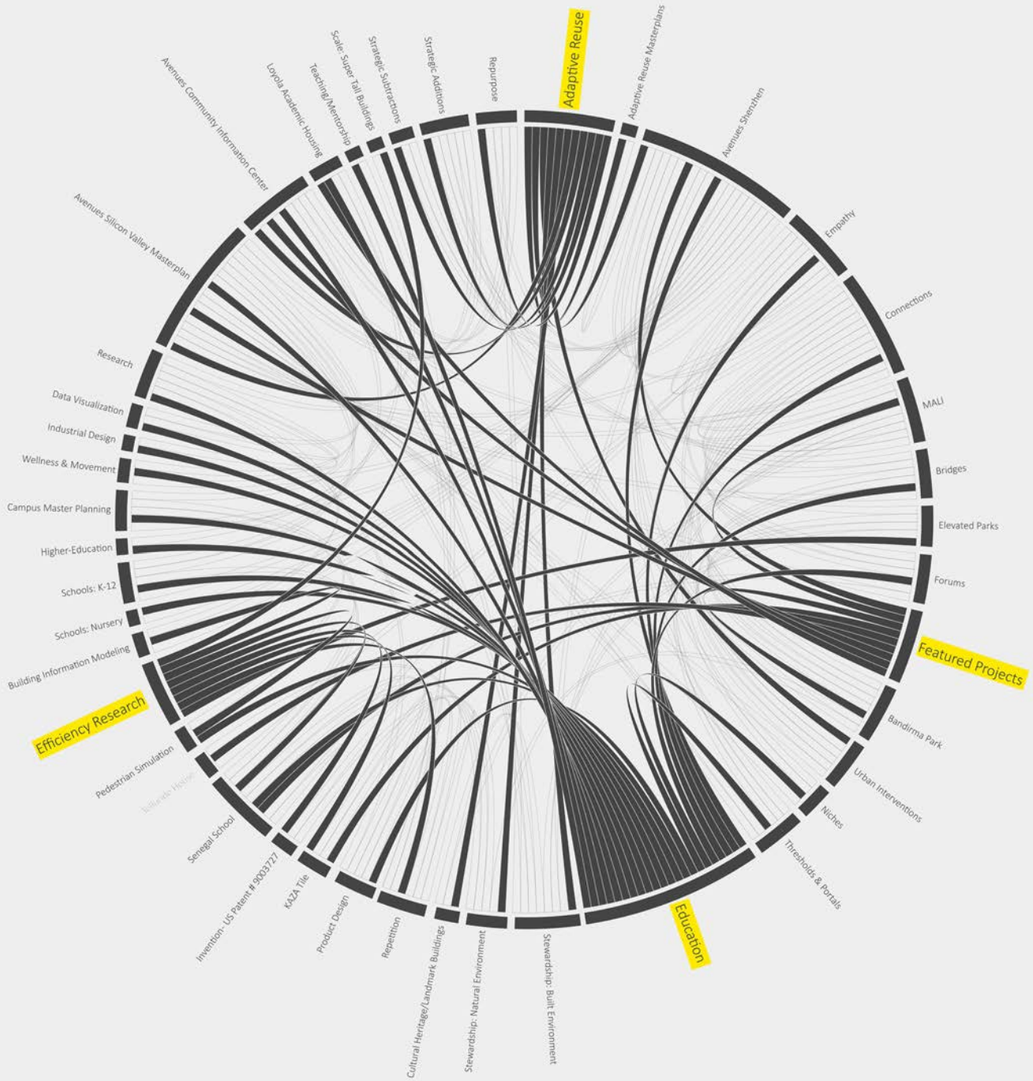
EFFICIENCY LAB FOR ARCHITECTURE



Efficiency Lab for Architecture is committed to a better understanding of efficiency in the built environment through research and design.

We are an architectural design firm. Our design approach is rational and rigorous. WE CARE FOR THE ENVIRONMENT. We advocate environmental consciousness at design and policy making platforms. WE INVENT. Aybars Asci holds a U.S. Patent for a highly energy efficient building enclosure system. DATA IS OUR ZEITGEIST. 90% of the data today in the world has been generated in the last two years alone. We believe design process needs to better integrate it. (X/Y=85%) WE CAN DO BETTER. We do not evaluate efficiency as a single ratio, but as an ecosystem made up of multiples, each fulfilling their individual mandate to their maximum potential while allowing others to reach theirs. WE TEACH EFFICIENCY. We launched an in-depth study on efficiency, through research seminars and studio projects in academia.

We believe that;

efficiency is **good business**
efficiency is **sustainable**
efficiency is **beautiful**

EFFICIENCYLAB.ORG

AVENUES: THE WORLD SCHOOL - SHENZHEN CAMPUS SHENZHEN, PRC

CAMPUS TOUR

Avenues: The World School in Shenzhen is located in the Tanglang Industrial Zone, one of the few remaining underdeveloped areas of Nanshan District. The Tanglang area has been slated for redevelopment as an education and research zone capitalizing on synergies with neighboring institutions – Southern Science University and Shenzhen University Gymnasium. The project envisions a place of learning with welcoming, safe, and sustainable green spaces and connections to the landscape.

Address: Sofunland A, Xiangrui 3rd Road 133
Shenzhen, Guangdong Province 518000 China
Program: N-12 School. Classrooms, Common Spaces, Support Spaces, Recreation Areas, Offices
Campus Master Plan: 300,000 sqft
Phase 1: 82,000 sqft
Client: Avenues World Holdings + Mingyang Education

Team
Masterplan: Efficiency Lab for Architecture PLLC
Design Architect: Efficiency Lab for Architecture PLLC
Interior Design: Efficiency Lab for Architecture PLLC
Local Design Coordination: WAY Design
Local Design Institute: CCDI
Local Planning Institute: Shenzhen Urban Planning Institute
Structural Design: Skidmore, Owings & Merrill LLP
Landscape Design: Terrain
Lighting Design: Claude Engel
Acoustic: WSDG
Structural Retrofit Contractor: Genzon
General Contractor: EDG

LEARNING PODS ->

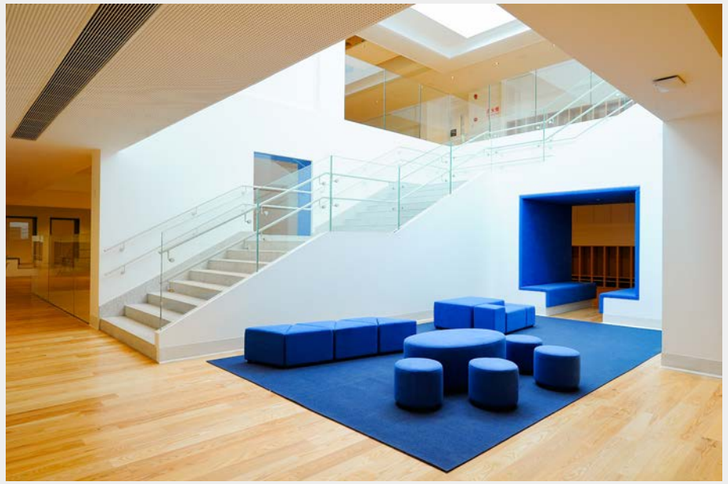
The Pods are organized around the atrium with views across one another. The writable glazing creates a fun and interactive learning surface.

INTERCONNECTING ATRIA

The floor slabs of the existing building is carefully cut to create multistory openings, arranged to allow for diagonal views across the three floors

CENTRAL ATRIUM ->

Located at the middle of the floor plate, the central atrium brings in natural light to the spaces below, as well as connecting the building up to the roof playgrounds.



BLUE KEYHOLE

Next to the Student Commons underneath the clerestory windows, the keyhole acts both as a gateway entry and a fun area to hang-out.

CAMPUS BRIDGES & VERTICAL PLAYGROUNDS ->

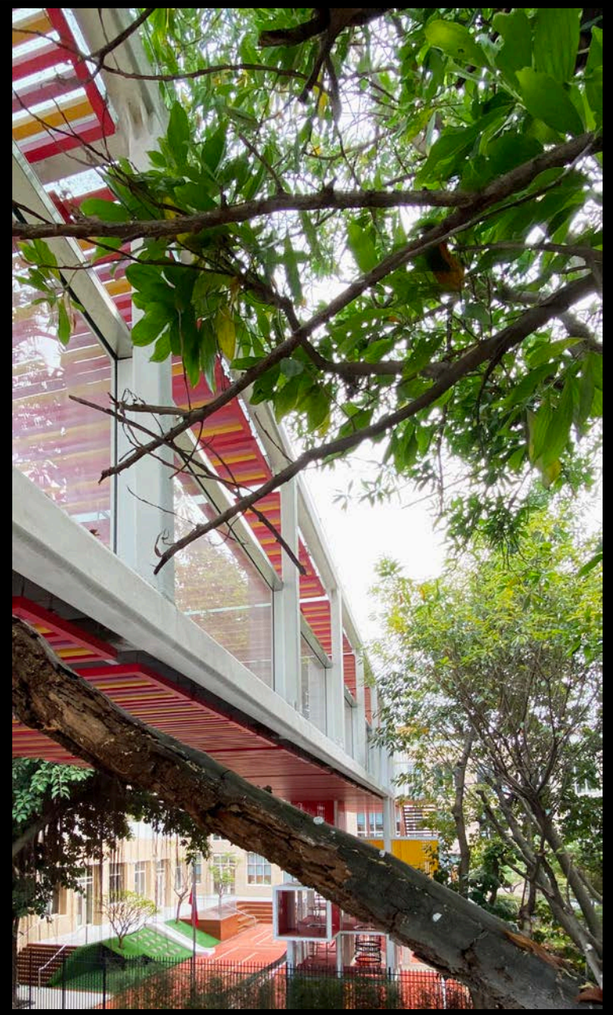
(1)

(2)

(1) View of the Pedestrian Bridge Connecting Early Learning Center to the Administration Building

(2) & (3) Views of the pedestrian bridge perched high up within the canopies of the Banyan Trees

(4) View of the vertical playgrounds. The support of the bridges are designed as vertical playgrounds offering students an immersive experience with nature.



