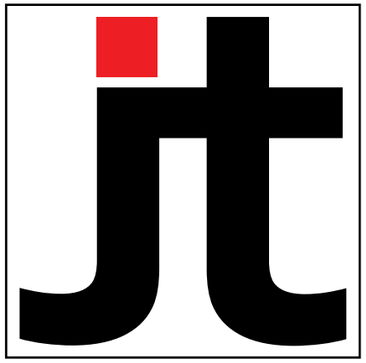


JACK**THRUN**

INDUSTRIAL DESIGN 2015

JACK**THRUN**

jackthrun@gmail.com / 973.349.0160 / jackthrun.com

EDUCATION

University of Cincinnati (DAAP)
Cincinnati, Ohio
Industrial Design Class of 2019 (BS)

GPA: 3.933
Dean's List

Mount Olive High School
Flanders, New Jersey
Graduated June, 2014

GPA: 3.7
Honor Role
Scholar-Athlete

WORK EXPERIENCE

Weis Markets
Flanders, NJ
Grocery Sales Associate, 2013 - 2014

Loaded and unloaded trucks.
Responsible for store displays.
Self-managed when manager not present.

Habitat for Humanity Restore
Dover, NJ
Volunteer, 2013

Unloaded donation trucks.
Organized items for resale.

***References available upon request.**

ACHIEVEMENTS

Art
Mary Gill Trustee's Award and Scholarship
Morris Museum, NJ
Fresh Perspectives Art Exhibition
Morris Museum, NJ
One of 50 pieces in NJ chosen
Mount Olive High School Art Show
First Place: Painting
First Place: Graphic Design
Best of Show: Drawing
Mount Olive, NJ Invitational
First Place: Sculpture
Vernon, NJ Invitational
First Place/Scholarship: Painting
Mount Olive High School Exhibition
Sculpture

Athletics
NJ Rockets Hockey Club, AAA Ice Hockey
2010 - 2014
Captain: One Year
Mount Olive High School Ice Hockey
2010 - 2014
Captain: Senior Year
HAAS Cup Champions: Senior Year
Four Year Varsity Letter
Bridgewater Bears Hockey Club, Ice Hockey
2001 - 2010
Captain: Three Years

ACTIVITIES

IDSA (UC Student Chapter)
DFA - Design for America
Habitat for Humanity
Greater Cincinnati, Ohio
Taos, New Mexico
Morris County, New Jersey
DAAP Bowling League
FIRST Robotics: MORT Team 11
Design Team Member
Ice Hockey
Golf

INTERESTS

Ice Hockey
Abstract Expressionist Movement
Raymond Loewy
Film Making
Outdoor Exploration

SKILLS

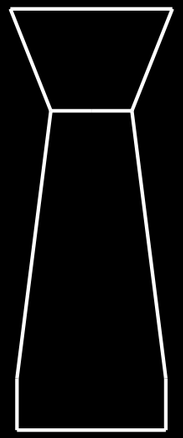
Digital
Proficient with Photoshop, Illustrator, InDesign

Working knowledge of Alias, SolidWorks, Keyshot, Inventor, Premier Pro, FinalCut Pro, HTML + CSS

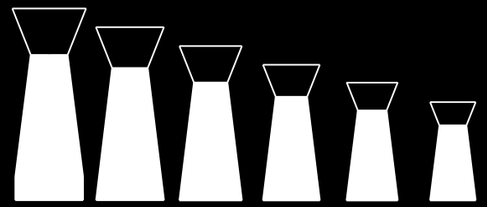
Analog
Foam modeling, marker rendering, brainstorming, sketching, wood shop, metal shop

Opulent Peril

Luxurious chess set focused on family of form

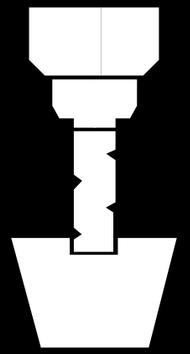


DESIGN GOALS



Family of form will be achieved by utilizing the **fibonacci percentages**.

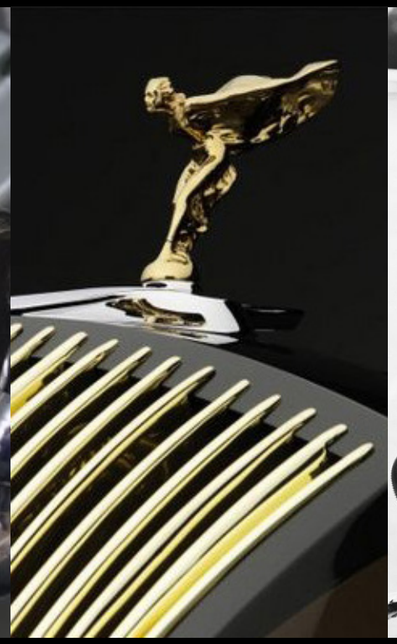
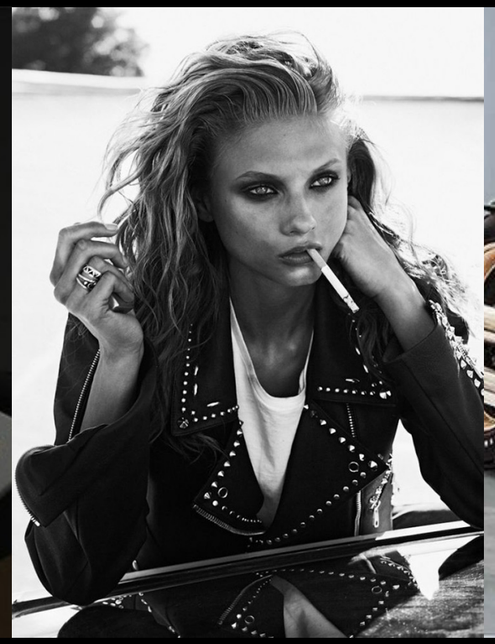
The feeling of **luxury** will come from the satisfaction of brass.



