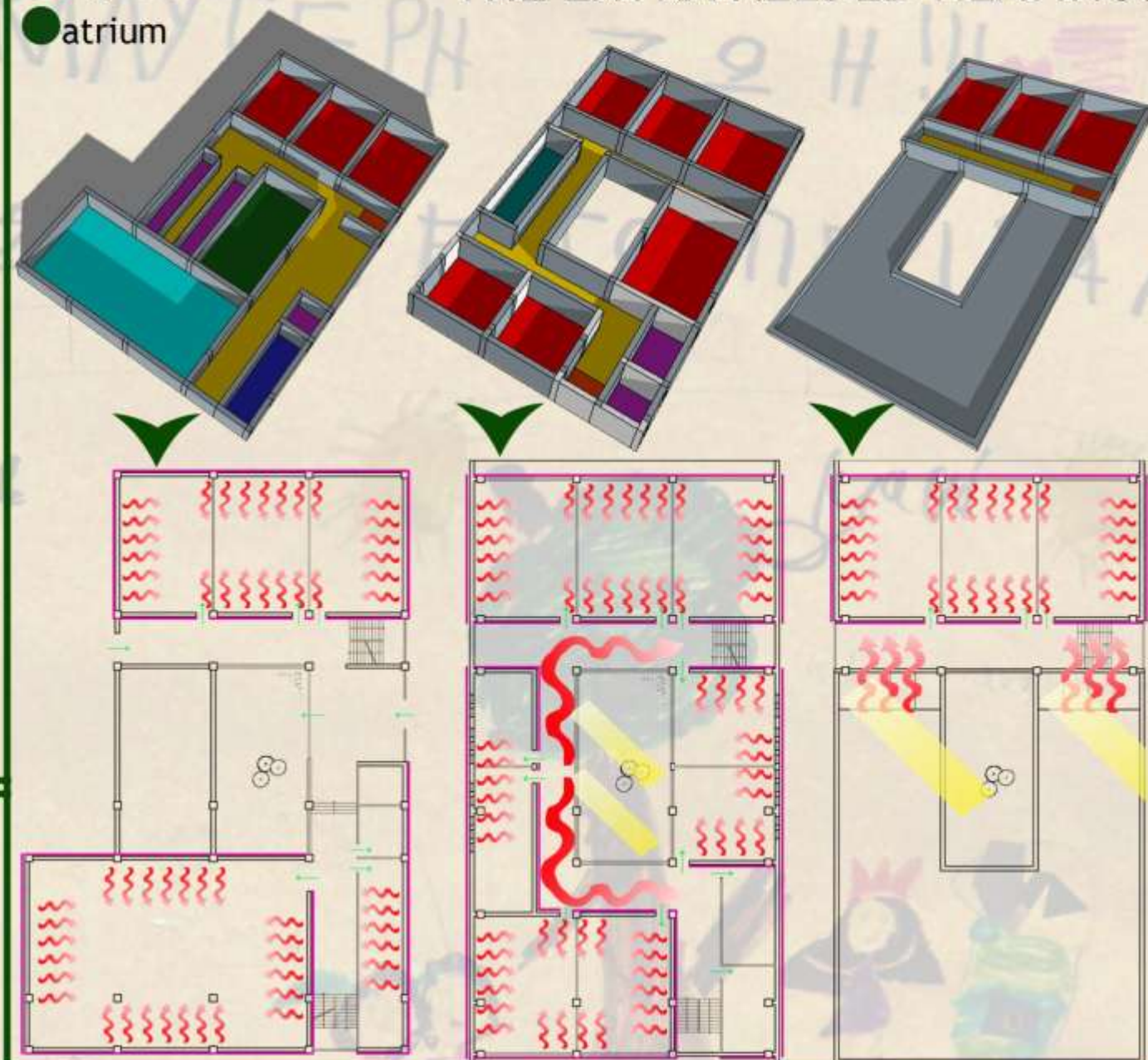


shading. IT'S IMPORTANT DURING SUMMER AND SPECIALLY AT THE SOUT-EAST WINDOWS SO AS TO PREVENT OVERHEATING. WE CALCULATE THE DEGREES AND DIMENSIONS OF SHADERS IN ORDER NOT TO LOSE THE SUNLIGHT DURING WINTER.



