



Lux Oculi NYC

laminated structural arch system

(U.S. Patent # 10,472,824)

LUX Oculi NYC

laminated structural arch system

(U.S. Patent # 10,472,824)

A fully customizable and scalable, architectural structural support system - plasma cut from steel plate, flat-packed for ease of transport and handling, and assembled on site from a pre-fabricated kit of parts - without heavy machinery or cranes.

Engineered to support load-bearing horizontal surfaces - walk-able glass panels, skylight units, insulated roof panels, and flooring - this system lends itself to myriad applications (roofs, walkways, railings, furniture, etc.) where exposed structural members are integrated into the master design.

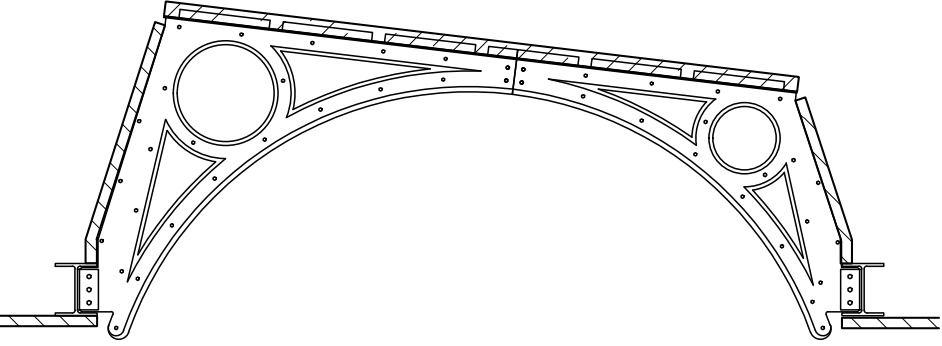
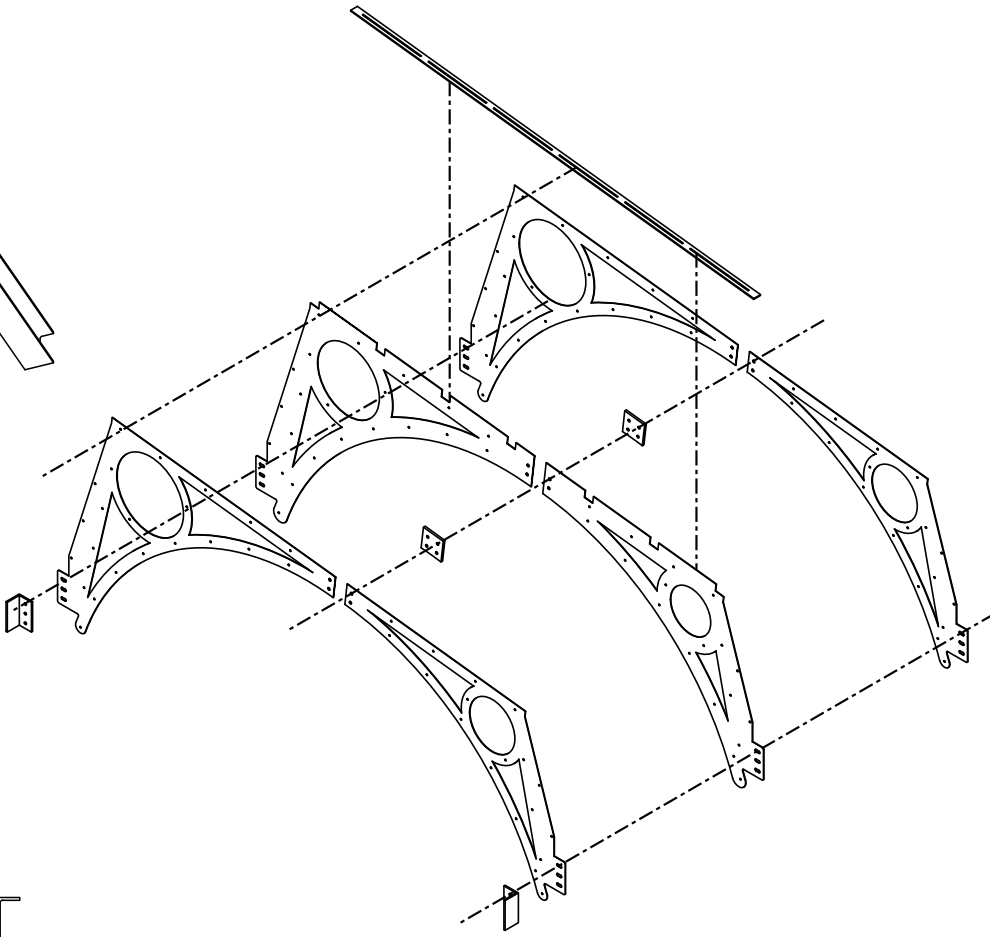
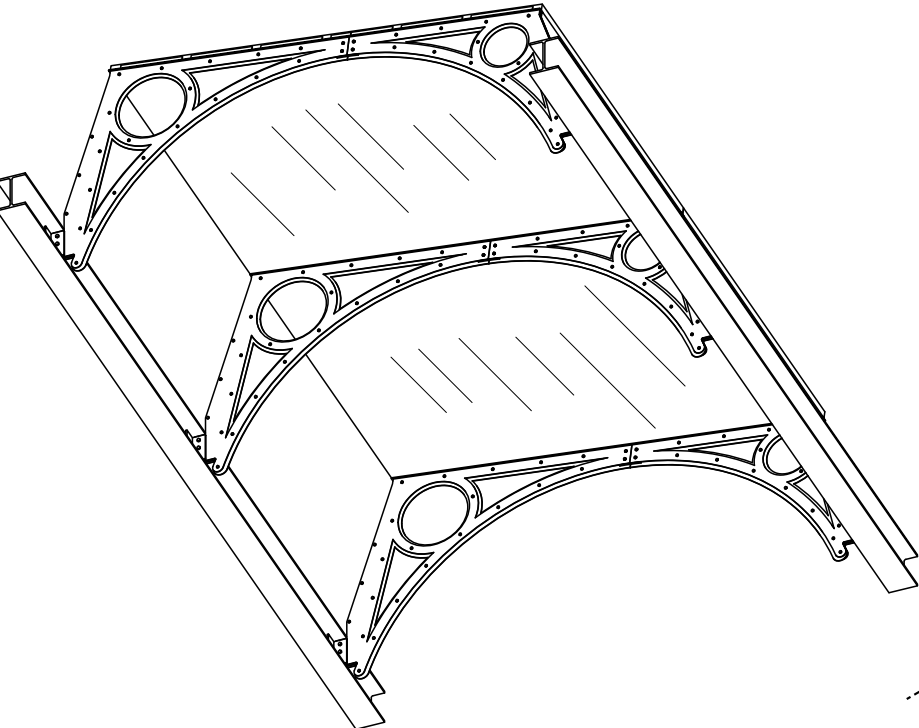
Timothy Barry