Tight tolerance machining using the engine lathe and mill.

INSPIRATION

My chess set is inspired by the luxurious bad-ass culture associated with high-end bars and pool halls.

RESEARCH

Not knowing how to play chess, I decided to focus my research on the different moves each piece is allowed to make to give myself a better understanding of the game.

KING

One square in **any direction**.

QUEEN

Any direction as far as possible.

BISHOP

Diagonally as far as it wants.

KNIGHT

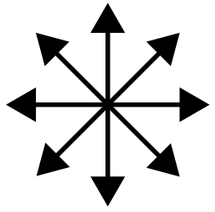
Two squares in one direction and then one more move at a **90 degree angle.**

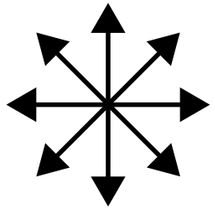
ROOK

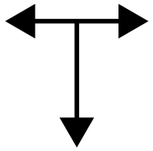
Any **perpendicular** direction.

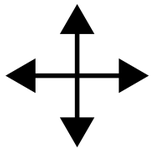
PAWN

Forward but attack diagonally.









IDEATION

With a solid direction in mind, I began to explore forms that best express the theme.

DEVELOPMENT

The crown's pattern is a direct correlation to the moves each piece can make. This aids in distinguishing each piece from each other.

KING

One square in **any direction**.

QUEEN

Any direction as far as possible.

BISHOP

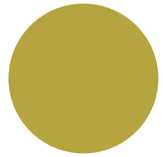
Diagonally as far as it wants.

KNIGHT

Two squares in one direction and then one more move at a **90 degree angle.**

ROOK

Any **perpendicular** direction.

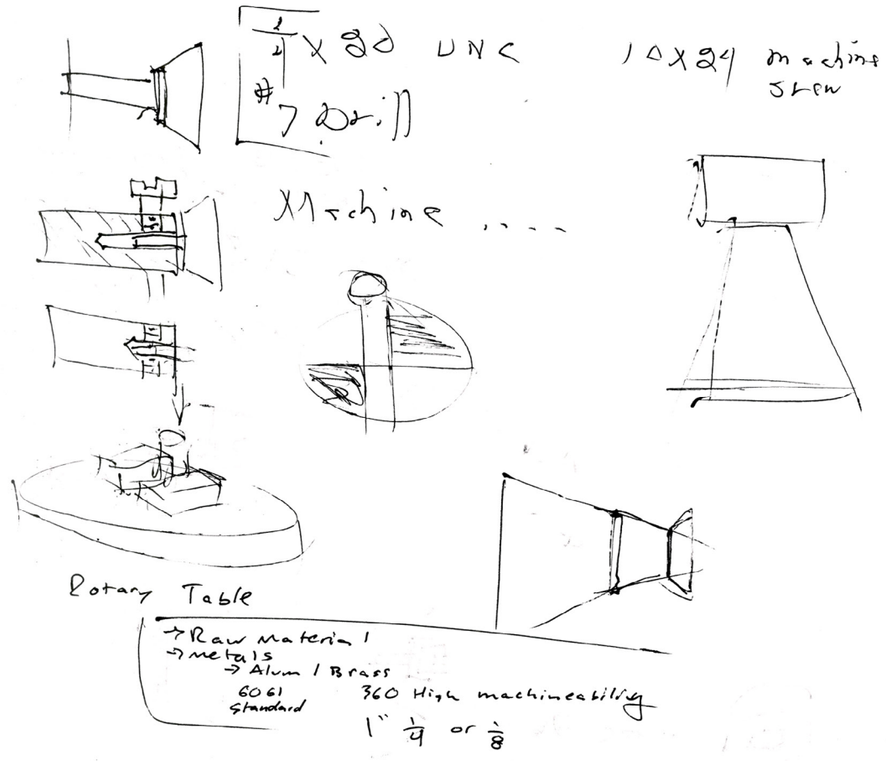


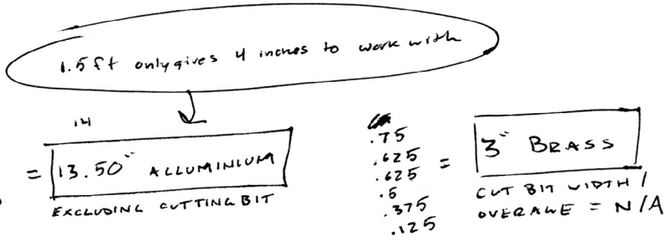
PAWN

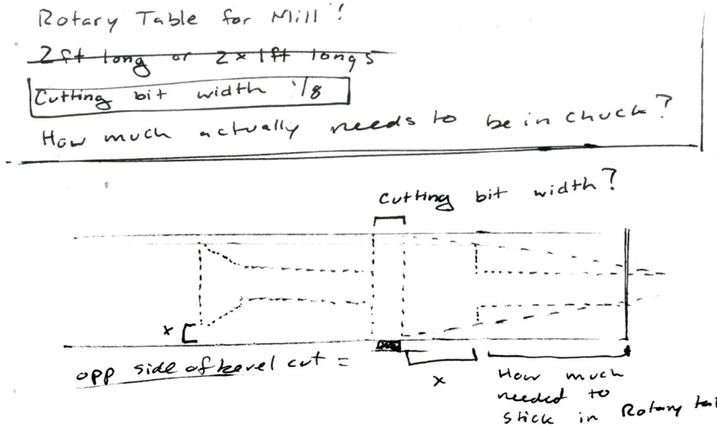
Forward but attack diagonally.