(3)

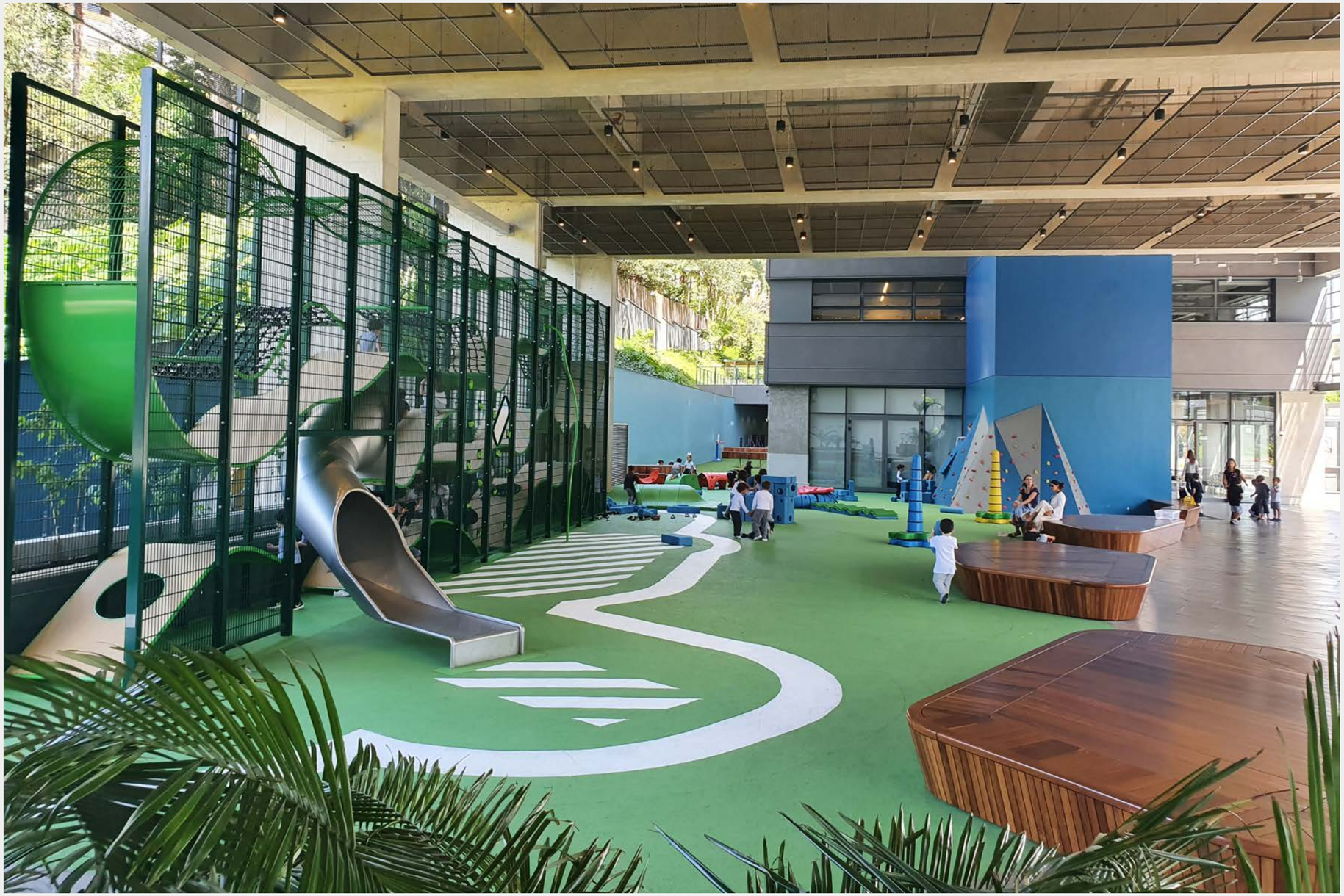
(4)

AVENUES: THE WORLD SCHOOL - SAO PAULO CAMPUS BRAZIL

Avenues Sao Paulo Campus is a Nursery through 12th Grade School. The project includes both refurbishments, improvements and landscaping for the existing campus building as well as a 250,000 GSF new campus expansion on a 1.6 acre adjacent site.

Address: R. Pedro Avancine, 73 - Real Parque, São Paulo - SP, 05679-160, Brazil
Program: Nursery - 12th Grade School
Area: 650,000 GSF (includes both existing and the expansion)
Total Floors: 9 above grade, 3 below grade
Client: Avenues: The World School

TEAM
Design Architect: Efficiency Lab for Architecture PLLC
Landscape Architect: Terrain
Structure: Certiphic Engineering



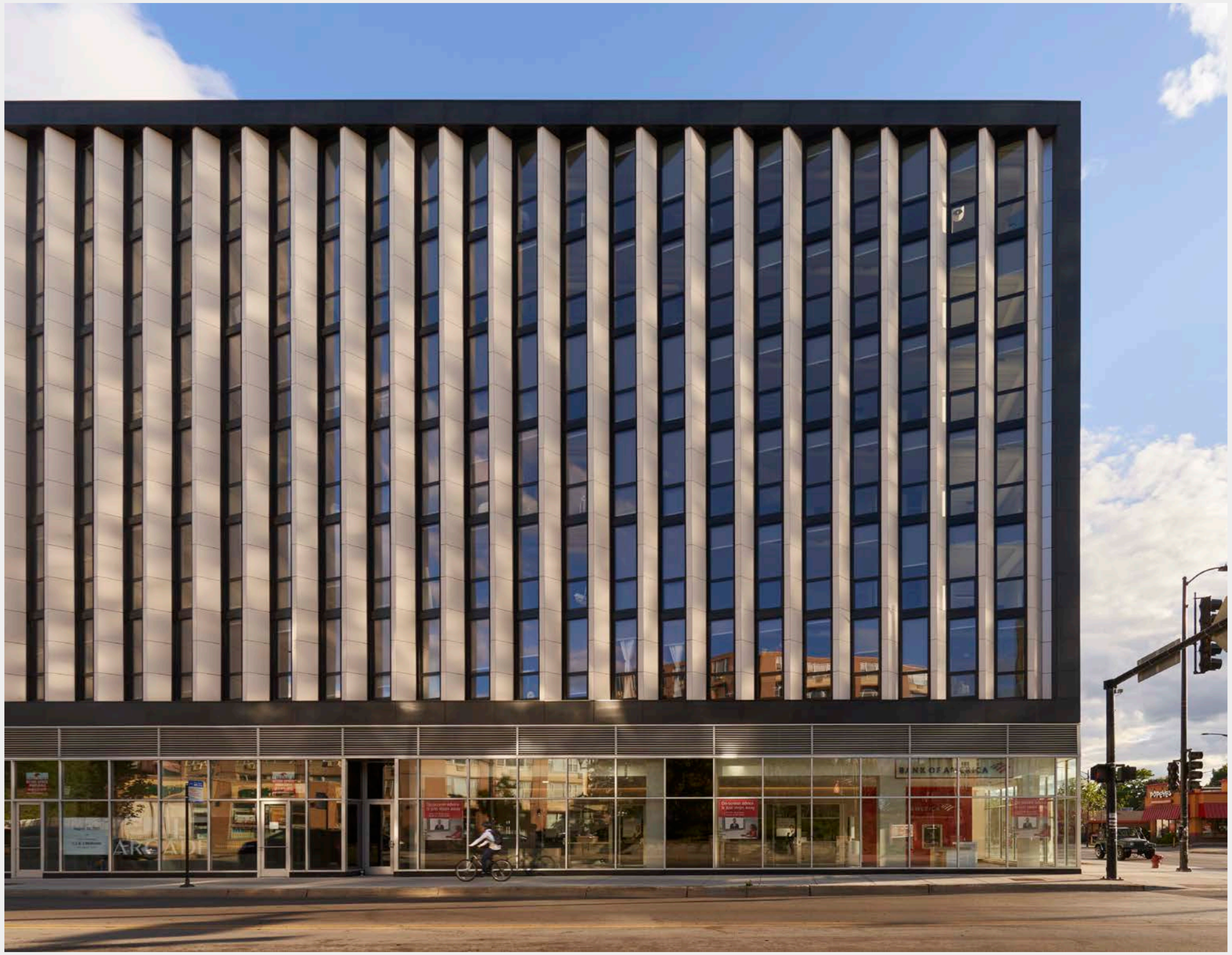
LOYOLA UNIVERSITY ACADEMIC HOUSING CHICAGO, ILLINOIS

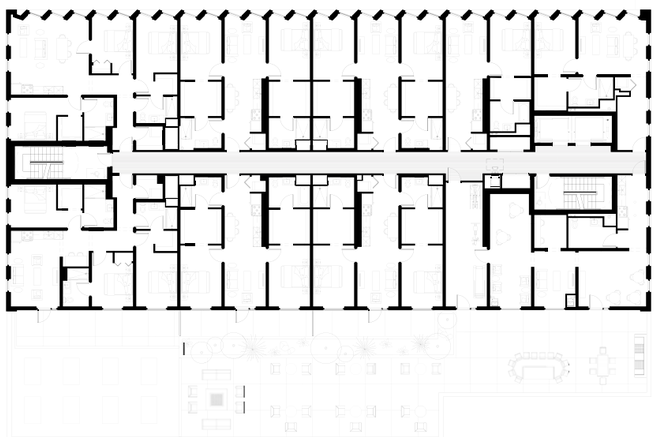
The Loyola University student housing project is a mixed-use project with a retail base, student lounge and common areas on the second level that access an outdoor terrace for student use, and student housing above. The pleated facade provides long vistas for the dwelling units to the nearby waterfront of Lake Michigan.

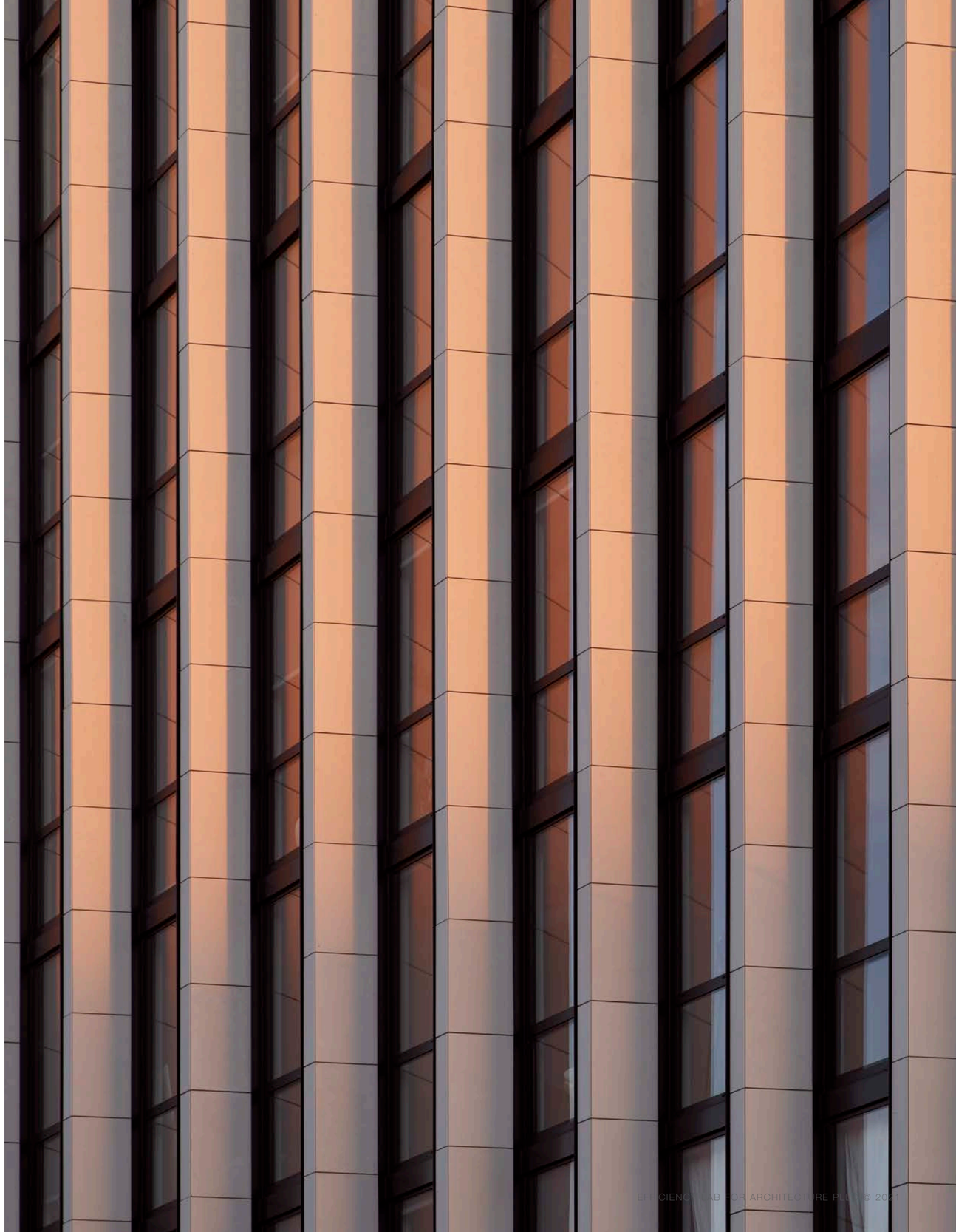
The enclosure design is a combination of stone and glazing components with operable windows. The pleating creates unique qualities of transparency and solidness as you move around the building.

