

MODULAR LECTURE

WHEN THE CONCRETE BLOCKS ARE JUXTAPOSED TO FORM A WALL, THE **LIGHT EFFECT** ALLOWS YOU TO SENSE THE DIFFERENT RELIEFS.

THE GRID REVEALS A CERTAIN **VERTICALITY** WHICH IS REINFORCED BY THE THINNESS OF THE VERTICAL JOINTS. ON THE OTHER HAND, THE HORIZONTAL JOINTS ARE DELIBERATELY LEFT THICKER TO CALM THINGS DOWN AND OFFER A RESPIRATION IN THE PATTERN.

THE DIFFERENT BLOCKS CAN BE PLACED ALTERNATELY, SOMETIMES WITH A HOLLOWY FACE AND SOMETIMES WITH A BUMPY FACE.

CONCRETE

REFLEXION

WE WANTED TO HAVE A FEELING OF **FLOWING MATERIAL**, TO GIVE AN UNUSUAL VISION TO THE ONE YOU CAN HAVE OF A CLASSIC CONCRETE SURFACE.

THIS IDEA OF TEXTURE WAS NOT TO BE LIMITED TO JUST ONE SIDE OF OUR MODULE. THE EXPERIMENTATION OF **POSITIVE (+) AND NEGATIVE (-)** IS DONE ON TWO PARALLEL FACES. ON ONE SIDE, A SERIES OF VOLUMES HOLLOWS OUT THE MASS OF CONCRETE, ON THE OTHER SIDE IT EMERGES.

MODULARITY

RESEARCH ON MODULARITY IS ESSENTIAL FOR THIS PROJECT. THE GOAL IS TO PRODUCE AN ELEMENT THAT COULD BE **REPEATED** TO FORM A COHERENT WHOLE. THE DIFFERENT ELEMENTS CAN VARY A BIT FROM ONE ANOTHER, DEPENDING ON THE PLEXIGLASS MOULDS USED AND THEIR POSITIONING IN THE FORMWORK.

TO ACHIEVE SUCH A RESULT, WE HAD TO FIND A PATTERN THAT COULD BE REGULAR, A GRID.

GRID

THE MOULD IS FORMED BY 2 SHEETS OF 5MM THERMO-DEFORMED PLEXIGLASS. AFTER SEVERAL TESTS, WE DECIDED TO GO FOR A GRID MADE OF **PARALLEL LINES**. WHEN THE CONCRETE BLOCK WILL BE ASSEMBLED ON A WALL, THESE LINES WILL BE VERTICAL. EACH BUBBLE IN THE PLEXIGLASS IS DIFFERENT FROM THE OTHERS, DEPENDING ON THE WAY THE SHEET HAS TAKEN ITS FORM WHEN HEATED. THIS SHAPE CAN BE RELATIVELY CONTROLLED BY HEATING MORE OR LESS ONE SPOT, AND BY INCLINING THE PLEXIGLASS TO OBTAIN A WAVE EFFECT.

ONE OF THE AMBITIONS OF OUR MODULE IS TO OFFER A **DOUBLE PERCEPTION**.

IF YOU LOOK AT IT FROM THE FRONT, A REPETITIVE VERTICAL PATTERN AND A SHADING PLAY ARE IDENTIFIED. WHEN YOU OBSERVE IT FROM THE SIDE, YOU UNDERSTAND THE RELIEFS THAT CREATE THESE SHADOWS:

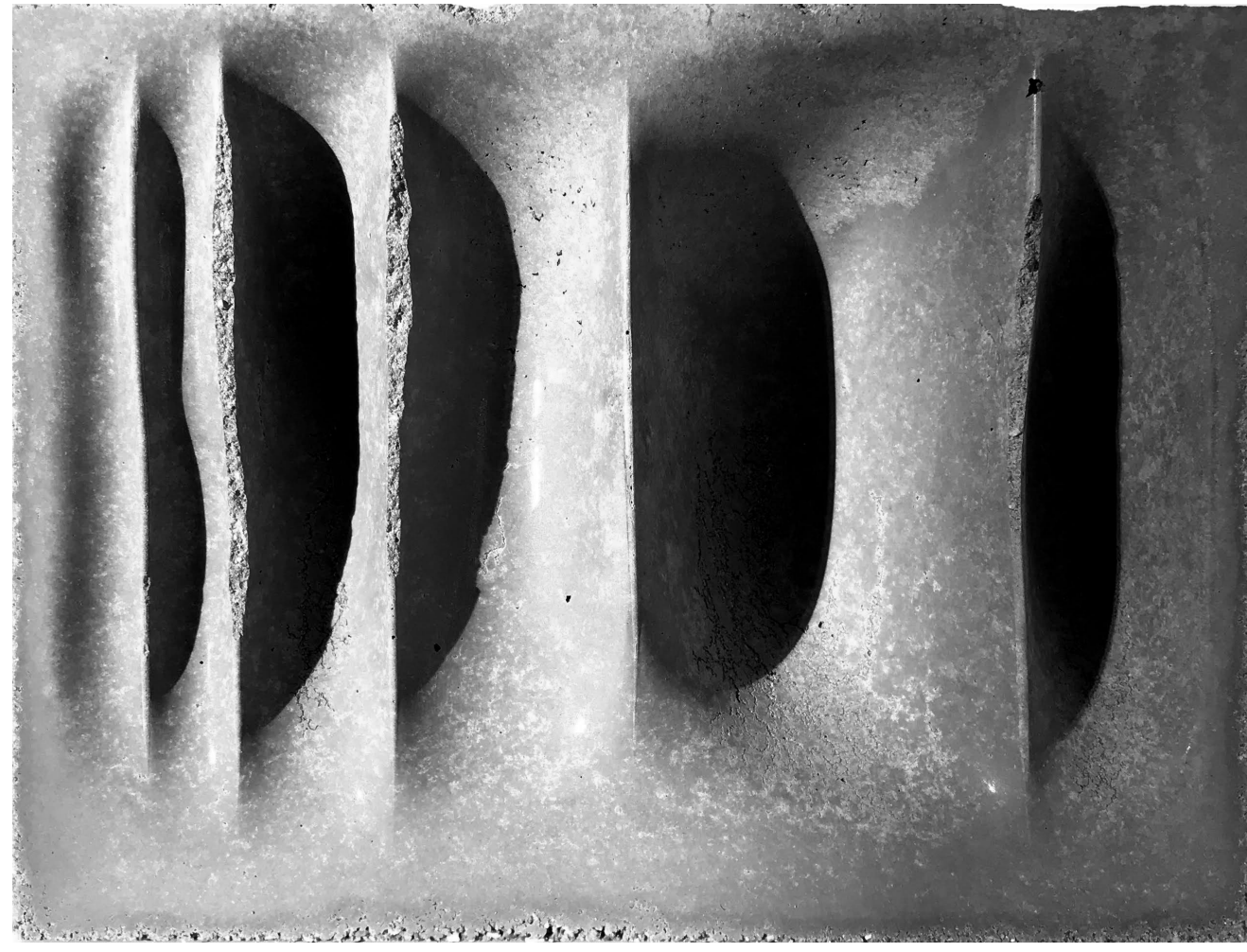
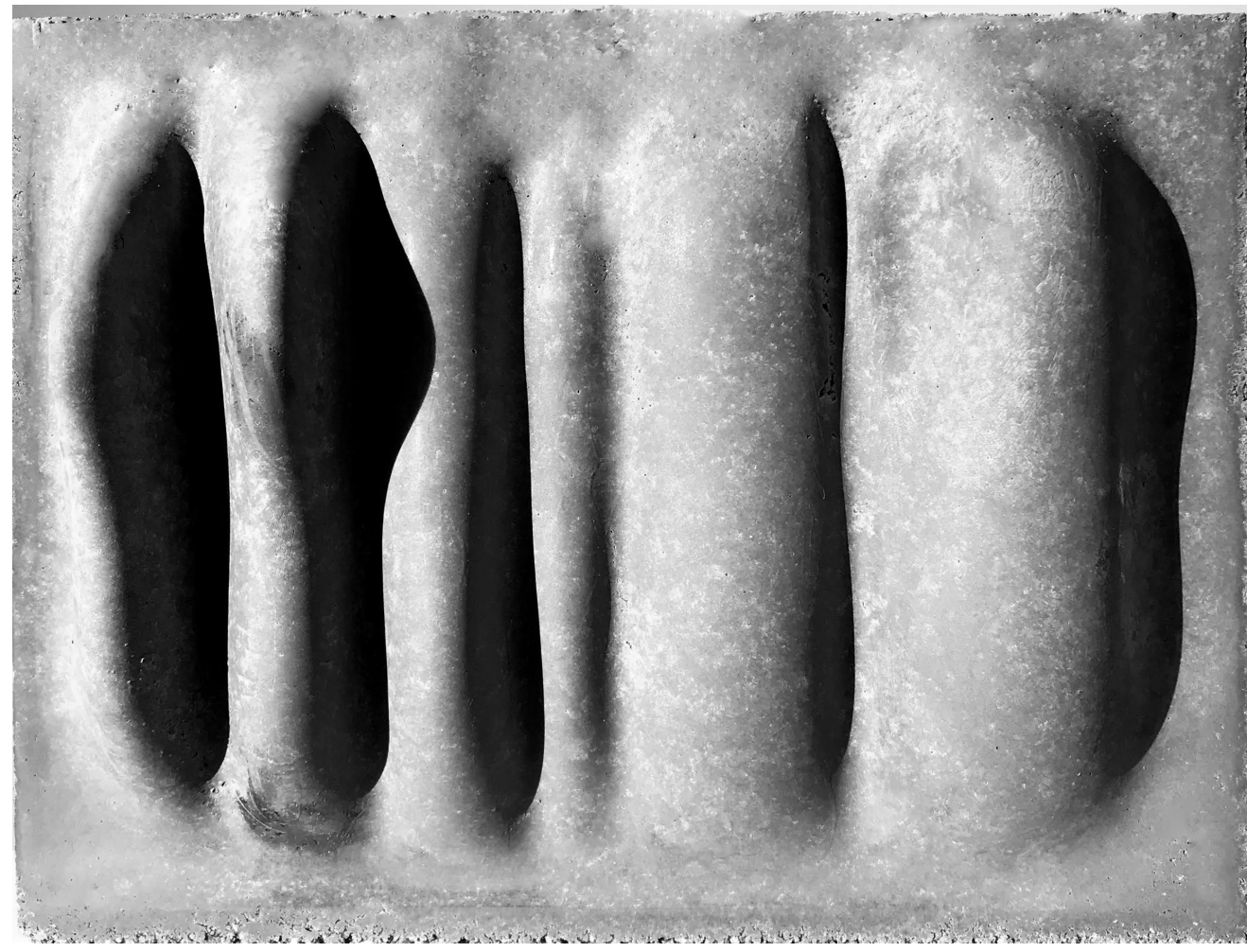
THE BUMPS THAT COME OUT OF THE BLOCK OR THE GROOVES THAT DIVE INTO THE MATERIAL.