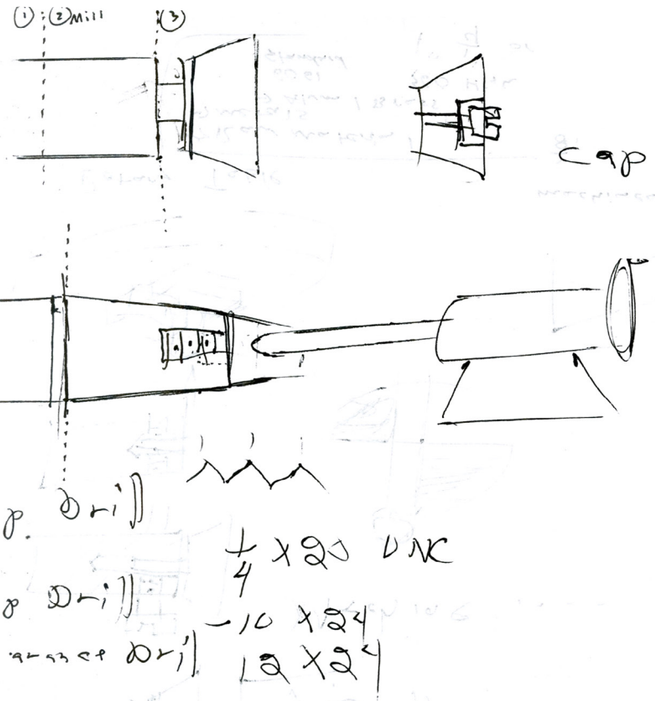
“FIGURING IT OUT”

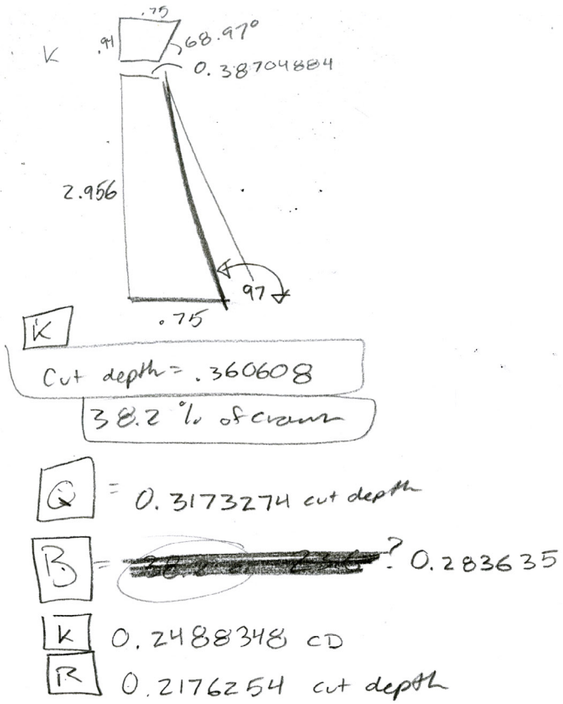
Being my first time using the metal lathe and mill, I wanted to make sure I had every step of the process figured out before I got started. These are visuals of the discussions I had with my professor.

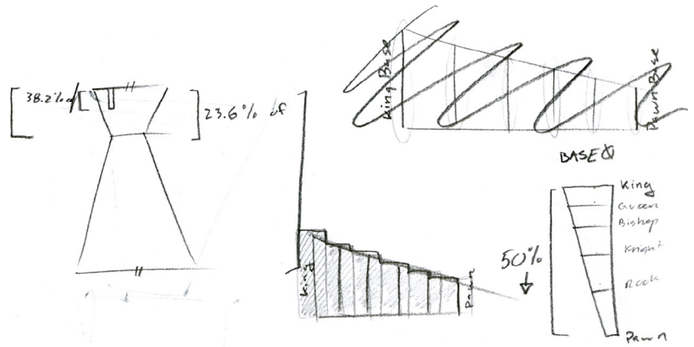












ALRIGHT, LET'S GET STARTED!

I needed a rotary table to mill the top portion of my pieces. I wanted to make sure the shop had one before I started. They had two!

JUST KIDDING!

They were both broken...

PROCESS_001

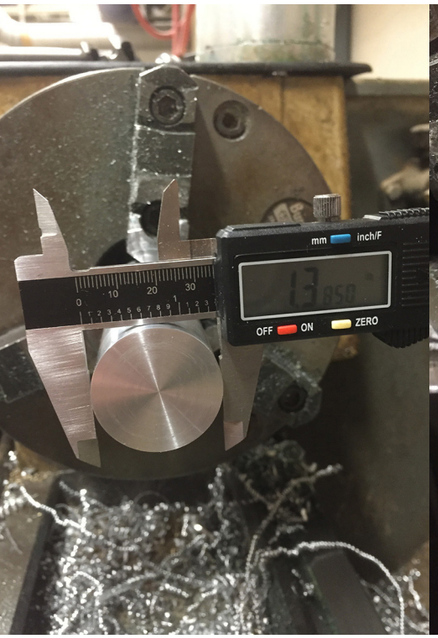
In fear of having to change my design, I was relieved when my professor, Gerry, saved the day by showing up with his rotary table that he keeps in his office!





