

# Aluminum structural framing— building inspiration

Creative structural alternatives for architecture and design



# Everything...



*“The challenge was to produce a new kind of prefab house that would provide an exceptional product at a relatively average price through smart construction strategies, reduction of on-site waste, and the elimination of heavy equipment and/or specialized trades.”*

Alan Koch  
Taalman Koch Architecture,  
Architects of iT House

Architects and designers are discovering an innovative resource to help them express their creative solutions to shape the spaces where we live, work and play.



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Cellophane House, KieranTimberlake



# ...To Build Anything

## New Shapes, New Spaces with Aluminum Structural Framing.

For over 30 years, Rexroth aluminum structural framing has been a mainstay in manufacturing environments—literally providing “everything to building anything.” It’s a complete building system, one we’re proud is now being embraced by the architectural and design community.



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SmartWrap™, KieranTimberlake

*“Bosch Rexroth framing enabled us to develop a system of off-site fabricated building based on flexible rules that can achieve multiple outcomes and meet individualized needs.”*

**James Timberlake**  
Partner, KieranTimberlake



Offering the most extensive range of profiles, connectors and accessories on the market, its unique T-slot design is specially engineered to provide high strength-to-weight ratios, fast assembly, easy reconfiguration and superior fit and finish. Plus, the system’s bolt-together design saves significant design and assembly time.





### Versatile in Form, Flexible in Function

Structural framing simplifies the creation of structures without sacrificing good environmental design—or aesthetic appeal:

- Design and build anything
  - High quality components for a wide range of architectural applications
- Engineered for precision
  - Excellent fit and finish
  - Lightweight components
  - Strong and durable (High strength-to-weight ratio)
- Easy to assemble—and disassemble
  - Pre-assemble in one location, break it down and re-assemble at the final site

### Designed for Aesthetic Applications

Rexroth engineers clean, well-designed framing products that can shape any environment with:

- Superior fit and finish
- Sleek, clean, anodized aluminum elements
- Polished design with high-tech look
- Scratch and corrosion resistant surfaces
- From smallest to largest—picture frames and cabinets to large museum exhibits and modular houses





© KieranTimberlake

Loblolly House, KieranTimberlake

## Structural Framing FAQs

### **What is Aluminum Structural Framing?**

The Bosch Rexroth modular framing system is built around a simple T-slot aluminum extruded profile, or framing element. It features hundreds of stock extrusions, connectors and accessories, which can be bolted together, rather than welded, nailed or otherwise permanently fastened.

### **How can I use it?**

Initially designed to create frames, workstations and machine bases for industrial applications, structural framing literally has “everything to build anything.” Now architects have begun

to discover the benefits of Aluminum Framing for interior design features (stairs, room dividers, shelving), display elements, booths and information kiosks, commercial and gallery displays, and even modular homes.

### **What design support tools are available?**

Rexroth offers design tools for any software environment. Save hours of design time with 3D Solid Models from our web site. FMSoft™ helps you choose standard components and eases 3D assembly, automatically compiling a parts list. Plus, we have a complete online Framing Shop for easy ordering.

# Applications: Imagine—Design—Build

Across the creative community, architects and designers are embracing structural framing. The more you use it, the more ideas will spring forth.

- Buildings and architecture—homes, studios, workspaces, stores, permanent and temporary structures
- Interior design—fixtures, entryways, door and window frames, stairwells, sunrooms, storage units
- Museum, gallery and tradeshow exhibits—fine art, science, kiosks, displays, directional and informational signage
- Retail and sales showrooms—product displays, distinctive exterior and interior signage, combination storage/display units
- Furniture—desks, shelving, cases, storage units, bookcases, computer tables, audiovisual units
- Information and visual displays—easels, display cases, bulletin boards
- Unique or temporary structures—transit stops, traffic control units, public/tourist information, single-day event shelters, portable stage systems

## Case Histories:

### See what you can build



#### A unique living experience

Taalman Koch Architecture has found a way to create a unique home environment with their

prefabricated iT house, using Rexroth structural framing. Made entirely with glass and an aluminum structure, the structural frame's lightweight and easy-to-assemble components create clean lines and a sleek exterior design.