FORMWORK

ALL PLEXIS HAVE THE SAME SIZE OF 33X25CM AND ARE THEREFORE **INTERCHANGEABLE**.

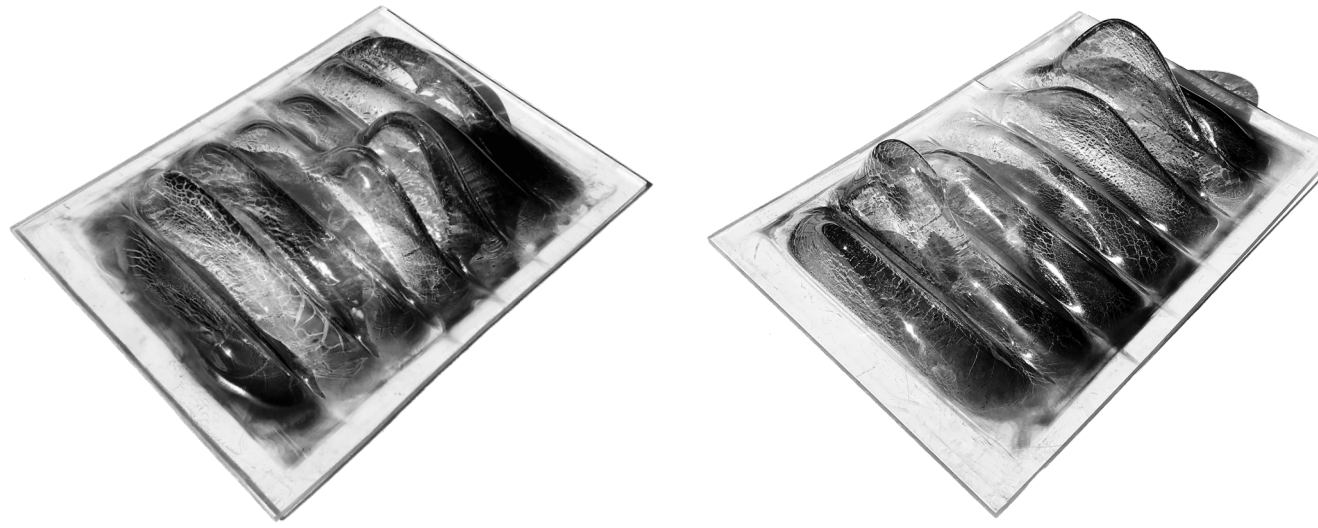
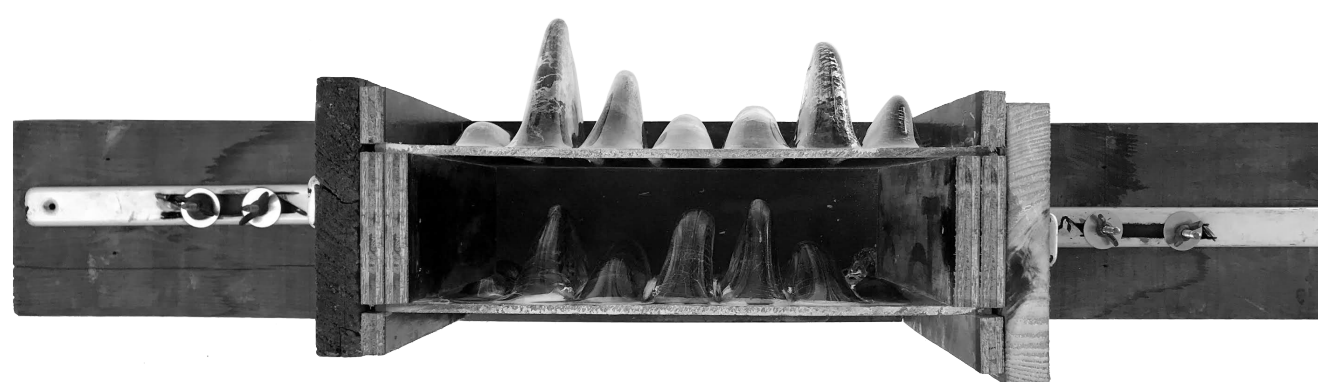
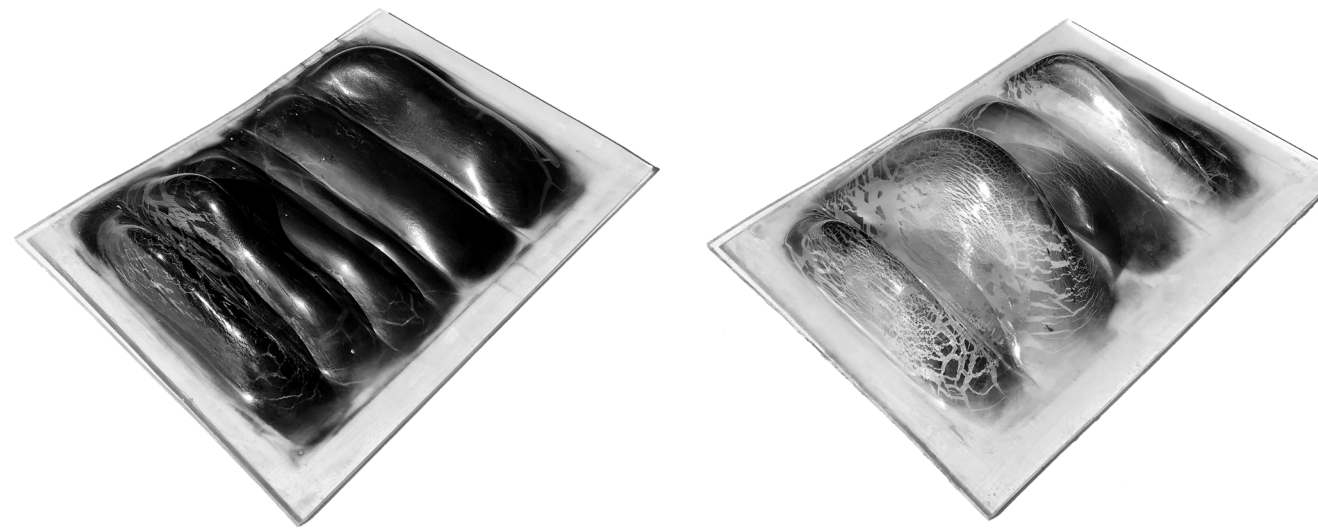