PROCESS_002

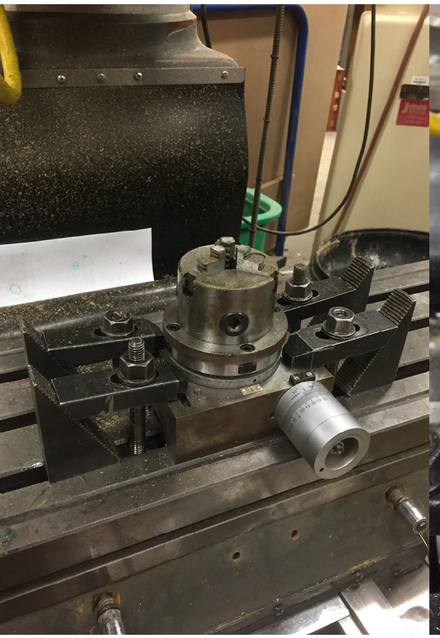
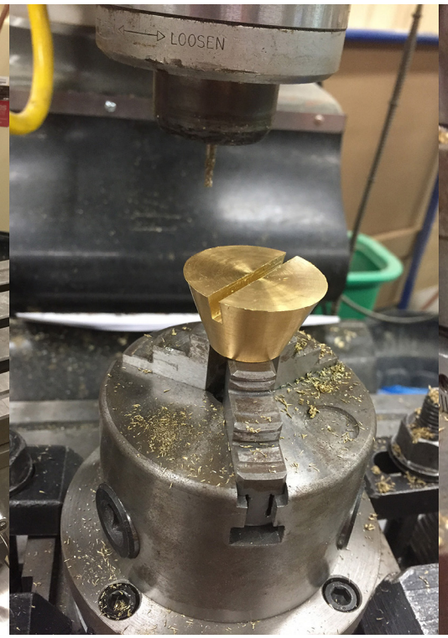
The aluminum taper was cut longer than needed and then slowly faced until a perfect fit was matched with the brass crowns.

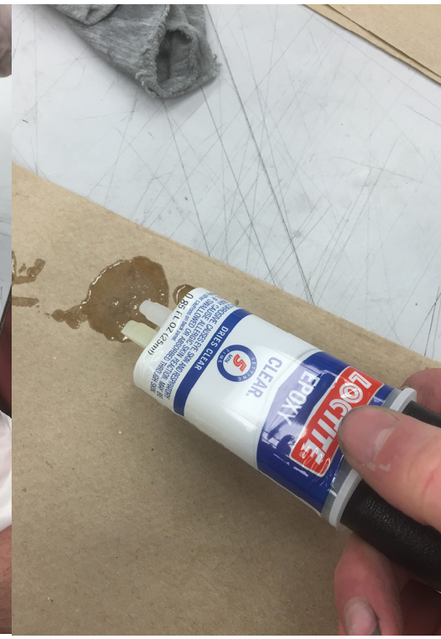





PROCESS_003

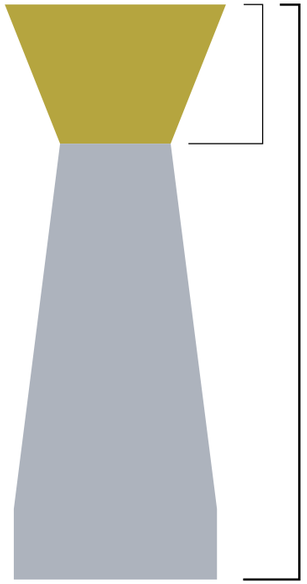
Using the rotary table, patterns were milled into the crowns. I then sanded and polished the pieces and used epoxy to hold them together.

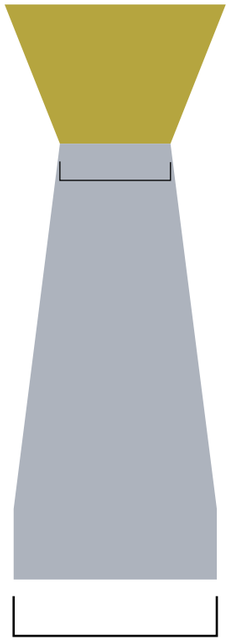



FIBONACCI PERCENTAGES

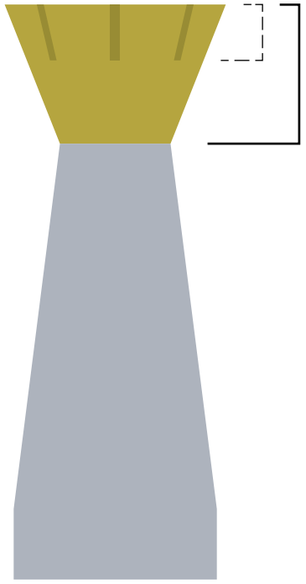
Focusing on family of form, I used fibonacci percentages to maintain proper proportion within each piece.



Each crown measures **23.6%** of the piece's total height.



The narrowest width of the piece is **50%** of the total width.



The cut depth of each piece measures **38.2%** of the crown.

FIBONACCI PERCENTAGES (cont).

