

MODEL AIR[©]

Design Consultancy
Mock up
3D Modeling
Prototypes

Architectural
Models

WHO WE ARE

In the era of virtual reality, in the advent of digital technology, the construction of a physical architectural model may seem to be an old-fashioned process; however, our work becomes a unique and indispensable tool in project management.

The sensorial perception of a constructed object, the possibility of verifying the impact in the real world, makes the realization of a physical model a fundamental step in representation and control. The model allows the designer to elaborate on a specific idea and has the fundamental role of communicating the essence of an objective concept.

MODELAIR produces the excellence of the handmade product, combining all the available technologies useful in the dialogue with the digital world. This process allows us to create uniquely designed pieces specific to each customer, while allowing us to cut significantly the production times as required by the traditional mechanical process.

MODELAIR was born in Rome as a laboratory that produces models, working models and presentation models with particular attention to the specific field of design and architecture. Since 1999 we have been making design prototypes, architectural models and construction mock-ups.

Our laboratory uses high-tech methods such as:



. 3D PRINTING :

3D printing from a digital file, using different materials with different characteristics of resistance and transparency.



. CNC / LASER CUTTING / ENGRAVING :

Using lasers or a cutter of 3 or 5 mechanical (cutter axes) we can engrave and cut different types of materials such as, methacrylate, pet, laminated wood or metal plates.



. COATING :

Usually we use natural materials in order to express the true colors textures and possible transparencies. However, we are also specialized in treating or coating any surface giving it a unique materiality or photorealism better meeting the expressive needs of a project.



. MOLDING :

Thanks to a real sculpture technique, we are able to copy objects with silicone molds and make accurate handmade replicas from polyurethane foam or Plasticine. At this point, we are able to modify the new object and use it as a study prototype.



. RESIN CASTING :

A perfect replica of the matrix prototype can be obtained by using transparent and non-transparent epoxy resins.



. THERMOFORMING :

Thermoforming is a technique for which it is possible to obtain a three-dimensional object from a Pet, methacrylate or polystyrene sheet. The film is heated and lowered onto an object, molding to its form also thanks to the help of a vacuum, which facilitates the perfect adherence to it.



. WELDING :

Tin soldering, using light metal and brass profiles, is very powerful in representing steel structures and facade grid patterns. This type of craftsmanship, sometimes replacing 3d printing, gives the model a much more realistic appearance.



. 3D SCANNER :

With the reverse engineering technology, it is possible to scan and digitize very precisely the outside dimensions of an object or the interior dimensions of a large space or environment. Our service, which uses sophisticated optical machinery, re creates a 3D file in CAD, Revit or Rhinoceros, ready to be used by the designer.

OUR AREAS OF EXPERTISE

MODELAIR offers the following services:

>> Architectural Models

Realization of architectural and urban models of every size, complexity and material, starting from the information provided by the client, we transform it into accurate reproductions, unique pieces with high technological and artisan craftsmanship.

>> Prototypes and Mock ups

Realization of conceptual models, prototypes for validation (mock-ups or working models?), technical prototypes, presentation models for the industry and the world of design. We start from 3D and 2D files and use the technology most suitable to the customer's needs.

>> Design Consultancy

Design support from the definition of the initial concept design, starting from the first phase of sketching, three-dimensional modeling, images and renderings that illustrate the product in every detail, to the realization of the prototype.

>> Modellazione 3D

Supporto alla progettazione e modellazione, realizzando modelli CAD dall'idea del cliente allo sviluppo del progetto, modellando le matematiche tridimensionali dal disegno 2D o cartaceo, implementando i file disponibili.

ARCHITECTURAL MODELS

- | | |
|---|--|
| 10 MILANORD AUCHAN
CINISELLO BALSAMO_2020 | 40 SHENZHEN BAO'AN INTERNATIONAL
AIRPORT, CHINA_2008 |
| 14 EXPO ITALIAN PAVILION
MILAN, ITALY_2015 | 42 VILNIUS HERMITAGE GUUGENHEIM
MUSEUM, LITHUANIA_2008 |
| 18 PRISTINA CATHEDRAL
KOSOVO_2003 | 44 ZENITH PORT ARENA, ILE DE LA REUNION
REUNION, (DROM) FRANCE_2010 |
| 20 ARMANI FIFTH AVENUE
NEW YORK CITY, USA_2008 | 46 NATIONAL ARCHIVES OF FRANCE
PIERREFITTE-SUR-SEINE, FRANCE_2007 |
| 22 BEIJING WAIFING SOHO TOWERS
BEIJING, CHINA_2009 | 48 SHENZHEN TOWER COMPETITION
CHINA_2007 |
| 24 CARREAU DES HALLES IN PARIS
FRANCE_2007 | 50 LOUVAIN LA NEUVE MUSEUM OF ART
BELGIUM_2008 |
| 26 CAREAU DES HALLES
PARIS, FRANCE_2007 | 52 CONGGUING INTERNATIONAL AIRPORT
CHINA_2008 |
| 28 CENTRO CONGRESSI EUR, THE CLOUD
ROMA, ITALY_2000/2010 | 54 DUBAI GLOBAL CONNECTION
UAE, DUBAI SOUTH_2016 |
| 30 FEDERAL NATIONAL COUNCIL COMPLEX
ABU DHABI, UNITED ARAB EMIRATES_2009 | 56 GELENDZHIK AIRPORT
RUSSIA_2018 |
| 32 FEDERAL NATIONAL COUNCIL COMPLEX
NEW YORK CITY, USA_2009 | 58 IS MOLAS GOLF RESORT
PULA, ITALY_2006 |
| 34 NELSON MANDELA UNIVERSITY CAMPUS
ABUJA, NIGERIA_2006 | 60 HIPPODROME PARIS LONGCHAMP
FRANCE_2011 |
| 36 NELSON MANDELA UNIVERSITY CAMPUS
ABUJA, NIGERIA_2006 | 62 METRO NAPOLI A PIAZZA NICOLA
AMORE, NAPOLI, ITALY_2013 |
| 38 PARC DES EXPOSITION LUXEXPO
HOLLERICH, LUXEMBOURG_2010 | 64 PIAGGIO MUSEUM PONTEDERA
ITALY_2004 |

- | | | | |
|----|---|-----|---|
| 68 | TBLISI PUBLIC SERVICE HALL
GEORGIA_2011 | 96 | ILOT CANDIE ST. BERNARD, PARIS 11EME
FRANCE, EXPO MODEL_2012 |
| 70 | TBLISI RIKE PARK CONCERT HALL
GEORGIA_2011 | 98 | TUSHINO RESIDENTIAL COMPLEX IN
MOSCOW_ RUSSIA_ 2017 |
| 72 | VERSOVA BANDRA SEA LINK
MUMBAI, INDIA_2018 | 100 | XIAMEN INTERNATIONAL AIRPORT,
CHINA_2016 |
| 74 | LA DEFENSE TOWER
PARIS, FRANCE_2005 | 102 | ART GALLERY EL MARSA
IN TUNISIA_2010 |
| 76 | MASTERPLAN IN BURSA
TURKEY_2005 | 104 | ART GALLERY EL MARSA
TUNISIA_2010 |
| 78 | MECCA JUDICIAL PALACE
SAUDI ARABIA_2009 | 106 | LEARNING RESOURCE CENTER
SFAX_2016 |
| 80 | ZENITH MUSIC HALL
DE STRASBOURG_ FRANCE | 108 | CENTRE DE VIE, UTIQUE ART CITY
UTIQUE_2015 |
| 82 | SCENOGRAPHY FOR MEDIA AND
EDIPO IN COLONO, SIRACUSA_2009 | 110 | UTIQUE CITY OF ART, UTIQUE
TUNISIA_2015 |
| 84 | LUX BANK
LUXEMBOUG_2008 | 112 | LANCIANO STUDENT HOUSE AND
COMMERCIAL MALL, ITALY_2006 |
| 86 | LONDON AQUATIC CENTRE
UNITED KINGDOM_2005 | 114 | MOKE UP OF SATELLITES FOR LRC,
SFAX_2017 |
| 88 | MYZEIL SHOPPING MALL
FRANKFURT, GERMANY_2008 | 116 | VERSARI HOUSE
ROME_2006 |
| 90 | PALAZZO EX SEDE UNIONE MILITARE, H&M
ROMA, ITALY | 118 | FACADE DETAIL FOR BTE BANK
HEADQUARTER, TUNISI_2012 |
| 92 | GAZPROM TOWER
ST PETERSBURG, RUSSIA_2006 | 120 | FACADE DETAIL FOR BTE BANK
HEADQUARTER, TUNISI_2012 |
| 94 | HANGZHOU XIAOSHAN
INTERNATIONAL AIRPORT, CHINA_2007 | 122 | FACADE DETAIL FOR BTE BANK
HEADQUARTER, TUNISI_2012 |

MILANORD AUCHAN_CINISELLO BALSAMO



3D printed parking access ramp



3D printed theme park elements



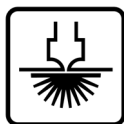
Laser cut pergola



Hand sculpted MDF skate park



Controllable LED lighting



Architect: Chapman Taylor

Client: LSGI Italia Management

Model scale: 1.200

Construction techniques/materials:

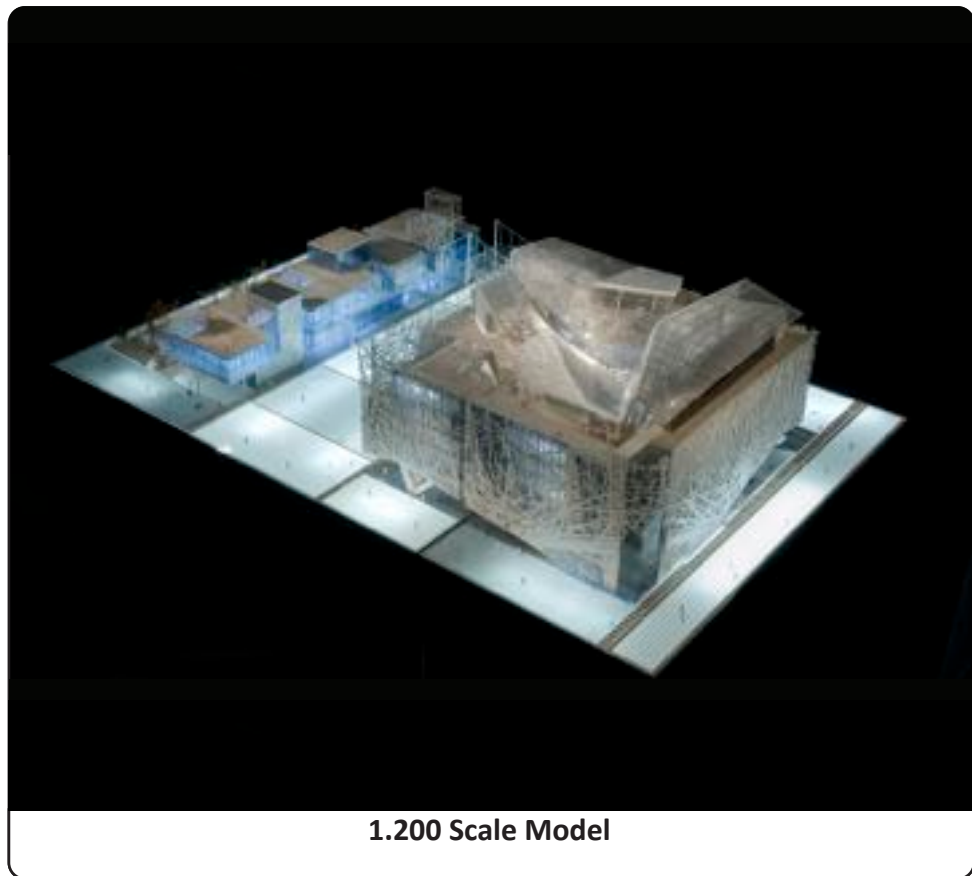
The roof structures are made from thermal formed plexiglass, 3D printing was used for the production of the elements in the rooftop theme park and remote controlled LED lighting is used to highlight each zone of the center.



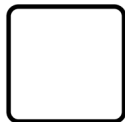
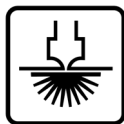




ITALIAN PAVILION_EXPO MILAN 2015



1.200 Scale Model



Architect: Studio Nemesi

Client: Milan Expo 2015

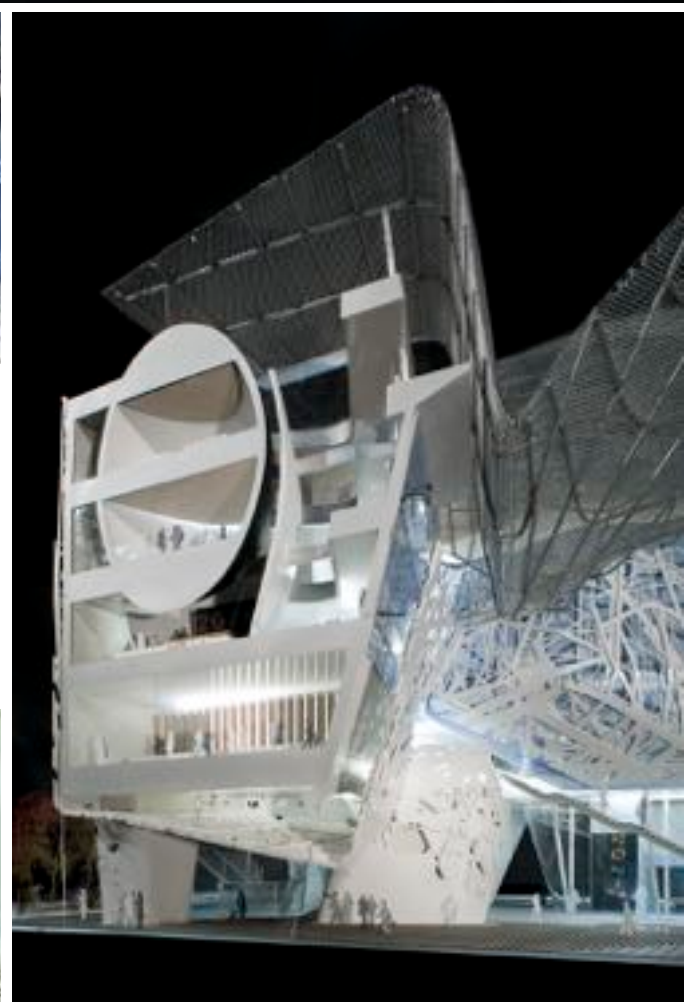
Model scale: 1.200 / 1.50

Construction techniques/materials:

The "basket weave" facade was fabricated with 3D printing, laser cut plexiglass and enhanced with hand made elements. The top roof is thermoformed plexiglass above a soldered brass structure.