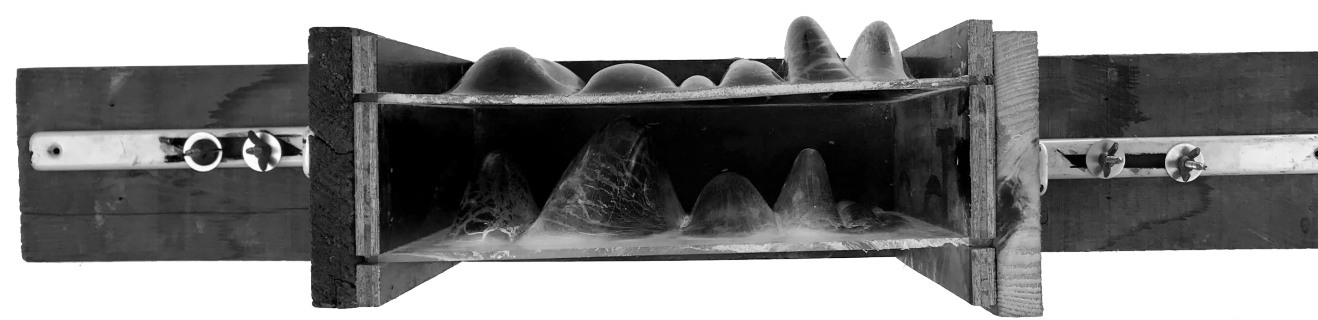
IT IS ALREADY POSSIBLE TO OBTAIN A MULTITUDE OF DIFFERENT BLOCKS SHAPES WITH A VARIATION OF 4 OR 5 SHEETS, BY ALTERNATING THEIR POSITION IN THE FORMWORK.