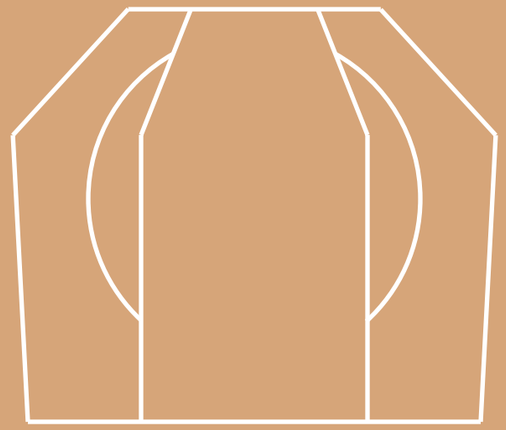
Fibonacci percentages were also used to provide proper proportion to the set as a whole focusing on overall height and base diameter.

The height of the pawn is **50%** of the king's height.

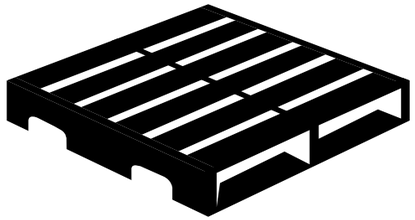
The pawn's base is **61.8%** of the king's base.

Bowling Ball Package

Industrial Design Studio 1

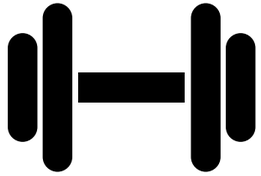


DESIGN GOALS



The design should **maximize the pallet**, without sacrificing aesthetic, to limit the amount of air that is shipped.

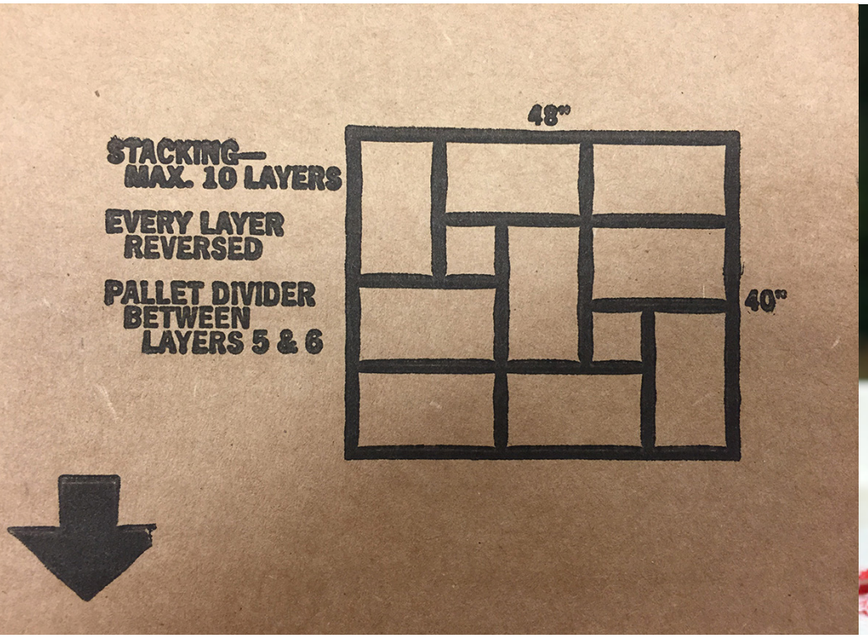
For shelf presence and worker satisfaction, the package should be **stackable**.



In order to support a regulation bowling ball, the package needs to be **strong**.

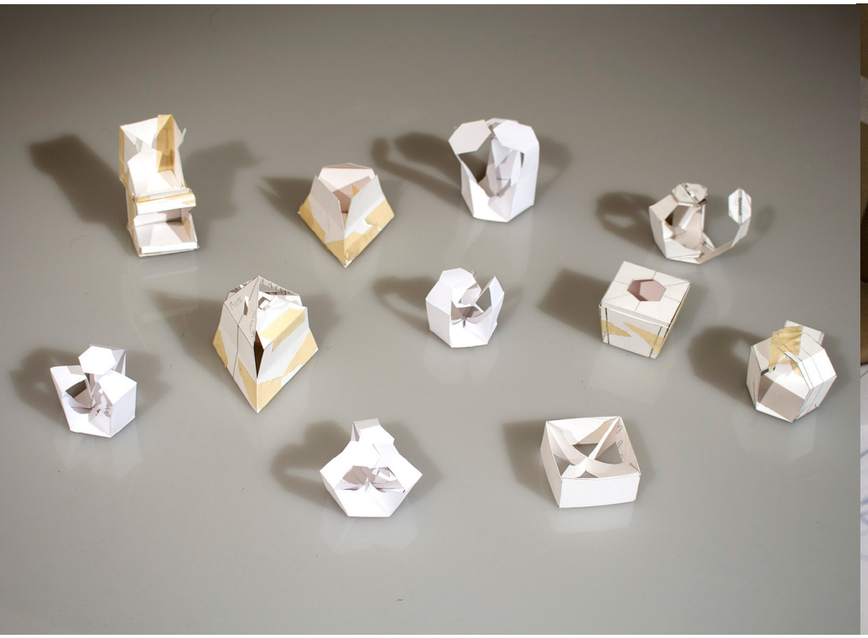
INSPIRATION

The honey comb pattern is used as inspiration for strength and durability while Bush's Best is the world's most satisfying can to stack as a grocery store stock boy.