PRISTINA CATHEDRAL_KOSOVO



Side elevation of nave and apse



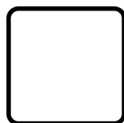
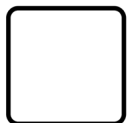
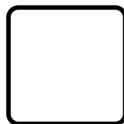
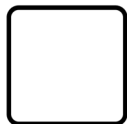
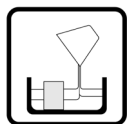
Bell Towers



Repetitive elements such as the courtyard portico were created with a single mould



Cupola created with two moulds



Architect: Bruno Valente
Giuseppe Burastani

Client: Valente Architecture

Model scale: 1.200

Construction techniques/materials:

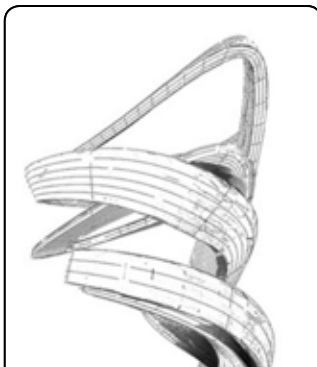
8 unique moulds were created from wood forms, which were used to create the repetitive polyurethane resin facade elements of the model. The external "skin" was attached to a transparent epoxy resin under layer.



ARMANI FIFTH AVENUE N.Y STORE_USA



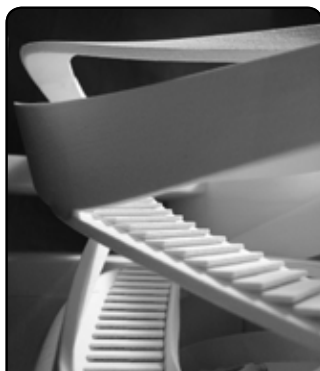
1.200 Scale
Stairs 3D Model



First 3D «sketch»
realized with Rhino



1.20 Scale Model
in plywood bent strips



1.200 Scale Model
General view



1.20 Scale Model
balaustrate in plywood



1.1 Scale
realized stairs



Architect : Massimiliano Fuksas



Model scales : 1.200 to 1.20



Construction techniques/materials :

3d printing from digital file on powder to realize the stairs.

Formed layers of plywood to realize the detail of the stair's railing.

Digital 3D technology make possible to realize all organic shapes and geometry.

ARMANI FIFTH AVENUE N.Y STORE_USA



1.200 Scale
Stairs 3D Model



First 3D «sketch»
realized with Rhino



1.20 Scale Model
in plywood bent strips



1.200 Scale Model
General view



1.20 Scale Model
balaustrate in plywood



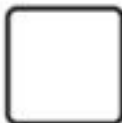
1.1 Scale
realized stairs



Architect : Massimiliano Fuksas



Model scales : 1.200 to 1.20



Construction techniques/materials :

3d printing from digital file on powder to realize the stairs.

Formed layers of plywood to realize the detail of the stair's railing.

Digital 3D technology make possible to realize all organic shapes and geometry.



1.200 Scale Model General view

BEIJING WAIJING SOHO TOWERS_CHINA



1.200 Scale Model
Perspective



Cladding and
Slabs details



1.200 Scale Model
Perspective



1.200 Scale Model
General view



Architect : Massimiliano Fuksas



Model scale : 1.200

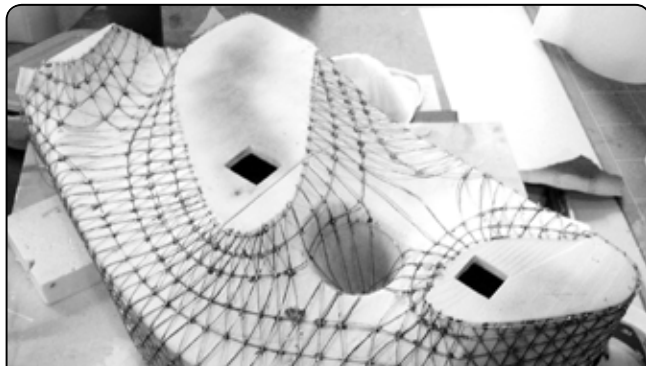


Construction techniques/materials :
Laser cutting to realize white plexiglass slabs
transparent plexy and brass treatment on fa-
cades panneling.
Panel's surfaces are colored with a special
epoxy double component resin. Trees are in
natural foam.



1.200 Scale Model General view

CARREAU DES HALLES IN PARIS_FRANCE



Positive template to form the steel wire structure



Wire brass structure



View of facade



General view interior of the model



Architect: Massimiliano Fuksas

Model scales: 1.200

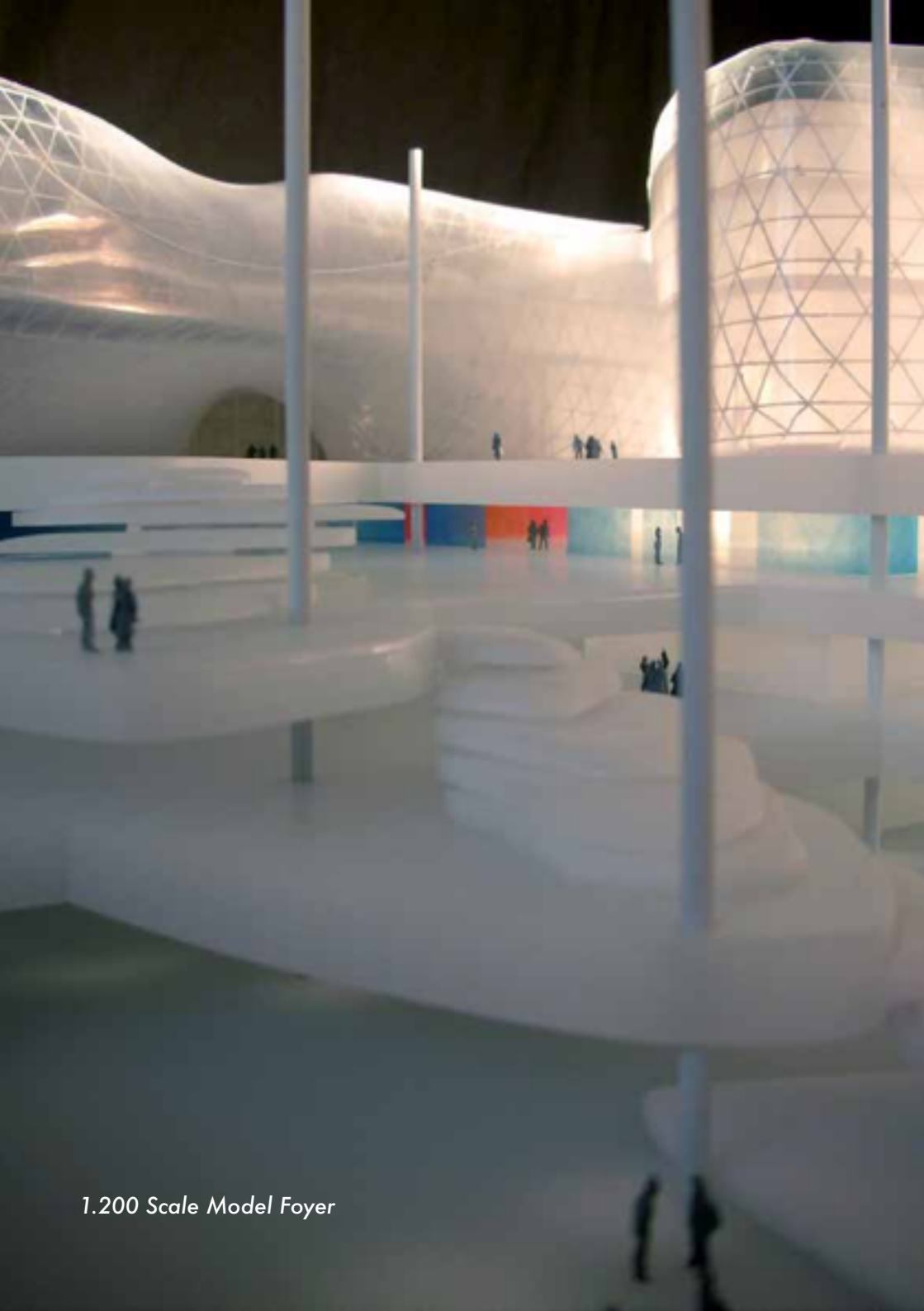


Construction techniques/materials:

Foam sculpting, plaster cast on silicon mold, PET sheet thermoforming, reverse engineering and 3D printing.



Metal profiles tin settled, engraving and lasercutting, are used to realized the mesh structure and slabs.



1.200 Scale Model Foyer

CARREAU DES HALLES IN PARIS_FRANCE



Epoxy resin copy of the original shape
in foam handmade



Cosa ci mettiamo
modificazione forma

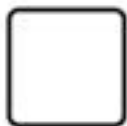


Modification of the volume with synthetic mold



Architect: Massimiliano Fuksas

Scale Model: 1.500



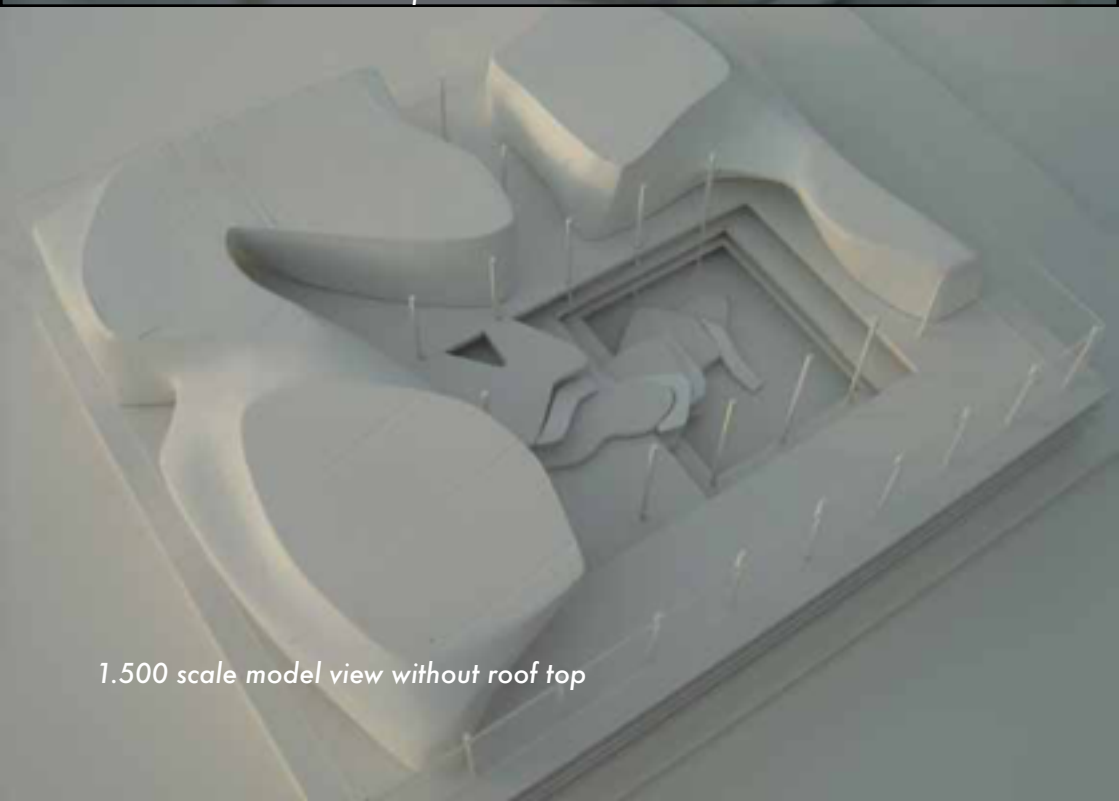
Construction techniques/materials:

Foam sculpting, plaster cast on silicon mold,-
PET sheet thermoforming, reverse engineering
and 3D printing. Engraving and lasercutting
to build transparent facade in plexyglass. All
the shapes used to thermoforming are made
in manual foam sculpting process.





1.500 scale model roof top



1.500 scale model view without roof top

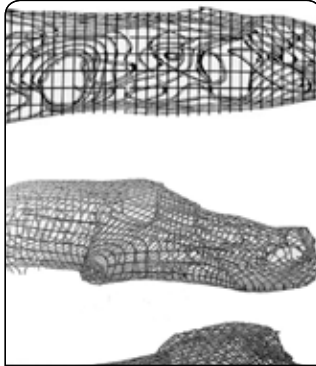
CENTRO CONGRESSI EUR_ THE CLOUD_ROMA



1.50 section detail of auditorium shell



1.50 detail of stainless steel structure and mullions



3d frame of cloud's structure



1.50 scale model general view



Architect: Massimiliano Fuksas

Model scale: 1.200 to 1.50

Construction techniques/materials:

Plywod CNC and band saw cutting wooden profiles, plexyglass engraving with laser, PET thermoforming on wood solid, gypsum mold and resin casting on silicon mold.



Auditorium external structure view

FEDERAL NATIONAL COUNCIL COMPLEX_U.A.E



1.500 scale model
general view



1.200 scale model
view on main hall



Honeycomb structure
used as a template



1.200 scale model section of building



Architect: Massimiliano Fuksas



Scale Model: 1.200 to 1.500.

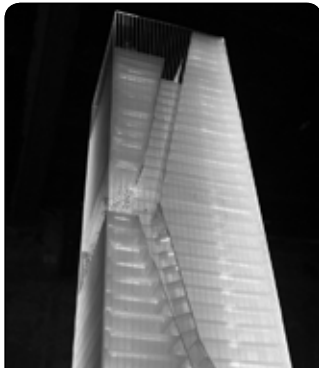


Construction techniques /materials:
CNC lasercutting and engraving on transparent plexyglass.
Powder bed 3D printing for volumetric scale model 1.500, plywood, brass coating for the facades panneling.
Palms trees hand main in polystyrene.

