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New London Embassy: US

KieranTimberlake

DATE: 2009 - CURRENT (CD PHASE)

SITE: LONDON, ENGLAND

PROJECT TEAM: KIERANTIMBERLAKE, OLIN, ARUP, AND WEIDLINGER ASSOCIATES

The design for the new embassy of the United States in London was the product of an intensive competition. The final 4 firms of the competition were: Morphosis, Pei, Cobb, Freed, Richard Meier and Partners, and KieranTimberlake.

The design is a deceptively simple solution to the many complex and rigorous requirements for a modern embassy, ranging from security (forced entry, blast, ballistic, and controlled access) to environmental (LEED, BREEAM), to the ephemeral ideals of what an embassy should be.

The building design is a glass cube covered on the south, east and west sides with a performative outer enclosure. The landscape design folds the security requirements into its features and brings the landscape into the building to provide public green spaces to the occupants.

The New US Embassy is slated to open on July 4th, 2017.

AERIAL RENDERING



RENDERING BY: STUDIO AMD



PERSPECTIVE RENDERING
EXTERIOR

RENDERING BY: STUDIO AMD



PERSPECTIVE RENDERING
INTERIOR

RENDERING BY: BEN MULLER



PERSPECTIVE RENDERING
INTERIOR

RENDERING BY: MARK DAVIS

EEOB: Screening Facility

KieranTimberlake

DATE: 2008 - CURRENT (CD PHASE)

SITE: WASHINGTON, D.C. USA

PROGRAM: SECURITY SCREENING

The Eisenhower Executive Office Building (EEOB) is located in Washington D.C., directly west of the White House. The EEOB is a French Second Empire style building built in the late 1800's that house the offices for the executive branch of the US government.

Increasing security demands are a new fact in modern society, especially in Washington DC. Because of this, there are many beautiful historic buildings that have new security buildings and tents being built at their entrances that have become an architectural eye sore.

The US General Services Administration (GSA) asked us to devise a solution to the increasing security requirements while maintaining the historical fabric of the architecture.

The solution that ultimately won the contract for us was one that keeps the historic entry and fabric in tact while removing the screening facility from sight. The screening facility is buried beneath the existing plaza accessed by new ramps added within the boundaries of the existing lawn.

The project is currently on hold after completing Construction Documents in early 2012.



