# MHS BUILDING SYSTEMS

Sustainable Modular Prefab Building Components



### STRUCTURAL ALUMINUM FRAMING DESIGN

MHS DESIGN STUDIOS

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#### UNIQUE PROPERTIES / PRODUCTS DESCRIPTION

MHS Building Systems, an internationally awarded construction system designed, patented, and developed by an Architectural Engineer. Our Prefabricated Modular Building Materials and Construction Components offer a strong yet lightweight Aluminum Post and Beam Framing System, providing an ideal solution to meet the creative demands of modular projects. Collaborating with designers and contractors, we deliver sustainable prefabricated projects using MHS Structural Aluminum Framing and paneling systems. This certified method supports the construction of architectural designs for residential and commercial buildings up to three stories.

#### PROJECT DURATION AND LOCATION

MHS's design and inventor office is based in Irvine, California. Fabrication licenses are held in Los Angeles, Sacramento, and Long Beach.

#### PRODUCTION / REALIZATION TECHNOLOGY

Research and Evaluation Report: LARR: 25703 from the Department of Building and Safety in Los Angeles, CA, USA. Our systems have received General Building Codes Approval with Technical Modifications, allowing the use of MHS building systems in Seismic Design Categories A-F (LARR 25703).

#### **SPECIFICATIONS / TECHNICAL PROPERTIES**

MHS Prefab Aluminum Post and Beam Framing can be left exposed or covered with various enclosure systems depending on architectural requirements. The MHS-170 extrusion section measures 170 mm x 170 mm.

#### **CHALLENGE**

The unique simplicity and flexibility of this structure allows it to harmonize with its environment, showcasing optimal sustainability.

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#### **METHODOLOGY**

- 1. Post and Beam Framing Construction, utilizing sandwich panels for roofs and floors, and light wood shear walls for multi-story buildings.
- 2. MHS prefab modules, standard modular structural units utilizing sandwich panels for roofs and floors, ready for quick assembly on-site.

#### PATENTS/COPYRIGHTS

The system's inventor holds patents in the USA and China for Modular Aluminum Systems with an interlocking mechanism for prefab housing aluminum construction, compatible with EPS sandwich panel assembly and conventional building materials.

#### **PROFILE**

MHS Structural Aluminum Framing, invented, designed, and rigorously tested to meet International Building Codes by Tim Siahatgar, an Architectural Engineer based in Irvine, California. MHS Building Systems introduces a groundbreaking prefab solution for sustainable living, featuring the patented MHS Building Systems technology—the world's first load-bearing modular aluminum post and beam structural system.

#### **Innovation and Versatility**

MHS Building Systems offers unparalleled construction options, providing limitless design and configuration possibilities, constrained only by creative imagination. Our solutions enable newly designed homes, offices, or structures to perfectly integrate into any chosen site, optimizing views, sunlight exposure, and natural surroundings.

#### Advanced Design and Eco-Friendly Technology

MHS Building Systems' advanced and innovative designs integrate Modernist aesthetics with ecofriendly technology, catering to diverse sites, locations, and lifestyle requirements. Tim Siahatgar's technology promotes a superior green lifestyle through the integration of design principles and renewable technologies.



#### Sustainability and Adaptability

The MHS structure is fully recyclable and re-locatable, leaving minimal human footprint. Our modular structural design offers adaptable living solutions for any architectural application, utilizing precision-built MHS modular components assembled on-site.

#### **Construction and Features**

MHS Structural Frame Assembly includes prefabricated MHS Modular Aluminum frame extrusions combined with structural insulated panels (SIP) featuring EPS foam core material. The MHS prefabricated building envelope ensures healthy, termite-free, mold-free, and energy-efficient homes with superior ventilation and insulation properties.

#### **Key Features**

- 1- Equivalence to conventional post and beam designs, with structural lumber or I-beam steel replaced by MHS aluminum posts and beams.
- 2- Features an interlocking bolting system and modular grid-type construction built on a 4-6-foot center.
  - 3-- Aluminum Column Post & Beam members bolt together, integrating seamlessly with infill insulated panels for walls, roofs, and floors.
    - 4-- Can be supported with MHS tested shear walls and diaphragms, accommodating almost any architectural design.

#### **Industry Recognition**

In 2017, MHS Building Systems received approval from the Research Department of Building and Safety in Los Angeles (RESEARCH REPORT: RR 25703), solidifying its commitment to innovation and compliance with rigorous industry standards.