Address: 6351-67 North Broadway, Chicago IL 60660
Program: 58 university student housing units and lounge spaces, 29 parking stalls, ground level retail
Duration: May 2017 – September 2019
(construction complete, building open and occupied)
Area: 105,000sqft
Total Floors: 7 above grade, 1 below grade
Client: Algonquin Venture Real Estate, LLC

TEAM
Design Architect: Efficiency Lab for Architecture PLLC
Architect of Record: Hirsch Asscociates, LLC
Structural Design: Simpson Gumpertz & Heger
MEP Engineer: The Engineering Studio, Inc
Civil Engineer: Eriksson Engineering
Landscape Architect: Daniel Weinbach & Partners, Ltd







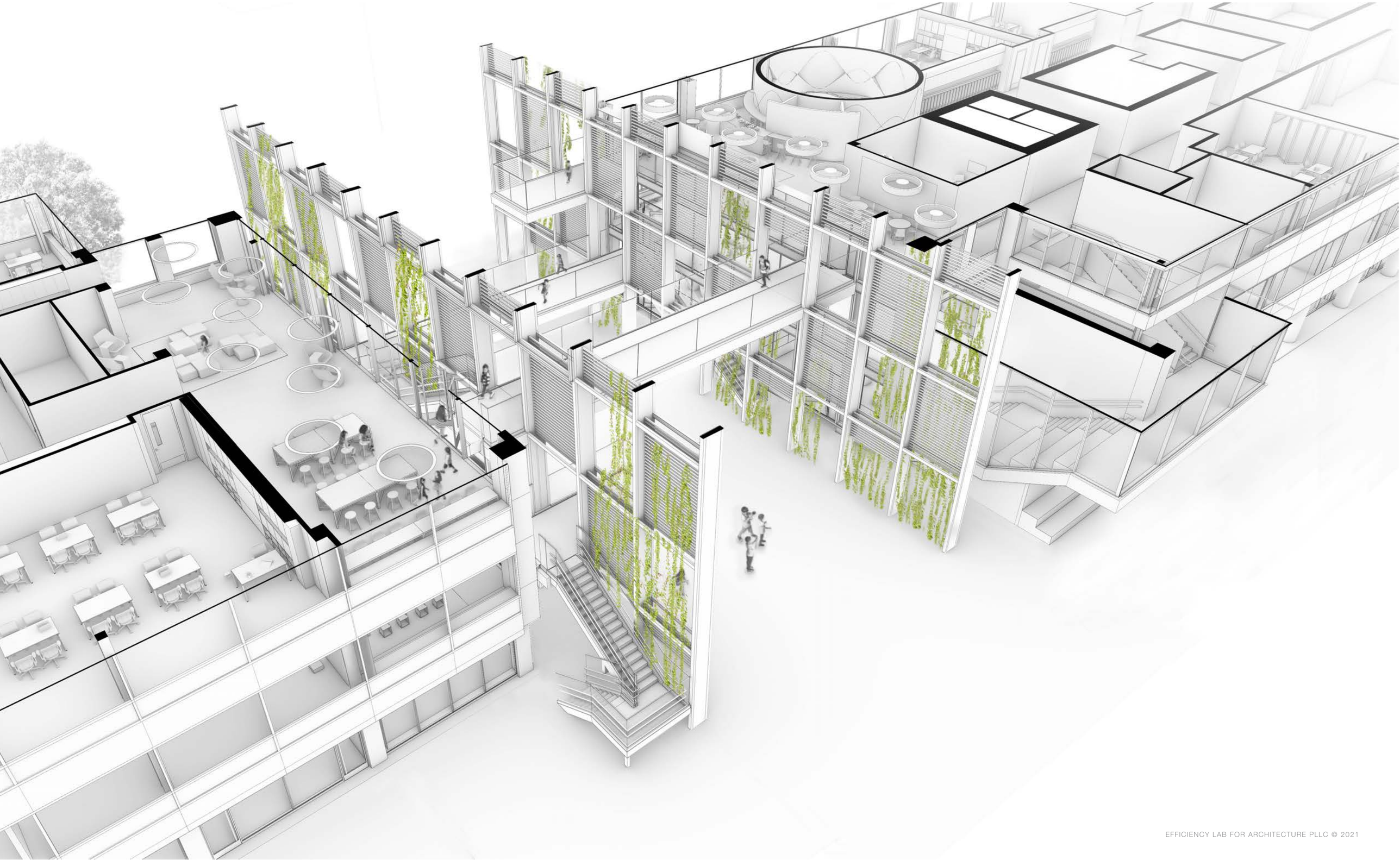
AVENUES: THE WORLD SCHOOL - SILICON VALLEY CAMPUS SAN JOSE, CA

Avenues Silicon Valley is a 12-acre campus located in San Jose, California for 2,744 students. The project consists of the adaptive re-use of two commercial office buildings for academic purposes as well as the construction of five new buildings, inclusive of a Fitness Facility with a natatorium and a Performing Arts Center with a Theatre.

The campus is organized around a central campus pedestrian walk which allows the school to engage the landscape with learning spaces. The primary design feature for the project is a 50' steel portal structure that serves as a centralizing focal point for the school. New student common areas (both inside and outside) engage the portal on both sides with pedestrian bridges linking these spaces through the portal.

Address: 550 Meridian Avenue, San Jose, California 95126
Program: N-12 School. Classrooms, Common Spaces, Support Spaces, Recreation Areas, Offices, Performing Arts Auditorium, Laboratories
Site: 11.87 acres
Area: Campus Master Plan: 550,000 sqft; Phase 1: 183,000sqft
Client: Avenues World Holdings

Team
Masterplan: Efficiency Lab for Architecture PLLC
Design Architect: Efficiency Lab for Architecture PLLC
Interior Design: Efficiency Lab for Architecture PLLC
FF&E: Efficiency Lab for Architecture PLLC
Architect of Record: Adamson Associates
Structural Engineer: SOM
MEP: Syska Hennesy
Civil: Kimley Horn
Lighting Design: Claude Engel
Acoustic: Longman Lindsay

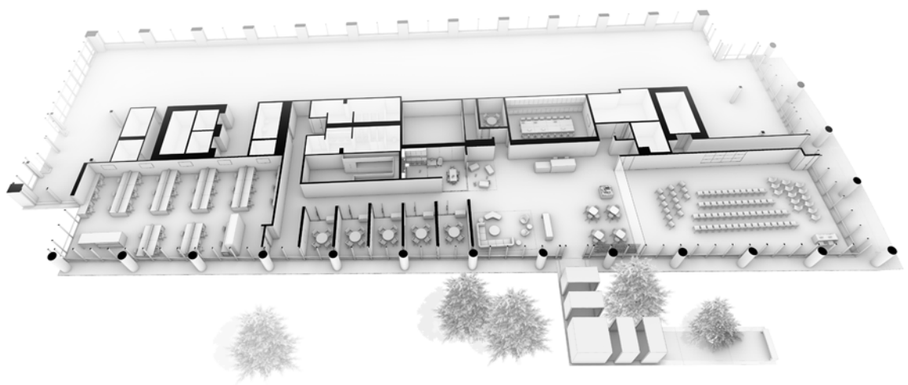


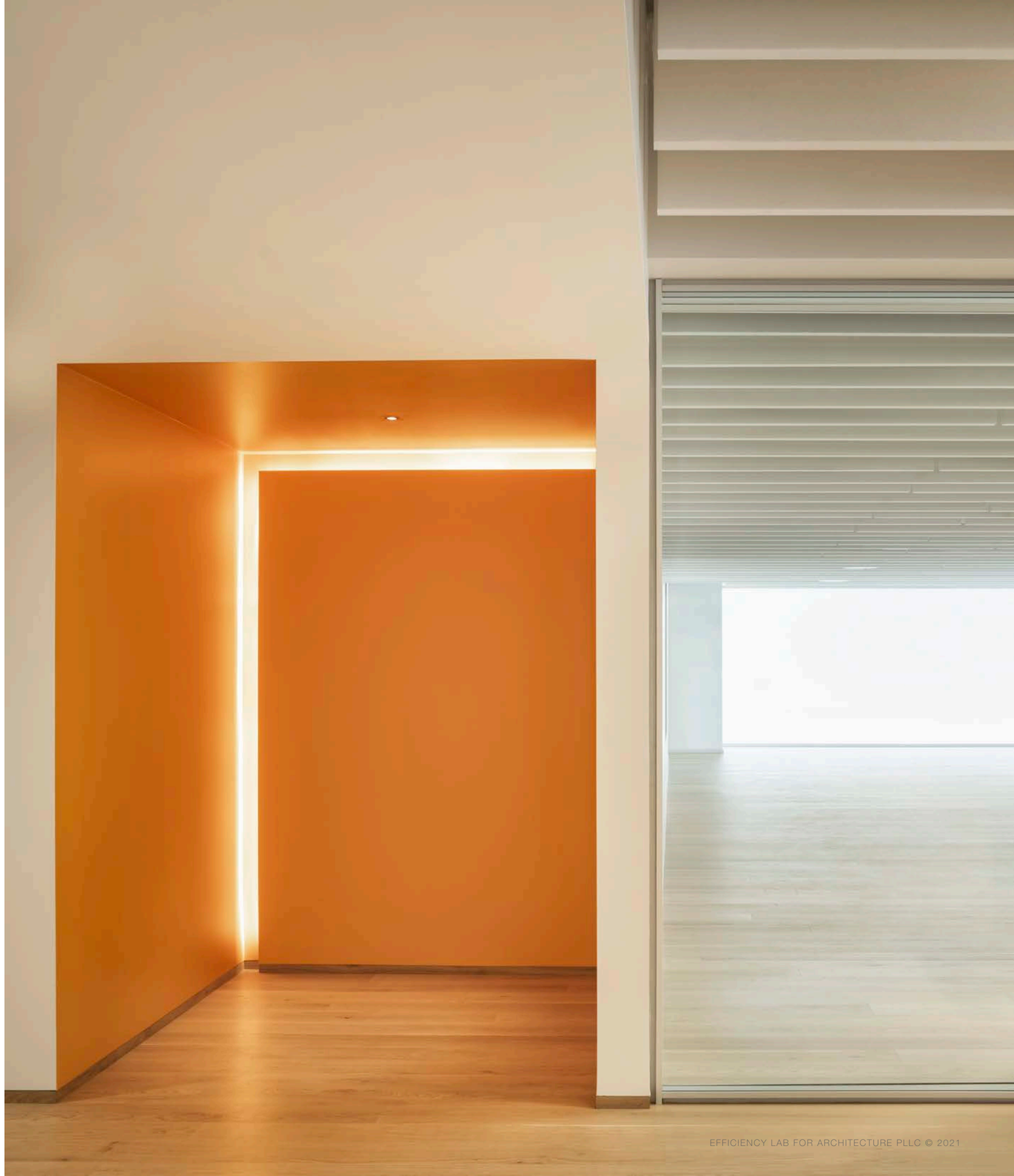
COMMUNITY INFORMATION CENTER SAN JOSE, CA

The Community Information Center in San Jose is a 10,000sqft ground level renovation project that creates a reception and lounge area with an adjacent presentation space in an existing commercial office building. Concrete portals located within the immediate landscape at the entrance welcome visitors to the center and serve to reorient their attention from is suburban office park context to a light filled open interiors.