HISTORIC PHOTO



3D PRINTED MODEL

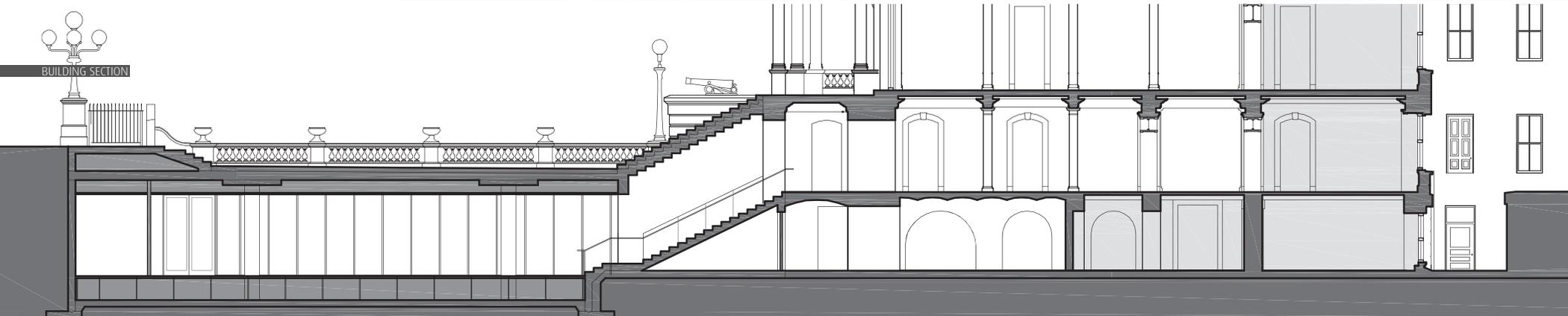


PERSPECTIVE RENDERING



PERSPECTIVE RENDERING

ALL RENDERINGS BY: BEN MULLER



BUILDING SECTION

INTERIOR LAYOUT INFORMATION OMITTED

DILWORTH PLAZA: City Hall

KieranTimberlake

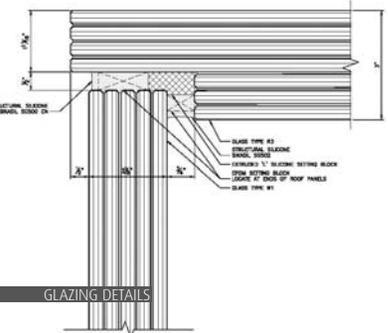
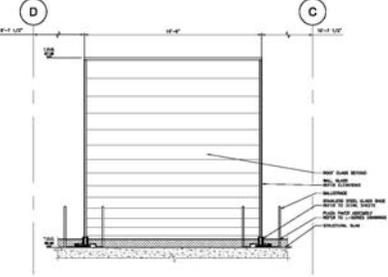
DATE: 2008 - UNDER CONSTRUCTION
 SITE: PHILADELPHIA, PA. USA.
 AWARDS: AIA PHILADELPHIA SILVER MEDAL

Dilworth Plaza is located on the west side of Philadelphia's historic City Hall. The site surrounding City Hall has a long history of adapting its context to the city center.

The current plaza, designed by Vincent Kling, is viewed more as a barrier than a forecourt to City Hall because of its many level changes and labyrinthine layout. Our design for a new Dilworth Plaza removes the level changes and puts the entirety of the plaza on a single datum which connects the plaza to the ground plane. The plaza also has a programmable pixelated fountain, a lawn, and a small cafe.

The pavilion that connects the plaza level to the concourse level is a single arc of glass which punctures the plaza and allows people to walk over it. This move gives the impression of a large continuous building without actually having a structure that would compete with City Hall. In effect we have an iconic building that respects and frames Philadelphia's City Hall.

I was a member of the design team from Schematic Design to 50% Construction Documents.



EXTERIOR RENDERING

RENDERING BY: BEN MULLER



SECTION RENDERING

RENDERING BY: BEN MULLER



PERSPECTIVE RENDERING

RENDERING BY: BEN MULLER



EXTERIOR RENDERING

RENDERING BY: UK JUNG

ANTHILL: Philly Rowhome

Moto DesignShop

DATE: SUMMER 2007
TEAM: BEN MULLER & RYAN KEERNS
SITE: PHILADELPHIA, PA
PROGRAM: RESIDENTIAL

This project design is inspired by anthills, their structure and their organization to tackle the problem of the thin nature of Philadelphia row homes.