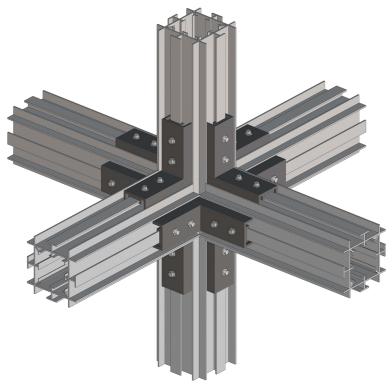
MHS Building Systems Structural Aluminum Framing Design by Tim Siahatgar is Winner in Building Materials and Construction Components Design Category, 2022 - 2023.



#### **DESIGN SAMPLE:**

Visit the following page to learn more: http://instagram.com/mhs\_building\_systems







A' Design Award Winner in Building Materials and Construction Components Design Category, 2022 - 2023.

#### MHS Building Systems by Tim Siahatgar

Structural Aluminum Framing Design: MHS Building Systems, designed, patented and developed by Tim M Siahatgar, Architectural Engineer located in Irvine California. A strong, yet lightweight, Aluminum Construction Systems, it's the perfect solution to meet the creative demands of modular unique projects, with endless possibilities, designer & contractors work together, to deliver sustainable perfeativated projects using MHS Structural Aluminum Fauniar and paneling systems. Almost any architectural residential and commercial buildings design up to 3 stories can be built with this certified method of modular prefab construction.











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MHS Los Angeles Fabricator Licensee



## MHS Prefab Modules

**Structural Prefab Modules Assembly** 



MHS Structural Aluminum Framing Mudules

MHS structural modules serve as a versatile skeleton framework for any architectural plan modifications

A Call for Collaboration and Innovation

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# MHS Prefab, Structural Aluminum Framing Design

**Apartment Duplex with MHS Post and Beam Framing** 

#### **Modern Construction**



MHS Post and Beam Framing: MHS (Modular Housing Systems) offers sustainable prefabricated projects using structural aluminum framing and paneling systems

#### A Call for Collaboration and Innovation

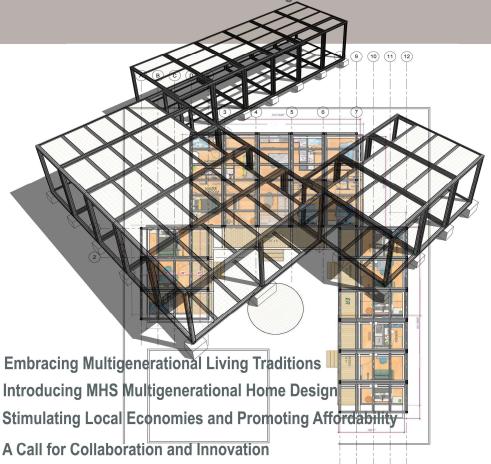




## MHS Prefab Modules

### Revolutionizing Multigenerational Living with Innovative Solutions

**Prefabricated Structural Aluminum Framing Modules for Modern Construction** 



MHS structural modules serve as a versatile skeleton framework for any architectural plan modifications

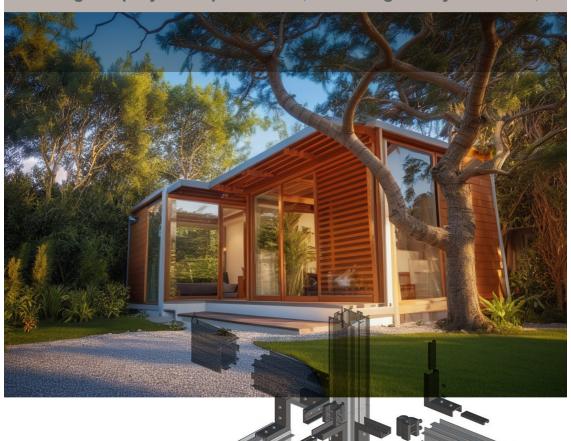
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## MHS Prefab,

Structural Aluminum Framing Design

MHS modules are highly versatile, catering to a diverse range of project requirements, including Backyard ADUs,



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**Apartment Duplex with MHS Post and Beam Framing** 

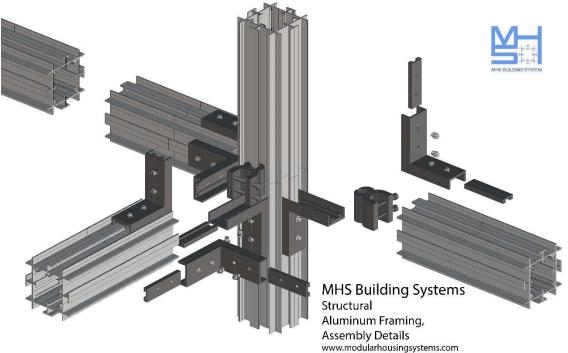


MHS Post and Beam Framing: MHS (Modular Housing Systems) offers sustainable prefabricated projects using structural aluminum framing and paneling systems

#### A Call for Collaboration and Innovation











#### MHS Prefab



### Made in USA

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