#### Showcasing Sue, the T. Rex

When “Sue,” the most complete T. Rex fossil yet discovered, was put on display at Chicago’s Field Museum of Natural History, a special gift shop, the Sue Store,



was built with Rexroth Aluminum structural framing. It offered a flexible system with industrial strength and fast, easy assembly. From initial request through design evolution, only two weeks elapsed; once the design was finalized, the 1450 square foot kiosk shipped complete in a week and a half.

#### Cellophane House

Architects KieranTimberlake of Philadelphia used Rexroth structural framing to create Cellophane House for a special exhibition at The Museum of Modern Art exploring the historical and contemporary significance of factory-produced architecture.

Rexroth framing served as the structural framework to which other building elements were swiftly attached. Just as the elements were assembled easily, so were they disassembled easily and stored for future redeployment, preserving the energy embodied in the house materials. In an effort to further reduce waste, the dimensions of the house were dictated by the standard measurements of the Rexroth extrusions.



Cellophane House, KieranTimberlake

#### SmartWrap™

At the Cooper-Hewitt National Design Museum in New York, KieranTimberlake used structural framing for a pavilion to showcase SmartWrap™, a lightweight, energy gathering, mass customizable and sustainable building envelope system. In the process, KieranTimberlake partner, James Timberlake, noted that Rexroth’s structural framing provides a modern, well-designed modular system suitable for many uses.