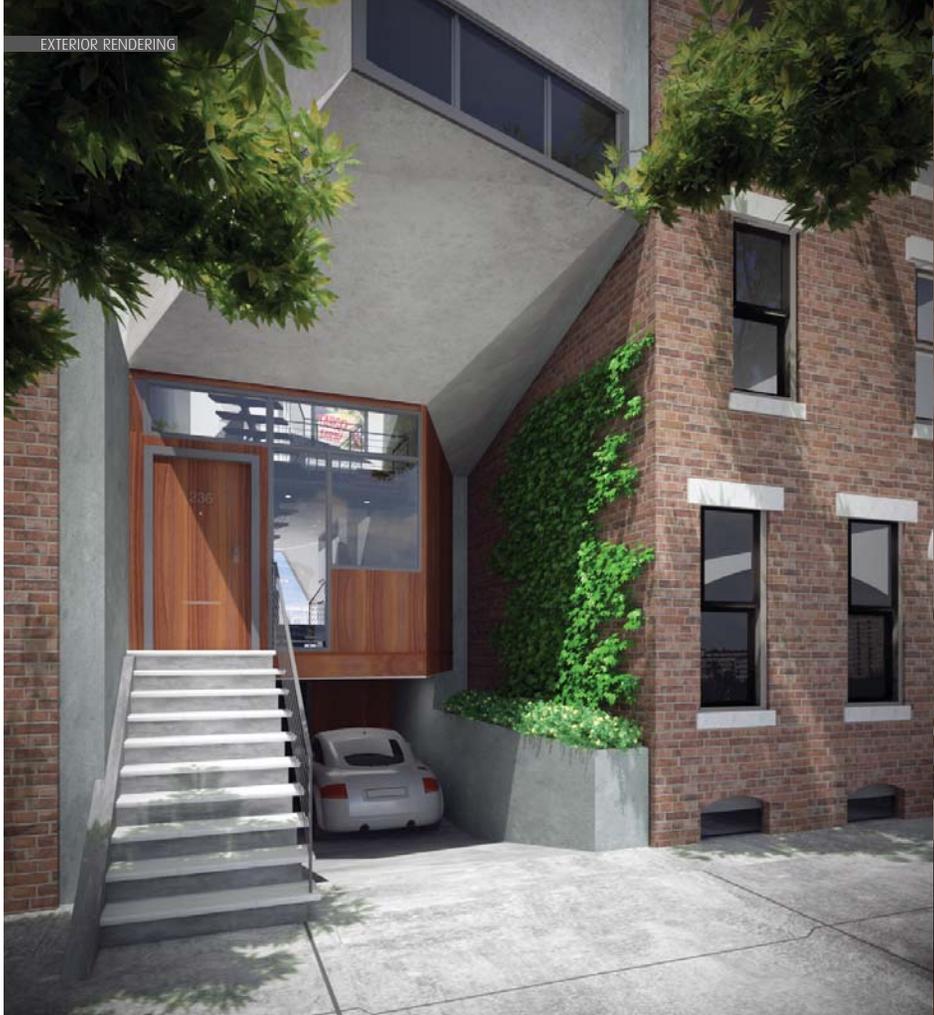
A computer script written in Bentley System's Generative Components software was created for the project. The script explores the relationships of rooms by varying the proximity of one room to the next, their relative size, and the sequence of rooms. This script generated dozens of variations of combinational possibilities, leading to the eventual design.

This method breaks the standard row home by compartmentalizing spaces and connecting them through a single continuous pathway.

It also allows for a residential design that feels and appears to be more generous in space and layout, even though its square footage is less than that of the average Philadelphia row home.

This work was created while working at Moto DesignShop. I created the GC Script, 3D model, 3D detailing, views, and renderings for this project.