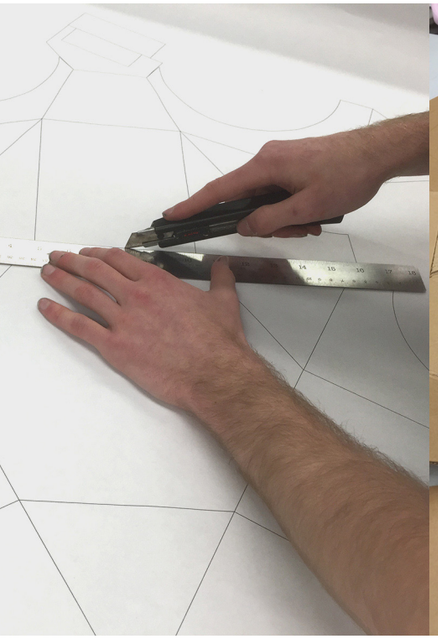
IDEATION

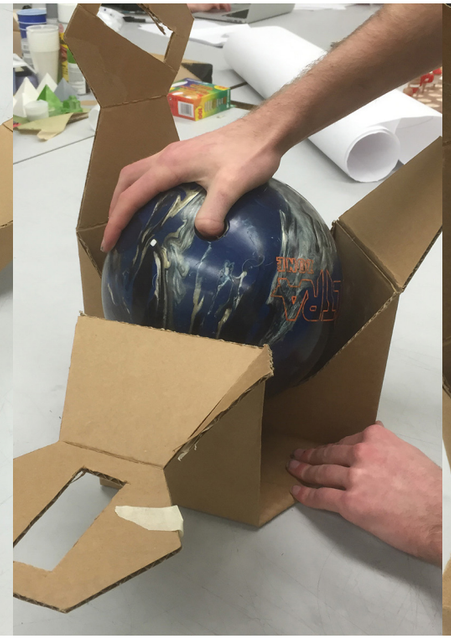
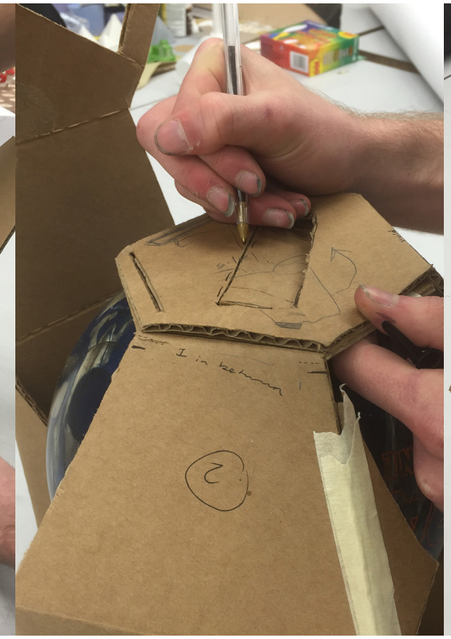
After sketching a few ideas, I needed to visualize them in 3D. Various iterations were developed around the criteria I had set for myself.



PROCESS

By printing out my flat pattern full scale I was able to transfer the design to the corrugated and test it out. Various changes were made throughout the process. The box is folded together from one pattern with both front and back folds.




FINAL PROTOTYPE

DETAILS

Three triangles fold together into a honeycomb shape to provide strength. The top and bottom layers are tabbed together sandwiching the middle layer.





PALLET PATTERN

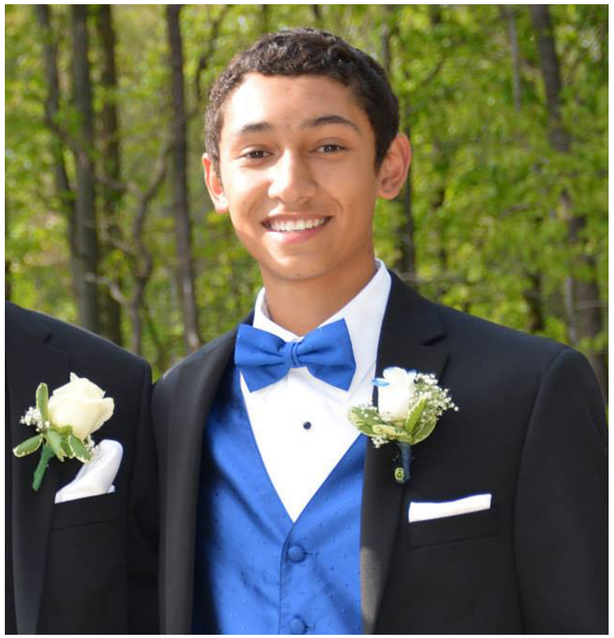
Bedmate

Lofted bed shelf for college dorm rooms

WHAT THEY WANT

CHRIS D.
RUTGERS UNIVERSITY

*"It would be nice to watch movies in bed without having to worry about my **laptop** crashing to the floor when I fall asleep mid movie."*