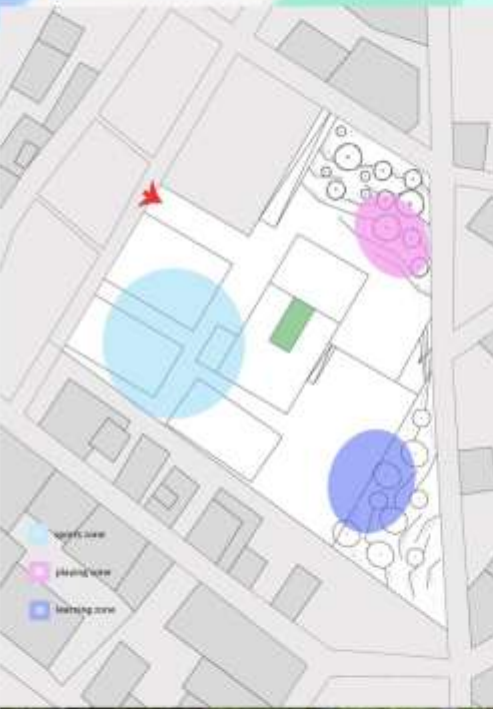
- classrooms
- corridors
- offices
- auxiliary spaces
- laboratory
- big hall
- atrium

insulation. IT'S ABOUT THE MAINTENANCE TECHNIQUE TO TRAP THE EXISTING HEAT. IT CONTRIBUTES IN MINIMIZING THE EXTRA NEEDED HEATING.



learning. CHILDREN CAN PLAY AND CREATE WITH MATERIALS AND IN MINI_WORKSHOPS IN ORDER TO LEARN HOW ALL THESE TECHNIQUES WORK THROUGH THE BUILDING AND WHAT IS THEIR MAIN PURPOSE (F.E. THEY CAN MAKE SMALL SUN COLLECTORS FROM ALUMINIUM AND SEE WHAT HAPPENS AFTER SOME HOUR).

green external space. WE CONVERT MANY PARTS OF THE EXTERNAL SPACE OS THE SCHOOL INTO PLAYGROUND AND EDUCATIONAL SPACES WITH PLANTS AND NATURE SOIL GROUND.



garden_ watering.

WE PICK UP THE RAIN WATER FROM THE ROOF AND WE CONNECT IT WITH THE W.C.'S. WE PASS IT THROUGH PIPES TO THE OUTDOOR GARDEN AND TO THE ATRIUM.

green roof. AFTER PUTING PLANTS ALSO AT THE TOP OF THE BUILDING (WITH A VERY LOW COST WAY) THE VIEW FROM THE UPPER LEVER IS IMPROVED AND THE ROOF INSULATION IS BEEN NATURALLY.



happier school. WITH COLOURS AND PAINTS MADE ALSO BY THE STUDENTS.