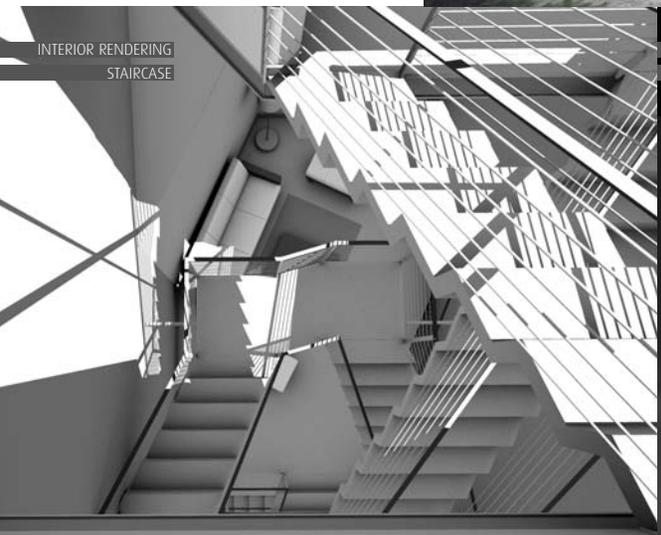
EXTERIOR RENDERING



INTERIOR RENDERING
LIVING ROOM



INTERIOR RENDERING
STAIRCASE



EXTERIOR RENDERING
NIGHT



SECTION PERSPECTIVE



SURFACE: Effects

Third Year Graduate Seminar

DATE: SPRING 2007
PROFESSOR: CATHERINE VEIKOS
TEAM: BEN MULLER & TODD COSTAIN

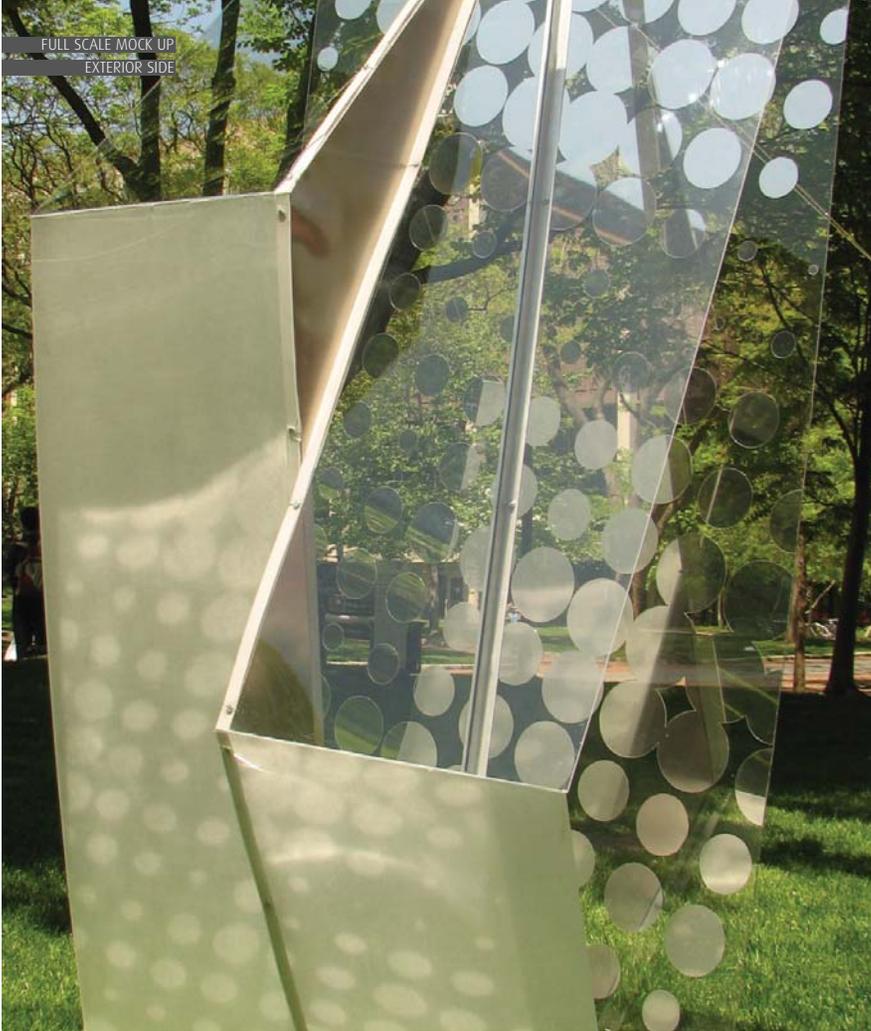
This study in surface and effects is a repeatable wall panel that investigates reflection, transparency, shadow and registration. The prototype demonstrates a play with the way sunlight reflects off a mirrored surface and can then be registered onto translucent glass.

The mirrored surface is a window tinting film that is applied to a glass surface. A halftone pattern is then cut out of the film after it is applied. When sunlight hits the film the pattern is reflected and registered onto the lower translucent panel.

