## THE 24 HOUR SOUARE COOLING & WARMING | GLIMMERING | URBAN ORIENTATION

A NEW CONCRETE COLLECTOR WITH ADDITIONAL FEATURES

THE CONCEPT USES THE **SYNERGIES** BETWEEN THE THERMAL CONDUCTIVITY OF THE MATERIAL CONCRETE, SOLAR ENERGY AND LIGHT. IT HELPS TO COOL DOWN THE INNER CITIES IN THE SUMMER AND PRODUCES ENERGIE. THE PLAZA CHAN-GES ITS SURFACE AND ITS FUNCTIONS DURING THE DAY.

ADDITIVES LIKE PHOTOLUMINESCENT MATERIALS OR BLINGCRETE SHAPE A new urban feeling AND A BETTER CONNECTION IN THE CITY. PATHS AND INFORMATIONS ARE POSSIBLE TO ILLUSTRATE. THIS INDUSTRIAL PREFABRICATED TILES WORK LIKE A FLOOR HEATING SYSTEM. THE NEGATIVE CONDUCTIVITY OF CONCRETE IS USED TO PRODUCE ENERGY. THROUGH A "TUBE IN TUBE SYSTEM", A LIQUID IS PUMPED THROUGH THE PLAZA, WHICH EXTRACTS THE HEAT OUT OF THE CONCRETE. WITH THE HELP OF A HEAT EXCHANGER IS IT POSSIBLE TO USE THIS FOR ENERGY PRODUCTION.

IN THIS STUDY, THE TECHNOLOGIE IS USED TO DESIGN THE SIDE OF THE OLD SYNAGOGUE IN FREIBURG, GERMANY. THE SURFACE OF THE SIDE IS COVERED BY THE CONCRETE COLLECTOR, THE 24 HOUR SQUARE. IN ADDITION, THE SYS-





