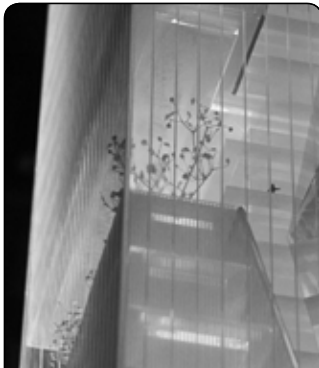


1.500 scale model bird view.

GOUSEN SECURITIES TOWER_SHENZHEN_CHINA



1.200 scale model
general view



Detail on
winter garden



View on
entrance hall



1.200 scale presentation model



Architect: Massimiliano Fuksas



Model scale: 1.100



Construction techniques/materials:

Cnc laser cutting with engraving on transparent plexiglass.

Internal cores are made in frosted plexy-glass, slabs are settled in position with these.

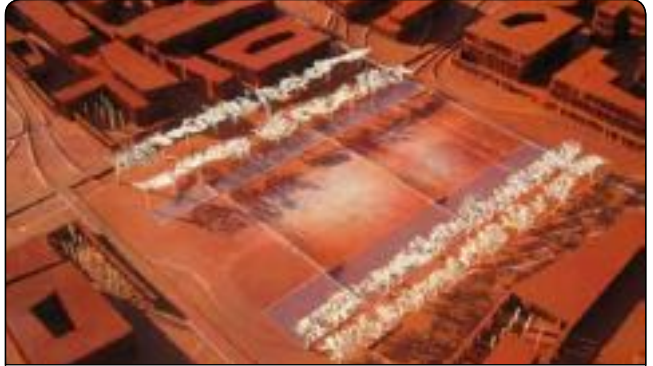


1.200 scale model perspective view.

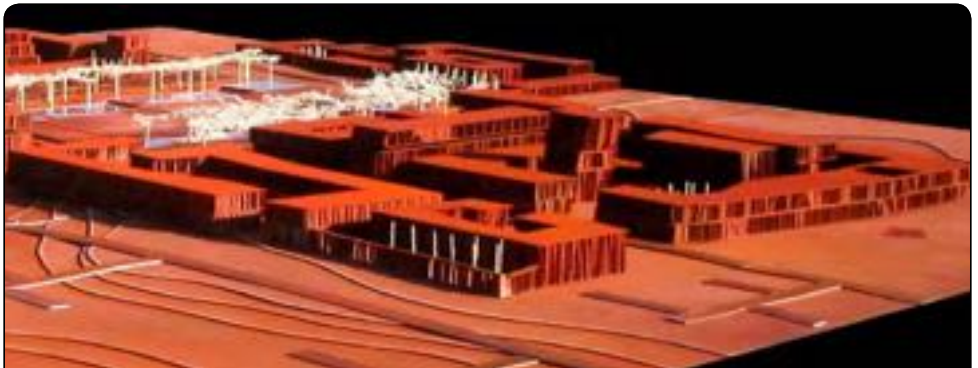
NELSON MANDELA UNIVERSITY CAMPUS _ABUJA



Detail view on court garden



Nelson Mandela Square



1.500 scale model general view _masterplan



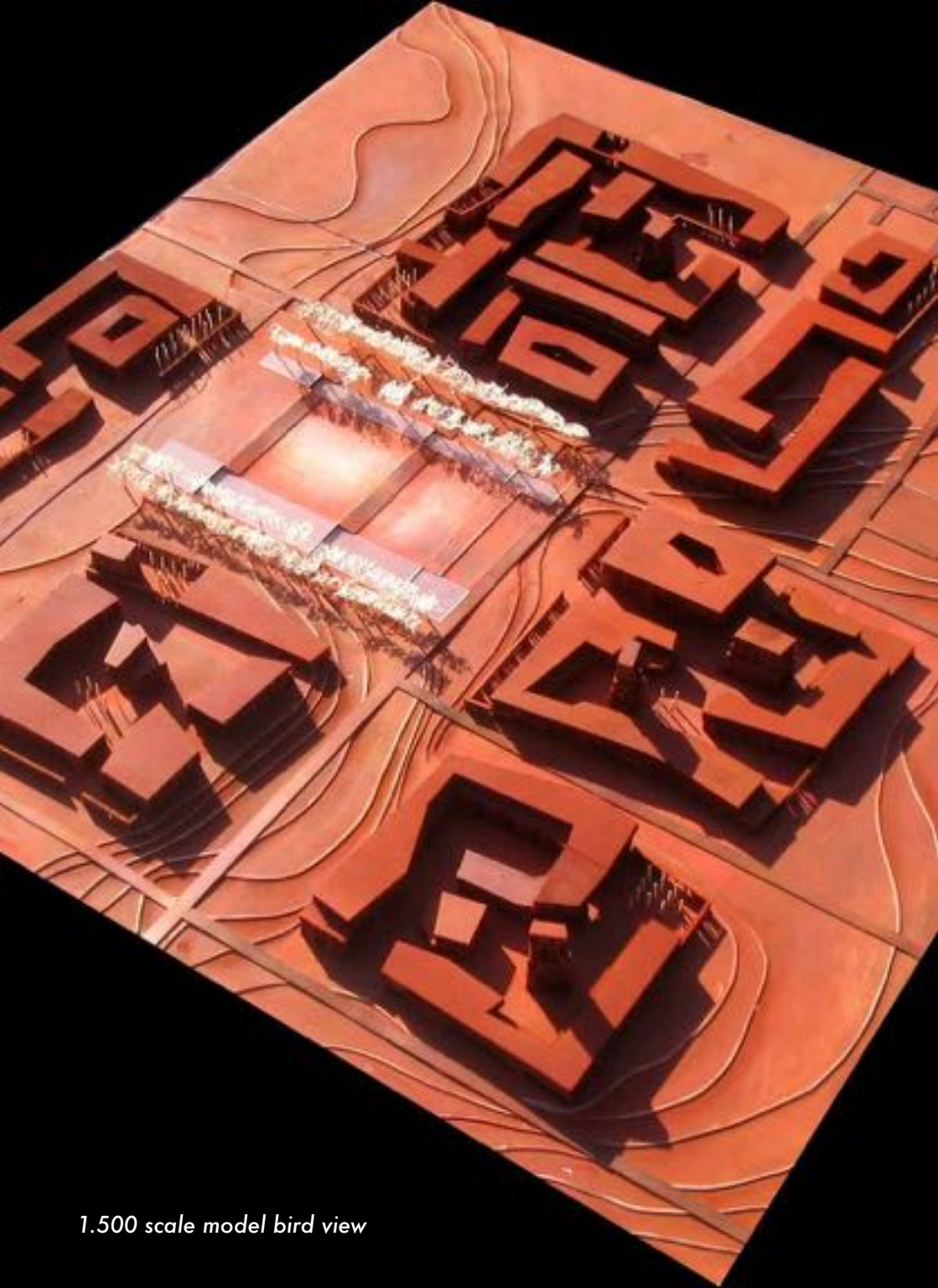
Architect: Massimiliano Fuksas

Model scales: 1.500



Construction techniques/materials:
Cardboard, forex, honeycomb cardboard.
Color techniques rusty corten effect.
The modulation of the color on the base that simulate the terrain
Is given by sand down the cardboard previously treated with water colors.





1.500 scale model bird view



1.1000 scale model: bird view



Architect: Massimiliano Fuksas

Scale Model : 1.1000



Construction techniques / materials :

Laser cutting to realize the all contour of the terrain levels.

CNC technology used to build the volumetric building of the masterplan.

the whole model is special painted with white concrete effect.



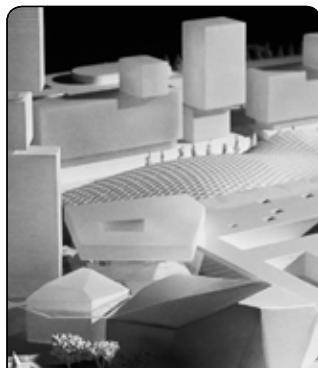


1.1000 scale model masterplan

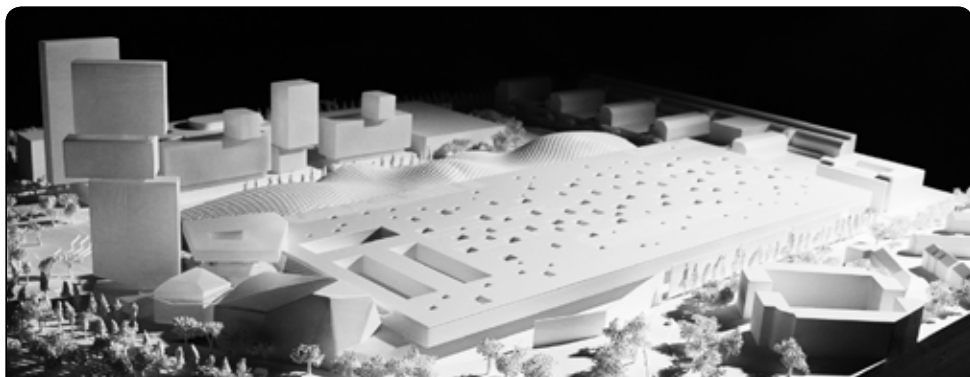
PARC DES EXPOSITION-LUXEXPO _HOLLERICH



1.500 scale model



Detail building



1.500 scale model bird view



Architect: Massimiliano Fuksas

Scale model : 1.500

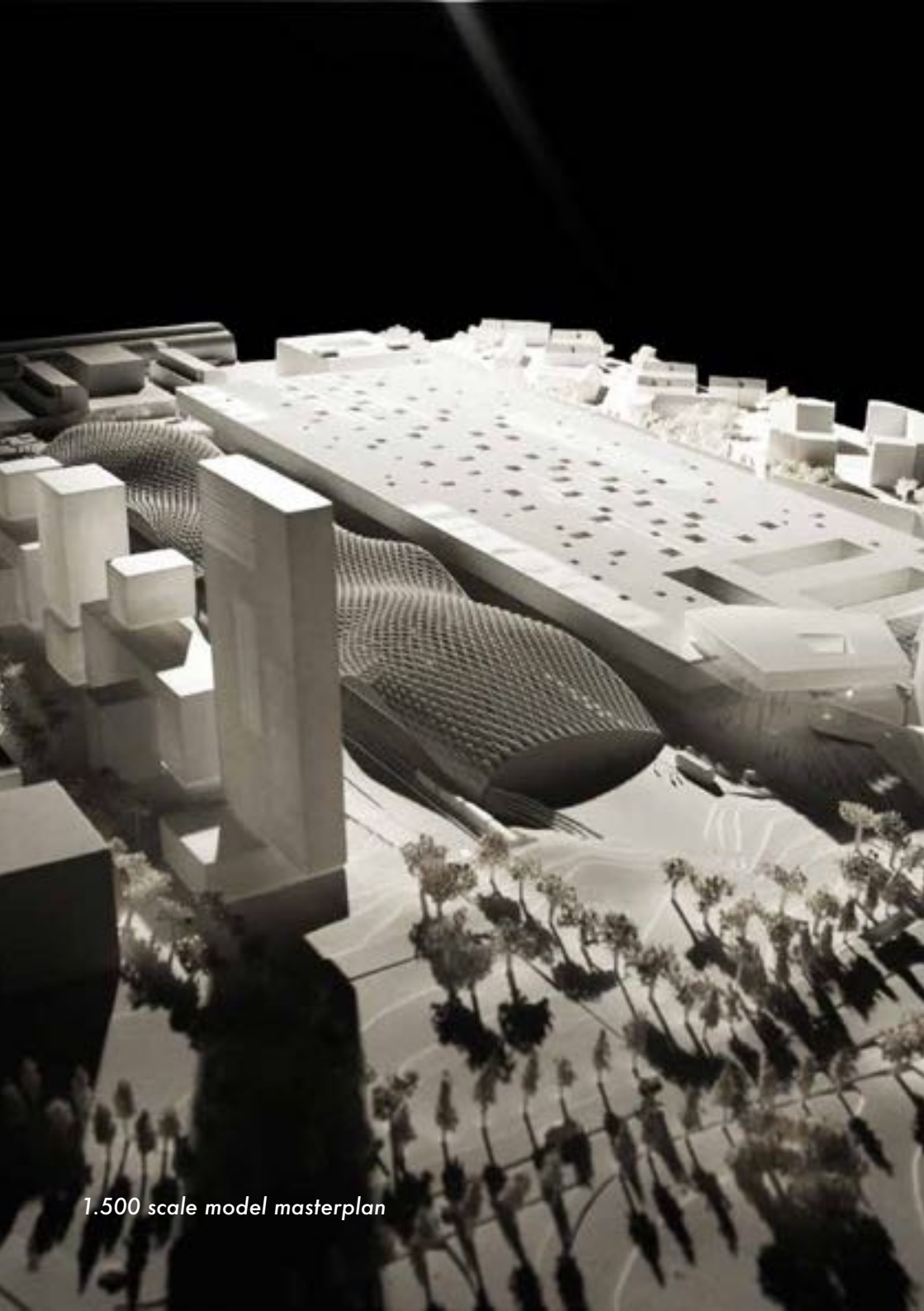


Construction techniques/ materials:

The general model is a volumetric assembly, treated with solid material and colors.

3D printing from digital file is used to realize the main building with skylight, and the mesh of the organic building is a mesh of nylon printed. The composition of green is made with plant tissue.