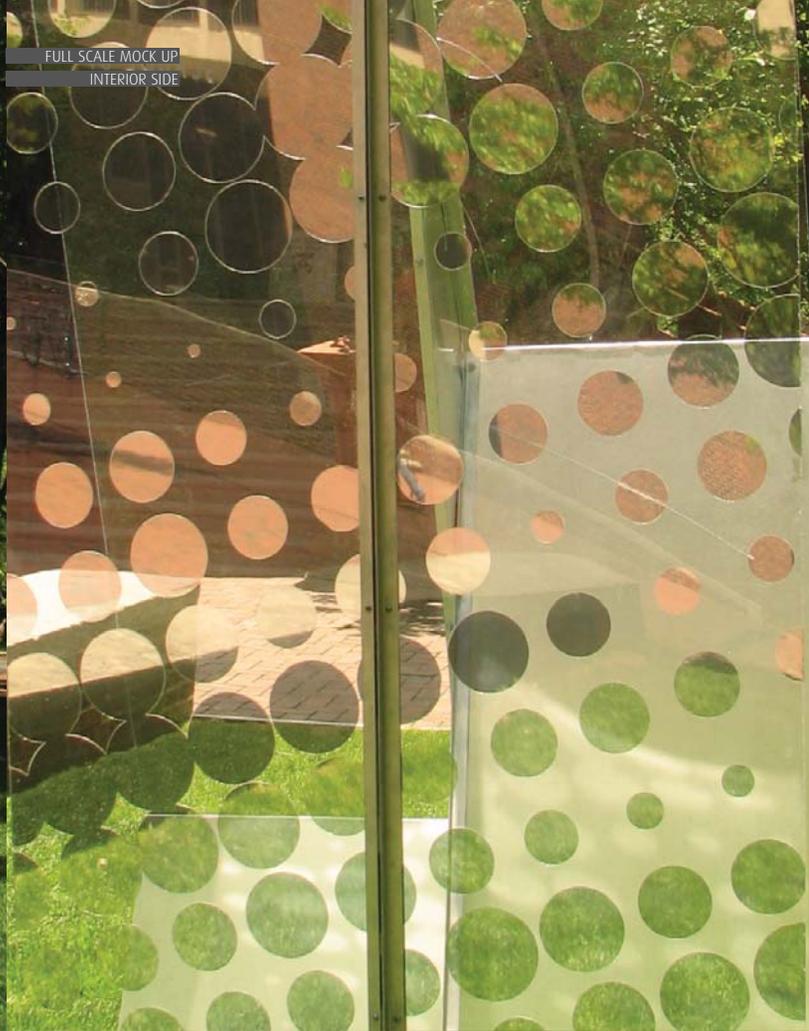
The printed halftone pattern for the film is derived from a picture of a forest of birch trees.

The built prototype is 3' x 6' and has a top panel that is clear glass and a bottom panel that is translucent glass. To achieve a variation in the facade the panels were joined at five different angles.

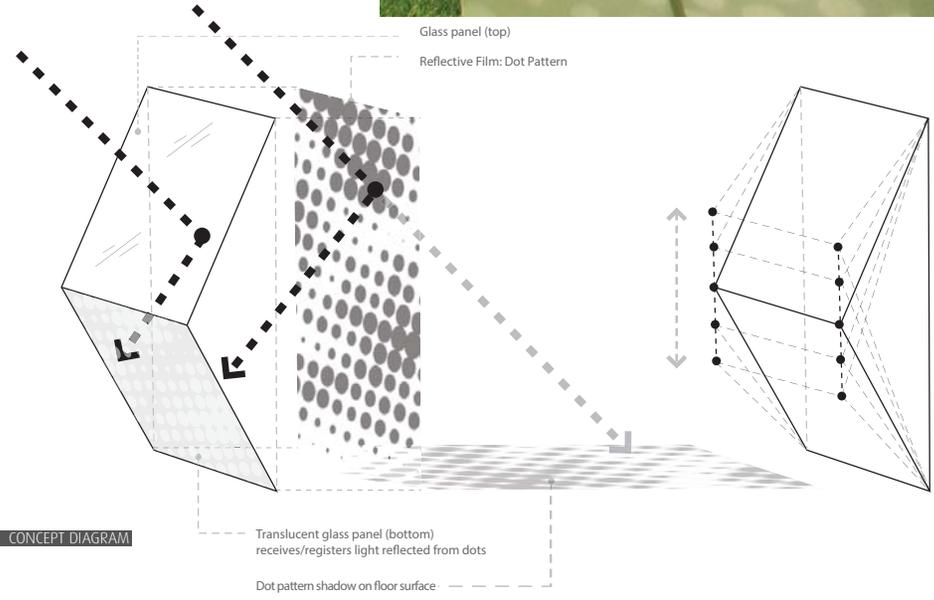
In the end the full scale mock-up is made of two panels halves side by side. This allows for the investigation of both the effect of the panel and the function of the joint between panels.