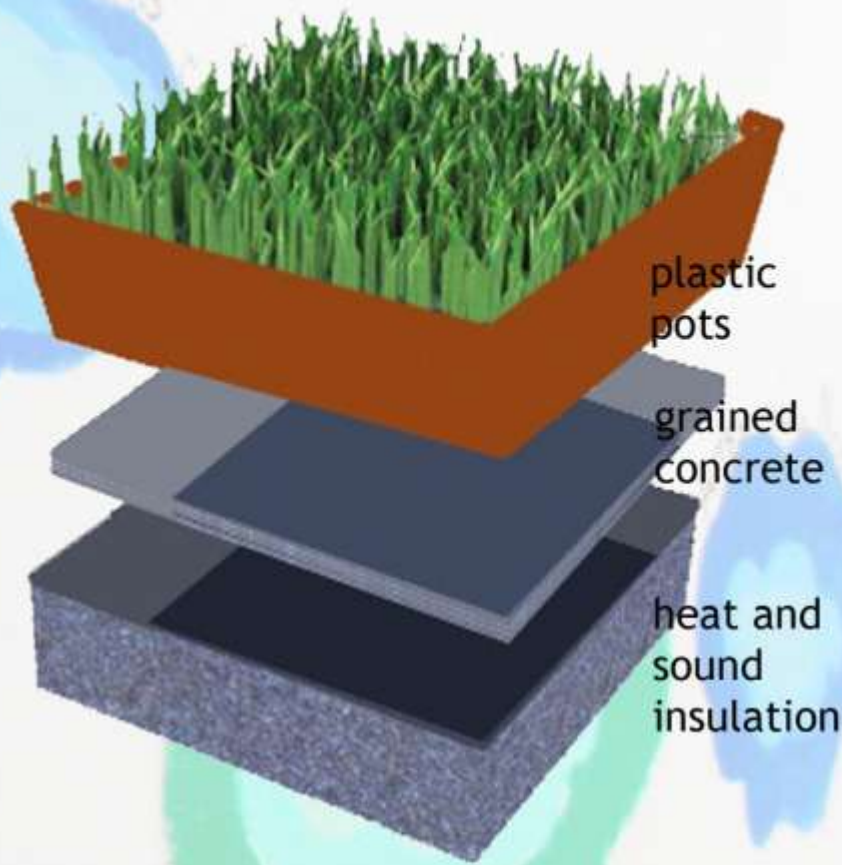


soiled area
green atrium

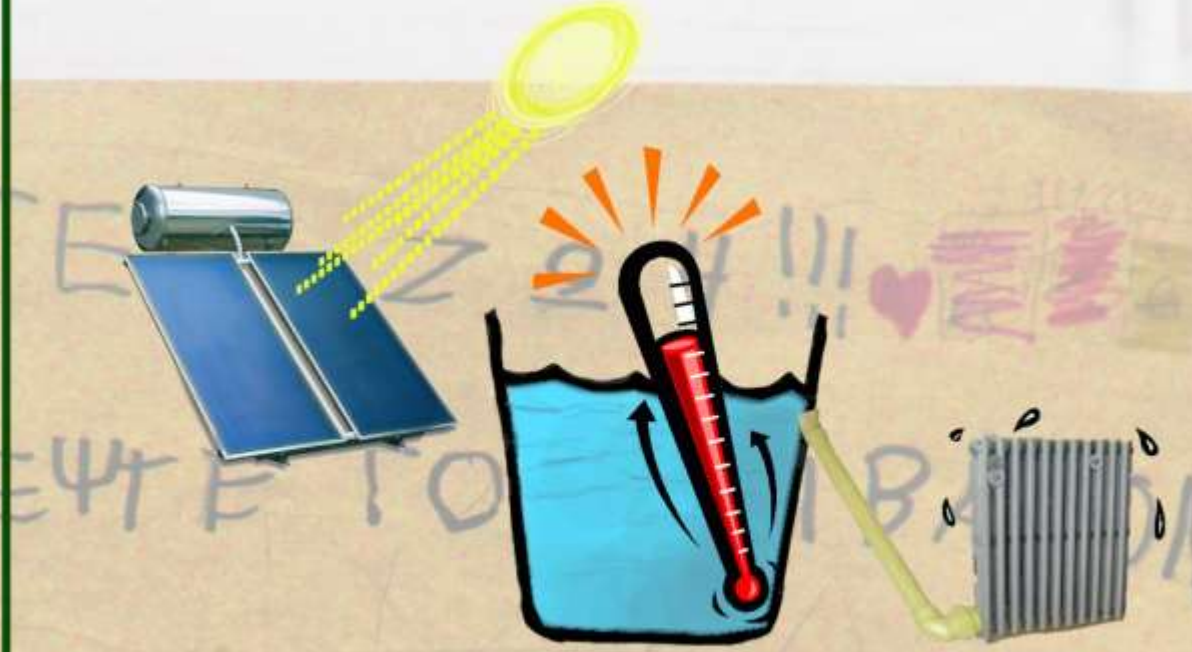
outdoor classroom

garden for vegetating

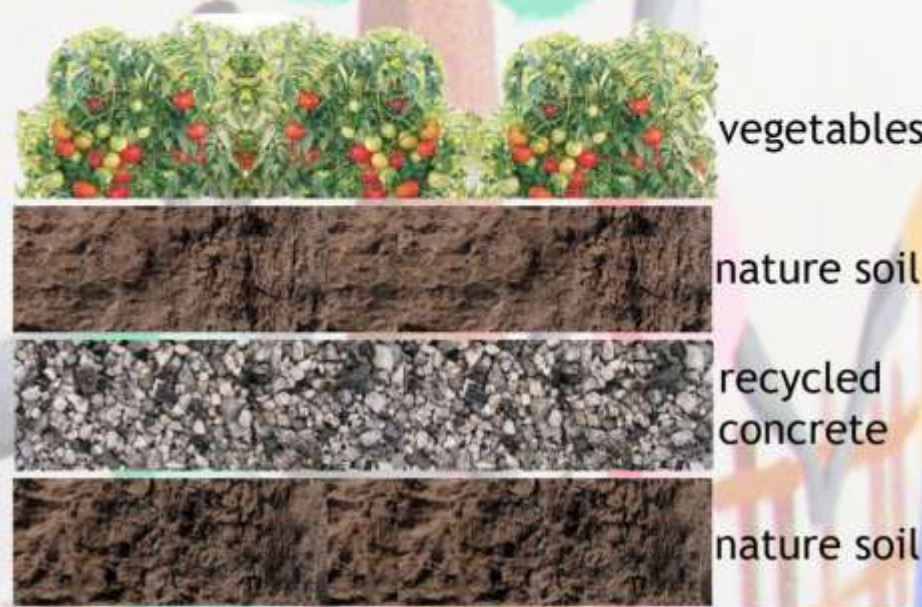




green roof construction. WE USE POTS TO PUT PLANTS IN AND THE TOTAL COST OF THE ROOF IS MINIMIZING 90%.



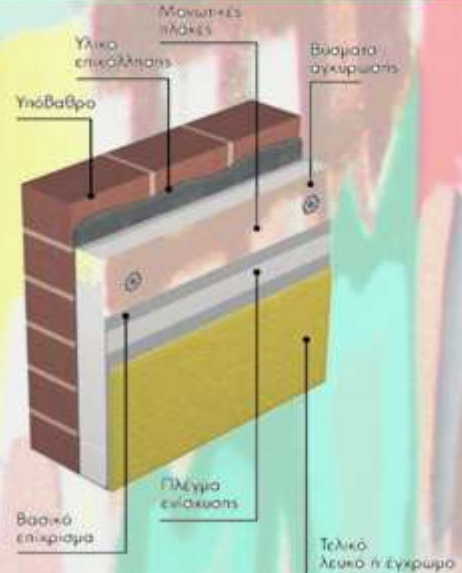