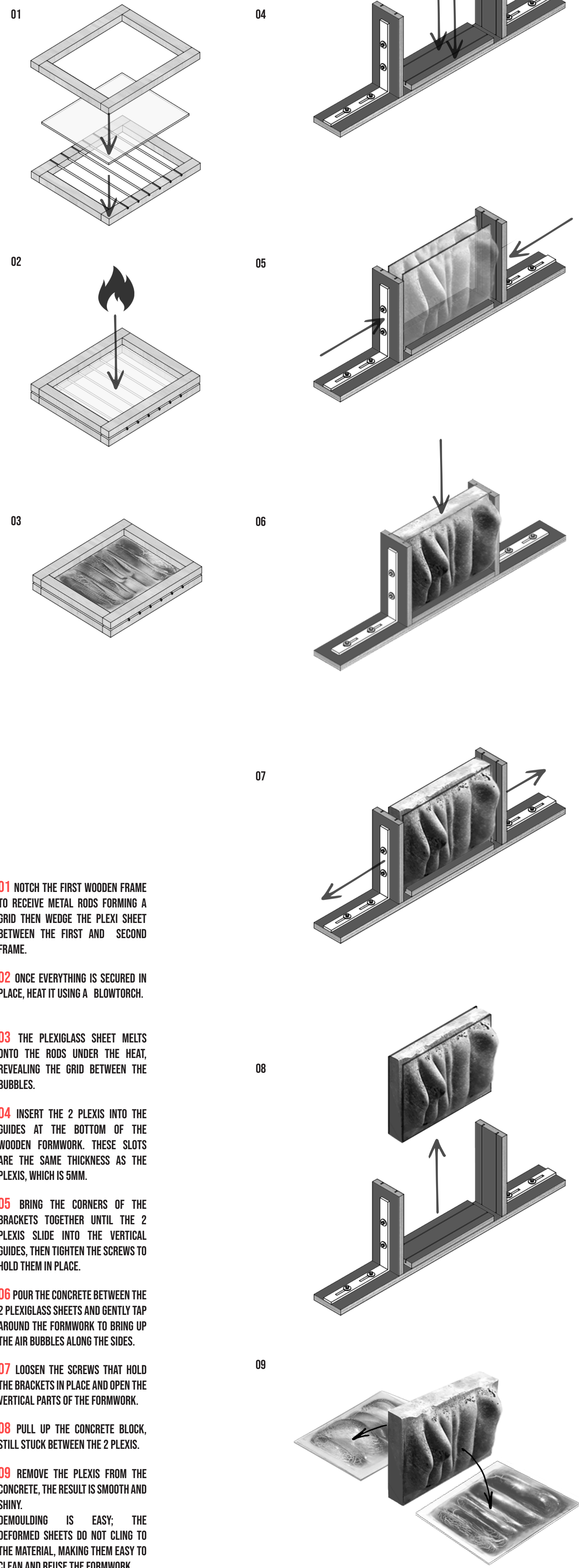
THIS SYSTEM ALLOWS A **SUCCESSIVE REUSE** OF THE FORMWORK, ONCE THE PLEXIS HAVE BEEN CLEANED.