FULL SCALE MOCK UP
EXTERIOR SIDE



FULL SCALE MOCK UP
INTERIOR SIDE



Glass panel (top)

Reflective Film: Dot Pattern

Translucent glass panel (bottom)
receives/registers light reflected from dots

Dot pattern shadow on floor surface

CONCEPT DIAGRAM



CONCEPT TESTS



METREPOLIS: Power Plants

HollwichKushner (HWKN)

DATE: WINTER 2007
COMPETITION: CITY OF THE FUTURE
AWARD: IBM: INNOVATION IN TECHNOLOGY

MEtreePOLIS is a prize winning competition entry in the 2007 "City of the Future" Competition. The competition asked competitors to design a response to the question "What will Atlanta look like in 100 years?". The competition allowed seven days to complete the entry with a complete city model.

MEtreePOLIS predicts that society will not change its lifestyle to be in harmony with nature; but, rather that we will change nature to be in harmony with us. In this future vision plants have been genetically altered to be the energy source for buildings.

This concept creates the need for two new building types: one where existing buildings are retrofitted to the new power grid, and the second where architecture and the new power plants are merged together.

After a full integration of the new econic power grid the ground level would be reclaimed by nature allowing for a single plane of open space.

I was a member of this project team throughout the competition.



EXTERIOR RENDERING
NEW BUILDING TYPOLOGY



EXTERIOR RENDERING
HYBRID BUILDING TYPOLOGY



EXTERIOR RENDERING
ATLANTA: YEAR 2107



PHYSICAL MODEL
ATLANTA: YEAR 2107

SWARM: Robotic Facade

Third Year Graduate Studio

DATE: FALL 2007
 TEAM: BEN MULLER & AARON JEZZI
 PROFESSOR: MATTHIAS HOLLWICH
 SITE: RIO DE JANEIRO, BRAZIL
 PROGRAM: THEATRE, MARKET, EXHIBITION