Address: 570 Meridian Avenue, San Jose, California 95126
Program: Presentation Space, Pre-function and lounge space, Offices and Support Spaces
Area: 10,000 sqft

Team
Design Architect: Efficiency Lab for Architecture PLLC
Interior Design: Efficiency Lab for Architecture PLLC
Furniture Design: Efficiency Lab for Architecture PLLC
Architect of Record: Adamson Associates
Structural Engineer: SOM
MEP: Syska Hennesy
Civil: Kimley Horn
Lighting Design: Claude Engel
Acoustic: Longman Lindsay





PRIVATE N-12 SCHOOL CAMPUS MIAMI, FL

Completion: 2025
Client: Confidential

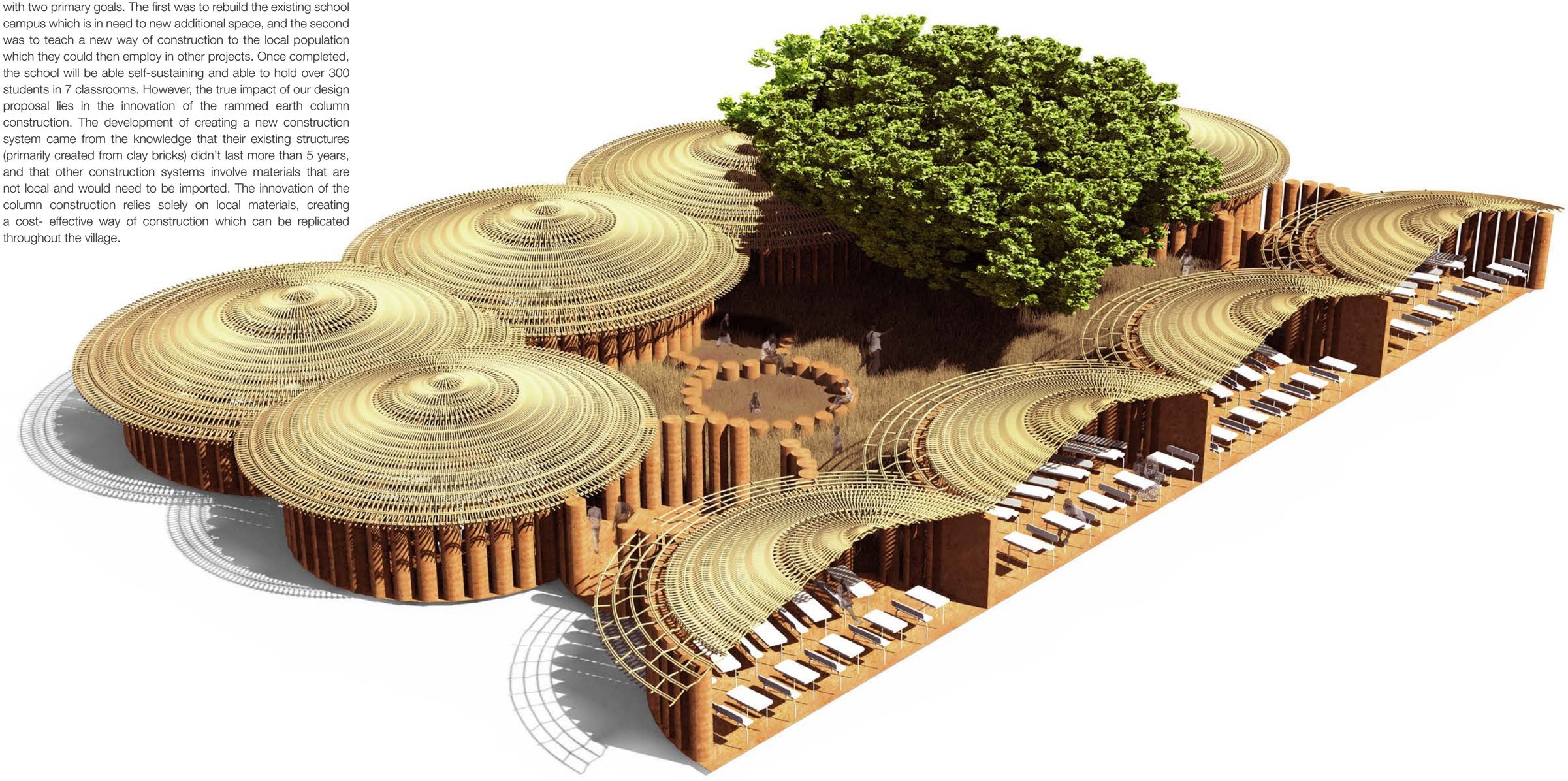
Total Gross Floor Area: 600,000 sf
Program: N-12 School. Classrooms, Support Spaces, Recreation Areas, Offices

TEAM
Masterplan: Efficiency Lab for Architecture PLLC
Design Architect: Efficiency Lab for Architecture PLLC
Interior Design: Efficiency Lab for Architecture PLLC
FF &E: Efficiency Lab for Architecture PLLC
Traffic: Langan
Civil: Langan

SAMBOU TOURA DRAME ELEMENTARY SCHOOL SENEGAL

Design Competition Entry: 2020
Client: Let's Build my School - NGO

The competition was held by the NGO Let's Build My School, with two primary goals. The first was to rebuild the existing school campus which is in need to new additional space, and the second was to teach a new way of construction to the local population which they could then employ in other projects. Once completed, the school will be able self-sustaining and able to hold over 300 students in 7 classrooms. However, the true impact of our design proposal lies in the innovation of the rammed earth column construction. The development of creating a new construction system came from the knowledge that their existing structures (primarily created from clay bricks) didn't last more than 5 years, and that other construction systems involve materials that are not local and would need to be imported. The innovation of the column construction relies solely on local materials, creating a cost- effective way of construction which can be replicated throughout the village.



THE LIMA ART MUSEUM - NEW CONTEMPORARY ART WING LIMA, PERU

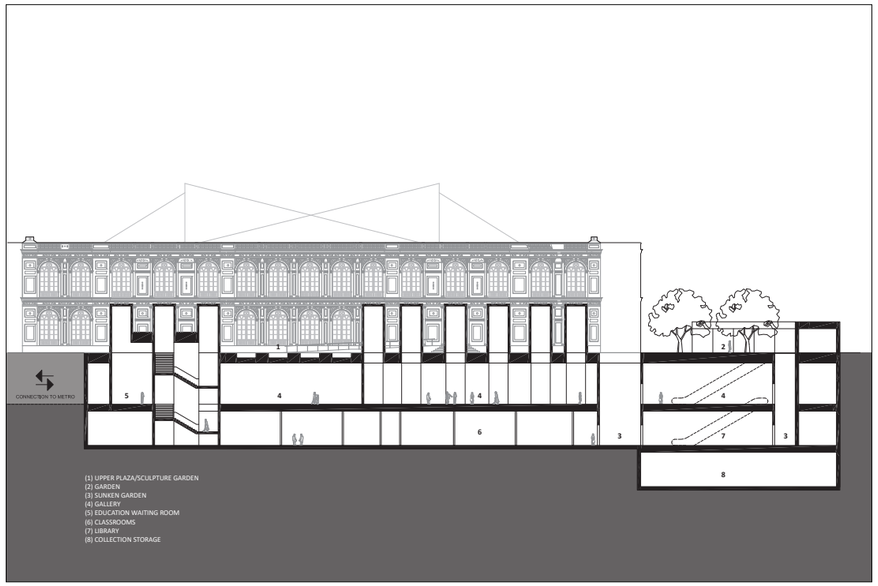
WINNER OF 2017 AIA NY DESIGN AWARD
WINNER OF 2016 WORLD ARCHITECTURE DESIGN AWARD

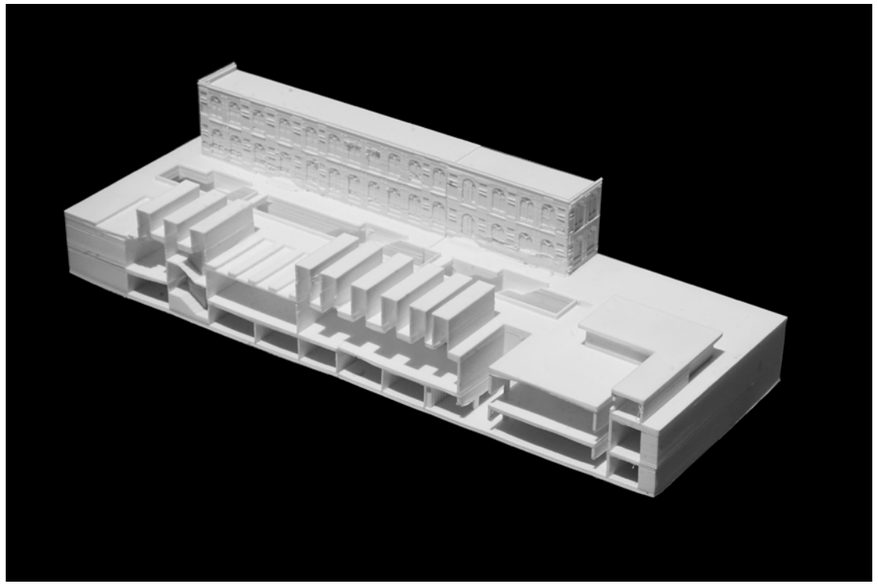
Design Competition Entry: 2016
Client: Lima Museum

Site Area: 3,500 m2
Total Gross Floor Area: 7,000 m2
Program: Art Galleries, Education Center, Library

PROJECT DESCRIPTION

The New Contemporary Art Wing Expansion to the Lima Art Museum located in the 19th century Exposition Palace, creates a strong architectural dialogue between the historical structure and the new expansion; they connect without touching. The project requirement to create a below grade expansion to the current museum without touching the historical structure below or above grade, resulted in a careful exploration of how to spatially connect these two buildings that cannot physically connect. The new expansion is conceived as an architectural counterpoint to the historical museum, by creating echoes of the historical structure throughout the project. While establishing a respectful relationship to the historical context of the site, the proposed new expansion creates a strong architectural presence that augments the experience of the historical context and offers a rich series of spatial interventions to engage the urban context.





KAUNAS M.K. ČIURLIONIS CONCERT CENTRE KAUNAS, LITHUANIA

Design Competition Entry: 2017

Site Area: 48,000 m2
Total Gross Floor Area: 11,500 m2
Program: Concert Halls, Multi-Functional Spaces, Restaurants

PROJECT DESCRIPTION

Polyphonic Projections - an ensemble of cellular structures, each designed specifically to enrich the audial, visual, tactile and environmental experience, form a series of unique spaces to house the Kaunos M.K. Čiurlionis Concert Centre. Inspired by the remarkable life & work of Ciurlionis, the phenomenological architectural approach of the proposed scheme emanates the Renaissance spirit of bridging different art forms.

The field condition created by the polyphonic projections - a silhouette of tapered forms - create a dialogue with the historical city fabric of Kaunos. The multiplicity of scales generated by the building massing and corresponding public spaces creates a permeable and active edge along the Nemunas River, forming an engaging civic space that will be a catalyst of activity for Aleksotas neighborhood.

Polyphonic projections spread out towards the park to create an active landscape/ a multi-faceted embankment which will create a unique park experience while forming sanctuaries of bio-diversity along the ebb and flow of the river's tidal reach.