central heating system. THE SUN IS COLLECTING FROM THE ROOF TO HEAT THE WATER THAT RUNS AROUND THE INTERNAL PART OF BUILDING.



soil_ground. WE TAKE OUT THE COCRETE GROUND, AND WE REPLACE IT WITH SOIL.



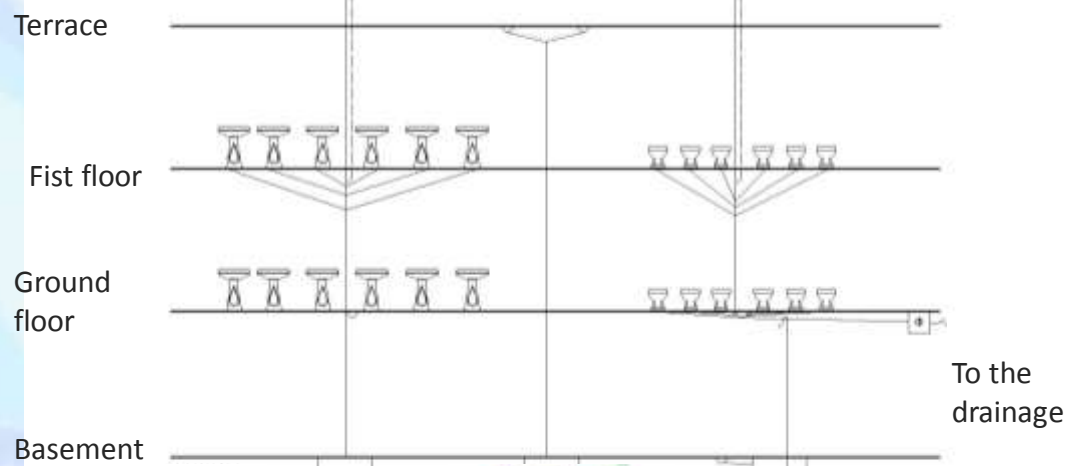
shaders. BOAT_FABRIC SHADERS, ABLE TO BE PAINTED FROM THE STUDENTS ARE USED TO PREVENT HARD SUN GETTING INSIDE DURING SUMMER.