1.500 scale model masterplan

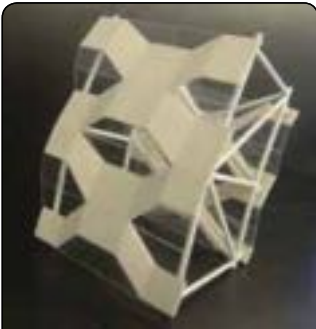
Shenzhen Bao'an International Airport_China



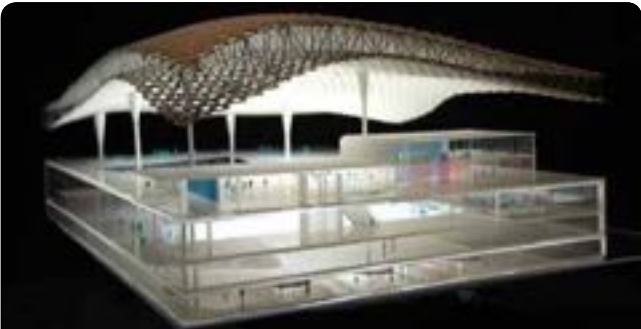
Detail of facade



An aerial view of the concourse



1:50 concourse facade: external honeycomb skin study model,



1:100 Terminal presentation model



Architect: Massimiliano Fuksas

Model scales: 1:100 to 1:20

Construction techniques/materials:

tin welded brass profiles on wood layers mold honeycomb paper to simulate the outern skin of the terminal and concourse. 3D printing technology in ABS mate,CNC laser cutting on plexiglass and reverse engineering. Display animation is made with colored printed adhesive layers.



A picture of the inner honeycomb



Concours presentation model 1:100



3D printed model at 1.500 scale



Vilnius Hermitage Guggenheim Museum_ Lithuania



Scale model 1.500



View to the inner space from the skylight



Study model of the shape



Scale model 1.500 general perspective on the river



Architect: Massimiliano Fuksas

Model scale: 1.500



Construction techniques/material:

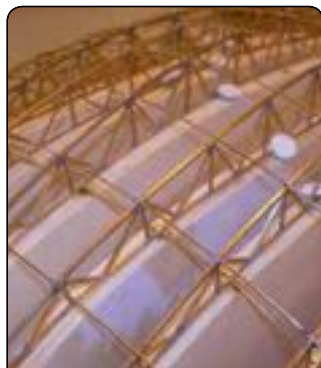
3D printing on powder , Pet thermoforming on 3d solid, plexyglass engraving for the skylights Reverse engineering to obtain a point cloud of the hand made shape of the shells,after optimization with 3d rhinoceros software for the final 3d printing. CNC lasercutting.





Scale model view on the river 1.500.

ZÉNITH ARENA DE L'ILE DE LA RÉUNION



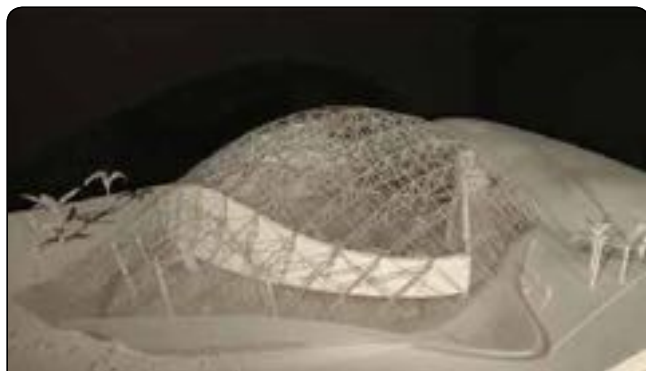
Beam roof structure



Solid shape to thermoforming the skin



Welding and assembling phase



1.200 Scale Model General View of the structure system



Thermoformed polyester sheet on 3d mold

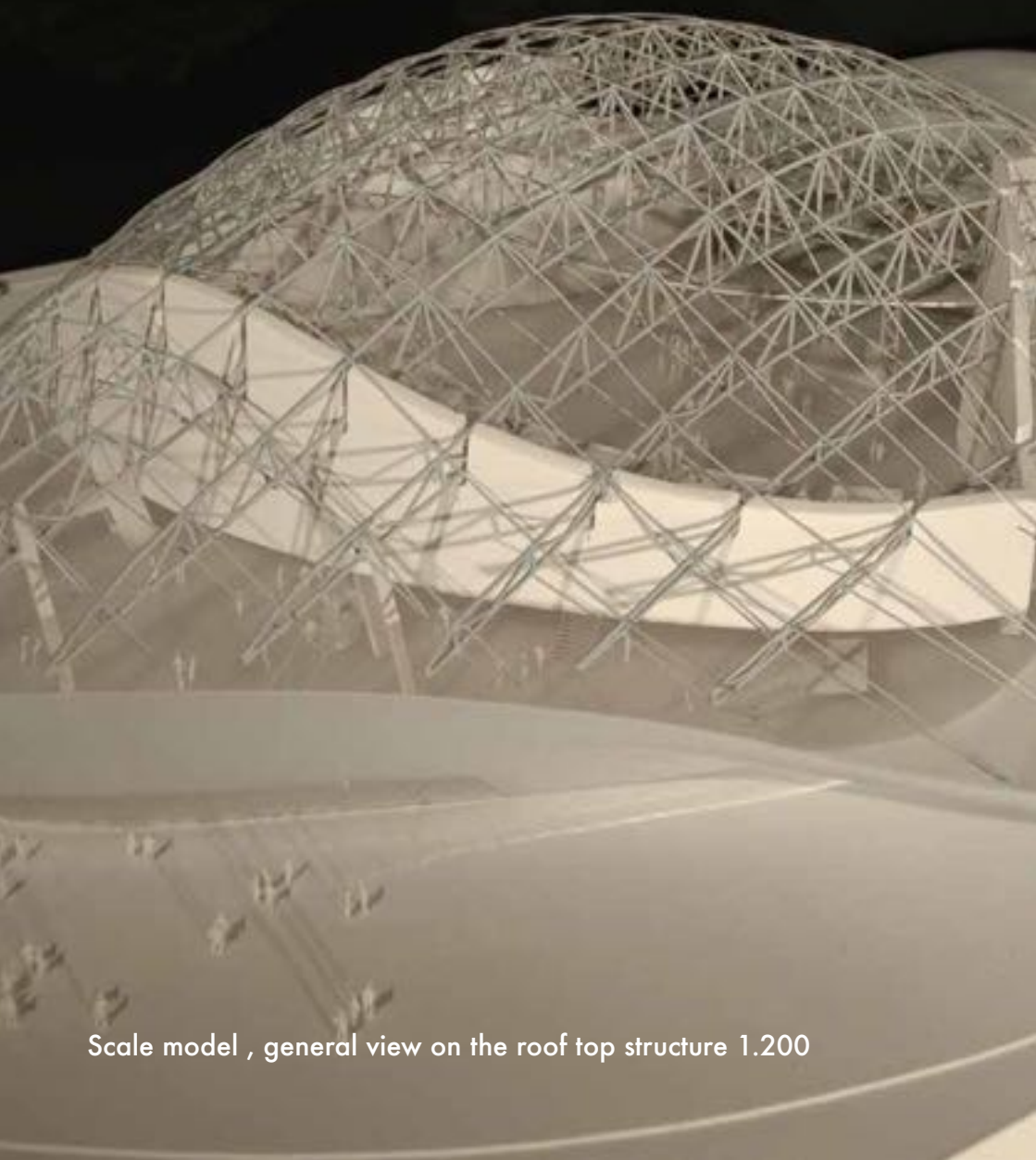


Architect: Massimiliano Fuksas

Model scale: 1.200

Construction techniques/ materials:

Foam sculpting, plaster cast on silicon mold
Pet sheet thermoforming on solid volume, metal profiles tin welding, lasercutting. The main shape is sculpted on high density foam by hand, and the final solid is copied in silicon mold with epoxy resin to obtain an hard part to be used for thermoforming the roof skin.



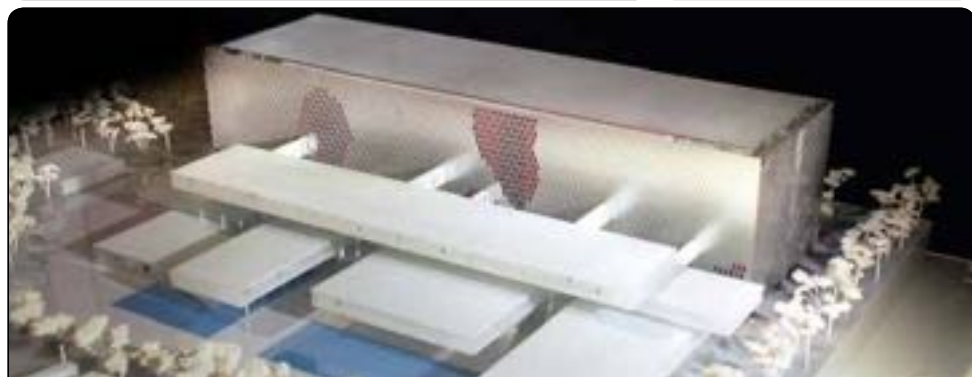
Scale model , general view on the roof top structure 1.200



1.200 Scale model bird view



Detail of the mirror facades



1.200 Scale Model



Architects: Massimiliano Fuksas

Scale Model: 1.200



Construction techniques/materials:

The complex of building is realized with plexyglass where engraving and lasercutting are the main used techniques.



The coloring of the main volume give a special mirror effect to the facades, characterized by the reflection of the smaller volume-try on it.



1.200 Scale Model detail on cladding

SHENZHEN TOWER COMPETITION_CHINA



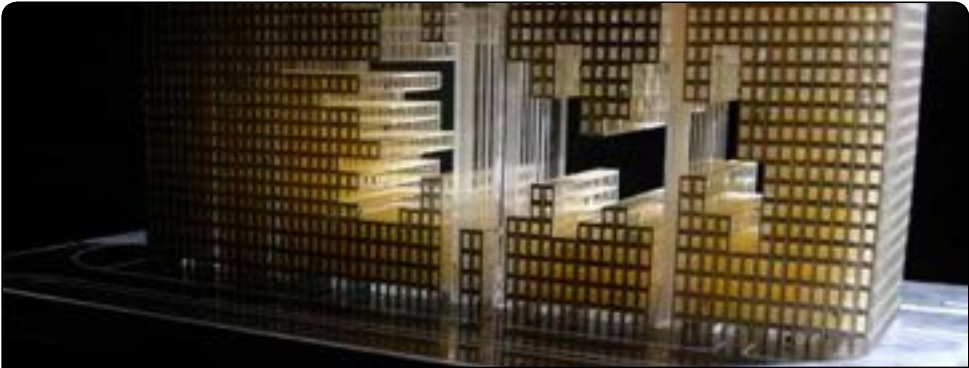
View on the void



lifts detail



facade pattern



1.200 Scale Model

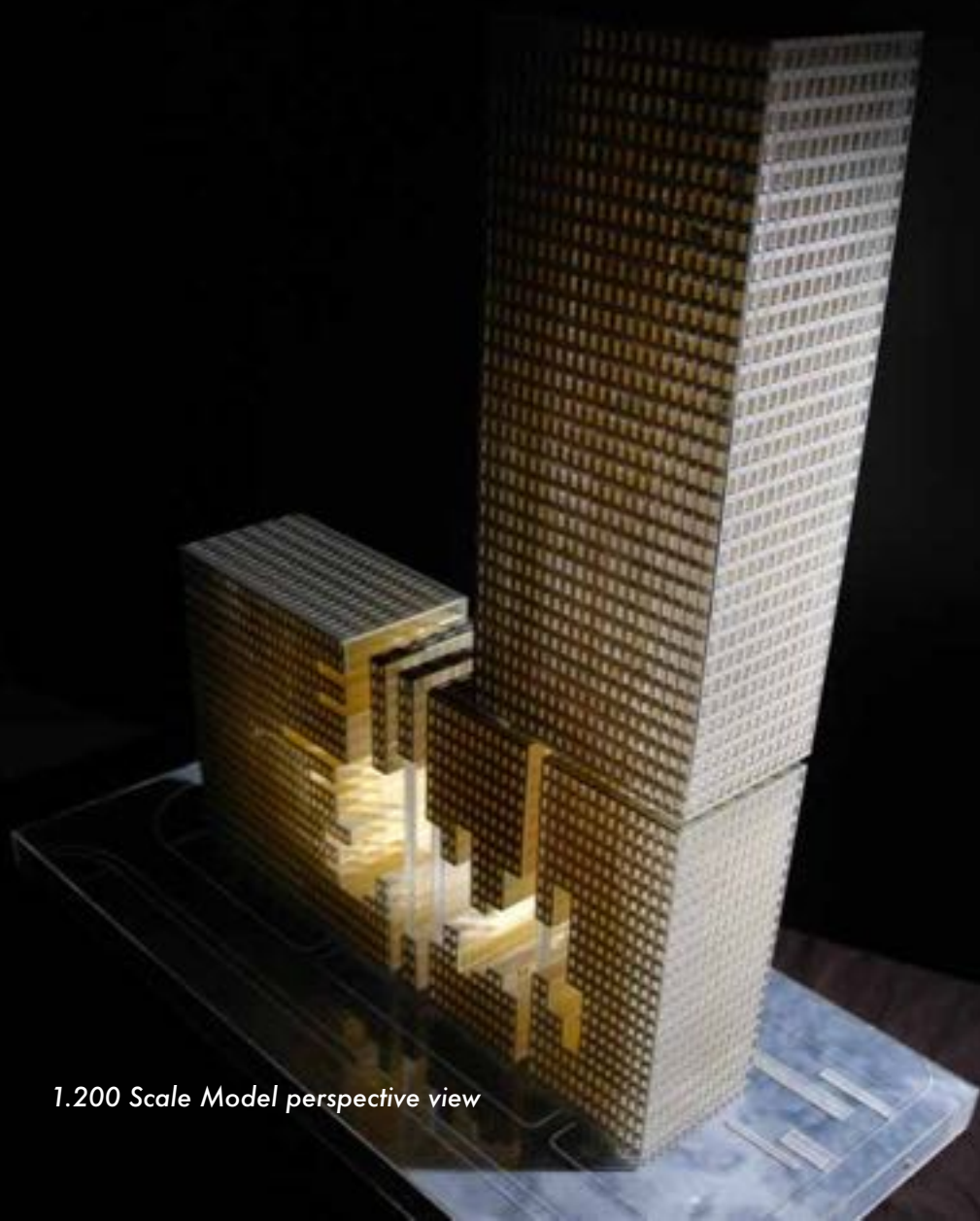


Architect: Massimiliano Fuksas

Scale Model: 1.200

Construction techniques/materials:

The model is made of transparent and colored plexyglass, all the facade are lasercutted, as the inner slabs and lifts shafts. Those are in solid plexyglass with milled grooves. The color effect is different from the inside part of the model and the external definition of the facades to create a better intensity and contrast. The masterplan is graven on transparent plexy overlaid on a colored printed layer.