SINGLE FAMILY RESIDENCE TELLURIDE, COLORADO

WINNER OF 2017 WORLD ARCHITECTURE DESIGN AWARD

Completion: 2021 (under construction)
Client: Confidential

Total Gross Floor Area: 7,500 sf
Program: Private Residence
Open Living, Dining & Kitchen, 5 Bedrooms, Media Room, Library, Mud Room, 2 Car Garage

Number of Floors: 3
Floor to Floor Height: 12’-6”
Floor to Ceiling Height: 10’-0”

TEAM

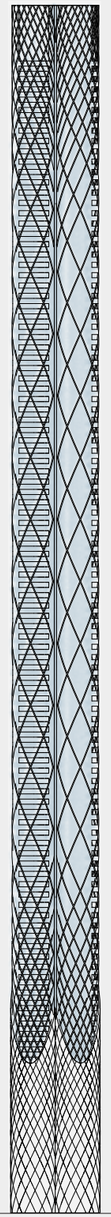
Design Architect: Efficiency Lab for Architecture PLLC
AOR: Tommy Hein Architects
Interior Design: Gachot Studios
Structural Design: Skidmore, Owings & Merrill LLP
MEP: Bighorn Consulting Engineers
Civil Engineer: Uncompahgre Engineering
Geo-Hazard Engineer: Trautner Geotech
Avalanche Diversion Wall: Gordon Geotechnical Engineering
Landscape Design: Caribou Design Associates
Pre-Construction: Gerber Construction

Construction Photo (Winter 2020)

MIXED USE TOWER NEW YORK

Design Proposal: 2016
Client: Confidential

Program: Hotel + Residential
Tower Height: 1,400’
Total Gross Floor Area: 1,000,000 sf



SHUMYIP UPPERHILLS SHENZHEN, PRC

VIDEO

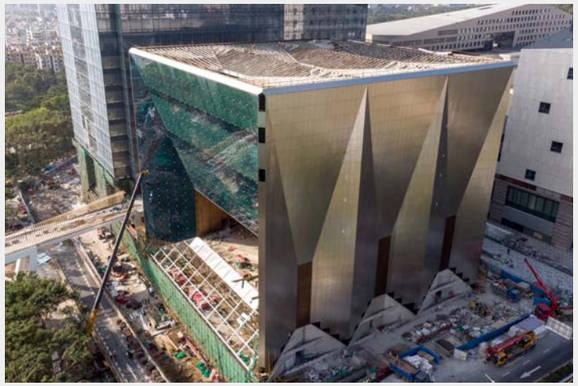
Completion Date: 2018 (under construction)
Program: Office, Hotel, Retail
Environmental: LEED Gold Certified (Tower 1)
Client: Shum Yip Land

Tower 1
Tower Height: 388 meters
Tower Floors: 80
Tower Gross Area (above grade): 228,600 m2
Tower Office Area: 185,880 m2
Tower Hotel Area: 36,500 m2
Typical Floor Gross Area: 2,999 m2
Typical Floor to Floor Height (office): 4,500 mm
Typical Floor to Floor Height (hotel): 4,200 mm
Typical Floor to Ceiling Height: 3,000 mm

Tower 2
Tower Height: 300 meters
Tower Floors: 62
Tower Gross Area (above grade): 155,375 m2
Typical Floor Gross Area: 2,543 m2
Typical Floor to Floor Height: 4,500 mm
Typical Floor to Ceiling Height: 3,000 mm

Mandarin Oriental Ballroom Pavilion
Building Height: 58 meters
Floors: 6
Total Gross Area (above grade): 18,000 m2
Total Hotel Area: 8,000 m2
Typical Floor to Floor Height: 9,500 mm (ballroom levels)

Project designed by SOM (Aybars Asci, Director-in-Charge of Design)



AL HAMRA TOWER KUWAIT CITY, KUWAIT

DISCOVERY CHANNEL VIDEO

Completed: 2011
Program: Commercial office tower with retail podium
Client: Al Hamra Real Estate Co.

Tower Height: 412.6 m
Tower Floors: 74 floors
Site Area: 10,480 m2

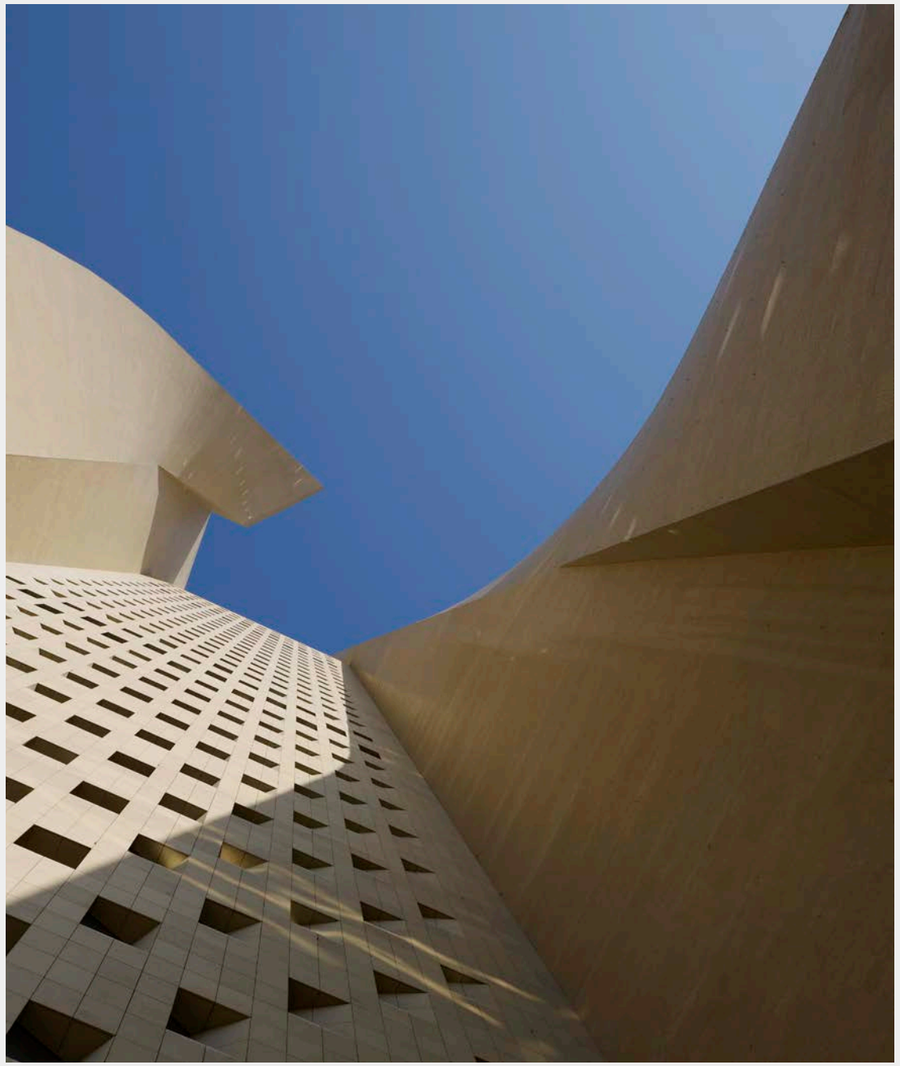
Tower Gross Construction Area: 186,381 m2
Tower Gross Area (above grade): 178,061 m2
Typical Floor Gross Area: 2,280 sm - 2,450 m2
Typical Floor Lease Span: 12,000 mm
Typical Floor to Floor Height: 4200 mm
Typical Floor to Ceiling Height: 2700 mm
Ground Floor Lobby Area: 1,200 m2
Retail Podium: 34,000 m2
Total MEP Area: 15,500 m2 (8,100 m2 above grade)

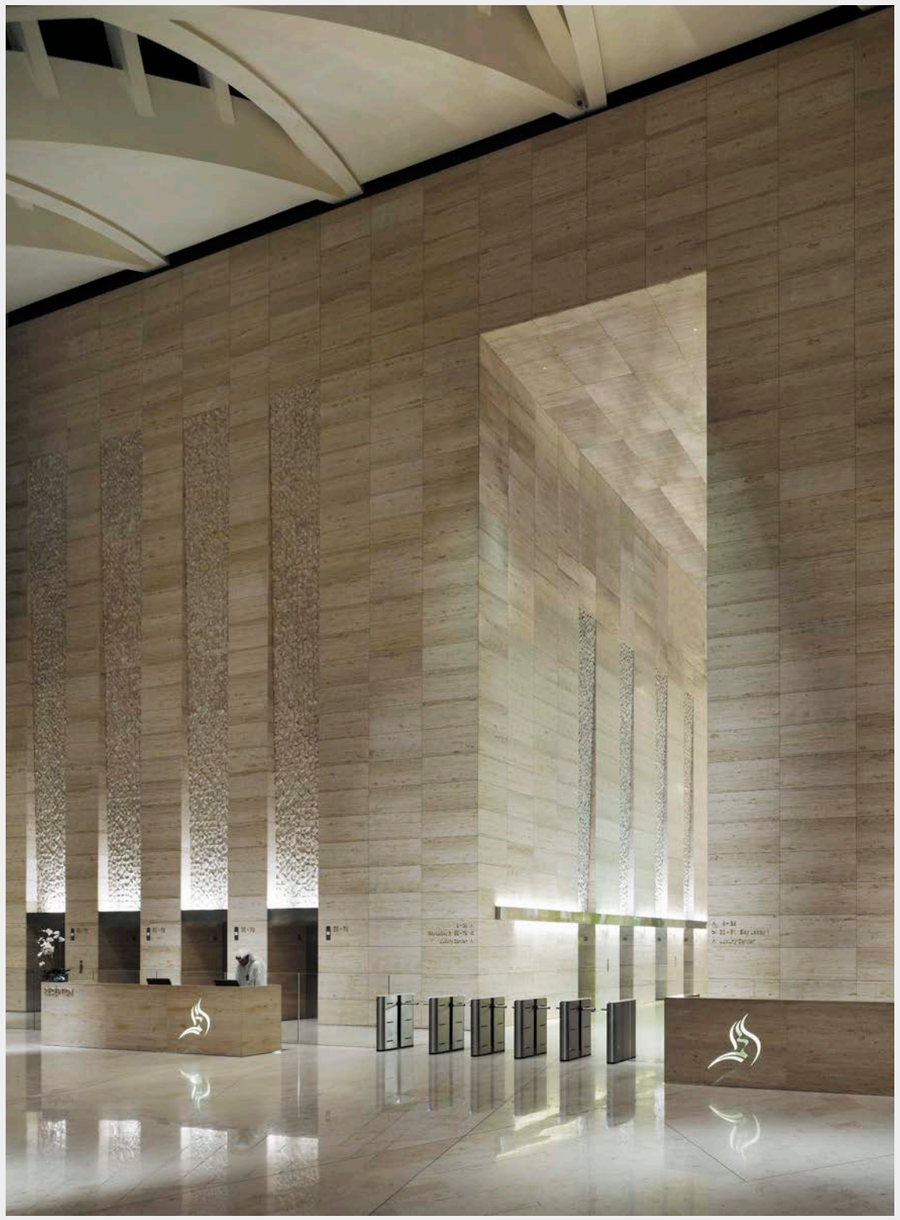
Building Envelope
Total External Surface Area: 101,675 m2
Total External Surface Glass: 60,680 m2
Total External Stone/Trencadis Cladding: 40,995 m2