insulation. WE USE HERAKLITHE FOR HEAT AND SOUND INSULATION. IT'S VERY FRIENDLY FOR THE ENVIRONMENT AND ALSO IS CAN BE PUT IN COLOURS.

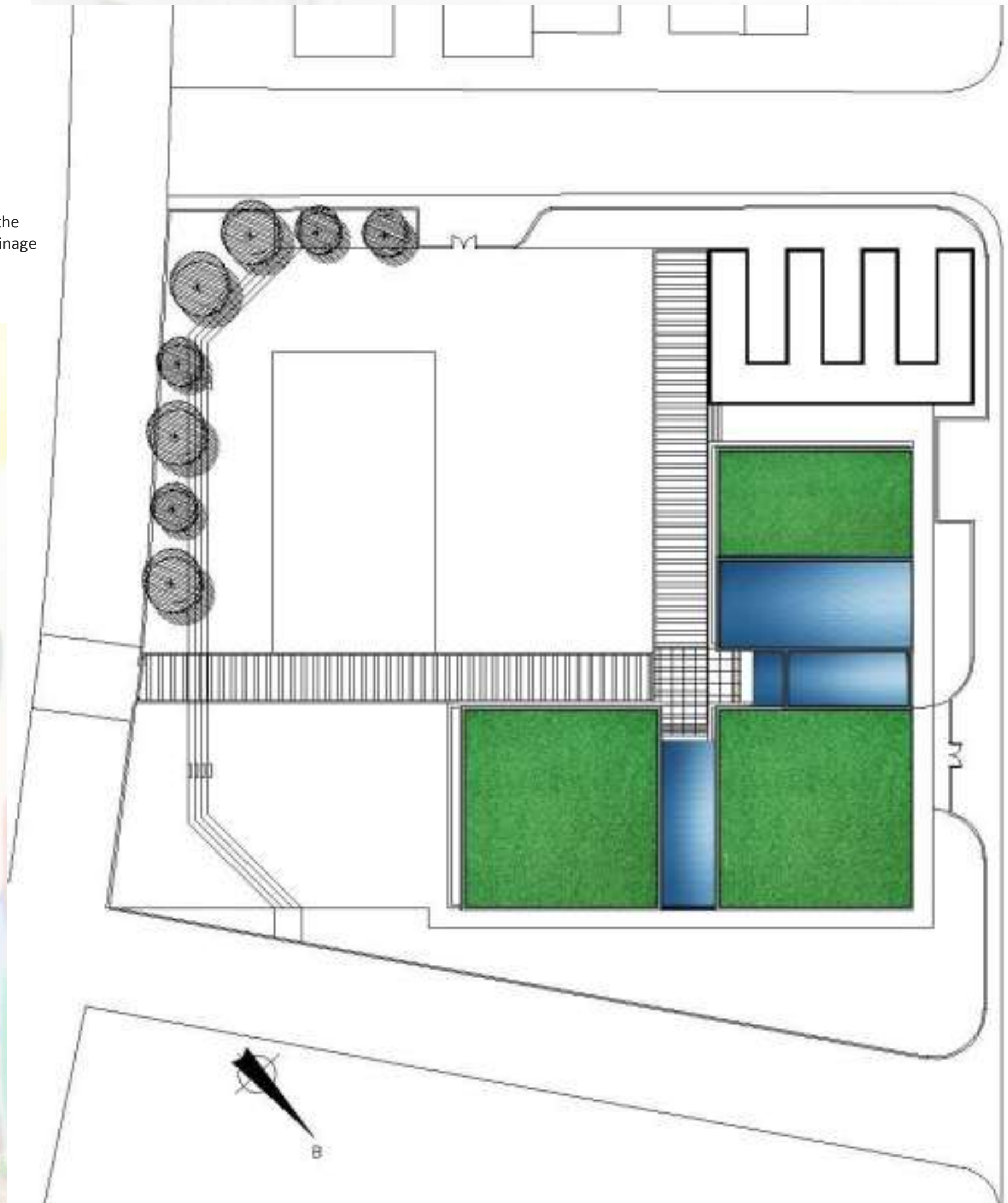


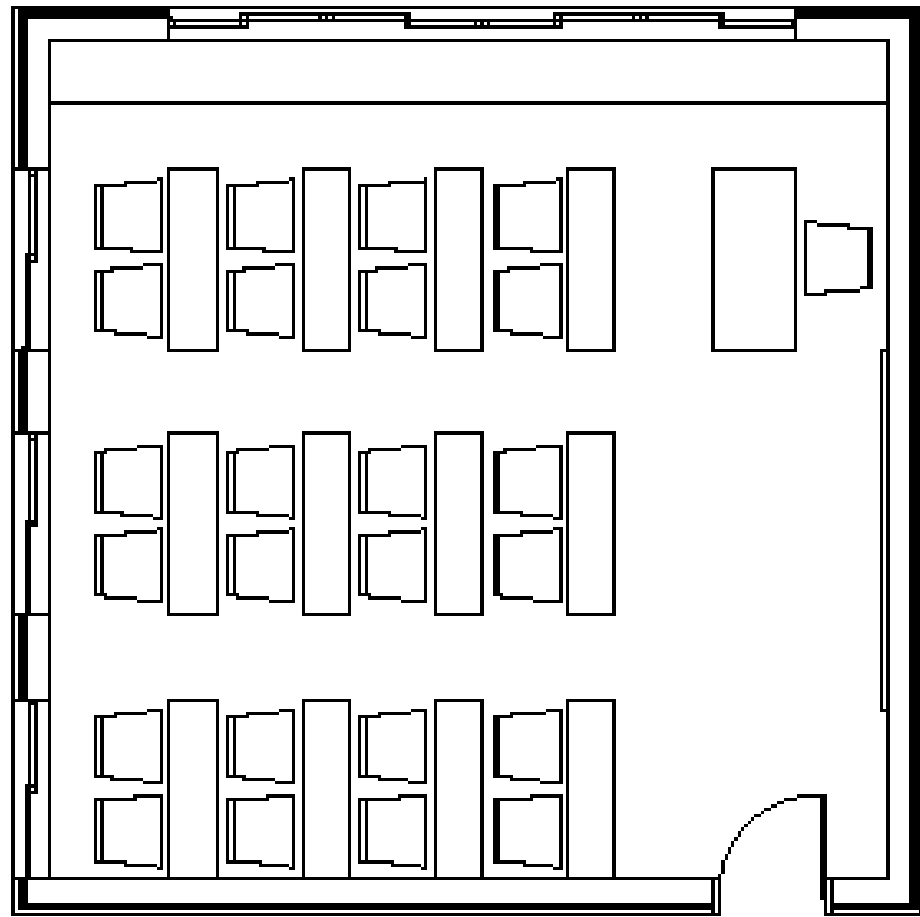
WATER BARRELS
COMPOST BINS