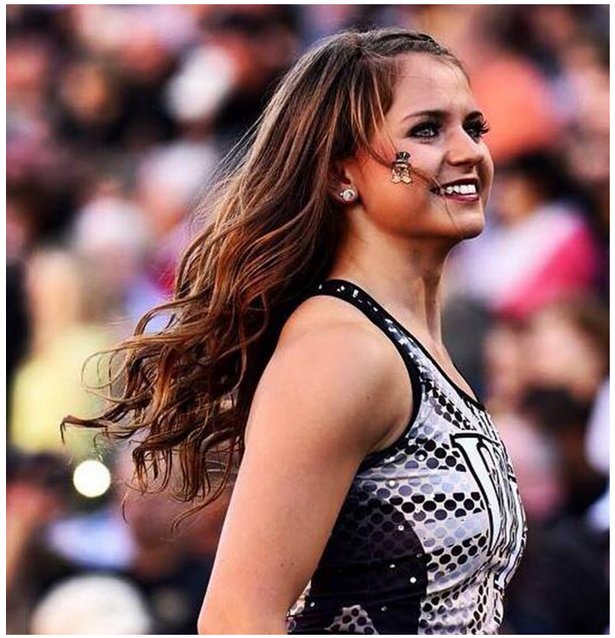


MICHAEL J.
VIRGINIA TECH

*"I need a place to charge my **phone** and put my **alarm clock**...oh and **food!**"*

KATIE B.
CLEMSON UNIVERSITY

*"I love to read. It would be nice to have a space to place my **books** when I get tired. They usually end up falling to the ground in the middle of the night... then I end up loosing my place!"*



JESSIE F.
WAKE FOREST

*"I actually use one of the bunk shelves that are already on the market but I **can't fit much** on them at all. Plus I'm a little **skeptical** about putting too much weight on them. They don't seem **sturdy**."*

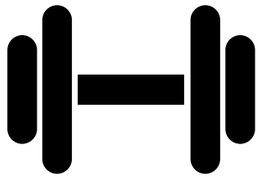
CURRENT MARKET

flimsy
little support holds limited weight

crowded
no room for laptop and books

limiting
a simple hook does not fit a variety of beds

DESIGN GOALS



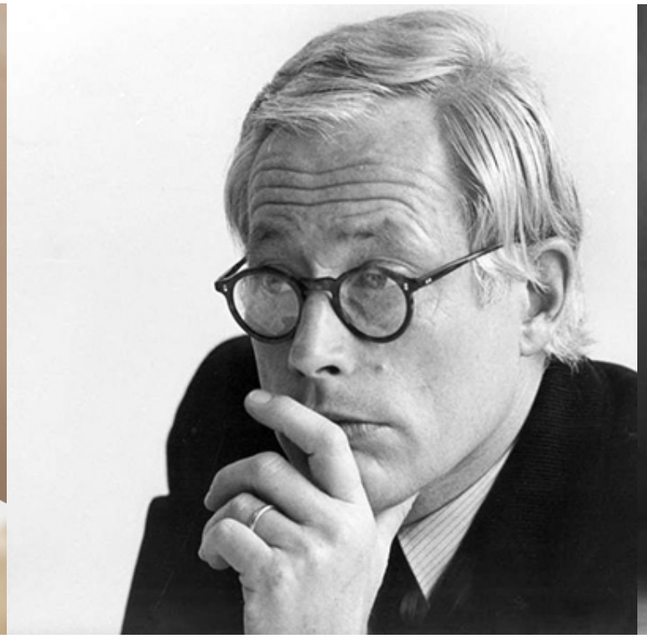
In order to support a laptop and heavy books, the design needs to be **strong**.

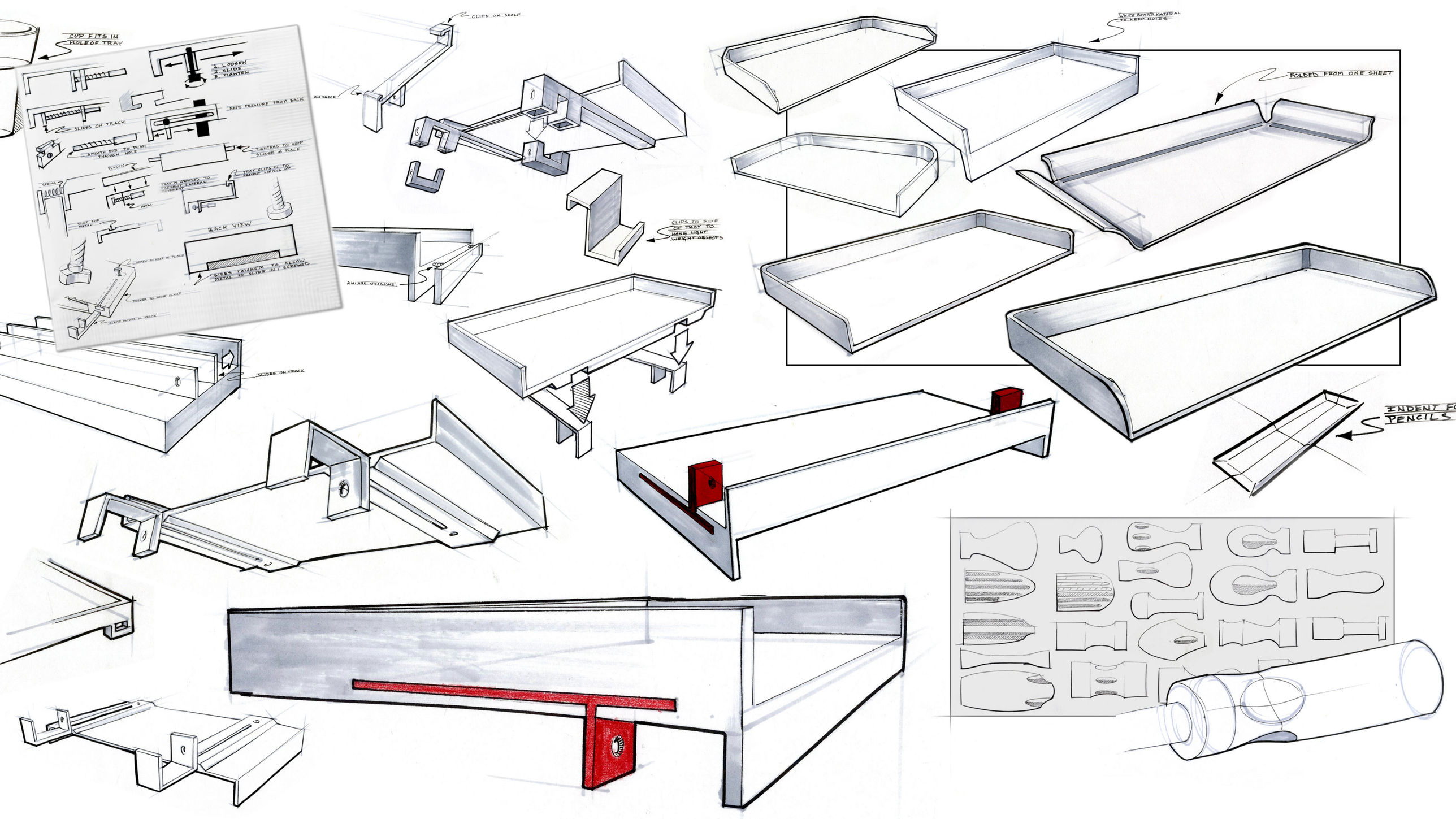
The design needs to have a **large surface area** to fit a laptop, books, and other necessities.