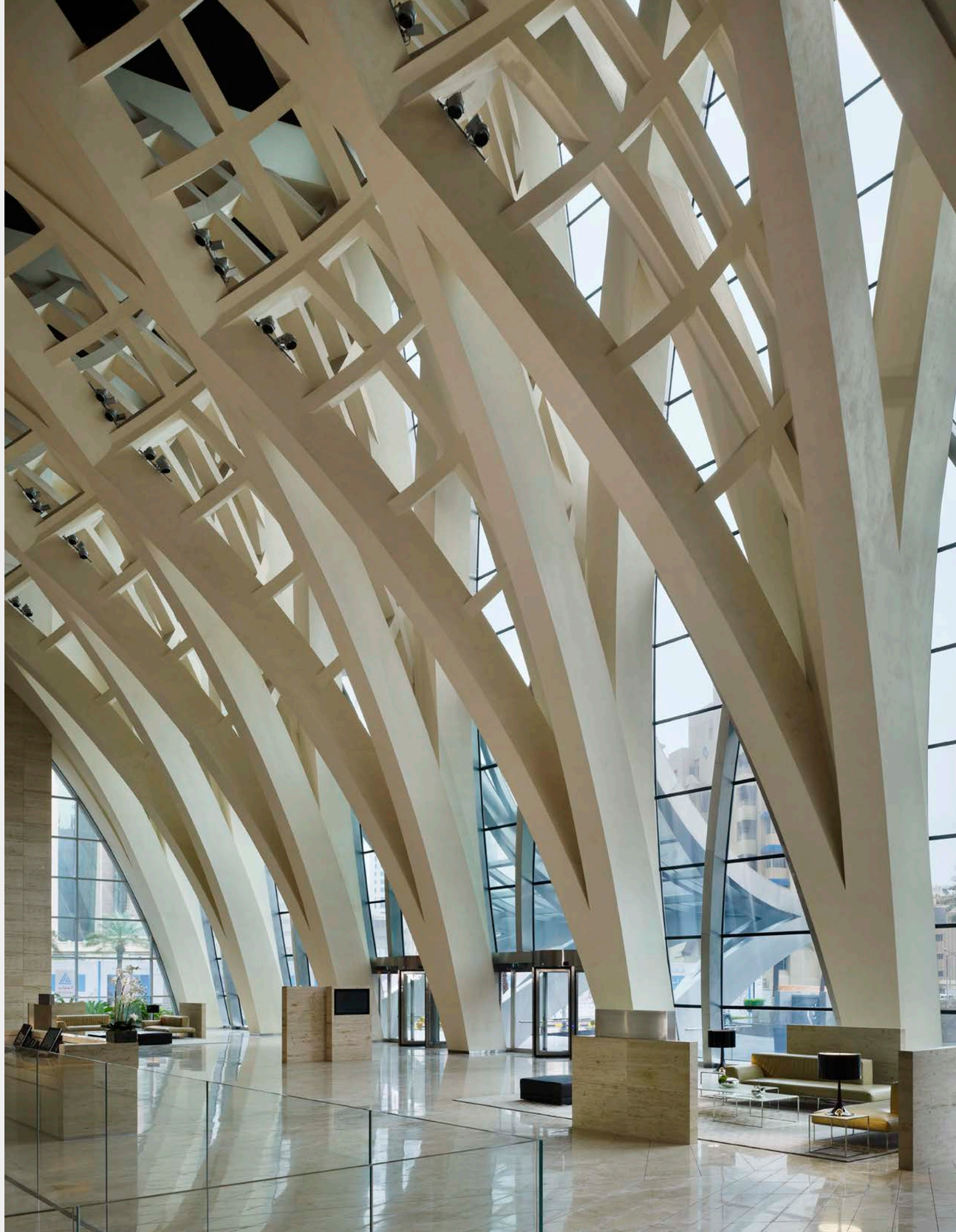
Glass
External Surface Area (Flat Glazing): 42,520 m2 (70.0%)
External Surface Area (Curved Glazing): 18,160 m2 (30.0%)

Stone/Trencadis
External Surface Area (Stone): 12,445 m2
External Surface Area (Trencadis): 28,550 m2

Project designed by SOM (Aybars Asci, Director-in-Charge of Design)







BACCARAT HOTEL & RESIDENCES NEW YORK

Completed: 2015
Program: Hotel, Residential, Restaurant, Library, Amenities
Environmental: LEED certified
Client: Starwood Capital + Tribeca Associates

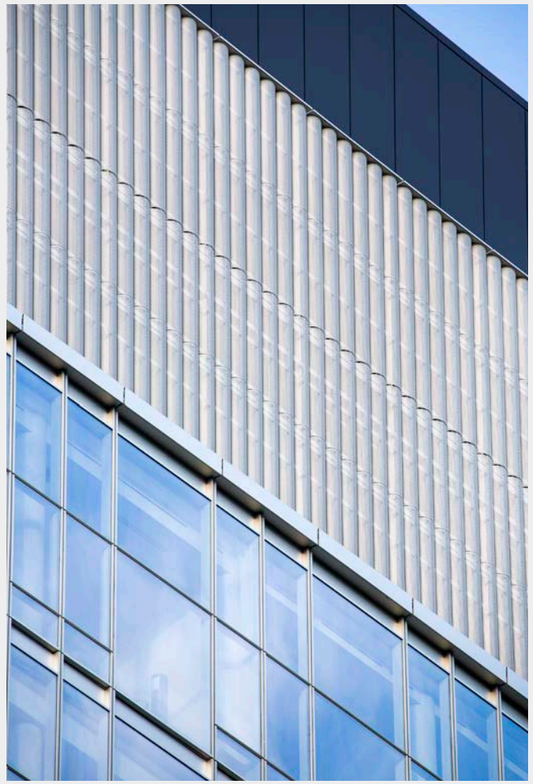
Tower Height: 605’ - 4”
Tower Floors: 46 floors
Total Gross Floor Area: 346,702 sf
Gross Area (above grade): 296,953 sf
Total Residential Gross Area: 171,827 sf
Total Hotel Gross Area: 146,802 sf
Total Restaurant Gross Area: 4,486 Ssf
Total Library Gross Area: 28,073 sf

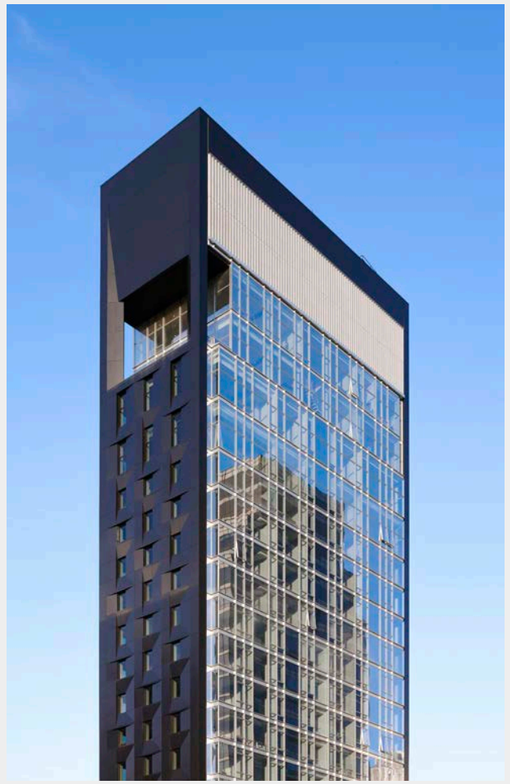
RESIDENTIAL
Residential Floors: 32 (Floors 14 -45)
Floor to Floor Height: 11’-8” (typ.) 16’-8” (penthouse floors)
Typical Residential Floor Area: 5,042 SF (110’-0” x 46’-2”)
Total Number of Units: 59

HOTEL
Hotel Keys: 114 (23% Suites); 435 SF typ. bay size
Typical Hotel Fl. to Fl.: 10’-8”
Typical Floor Plate Size: 9,500 sf (139’-8” x 70’-5”)
Amenities: 12,000 sf
Pool (14’x65’), Spa (3,500 sf), Fitness Center (1,200 sf)

BUILDING ENVELOPE
Total Exterior Wall Area: 196,992 sf
North-South Curtain Wall: 131,532 sf
East-West Metal Panel: 56,007 sf
Prismatic Storefront Area: 6,782 sf
B-Bar Terrace Curtain Wall Area: 1,219 sf
New York Library Storefront Area: 1,452 sf

Project designed by SOM (Aybars Asci, Director-in-Charge of Design)






SHOP MoMA
SHOP MoMA

LIQUID FORMS BY AYBARS ASCI - KAZA CONCRETE

WINNER OF WALKER ZANGER KAZA DESIGN COMPETITION - 2016

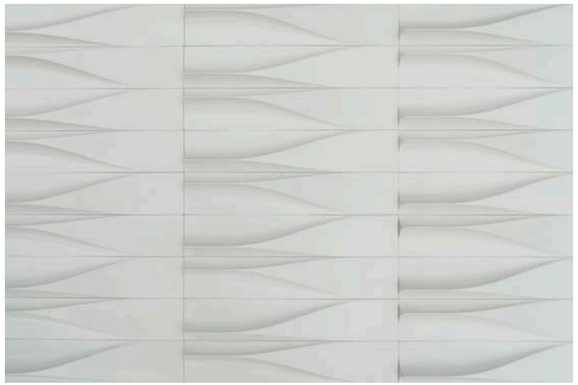
Commercially available in 2017

“The nature of concrete as a material has always been very inspiring to me - it is poured in a liquid state, and it takes its ultimate form as it cures. There is poetry in a material that finds its form as it changes phases. When I see a concrete surface, I always imagine its liquid state, its movement as it is poured. The concept I explored for this design was the expression of flow and movement in a solid form.

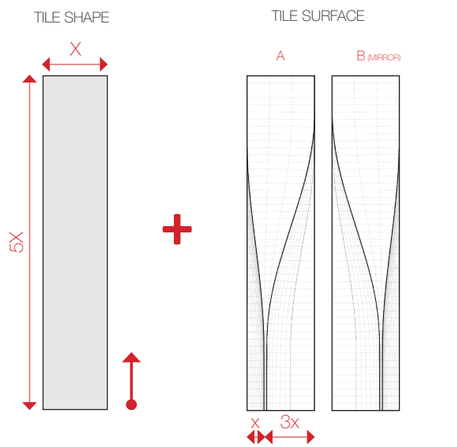
And perhaps the best examples of this phenomena manifests itself in the mastery of Baroque sculptors - chiseled into marble. The ephemeral qualities of capturing movement in stone in Bernini’s masterpieces has been an inspiration for me
.
And how does the idea of capturing movement translate itself into tiling?

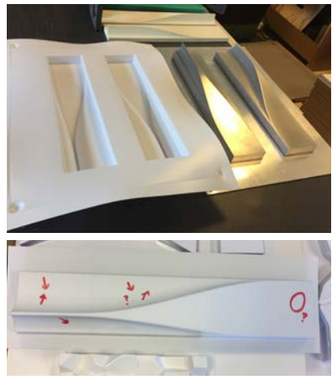
Tiling by nature is about repetition. And repetition can be a powerful design tool. Imagine the music of Steve Reich or Philip Glass. Creating a single tile design that can generate multiple patterns was very important to the ethos of this idea. ‘Liquid forms’ tile is aesthetically versatile. All the different patterns it generates have unique visual qualities that will give architects and interior designers a rich palette to work with.”