917-747-9313



Proof of Concept, NYC
50' x 10'

(U.S. Patent # 10,472,824)



PROOF OF CONCEPT PROTOTYPE

50' x 10' SKYLIGHT, NYC

The tri-stacked assemblage of 1/8" plate steel, combined with the unparalleled structural strength of the Arch form, creates an ultra-light structural member with a profile of only 1 3/8" -- yet provides 3 times the structural load capacity required by NYC code.

Over the 50 linear feet of skylight, this exceptionally slim assemblage -- when compared to a standard aluminum extrusion system -- allowed for an additional 7 linear feet of skylight glass.

In addition, the entire kit-of-parts for this 500 square foot skylight was flat-pack delivered in the bed of a standard pickup truck, and was assembled and installed by two men using only a wrench and hand-cranked lift.

Because this kit-of-parts was designed in the computer and precisely "printed" from common steel plate, and taking into account the exceptional ease of transport and installation, this prototype was completed under budget and ahead of schedule.



Flat Pack Kit of Parts

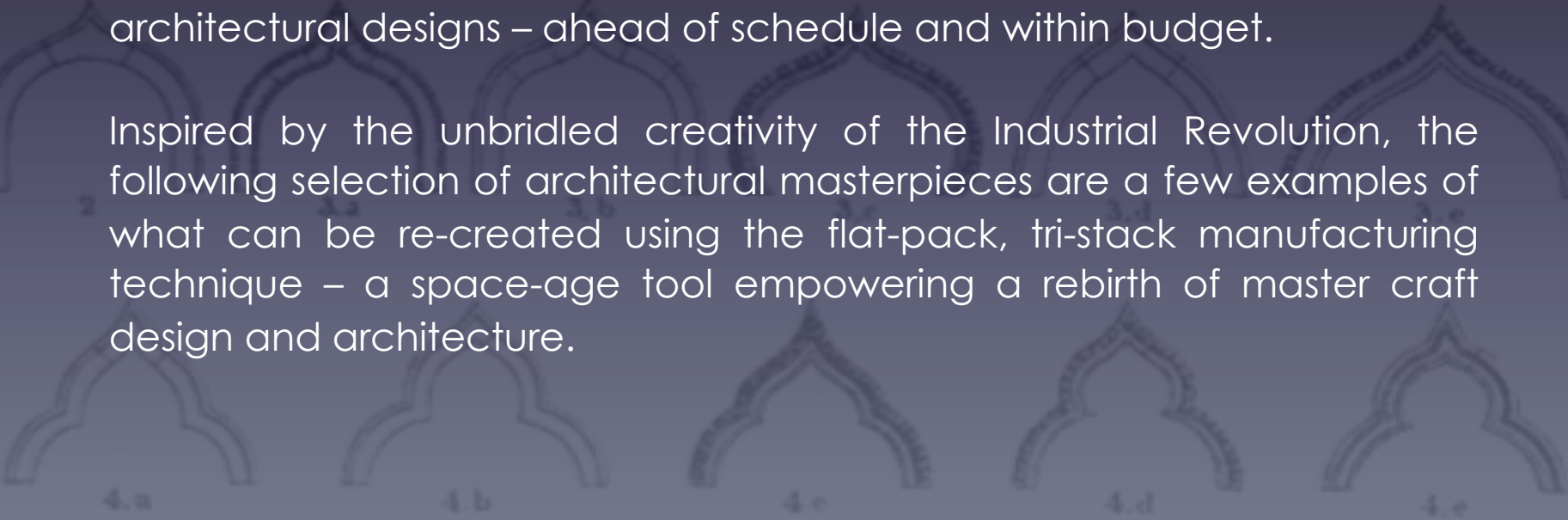


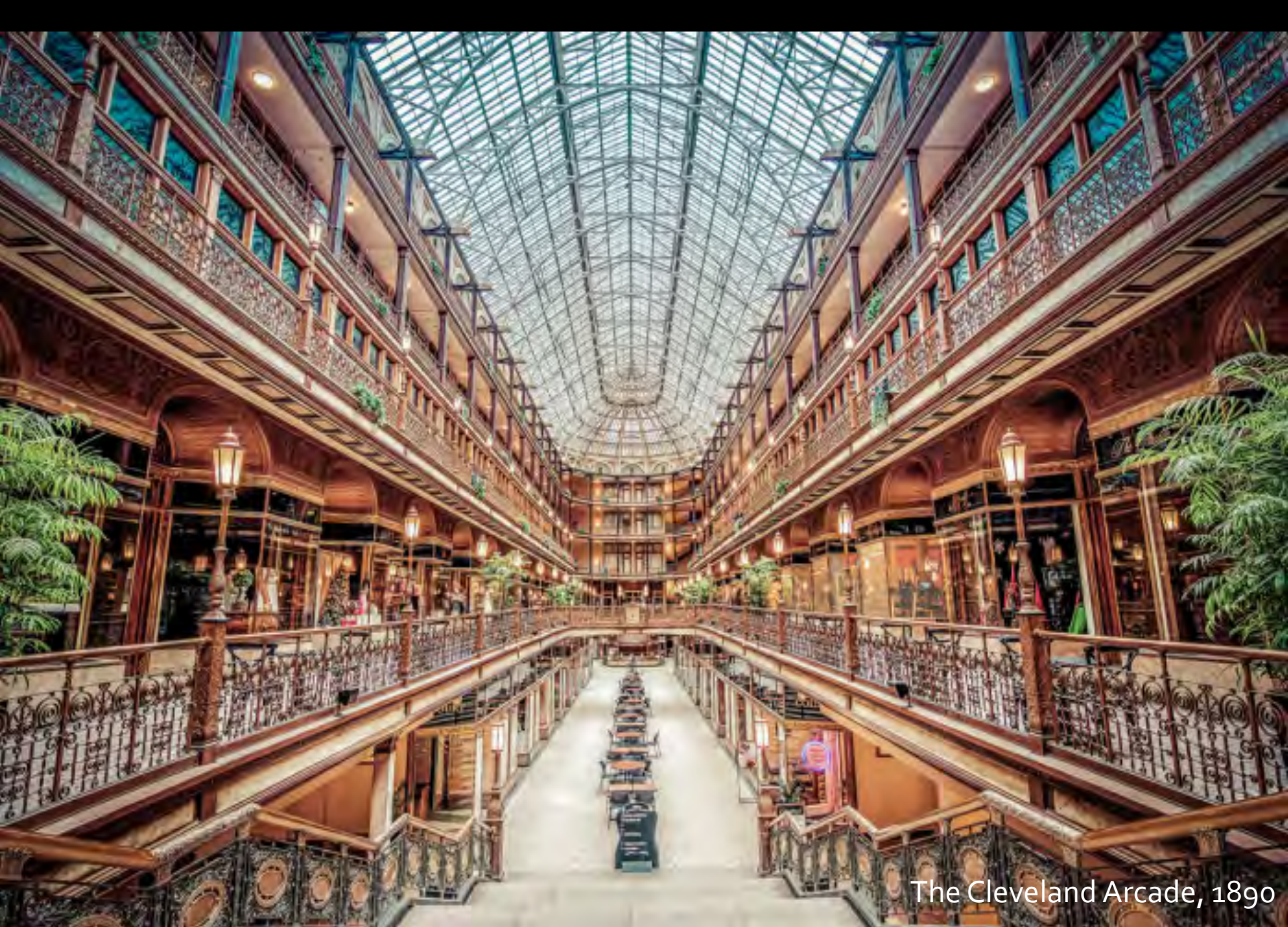
Golden Age Craft – Space Age Fabrication

Since we build within the computer, we can utilize the vocabulary of magnificent designs from hand-crafted steel architecture – today a lost art, and prohibitively expensive to mass reproduce by hand – and precisely “print” a customized kit-of-parts from common steel plate.

No longer limited to I-beams and angle iron for structural steel members, this manufacturing technique allows us to create fabulously curvaceous architectural designs – ahead of schedule and within budget.

Inspired by the unbridled creativity of the Industrial Revolution, the following selection of architectural masterpieces are a few examples of what can be re-created using the flat-pack, tri-stack manufacturing technique – a space-age tool empowering a rebirth of master craft design and architecture.





The Cleveland Arcade, 1890



Hôtel de Ville de Bruxelles, 1868



"Gothic Bridge", Central Park, NYC 1864

A detailed illustration of the interior of the Crystal Palace in London, 1851. The structure is a massive, arched glass and iron building. The floor is filled with people in 19th-century attire, a large fountain with water spraying upwards, and a prominent statue of a man on a horse. The architecture features multiple levels with red curtains and ornate metalwork. The overall scene is vibrant and captures the grandeur of the event.

LET YOUR
IMAGINATION
RUN WILD!