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OPEN-SPACE
ASSEMBLING THE DIFFERENT BLOCKS INTO A **PARTITION WALL** ALLOWS US TO TAKE ADVANTAGE OF ITS TWO SHAPED FACES, ONE EMERGING IN AND THE OTHER SUBMERGING OUT. IT IS THEREFORE POSSIBLE TO COMBINE THE BLOCKS IN SEVERAL WAYS: ONE SIDE OF THE PARTITION WALL FULLY CURVED, THE OTHER RECESSED; OR THE TWO FACES ALTERNATIVELY ON THE SAME SIDE OF THE WALL.

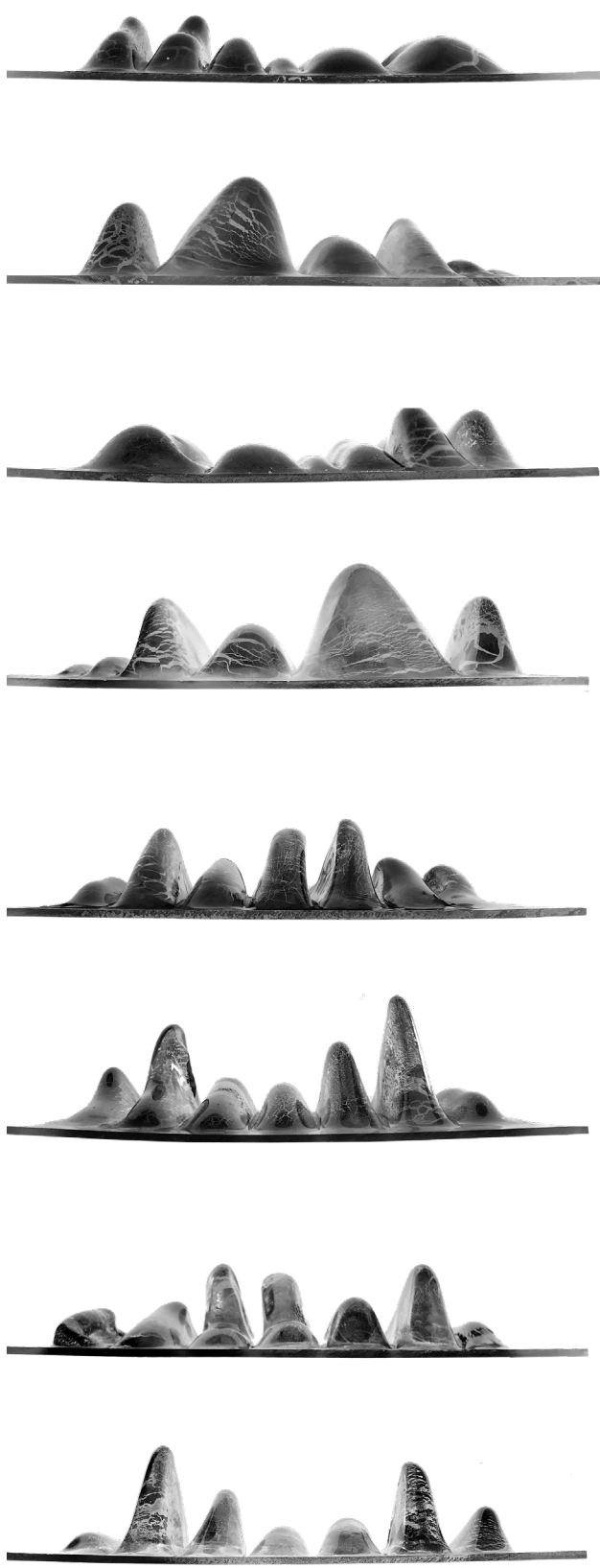
FACADE
THE USE OF THE CONCRETE MODULE AS A **CLADDING** FOR A FACADE GIVES THE OPPORTUNITY TO **PLAY WITH RELIEF AND LIGHT**. IN RAINY WEATHER, WATER FLOWS INTO THE GROOVES CREATED BY THE VERTICAL GRID. IN THIS CASE, THE CONCRETE ELEMENTS HAVE THE DIMENSIONS OF STANDARD BLOCKS, THE VERTICAL JOINTS BETWEEN THEM FADE AWAY TO LET THE HORIZONTAL JOINTS EXPRESS THEMSELVES ON THE FACADE. A PARTICULAR MODULAR COMPOSITION COULD BE IMAGINED, AROUND THE OPENINGS FOR EXAMPLE.