1.200 Scale Model perspective view

LEUVEN MUSEUM OF ART_BELGIUM



1.500 scale model



Detail on skydome



1.500 scale model view on the water



Architect : Massimiliano Fuksas

Scale model : 1.500

Construction techniques/ materials:

The initial geometry of the project was made with plasticine, than with a molding techniques in silicon rubber the same shape was copied, to obtain a final and rigid artefact. All the facade pattern was realized with honeycomb cartboard section. The building and all the model after was treated with a matte watercolor to give it a uniform final image, and emphasize shadows and volumetry



1.500 Scale Model perspective

CONGQUING INTERNATIONAL AIRPORT_CHINA



Detail of the beam



Welding process on ribs



Section of 1.200 model



1.200 Model general perspective



1.200 model detail view on concourse



Architect: Massimiliano Fuksas

Scale model: 1.200



Construction techniques/ materials:

The main skin of the terminal structure is realized with a 3D printing from digital 3D files. The frame structure is welded on a referenced template realized in section of plywood Slabs and interior is realized with lasercutting of white matte plexyglass.





1.1000 Scale Model General Masterplan

DUBAI GLOBAL CONNECTION _U.A.E



1.1000 Scale model masterplan side view



Detail on congress center

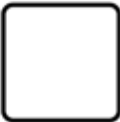


1.1000 Scale model perspective



Architect: Massimiliano Fuksas

Scale model: 1.1000



Construction techniques/ materials:

The model is realized with frosted solid plexi-glass back light with led system. Band saw and parterre treatment of the masterplan is realized with lasercutting and engraving. Green system of trees is made with syntetic foam hand made.



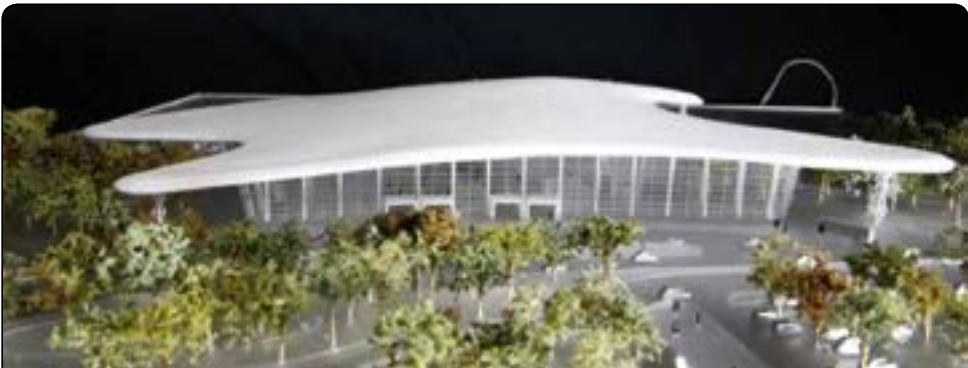


1.1000 Scale Model Masterplan top view

GELENDZHIK AIRPORT IN GELENDZHIK_RUSSIA



1.500 scale model_ general roof top view



1.500 scale model parking view and main entrance to the terminal



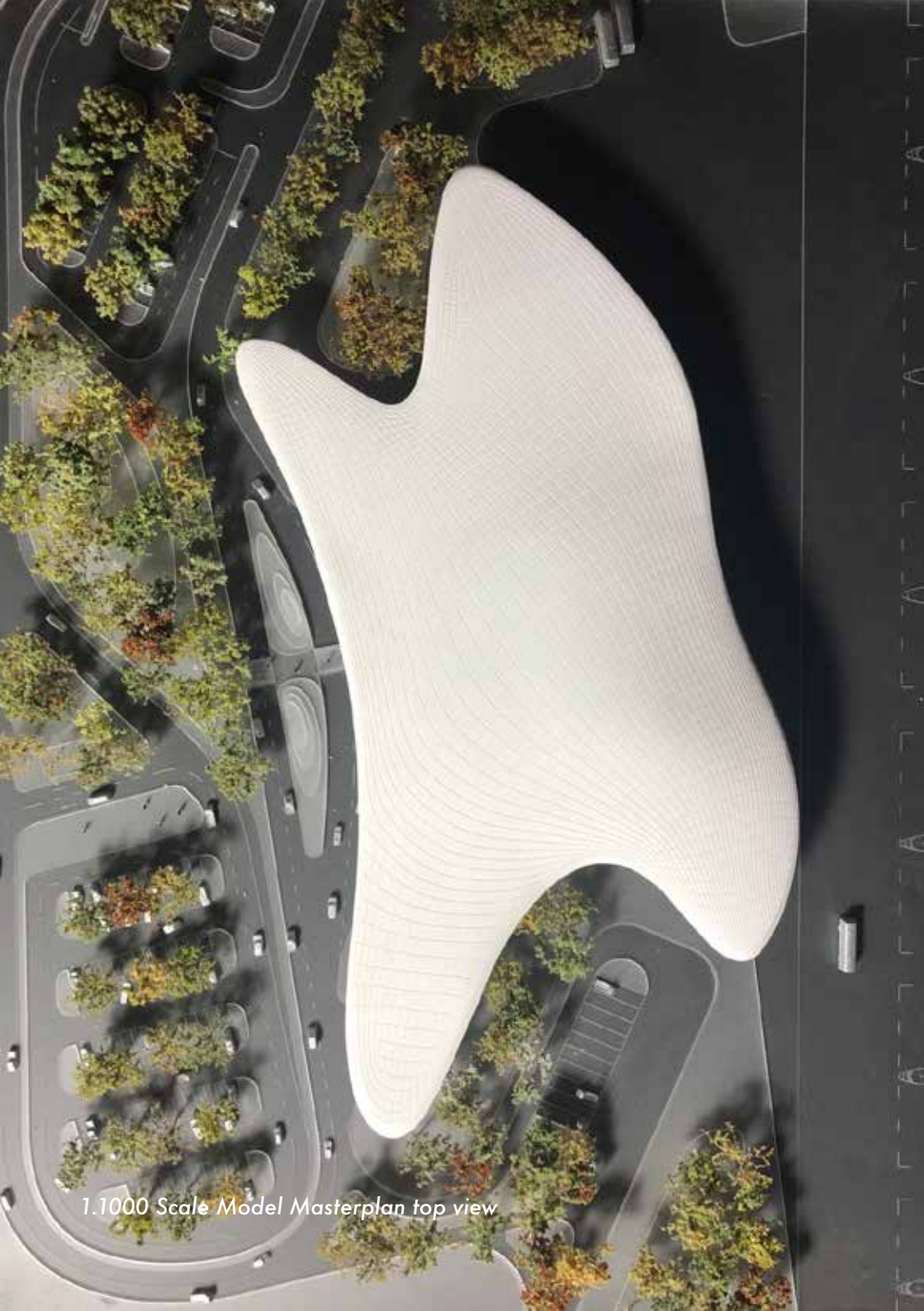
Architect: Massimiliano Fuksas

Model scale: 1.500



Construction techniques/ materials:
3D printing from digital file to realize the positive shape of the roof skin. PET thermoforming, engraving for roof pattern of white plexyglass sheet. Thermoformed ribbon of transparent plexy to realize the facade geometry. Green treatment with natural moss.





1.1000 Scale Model Masterplan top view

IS MOLAS GOLF RESORT PULA _ITALY



View of the canopy



View on the swimming pool



1.50 scale model _ general view



detail of columns



Architect : Massimiliano fuksas

Scale model : 1.50

construction techniques/ materials:

The volumetry of the complex is realized with hand sculpting techniques on rigid foam. After a copy of the singular pieces in silicon rubber mold, the element was colored with a special treatment to age the surface.

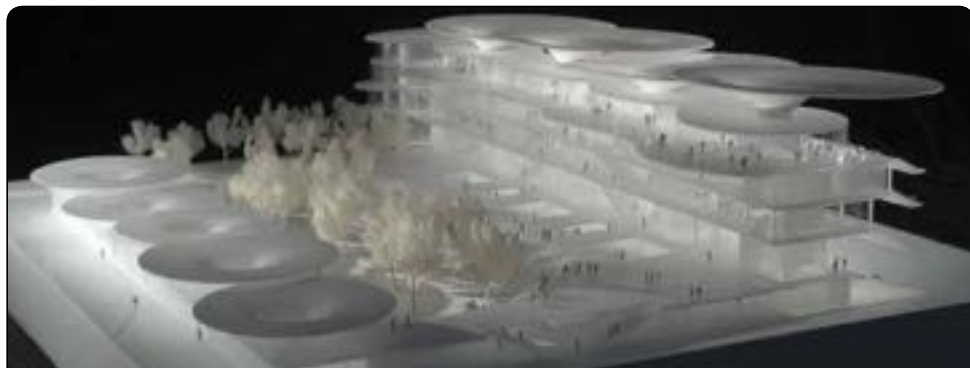
The canopy and structure are built with wooden profile and vegetable essences.





1.50 Scale Model detail on canopy and swimming pool

HIPPODROME PARIS LONGCHAMP_FRANCE



1.200 scale model_ general view on grandstands



1.200 scale model top view

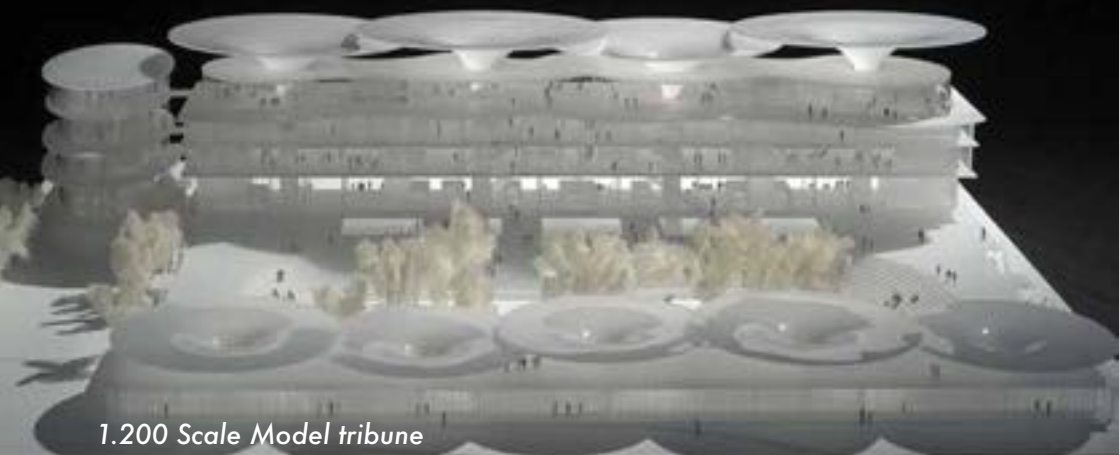


Architect : Massimiliano Fuksas

Scale model : 1.200

Construction techniques/ materials:

Technique of CNC lasercutting, thermoforming, and 3D printing to realize the umbrellas of the tribunes were adopted. All the green arrangement were made with special syntec foam and profile in pvc to realize the trees. Lasercutting and engraving of transparent plexy were used for slabs cutting and the enclosure. A particular coloring on plexyglass were done, to create different gradient of transparency with a white tonality