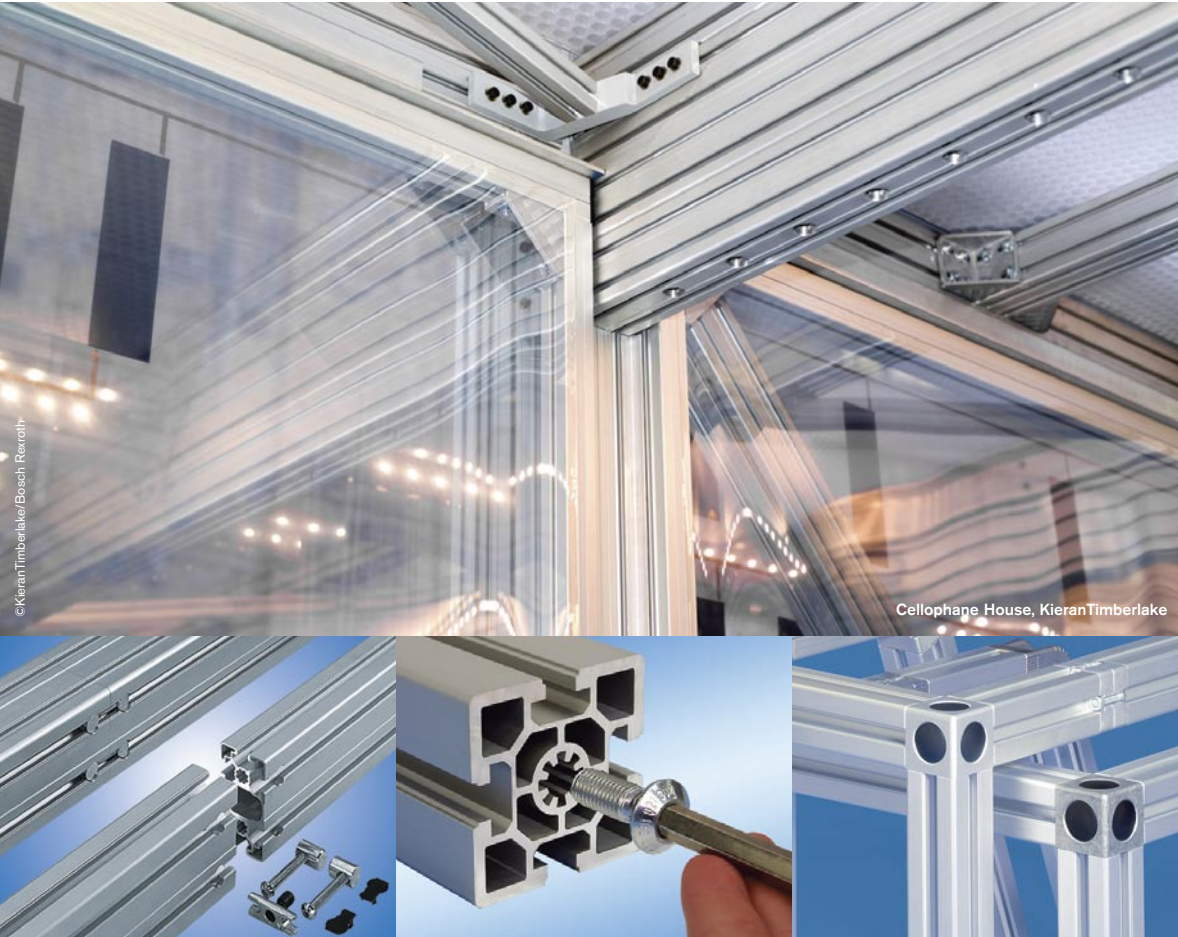


SmartWrap™, KieranTimberlake

# Shape your designs

Bosch Rexroth offers a comprehensive array of design and support tools to help you realize the full creative potential of Rexroth structural framing. Our tools include:

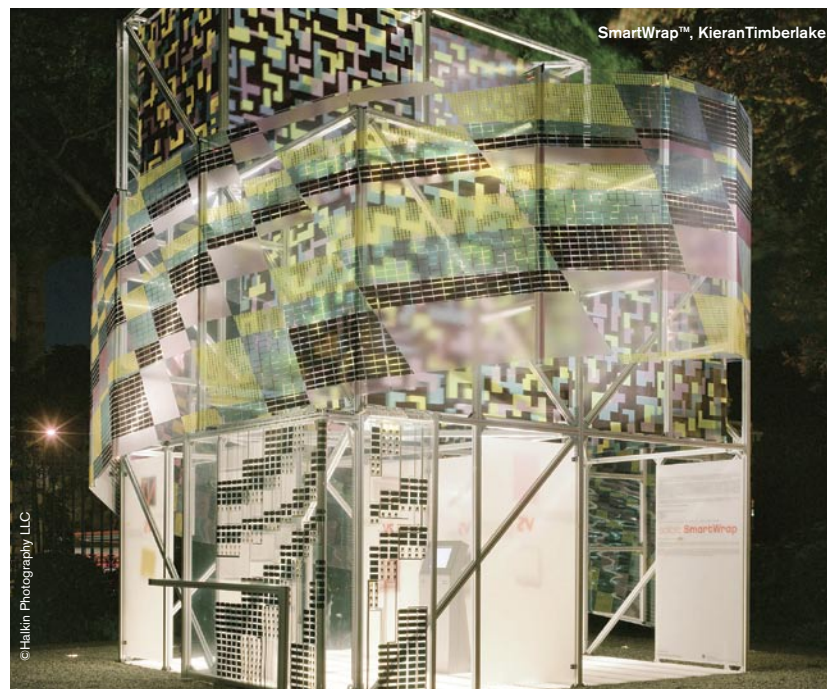
- Comprehensive brochure and structural framing catalog
- AutoCAD files and Solid Models library online
- MTPro and FMSoft design tools for easier layout and design
- Sophisticated, user-friendly online ordering site has catalogs, CAD models, versatile design and ordering tools for one-stop product selection and service
- Nationwide network of stocking, full service distributors



# Build your dreams

Rexroth makes it easy to turn your visions into finished structures. We offer expert advice and support from our exclusive network of aluminum structural framing distributors. Every distributor stocks a complete inventory of all common components, with the capacity to turn around complex orders in record time.

Plus, they're certified professionals, with in-house design and fabrication capabilities, application advice, service and other technical support. For added flexibility, you can choose to receive your aluminum framing products in bulk, kit form or fully assembled.



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