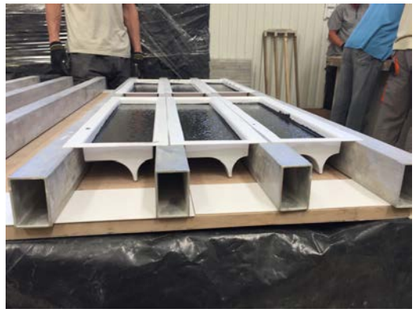
AYBARS ASCI



ONE TILE MULTIPLE PATTERNS







Fabrication Photos (December 2017)

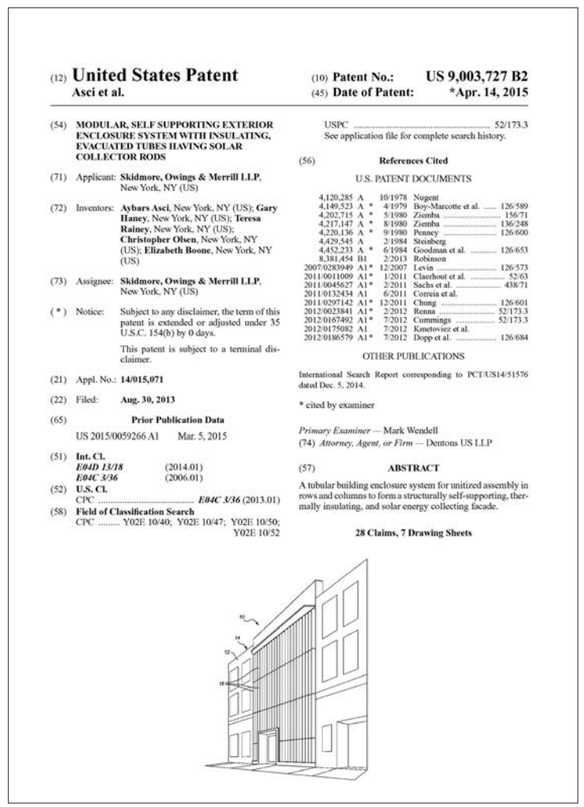
VACUUM INSULATED TUBES INVENTION

U.S. Patent Awarded: 4-14-2015
Aybars Asci, Inventor

Tube Assembly: Two uniform-radiused-curved pieces of laminated glass forming an evacuated chamber. The system is assembled by thermally broken aluminum extrusion and plate framing.

Claims Summary: Superior thermal performance due to evacuated chamber*; modular assembly; self supporting due to system cross section depth

** 0.06 Btu/hr-ft2-0f for a 100% window to wall ratio (desktop study results)*



(12) **United States Patent**
Asci et al.

(10) **Patent No.: US 9,003,727 B2**
(45) **Date of Patent: *Apr. 14, 2015**

(54) **MODULAR, SELF SUPPORTING EXTERIOR ENCLOSURE SYSTEM WITH INSULATING, EVACUATED TUBES HAVING SOLAR COLLECTOR RODS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(52) **U.S. Cl.**
CPC ***E04C 3/36*** (2013.01)

(58) **Field of Classification Search**
CPC Y02E 10/40; Y02E 10/47; Y02E 10/50; Y02E 10/52
USPC 52/173.3
See application file for complete search history.

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International Search Report corresponding to PCT/US14/51576 dated Dec. 5, 2014.

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Primary Examiner — Mark Wendell
(74) *Attorney, Agent, or Firm* — Dentons US LLP

(57) **ABSTRACT**

A tubular building enclosure system for unitized assembly in rows and columns to form a structurally self-supporting, thermally insulating, and solar energy collecting facade.

28 Claims, 7 Drawing Sheets

EFFICIENCY RESEARCH

Efficiency & Building Enclosures. The Bernard and Anne Spitzer School of Architecture, CCNY. 2015-2018

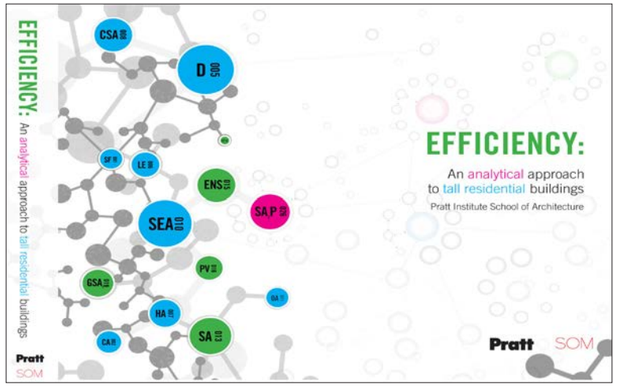
Efficiency & Understanding Thermal Comfort. Cornell University. Spring 2015.

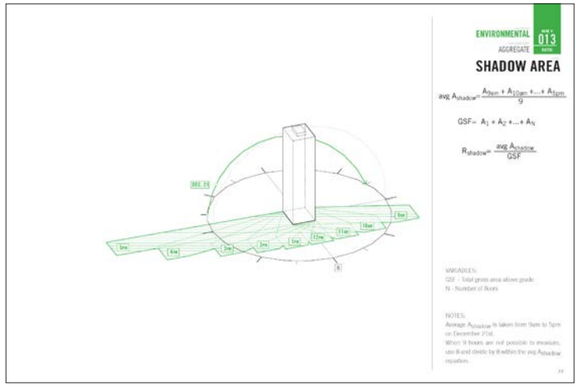
Efficiency: An analytical Approach to Tall Residential Buildings. Pratt Institute. Fall 2014

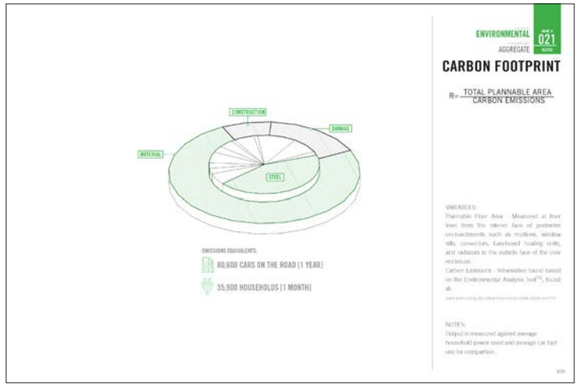
Efficiency: An analytical Approach to Tall Office Buildings. Northeastern University. Fall 2013 and Spring 2014

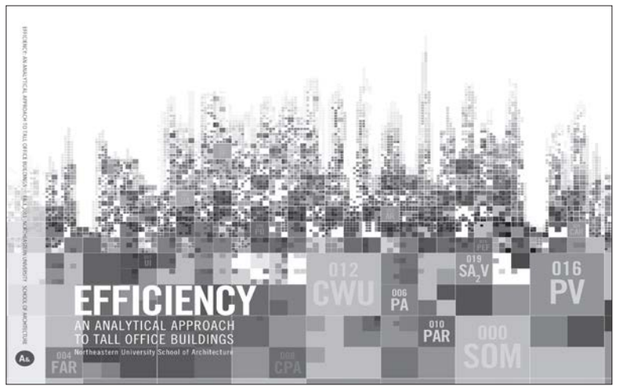
In architectural discourse, the use of efficiency oscillates between loosely-defined anecdotal claims of '*buildings being highly efficient*' and the short-sighted analytical approach of simple ratios, usually reported in a single percentage like sellable-to-gross floor area. There is a lack of a cohesive discussion on efficiency that takes into account the complexity of various building attributes and how they relate to each other. Moreover, there is an urgent need to begin an analytical discourse that demystifies some of the metaphorical claims of efficiency, and build a real foundation that can be used as a tangible model. This research study on tall towers is an attempt to formulate one. Tall tower typology is chosen as a case study because of its following characteristics: a) large scale b) repetition and c) extremeness. Even though these characteristics are intrinsic to tall buildings they are not exclusive to them. That is why the research for these three characteristics took a broader perspective. For each of these, the students looked at natural and manufactured landscapes, works of art, utilitarian objects, highly engineered products, work processes, behavioral patterns, etc. The class also surveyed efficiency concepts in other fields, such as '*pareto efficiency*' to understand their applicability to the built environment.

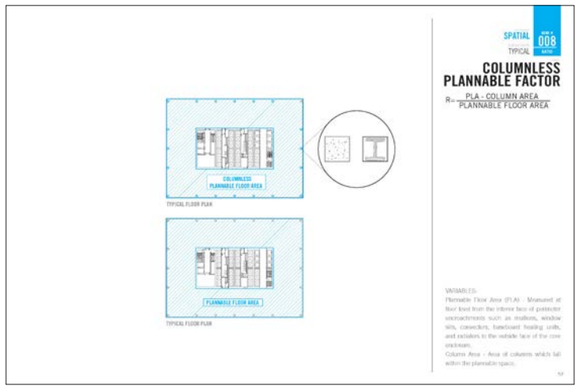
The tall buildings were studied under three categories; spatial, structural and environmental. The spatial efficiency category covered topics like floor plate size, core configuration, planning module and vertical stack. The structural efficiency category covered forces, structural systems, placement of material, form-finding algorithms and structural optimization. The environmental efficiency category covered building systems, enclosure design, thermal comfort, energy and life-cycle analysis. Each student were given a case study, and they analyzed these buildings with the measuring eye of the surveyor, cataloging them diligently to create a data base of information.

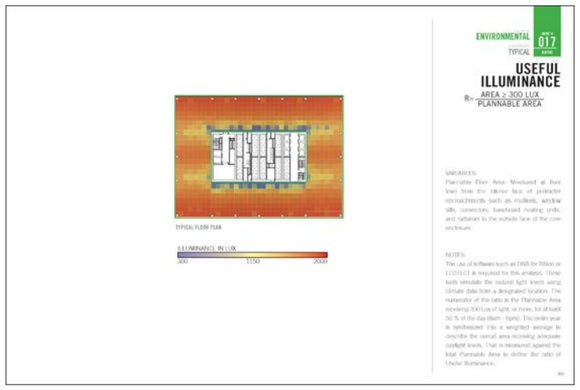


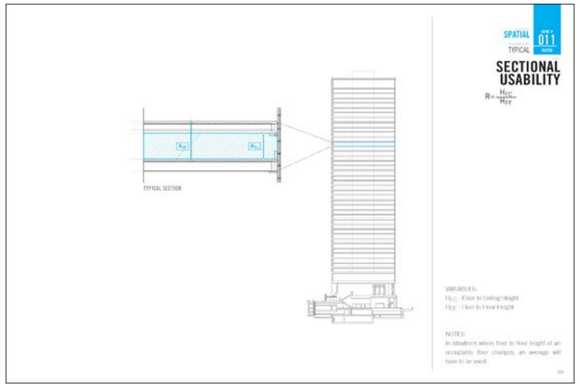


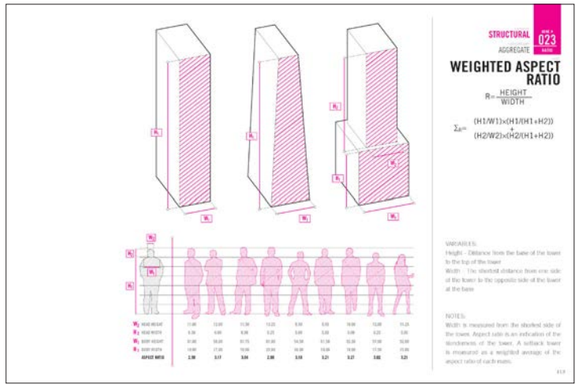












PROJECTS / RECOGNITIONS

LIST OF PROJECTS

2023 Avenues World School Campus, Miami, FL

2021 Avenues Sao Paulo, Brazil

2021 Avenues World School Campus, Silicon Valley, San Jose, CA

2019 Avenues World School Campus, Shenzhen, PRC

2019 Student Housing, Loyola University, Chicago, IL, USA

2019 Single Family Residence (under construction), Telluride, CO, USA

2019 35 Hudson Yards, New York City, NY, USA

2018 Four Seasons Jeddah (under construction), Jeddah, Saudi Arabia

2018 Shum Yip Upper Hills, Shenzhen, PRC

2015 Baccarat Hotel & Residences design competition, Doha, Qatar

2015 Baccarat Hotel & Residences, New York City, NY, USA

2014 Financial City, Taiyuan, PRC

2014 Midtown Masterplan, Shenzhen, PRC

2012 Central Park Masterplan, Xian, PRC

2011 Al Hamra Tower, Kuwait City, Kuwait

2010 3 Columbus Circle design competition, New York City, NY, USA

2010 Haitian Center, Qingdao, PRC

2011 Anida Tower, Mexico City, Mexico

2011 Zhaorui Plaza Masterplan, Tansghan, PRC

2010 Guan Yin Temple, Tianjin, PRC

2010 K1+K2 Towers design competition, Jeddah, Saudi Arabia

2009 Qatar Petroleum Headquarters, Doha, Qatar

2009 twofour54 Media City design competition, Abu Dhabi, UAE

2008 Wood Wharf Towers, London, UK

2007 Warwick Road Residential Towers, London, UK

2007 U.S. Census Bureau Headquarters, Suitland, Maryland, USA

2006 City Santa Fe Towers, Santa Fe, Mexico

2005 Al Sharq Tower, Dubai, UAE

2004 Al Rajhi Bank Headquarters, Riyadh, Saudi Arabia

2004 400 Fifth Avenue, New York City, New York

2003 Bahrain Waterfront, Manama, Bahrain

2003 Central Bank of Kuwait design competition, Kuwait City, Kuwait

2003 U.S. Border Crossing Stations, various locations, USA

2002 Fuller Building, New York City, NY, USA

2001 New York Stock Exchange, New York City, NY, USA

PRESENTATIONS

2020, December 8. Zhulong Lecture Series. ‘Efficiency is Beautiful’.