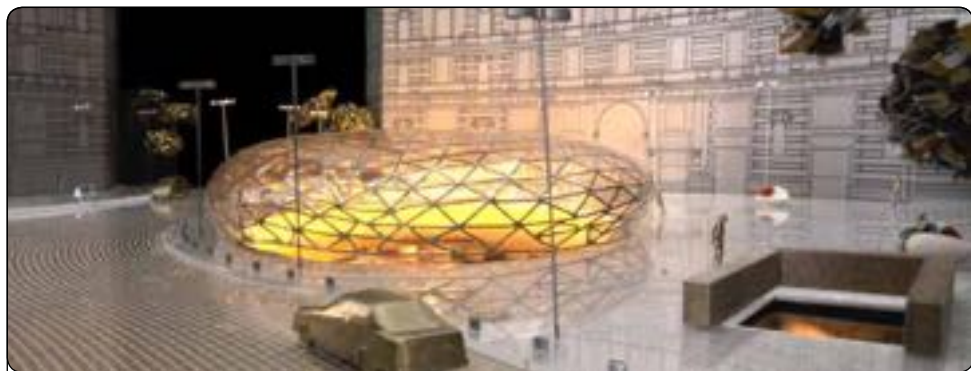


1.200 Scale Model tribune



1.200 Scale Model general perspective

METRO NAPOLI A PIAZZA NICOLA AMORE_ITALY



1.50 Scale Model



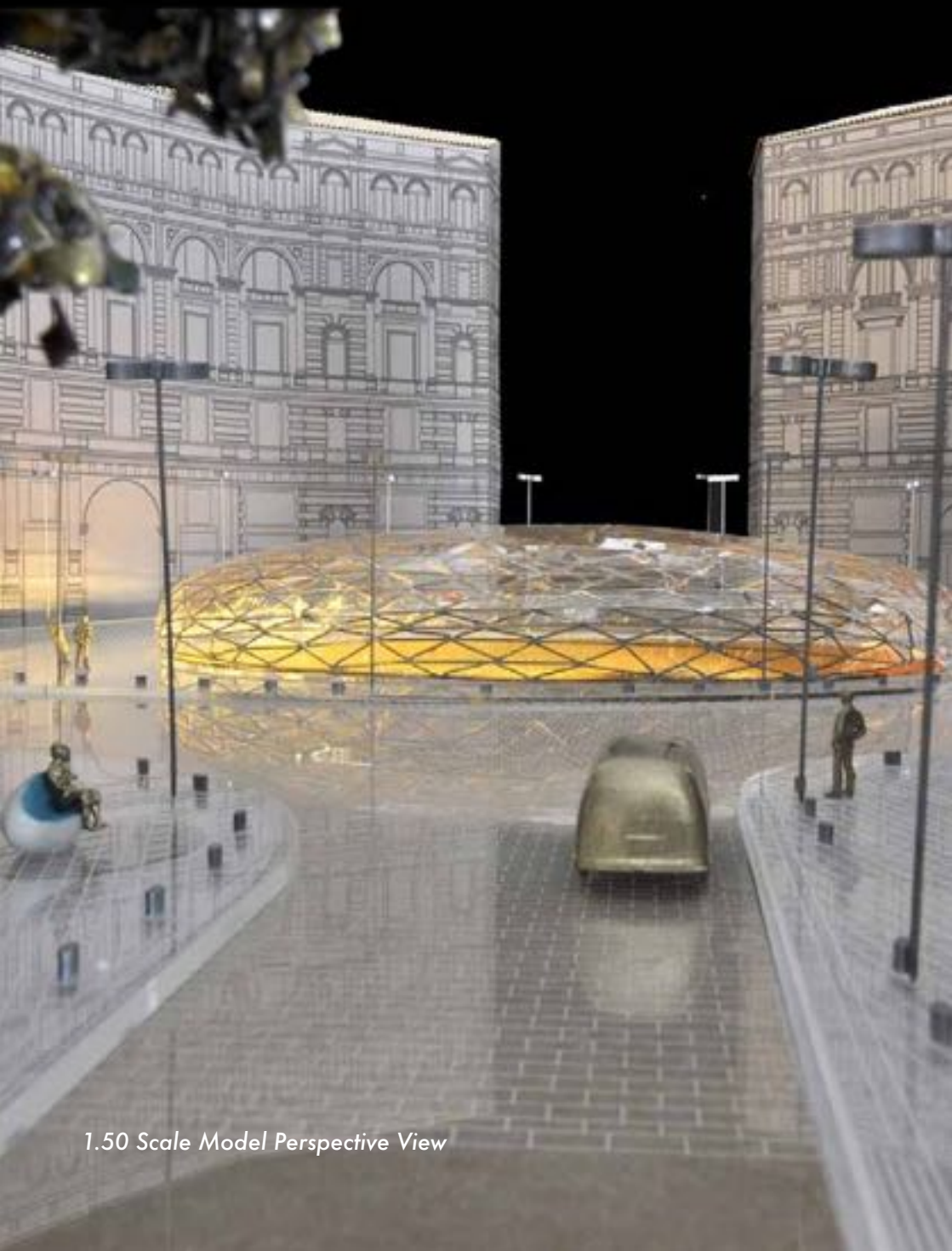
Architect: Massimiliano Fuksas

Scale Model: 1.50

Construction techniques /materials:

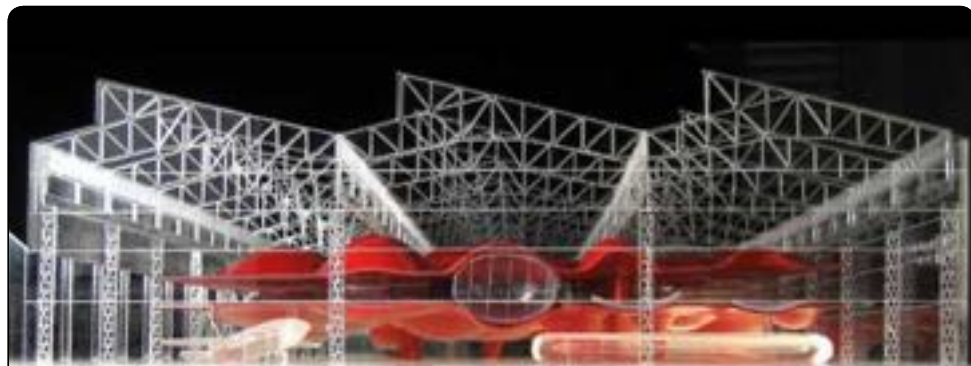
Engraved plexyglass on printed colored and texturized sheet for pavement design of the square. The transparent dome is built with a weld brass wire to represent the structure, and PET thermoforming on a rigid 3D printed mold.

Trees are realized with gold tin foil.

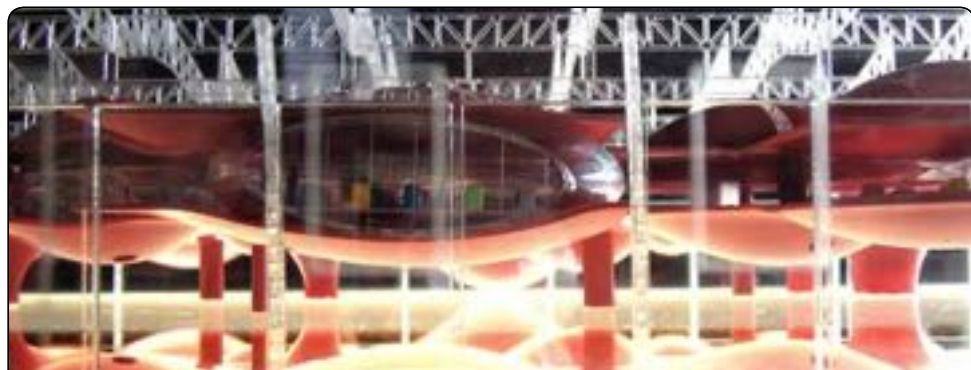


1.50 Scale Model Perspective View

PIAGGIO MUSEUM PONTEDERA_ITALY



1.200 scale model general view



1.200 scale model detail on the double skin

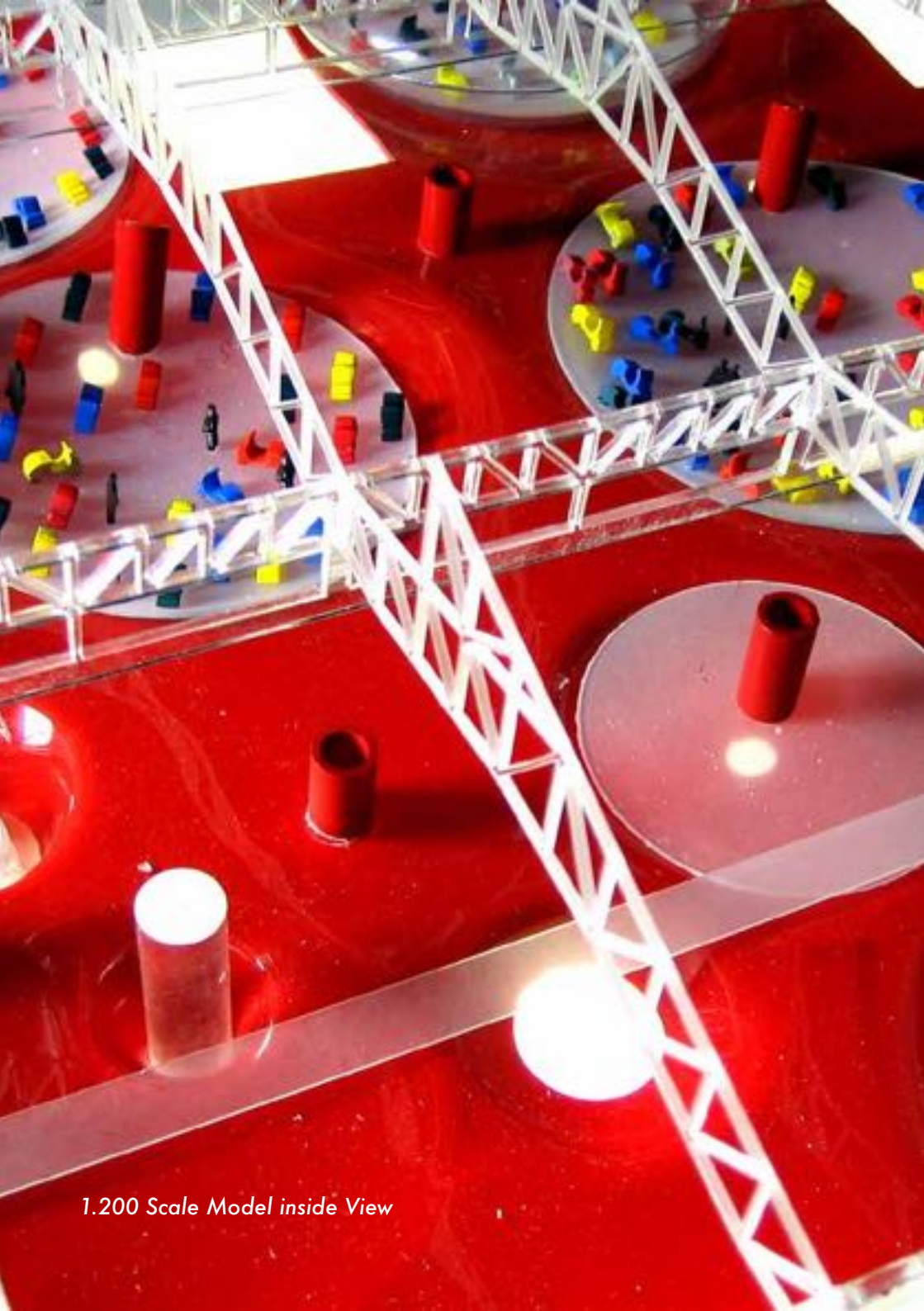


Architect: Massimiliano Fuksas

Scale Model: 1.200

Construction techniques /materials:

The double cover which defines the space of the project, is made with thermoforming of PET sheets, lasercutting is used to reproduce all the beams structure of the industrial existing hangar, where the project is positioned. All the furniture and animation is lasercutted on closed plexiglass.

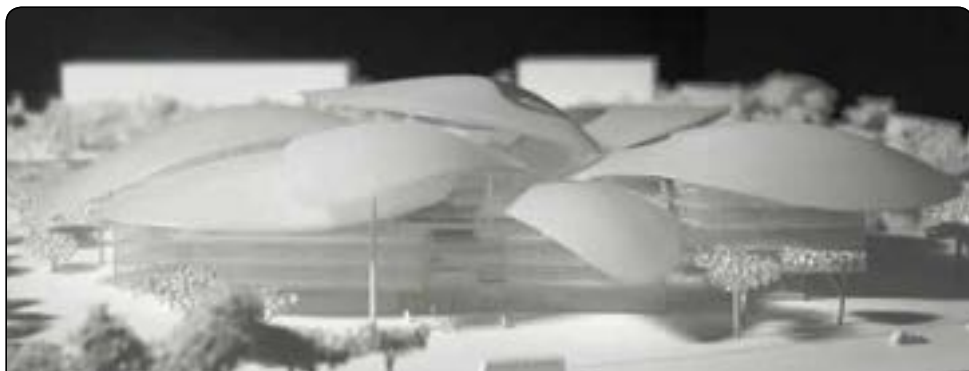


1.200 Scale Model inside View

TBILISI PUBLIC SERVICE HALL_GEORGIA



1.200 scale model perspective



1.200 scale model_ general masterplan view



Architect: Massimiliano Fuksas



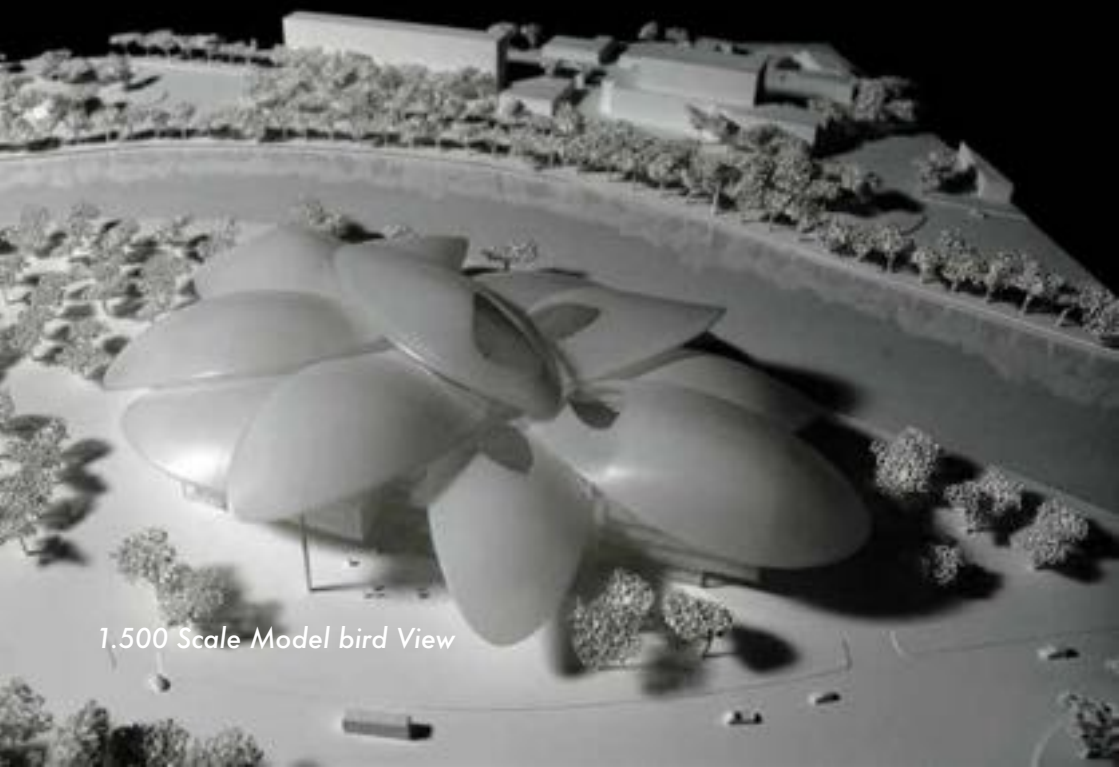
Model scale: 1.200



Construction techniques/ materials:

The leaves of the roof top are made with 3D printing technologies, the main structure in brass profile colored.

Transparent plexyglass is used for main facade graven with laser technology.



1,500 Scale Model bird View

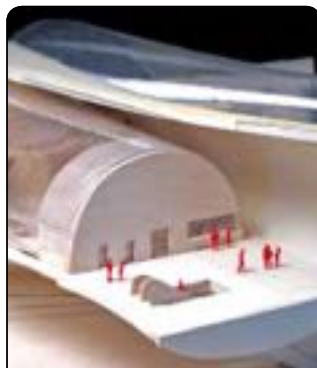
TBILISI RIKE PARK CONCERT HALL_ GEORGIA



Detail on the eye



View of the main entrance



Open section of model



1.200 scale model_ general perspective



Architect: Massimiliano Fuksas

Scale Model: 1.200



Construction techniques / materials:

The complex geometry of this project, is realized with 3D printing and thermoforming of the transparent part on a solid mold realized with same techniques.