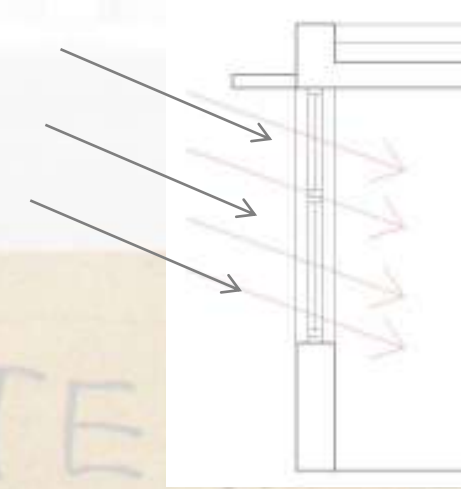
Watering the flowers of the yard

Rain water collection



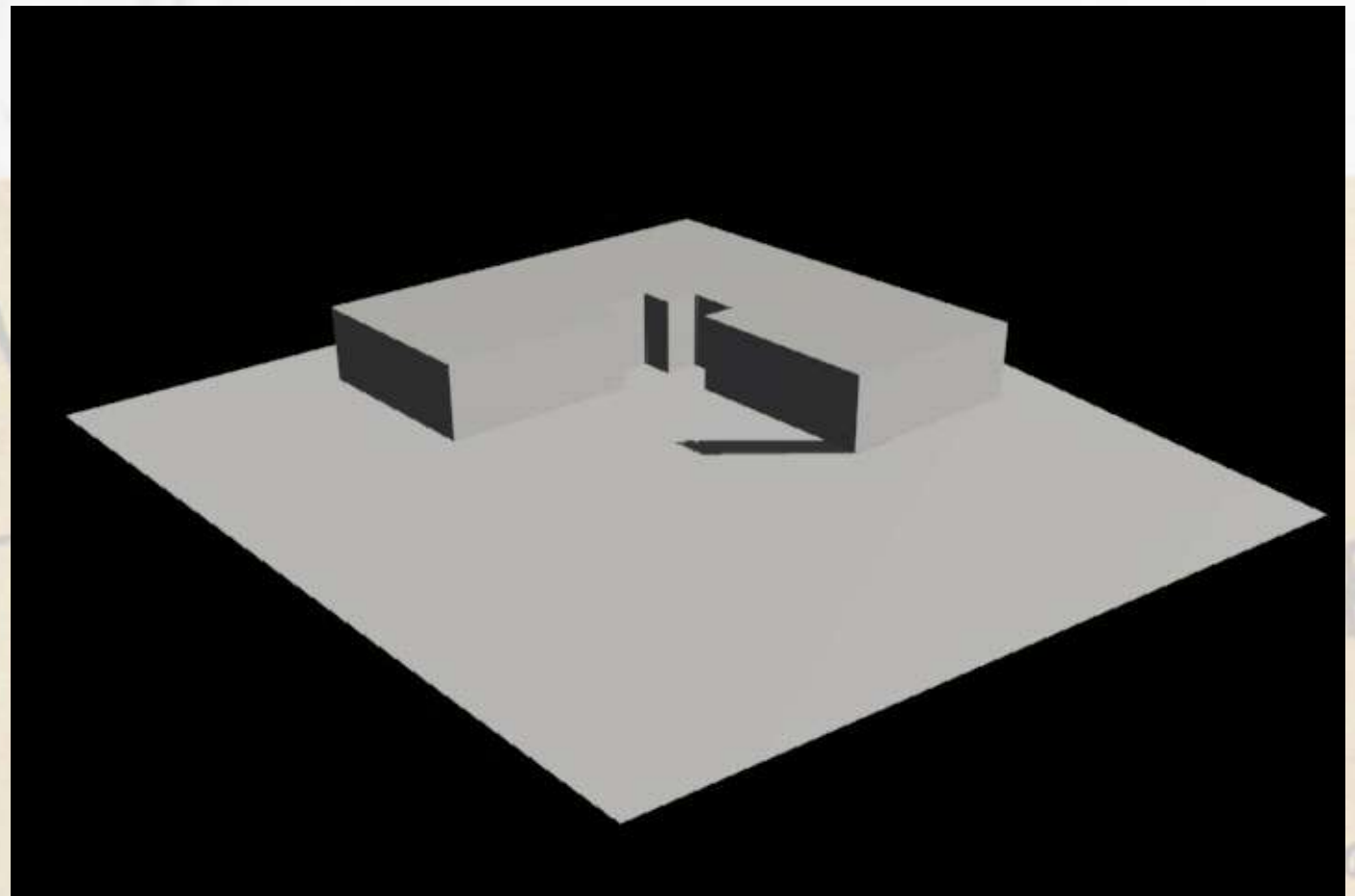