2017, September 20. London Design Festival. DOMUS Clerkenwell. ‘Liquid Forms’

2017, June 15. FUGA: Budapest Center of Architecture. ‘Concrete Stories’

2017, April 14. Bilkent University, Ankara. ‘Bandirma Park’.

2016, November 30. Rensselaer Polytechnic Institute. ‘Efficieny Lab for Architecture’.

2016, March 31. School of Visual Arts, New York. ‘Understanding Efficiency in Architecture’.

2015, November 10. The Bernard and Anne Spitzer School of Architecture, The City College of New York. ‘Understanding Efficiency in Architecture’.

2015, September 9. The Pennsylvania State University. ‘Understanding Efficiency in the Built Environment’.

2015, March 4. Buffalo School of Architecture & Planning. Symposium. Facade: Phenomenon, Memory, Identity. Speaker

2015, February 25. Northeastern University. Symposium. Export Agendas: The Global Transfer & Translation of Architectural Expertise. Speaker.

2014, October 11. Pratt Institute. Symposium. City By Numbers: Big Data and the Urban Future. Respondent. WW

2013, December 26. TED University, Ankara. ‘SOM: Stereotomic Works’

2012, October 18. CTBUH, Award Ceremony, Chicago. ‘Al Hamra Tower’. co-presented with Mark Sarkisian

2011, October 10. CTBUH 2011 World Conference, Seoul. ‘Al Hamra Firdous Tower’. co-presented with Mark Sarkisian

2011, October 1. The Architecture League, New York. ‘Annual Student Event Presentation’

2011, March 27. China Architecture Design & Research Group, Beijing. ‘Al Hamra Tower’

2011, March 22. The 4th Annual Ultra-High Rise Building Summit, Shanghai. ‘SOM Legacy + Innovation: the Iconic Skyline’

2010, December 17. Tsinghua Design Institute, Beijing. ‘Algorithmic Design at SOM’

2010, February 16. MIT. ‘Design In-Formation: The DP Experience at SOM’ - co-presented with Tobias Schwinn

2009, February 17. MIT. ‘Variations Under Control’ - co-presented with Tobias Schwinn

2008, February 15. MIT. ‘Qatar Petroleum Complex’ - co-presented with Tobias Schwinn

2007, December 6. Oxford Brookes, UK. ‘London Experiment’

2007, May 5. ASA, Thailand. ‘Performative Design’ - co-presented with Noppon Pisutharnon

2007, November 7. Architecture Association, London. ‘Designing in Extreme Climates’

2006, November 15. Digital Project Conference, London. ‘Analysis & Performance in Design Process’ - co-presentor

AWARDS

The Lima Art Museum - New Contemporary Art Wing

2017, AIA New York Design Award

2016, World Architecture Design Award

Bandirma Park Masterplan

2017, International Design Competition, Honorable Mention Award

Kaza Concrete Tile

2016, Walker Zanger Kaza Design Competition Winner

Brodsky Residence

2017, World Architecture Design Award

Al Hamra Tower

2014, Middle East Architecture Awards, Commercial Project of the Year

2013, Architizer, Architizer A+ Award: Office Building High Rise, Finalist

2013, Structural Engineers Association of Illinois, Best International Project Over $150 Million

2013, AIA - New York City Chapter, Design Award

2012, Institution of Structural Engineers, Award for Commercial or Retail Structure

2012, Structural Engineers Association of Northern California, Award of Excellence: Landmark Structures

2012, Popular Science Magazine, Best of What’s New

2012, CTBUH, Best Tall Building Middle East & Africa: Finalist

2012, National Council of Structural Engineers Association, Excellence in Structural Engineering

2012, National Council of Structural Engineers Association, International Structures over $100 Million

2011, Emporis, Skyscraper Award: Silver Medal

2010, Cityscape, Commercial / Mixed Use Built

2008. MIPIM Future Project Award: Tall Buildings

2008. International Architecture Award. Chicago Athenaeum

Al Rajhi Bank HQ

2011, Boston Society of Architects, Unbuilt Architecture Award

2008. Design Award. AIA - New York City Chapter

2007. International Architecture Award. Chicago Athenaeum

2005. Miami Bienal Grand Award

Al Sharq Tower

2009, Chicago Athenaeum, American Architecture Award

2009, MIPIM/Architectural Review, MIPIM Future Project Award: Commended Tall Building

2008. P/A Award: Architectural Design Progressive Architecture

2008. International Architecture Award. Chicago Athenaeum

Qatar Petroleum

2009, MIPIM Architectural Review Future Project Awards, Mixed-Use - commended

U.S. Census Bureau

2012, AIA Washington, D.C. Chapter Award of Excellence in Architecture

2009, The Chicago Athenaeum, Green Good Design

2007. Design Award. AIA - New York City Chapter

2007. Design Award. Institutional, Award of Excellence. AIA - New York State

2007. Sustainibility/Workplace Environment Citation. U.S. GSA

2007. Smart Environments Award. Metropolis

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2015, April 14. Patent Number: 9,003,727. Modular, Self Supporting Exterior Enclosure System with Insulating, Evacuated Tubes Having Solar Collector Rods. Aybars Asci, co-inventor

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Archicreation. Feature Issue on Four SOM Projects (Gary Haney + Aybars Asci). April 2015

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The Economist. June7-13, 2008. ‘From Blueprint to Database’ (featuring QP) p. 15

Asci Aybars. ‘The high Concept: ARB Bank Headquarters, Riyadh’. The Leaf Review. No.4, 2008, pp 66-69

Eastman; Teicholz; Sacks; Liston. ‘BIM Handbook: A Guide to Information Modeling’ (featuring Al Hamra Tower) John Wiley & Sons, Inc. 2008, pp 177-179.

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Lerner, Nick. ‘Changing the Rules of Design’. The Structural Engineer. Vol 85, No. 13, July 2007, pp. 26-27

Lerner, Nick. ‘Digital Project at SOM’. AEC Magazine. Vol 31. May/June 2007, pp. 20-21

AYBARS ASCI AIA LEED BD+C PHc
Founder

Aybars Asci, president and founder of Efficiency Lab for Architecture, is an advocate of research driven design that combines conceptual clarity with analytical processes such as the use of algorithmic tools and building performance modeling.

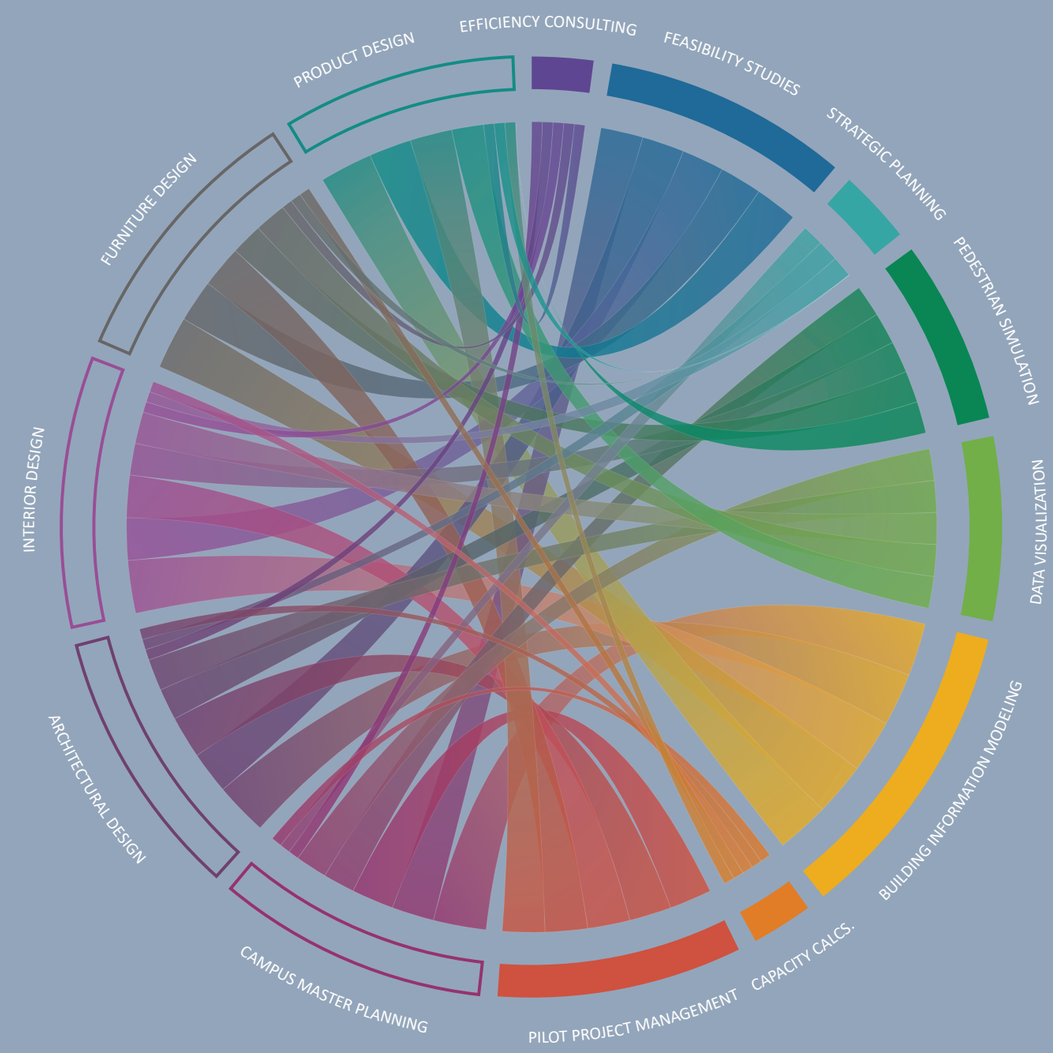
As a **practicing architect** he has over 20 years of experience, working in New York and London, on projects located in North America, Central America, Middle East and Asia.

As an **inventor**, he holds a U.S. patent for a high performance enclosure system (Patent # 9003727; approved 4-14-2015).

As an **educator**, he has taught seminars and studios on efficiency, high rise design and environmental systems at The City College of New York, Cornell University, Pratt Institute and Northeastern University.

As an **environmentalist**, he has advocated environmental consciousness at design and policy making platforms. He is a certified Passive House Designer and a certified LEED AP BD+C professional.

Aybars holds a Master of Science in Advanced Architectural Design degree from Columbia University.



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