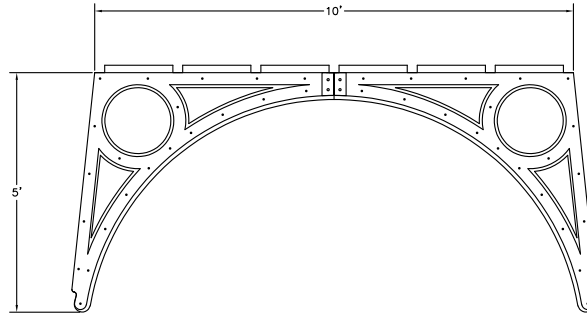
Crystal Palace, London, 1851

LUX OCULI NYC

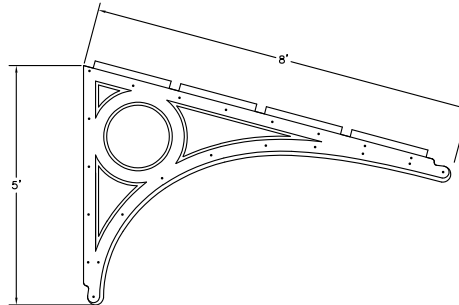
ALPHA SERIES

LAMINATED STRUCTURAL ARCH SYSTEM

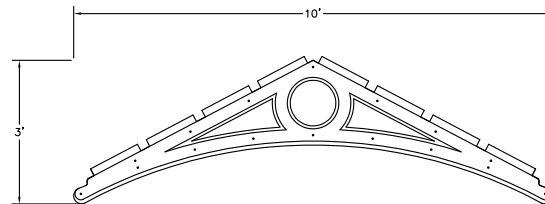
U.S. PATENT # 10 472 824



MODEL A



MODEL B



MODEL C

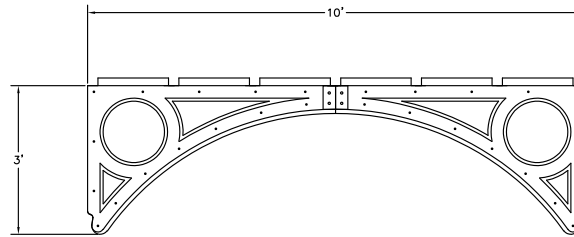
TIMOTHY BARRY
www.LuxOculi.NYC
917-747-9313

LUX OCULI NYC

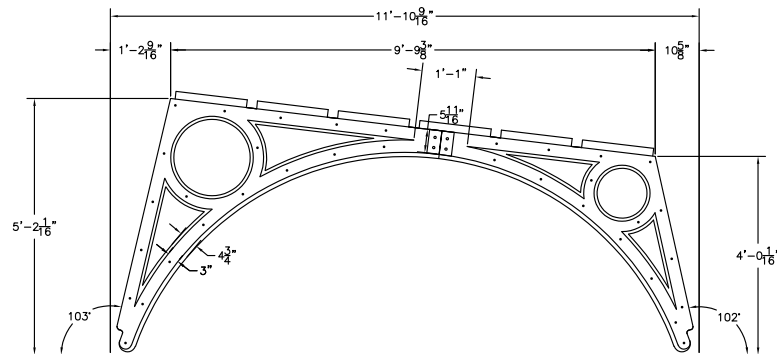
ALPHA SERIES

LAMINATED STRUCTURAL ARCH SYSTEM

U.S. PATENT #1 0 4 7 2 8 2 4



MODEL D



MODEL E

TIMOTHY BARRY
www.LuxOculi.NYC
917-747-9313

Lux Oculi NYC

laminated structural arch system

(U.S. Patent # 10,472,824)

Lux Oculi NYC Structural Laminated Arch System is an architectural structural arch system in kit form, assembled from a plurality of arch-shapes cut from stock metal plate or plywood, stacked in parallel in laminated configuration, and rigidly fastened together with nuts, bolts and spacers, to create a void between the stacked plates, forming an extremely thin, light, yet strong structural system, easy to transport, handle, and assemble without the need of large trucks, cranes, or heavy machinery, utilizing CAD (Computer Assisted Drawing) & CNC (Computer Numeric Control) fabrication technologies for ease of accurate mass production and fabrication.

For more information regarding custom design/build please contact

Timothy Barry
917-747-9313