Summer light

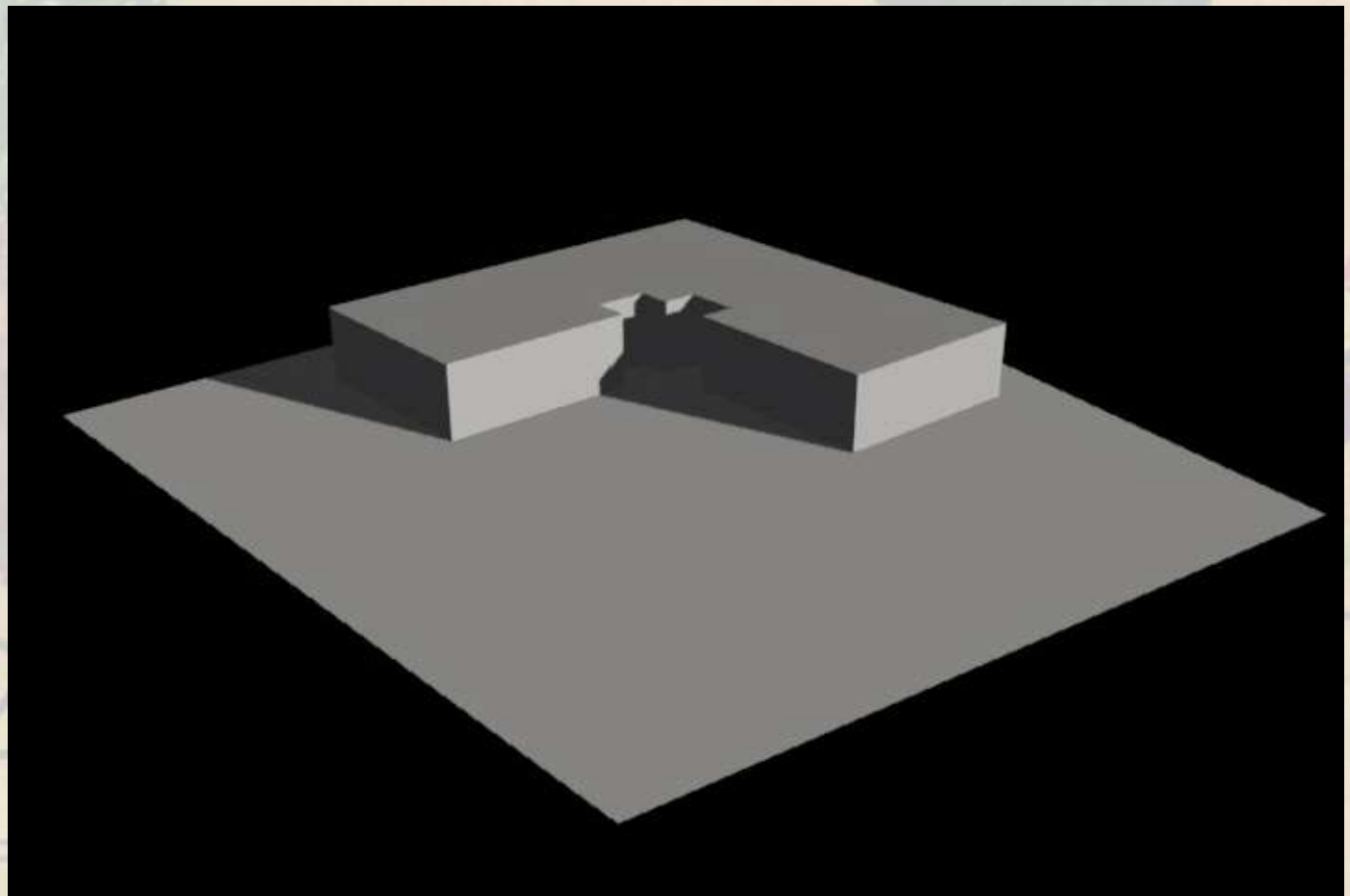


Winter light





Winter light



Summer light



ΣΧΟΛΕΙΟ ΜΕΤΑΜΟΡΦΩΣΗΣ