The steel structure is build with small brass profiles.

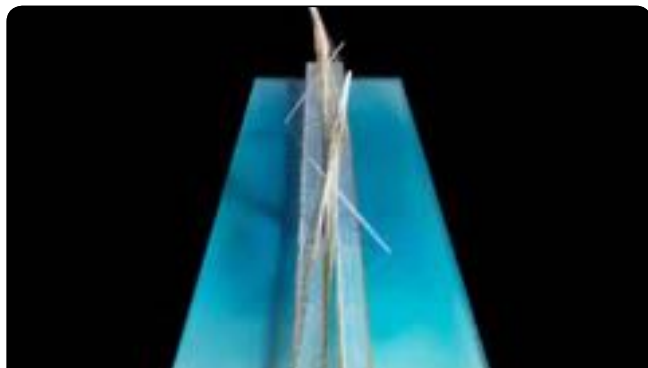


1.200 Scale Model General view

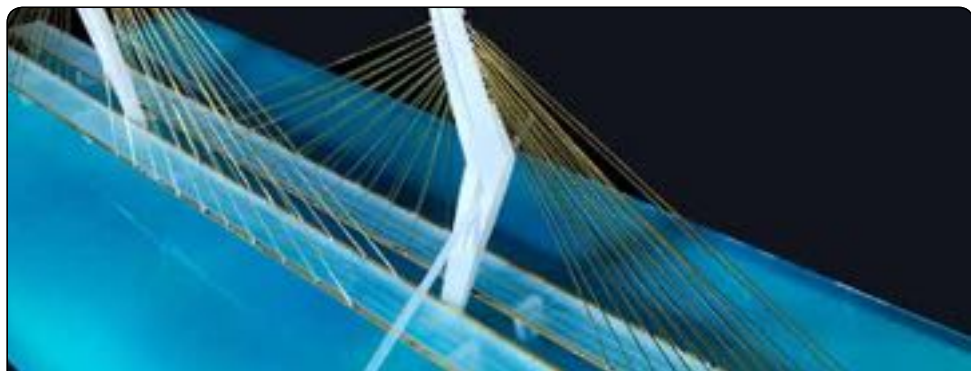


1.200 Scale Model detail on foyer

VERSOVA BANDRA SEA LINK MUMBAI_ INDIA



1.500 scale model perspective



1.500 scale model side view



Architect: Massimiliano Fuksas



Model scale: 1.500



Construction techniques/ materials:

The main structure is realized in brass wire, as the big pylons in frosted massive plexyglass. treatment of water is closed on double layer of transparent plexyglass. To give a deep realistic impression to the simulated river.



1.500 Scale Model perspective on the river

LA DEFENSE TOWER PARIS _ FRANCE



1.200 scale model



View of the solid shape



Veawing structure



Architect: Massimiliano Fuksas

Scale Model: 1.200

Construction techniques/materials:

3D printing on bed powder, were used to realized the plaques to compose the total shape of the two towers element.

On this shell were built the strucutal system of mul-
lions welding brass profile. The volume obtained
with 3D printing were necessary to thermoforming
the trasparent external skin.



1.200 Scale Model structure and piazza

MASTERPLAN IN BURSA _TURKEY



1.100 Scale model _Building view



1.1000 Scale model _Masteplan



Architect: Massimiliano fuksas

Scale Model: 1.1000

Construction techniques/material

The general masterplan is entirely realized in laminated wood to realize the levels contour of the terrain and solid wood for existing area building, the material is cutted with bandsaw. Project building are made in solid frosted plexyglass.

The system of green is realized with natural brushes colored with water color.





1.1000 Scale Model Solid plexy buildings

MECCA JUDICIAL PALACE_ SAUDI ARABIA



1.200 Scale model
detail of 3D printed mesh



The shell contains the slabs



Rendering General building view



Architect: Massimiliano Fuksas

Scale model: 1.500



Construction techniques/materials:

The shape is realized with high density foam hand embossed, after the element have been scanned with a reverse engineering technology (laser scan) to realize on the virtual shape parameter the steel design structure with rhinoceros 3d software.





1,1000 Scale Model mesh of roof skin

ZENITH MUSIC HALL DE STRASBOURG _ FRANCE



1.200 Scale model _ General view



Detail on the skin geometry



Structural roof detail



Architect: Massimiliano Fuksas

Scale Model: 1.200

Construction techniques / materials:

The external skin of the building composed of steel rings that tent a neoprene fabric, is realized in 3D printing technology.

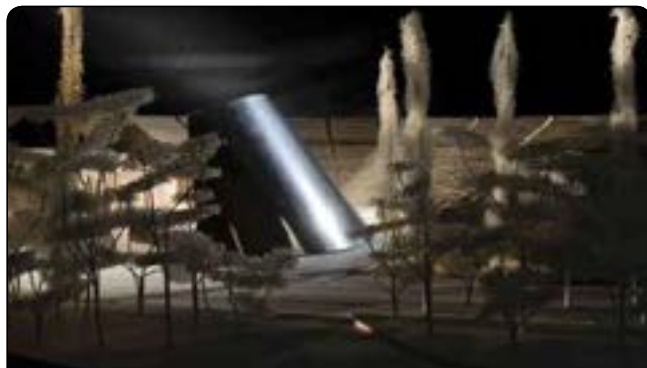
The internal structure of the roof system and the pillars on the facade are made with welded steel profile painted.

Engraving and lasercutting for the tribune.



1.200 Scale Model piazza and facade view.

SCENOGRAPHY FOR MEDIA AND EDIPO IN SIRACUSA



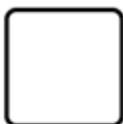
1.100 Scale model view of the steel stage



Detail of paving



1.100 Scale model general view of the anfiteatre



Architect: Massimiliano Fuksas

Model Scale: 1:100

Construction techniques/ materials:

The existing part of the roman theater amphitheater is made in solid wood as the tribune. To reproduce the trees and green, synthetic foam were used ,trees are handmade.

The reflective mirror surface of the stage is realized with pvc thick mirror sheet folded on a structure.





1.100 Scale Model Mirror display detail.

LUX BANK_ LUXEMBOURG



1.200 Scale model



View on winter garden



1.200 Scale model facade structure



Architect: Masimiliano Fuksas

Scale Model: 1.200



Construction techniques/ materials:

The slabs and facade of the model are made in lasercutting and engraving.

The big beams structure that hold the facade hanging, are realized in brass squared profile tin soldered.

Threes in the winter garden are made in vegetal foam.





1.200 Scale Model_General elevation view.

LONDON AQUATIC CENTRE _UNITED KINGDOM



1.500 Scale model bird View

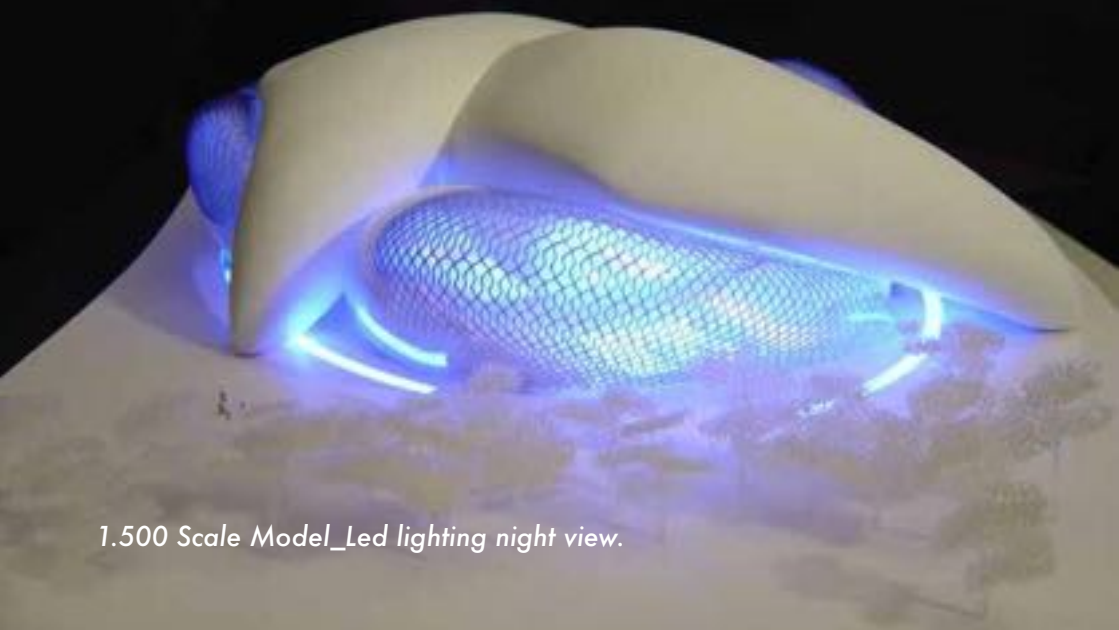


Architect: Massimiliano Fuksas

Scale Model: 1.500

Construction techniques/ materials:

The shape dome of the project is realized with high density styro-foam graven by hand. After this process, the original prototype has been copied in silicon mold and replicated with epoxy resin. The transparent blister that host the public tribunes are thermoformed on solid mold. The mesh structure is realized with a special deformable metal net.



1.500 Scale Model_Led lighting night view.

MYZEIL SHOPPING MALL FRANKFURT_GERMANY



Plaster mold to form
the steel wire structure



Structure and
thermoforming



1.500 scale model general mall view



Architect: Massimiliano Fuksas

Scale Model: 1.500

Construction techniques/ materials:

A glass roof characterizes the design of the project, as a metaphor of a river, long the route of the commercial mall elements in glass are hung from the ceiling as sleepstream.

Those elements are realized on PET thermo sheet with special punches and thermoforming.

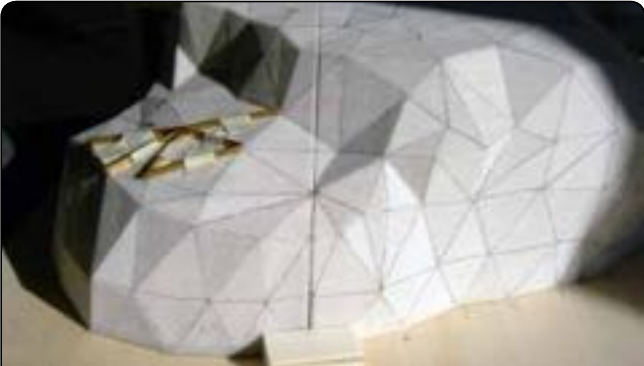
The big mold realized in plaster is necessary to weld the steel frame structure in brass.





1.200 Scale Model_Inside view.

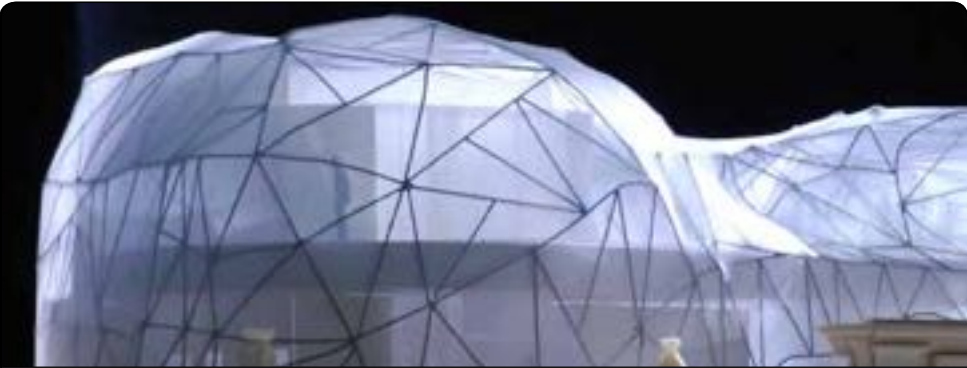
PALAZZO EX SEDE UNIONE MILITARE ROMA_H&M



3D printed template
for primary structure



detail of mullions
of skydome



1.50 model_ general view of the skydome



Architect: Massimiliano Fuksas

Scale Model: 1.50

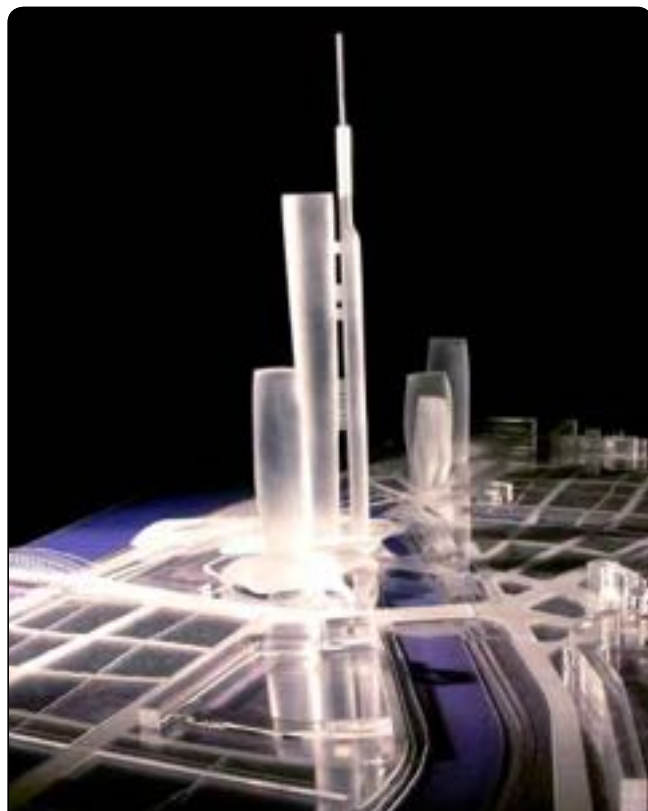
Construction techniques/ materials:

The main existing complex is built in wooden classical technique, as the moldings detail on the facade replicated in epoxi_resin Transparent Plexy is use for the facade frames and the interior slabs. The sky dome structure is realized on a positive volume template in brass profiles tin welded. The outern skin is made of white light elastic fabric.



Roof top view on the existing building.

GAZPROM TOWER ST PETERSBURG_RUSSIA



1.1000 scale model
in solid plexyglass



1.500 scale model
towers complex



Architect: Massimiliano Fuksas

Scale Model: 1.1000 to 1.500



Construction techniques/materials:

The 1.1000 masterplan model and the 1.500 are entirely realized in solid plexyglass frosted and transparent. Lasercutting and engraving were necessary processing to build the parterre and road /park system.





