



AR 16.02 OLD HABITS, NEW IDEAS



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Construction Techniques



VTI Brugge



Three Weeks



3000

HOUSING | PROJECT

WHAT | Two housing units

WHO | An old widow, her daughter Kesia, her son, his wife and their eight children.

WHY | On the small family plot there are three small, old mud huts: one in which the widow sleeps with two children and a baby cow, one in which Kesia sleeps and one used as storage space.



VTI BRUGGE | PARTNER

WHAT | Belgian secondary school

WHO | Fifteen students and four teachers

WHY | The labour intensive building method of earthbags called for helping hands. These craftsmen to be were then divided into different teams and a rotational system was put in place in order to keep everybody motivated. This close collaboration between trained craftspeople and members of C-re-a.i.d. elevated the design to the next level.



EARTH BAGS | TECHNIQUE

WHAT | Earthbag building utilizes the ancient technique of rammed earth in conjunction with woven bags as a flexible form.

WHY | To provide an alternative for the unsustainable burned bricks. The clearance of trees is namely essential to its manufacturing process.

HOW | Bags are filled using a suitable pre-moistened earth laid in a mason style running bond. Every finished row is thoroughly compacted. Two strands of barbed wire are laid in between every row.



CIRCULAR UNITS | DESIGN

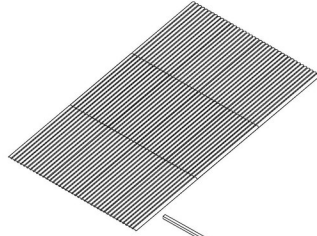
WHAT | The design concept consists of three intertwining circles: one for the mother, one for the daughter, and a common area in between.

WHY | The family's living condition was mainly defined by a lack of privacy. The design therefore focuses on the notion of living-together-apart.

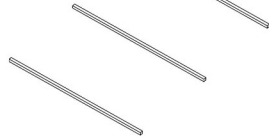
DETAIL | A bottle wall was installed adjacent to the door to let indirect light in. The common area was designed as a shaded outdoor space and was eventually paved with small cobble stones.



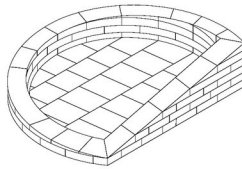
CORRUGATED ROOF SHEETS



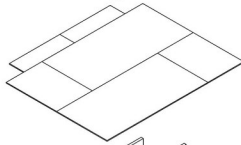
2X2 INCH RAFTERS



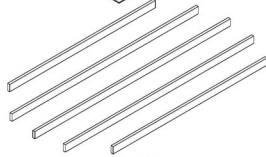
**SIX ROWS OF EARTH BAGS TO
CREATE INCLINATION**



**TWO 8 X 2.5 FEET PANELS OF
CONCRETE PLEX**



6X2 INCH BEAMS



**FOURTEEN ROWS OF
EARTH BAGS**