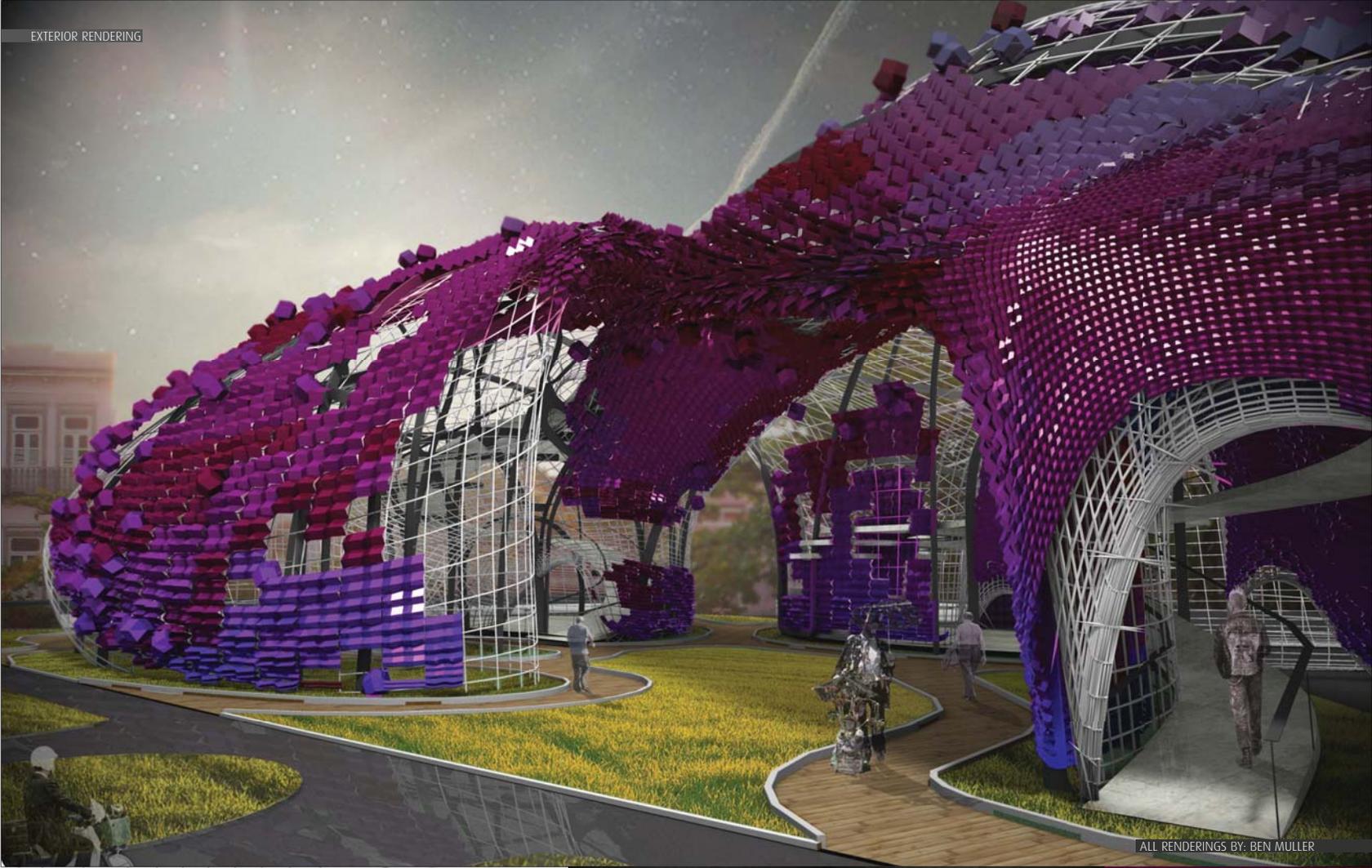
This ecological building design redefines what a building is and demonstrates how many traditional parts of a building can be reimagined.

The building enclosure is designed as an open mesh framework that allows tetrahedral shaped robots to climb across its surface. As the robots swarm across the surface of the framework, gathering solar energy, they dynamically enclose and open the various spaces of the building.

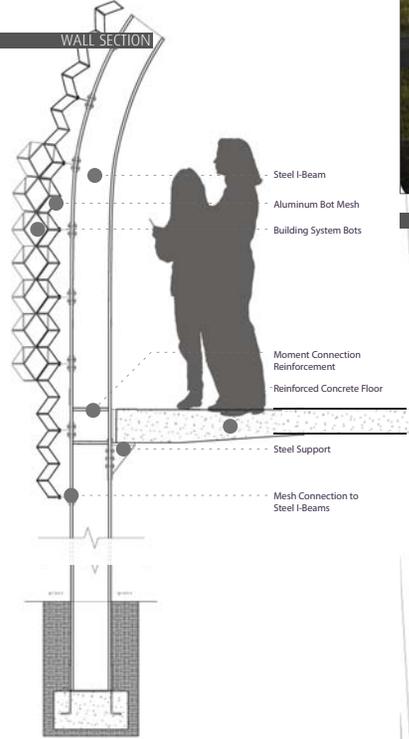
The robots do not simply enclose the spaces. Each robot performs a specific function of the building systems. There are robots that are used for heating, cooling, and for lighting.

The dynamic properties and phenomenological experience of the building shows that the reinvention of enclosure and building systems can redefine the architectural experience.

EXTERIOR RENDERING



ALL RENDERINGS BY: BEN MULLER



FLOOR PLAN



INTERIOR RENDERINGS