1.500 Scale model facade system.

HANGZHOU XIAOSHAN AIRPORT_CHINA



Architect: Massimiliano Fuksas

Scale model : 1.1000

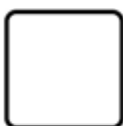
Construction techniques / materials :

thermoforming of PET for the main skin of the roof top, backlight solid plexy with modular led stripes. Engraving and laser cutting to implement the masterplan design and aeroplane parking. the solid geometry to build the skin is rapid prototyping printed. Green system and landscaping are builded with laser cutting o plexy layer.



1.1000 Scale model hub view and terminal

ILOT CANDIE ST.BERNARD_PARIS 11EME



Architect: Massimiliano Fuksas

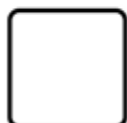
Scale Model: 1.100



Construction techniques/materials :

The model is build with laser cutting and engraving of transparent and milk plexyglass.

The lead coating of the main facade is aged with a special process in acid bath, to oxidize the surface. The compound is realized with a really fine mesh of steel.





1.100 Scale model _Lead facade

TUSHINO RESIDENTIAL COMPLEX _ MOSCOW



Architect: Massimiliano Fuksas

Scale Model: 1.50

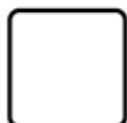


Construction techniques/materials:

The model realized in 1.50 scale is made of plywood and laminated essence.

The frame and windows are in transparent plexyglass, the model is illuminated from inside with led technology.

Wooden surfaces are treated with red wax.



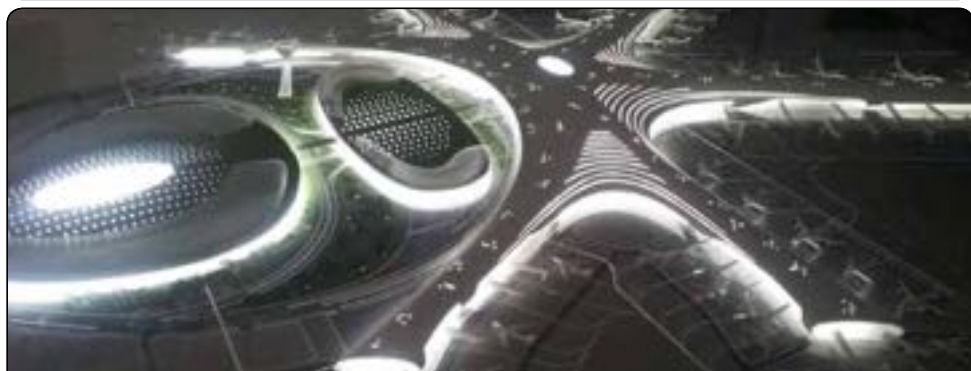


1.50 Scale model _Construction detail

XIAMEN INTERNATIONAL AIRPORT_ CHINA



Scale model: 1.1000 bird view of the complex



Scale model: 1.1000 general night view



Architect: Massimiliano Fuksas

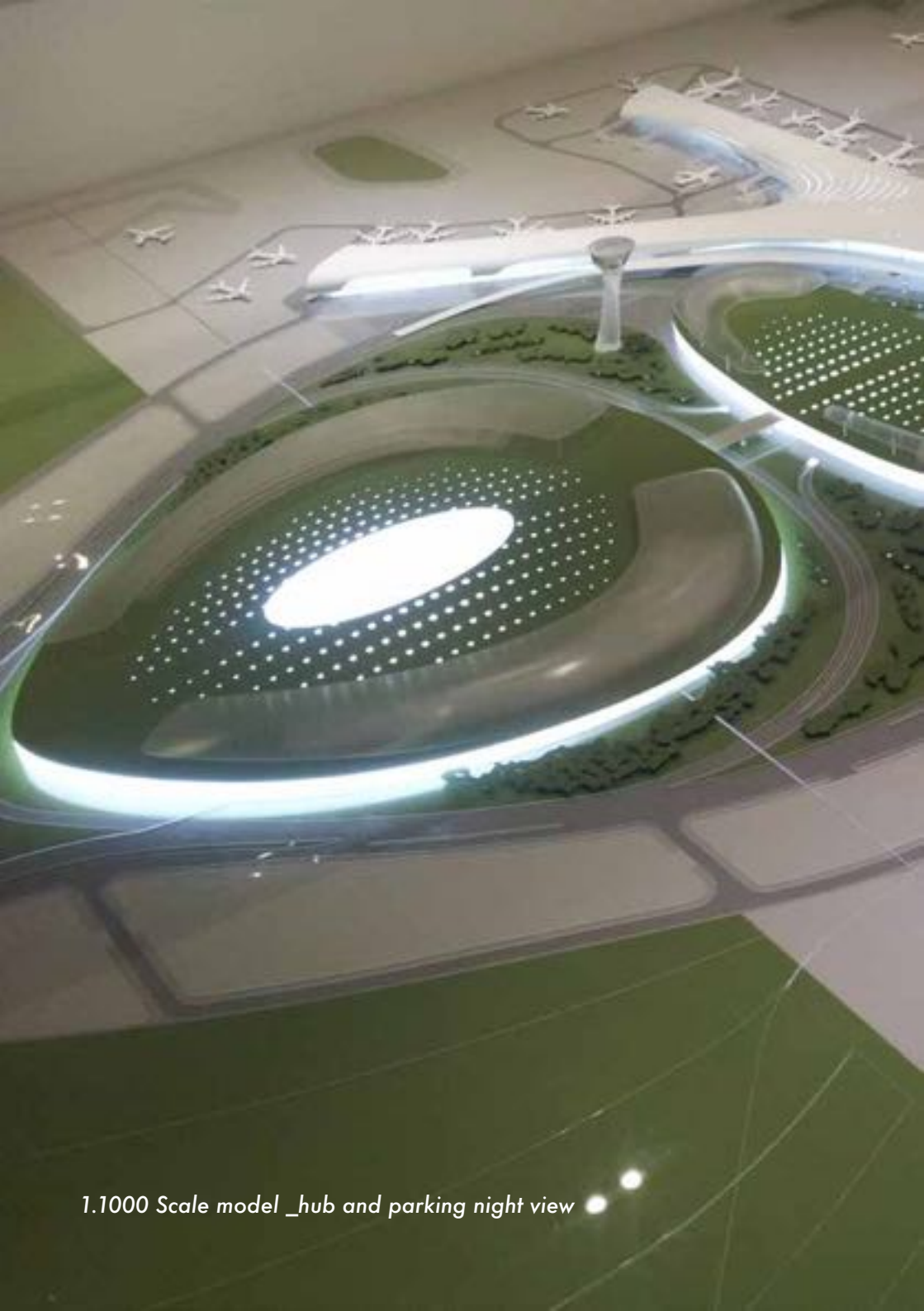
Scale model: 1.1000

Construction techniques/ materials:



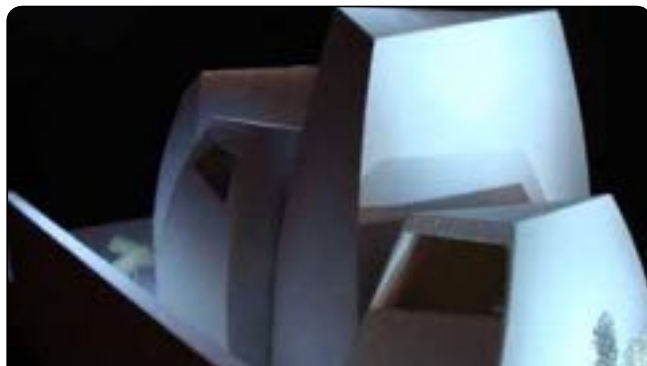
Thermoforming of PET for the main skin of the roof, backlight solid plexy with modular led stripes. Engraving and laser cutting to realize the masterplan design and aeroplanes parking. The solid geometry to realize the skin is rapid prototyping printed. Green system and landscaping is realized in laser cutting plexy layers.





1.1000 Scale model _hub and parking night view

ART GALLERY EL MARSA _ TUNISIA



1.100 Scale model perspective view



Top view and skylight



1.100 Scale model front on the road



Top night view



Architect: AIR_ArchitectsinRome

Scale Model: 1.100

Construction techniques/materials:

The shape of the project is studied with 3D software rhinoceros and printed on bed powder with ZCorp technology. The external surface after printing it is reinforced with a layer of epoxy resin. Slabs are realized with lasercutting technology.

The porosity of the material used well represents the naturalness of the plaster.



1.100 Scale model _Entrance view

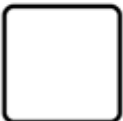
ART GALLERY EL MARSA _ TUNISIA



Architect: AIR_ArchitectsinRome



Scale Model: 1.100



Construction techniques/materials:

Hand Made, Study model. The materials used are forex-plastic by 2 mm covered with plaster. The threes surrounding are made with vegetal foam.



Sets study and conceptual models

LEARNING RESOURCE CENTER IN SFAX



1.100 Scale model
view on mezzanine level



Open model
satellites view



Interior view



1.50 Scale model



Architect: AIR_ Architects in Rome

Scale Model: 1.50

Construction Techniques/materials:

The main existing building, Chatedrale; is realized in white matte plexyglass with laser-cutting technology as the interior box of the auditorium and space for exposition.

The floating spherical elements «satellites» are 3D printed and colored with a particular mirror effect to reflect the lights color entering from the facades, made with colored glass element in the reality.



1.50 Scale model_Inside view



1.50 Scale model_Section

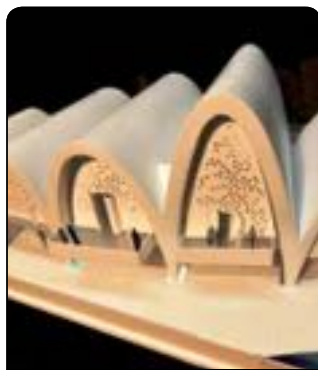
CENTRE DE VIE IN UTIQUE ART CITY



1.50 scale model library open model



1.50 scale model entrance hall



Vault view



Architect: AIR_ArchitectsinRome

Scale Model: 1.50



Construction Techniques/materials:

The pavement and facade frame are made with transparent engraved plexyglass. With Led technologies the model is backlight creating a scenographic effect on the vaults surfaces. The vaults are made with a laser cutted chassis in plexyglass clad with pvc thin layer.





1.50 Scale model_Night view

UTIQUE CITY OF ART_ TUNISIA



1.500 scale model



View on village



Water and pammuccale



Villas



Square View



Amphitheatre



Architect: AIR_ArchitectsinRome

Scale Model: 1.500



Construction techniques/materials:

The entire model is build with 3D printing technology. After printing all the terrain is finished with a special patina of acrylic colors and the water basin are lasercutted back colored to imitate the natural water color. Trees and vegetation are made with natural moss.



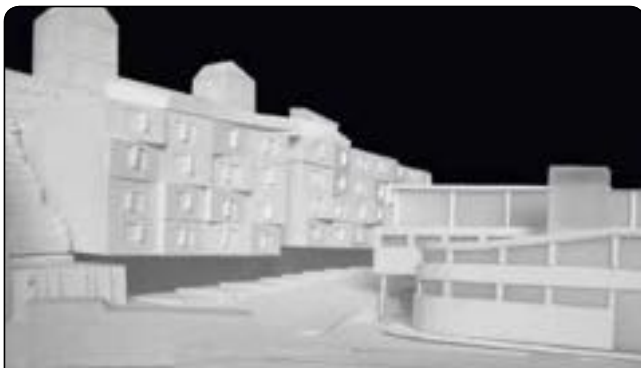


1.500 Scale model_Top view

LANDANO STUDENT HOUSE AND COMMERCIAL MALL



1.500 scale model



1.500 scale model volumetric



1.100 interior view



1.100 scale model commercial mall restoration



Architect: AIR_ArchitectsinRome

Scale Models: 1.500 to 1.200

Construction techniques/materials:

The model is made in white Forex and plexy transparent, as the basement and road system. The animation cars are print in silicon mold with transparent resin.

About hte 1.500 model all the students building is realyzed in syntetic plaster , the original volumetry is been copied in silicon mold.



1.200 Scale model_Market and piazza

MOKE UP OF SATELLITES FOR LRC_SFAX



1.25 scale model structure



Cladding



1.25 scale model detail of beams



Cladding 2



Architect: AIR_ArchitectsinRome

Scale Model: 1.25

Construction Techniques/materials:

The model is entirely realized in lasercutted plexyglass, coloration is done to simulate the materials in the real project, steel grey painted, mirror inox panels for cladding, wooden plank floor.

The particular beams are designed to permit pipes of technical installation to pass through.



1.25 Scale model

VERSARI HOUSE_ ROME



1.50 Scale model



Cantiliever



1.50 Scale model _ interior plan



Roof top



Architect: AIR_ArchitectsinRome

Scale Model: 1.50



Construction Techniques/materials:

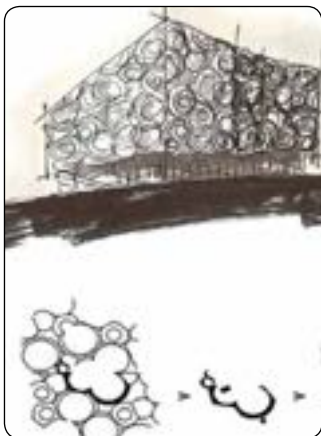
The model is built to imitate the true materials that have been used in the real project. Cardboard, laminated wood and plexyglass, are alternate with textures materials color printed on paper. Even the out part of garden is colored with acrylic paint to simulate natural out system.





1.50 Scale model_View on roof garden

FACADE DETAIL FOR BTE BANK HEADQUARTER



Architect: AIR_ArchitectsinRome

Scale Model: 1.50

Construction Techniques/materials:

The sample of the facade detail is designed in rhino 3d software than the object is 3d printed on bed powder reinforced with epoxy resin layers.

The final treatment is given with gold leaves.



1.50 Scale model_Facade detail

Contact us

Via Casilina, 110

00182 - Roma

Tel. +39 06 89871190

Mob. +39 351 9191746

modelair@officeair.it