SUBSTRUCTURE
THE SOLID NATURE OF OUR CONCRETE MODULE MAKES IT VERY SUITABLE FOR APPLICATION IN THE LOWER PART OF A FACADE. PROMINENCES AND HOLLOWS **UNDERLINE THE BASE** OF THE BUILDING AND GIVE DEPTH TO AN OTHERWISE UNIFORM FACADE.

PARC
ITS PARTICULAR GEOMETRY ALLOWS US TO IMAGINE IT ON A LARGER SCALE, FOR A LANDSCAPING DESIGN FOR EXAMPLE. **ACCOMPANYING** VISITORS ALONG A PATHWAY, **SUB-DIVIDING** A PUBLIC SPACE, OR SIMPLY LETTING USERS **INTERACT** WITH ITS ORAGNIC-SHAPED FACES.

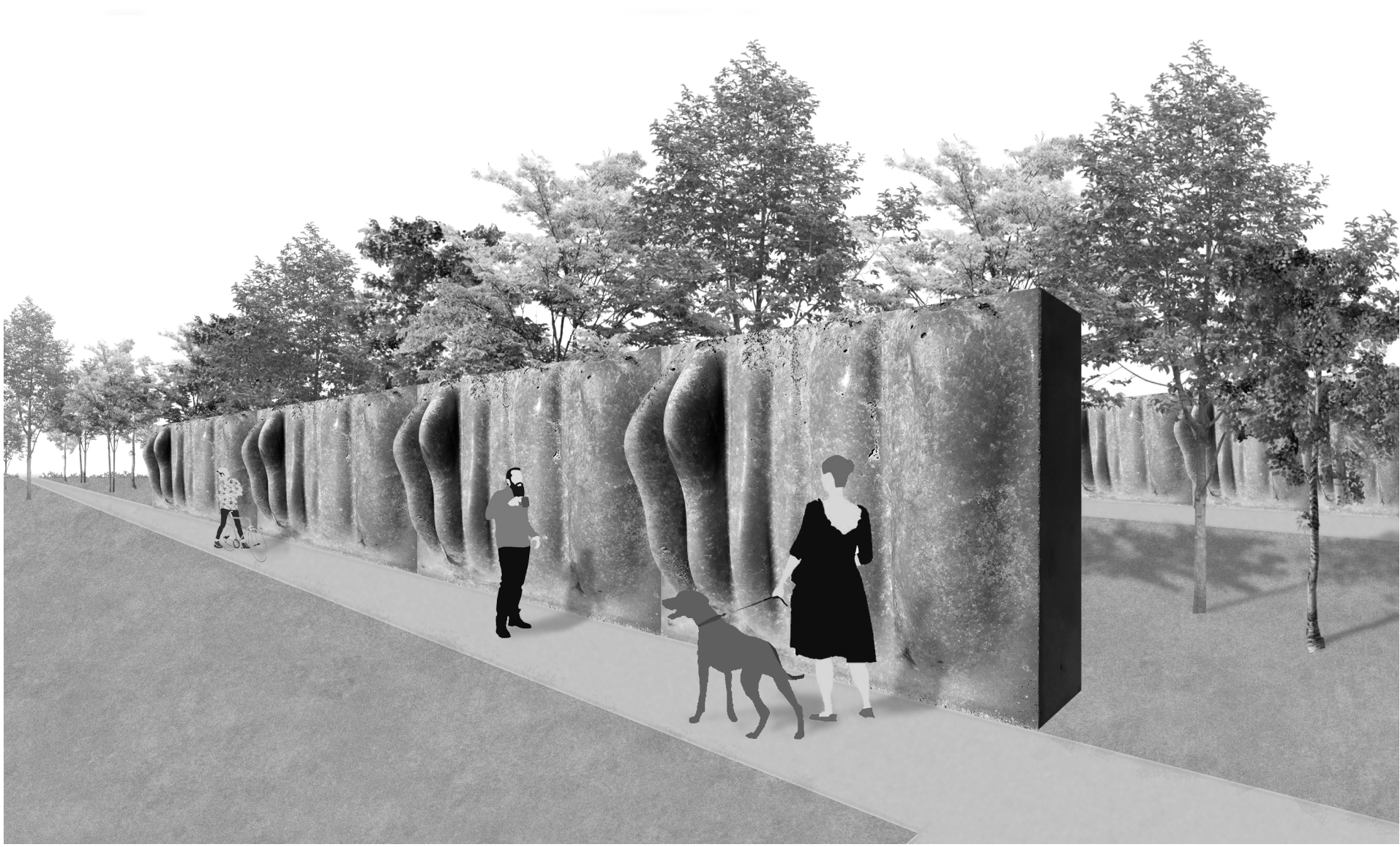
MUSIC ROOM
THE RIPPLES IN EACH BLOCK ARE **MULTIDIRECTIONAL**, ALLOWING SOUND WAVES TO BE REFLECTED IN ALL DIRECTIONS. THIS IS WHY ITS INSTALLATION IN A MUSIC OR THEATRE HALL WOULD BE APPROPRIATE IN COMBINATION WITH AN ABSORBENT CEILING.

ART GALLERY
FINALLY, THE DIFFERENT MODULES COULD BE HUNG SEPARATELY, LIKE PIECES OF ART ON THE WALLS OF AN **EXHIBITION**.



APPLICATION IN ARCHITECTURE

REPETITION IS NEVER IDENTICAL: THE COMBINATION OF THE SMOOTH ASPECT OF CONCRETE AND THE ORGANIC GEOMETRY GIVEN BY THE SHAPE OF THE PLEXIGLASS GIVES IT A VERY SINGULAR RENDERING. ONE OF THE ADVANTAGES OF THE MODULE IS THAT IT CAN BE PRODUCED ON **DIFFERENT SCALES**, IN SINGLE OR DOUBLE SIDED, AND CAN THEREFORE BE USED AND INTERPRETED IN A VARIETY OF WAYS.



REGULAR GRID

STILL IN THIS IDEA OF DOUBLE PERCEPTION, THE REGULAR GRID ALLOWS A MORE RELEVANT READING WHEN THE BLOCKS ARE ASSEMBLED. IN A FACADE FOR EXAMPLE, A SENSE OF **ALIGNMENT** CAN BE FELT BETWEEN THE GRIDS OF THE DIFFERENT MODULES. ONLY THE **RELIEF** IS **IRREGULAR**, IT SLIPS INTO THE VERTICAL STRIPS OF THE GRID. THIS ONE IS SOMETIMES QUITE SOFT, AND SOMETIMES MORE PRONOUNCED.