With a variety of head board thicknesses, the design needs to be **universal**.

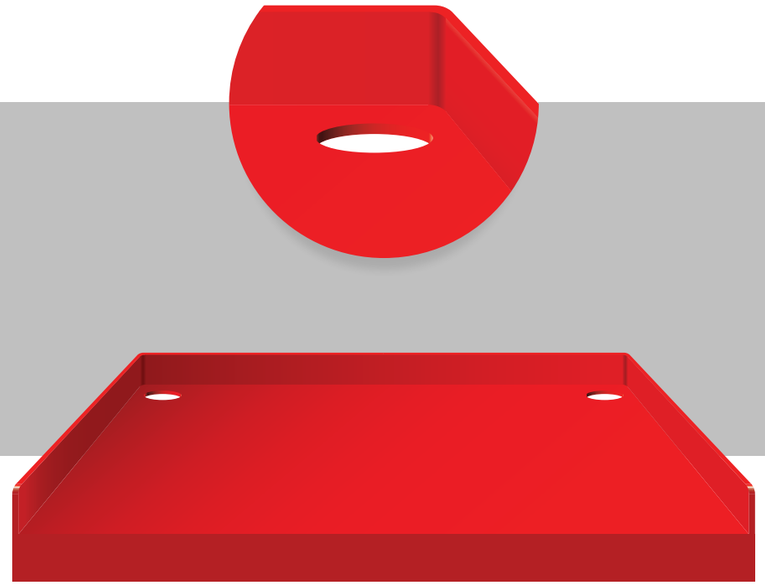
INSPIRATION

By adding a bit of color to Dieter Rams design philos-
ophies, high quality design can be introduced into
college dorm rooms

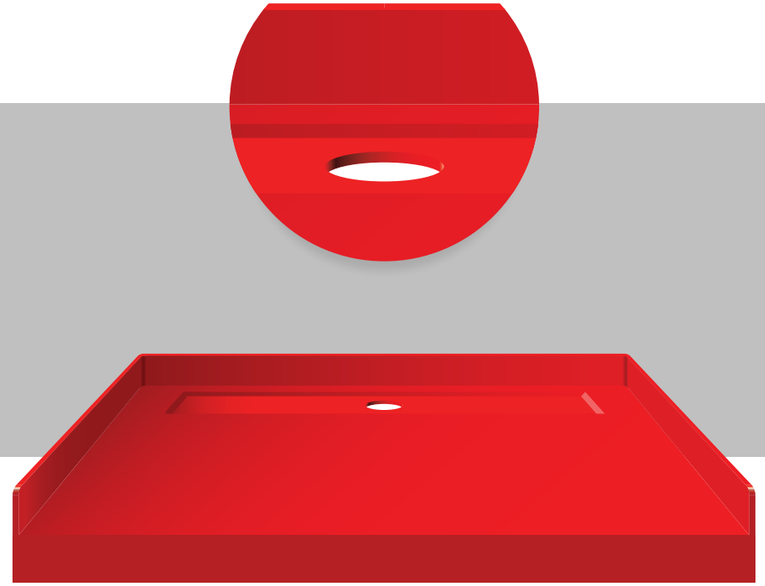



CUP FITS IN HOLE OF TRAY
1. LOOSEN
2. SLIDE
3. TIGHTEN
NEED PRESSURE FROM BACK
SLIDES ON TRACK
SMOOTH END TO PUSH THROUGH HOLE
TIGHTENS TO HOLD SLIDER IN PLACE
PLASTIC
SPRING
TRAY IS GROOVED TO PREVENT LATERAL MOVEMENT
TRAY CLIPS IN TO PREVENT TIPPING UP
METAL
SLOT FOR METAL
BACK VIEW
SCREW TO KEEP IN PLACE
SIDES THICKER TO ALLOW METAL TO SLIDE IN / SCREWED
THICKER TO MOVE CLAMP
CLAMP SLIDES IN TRACK
CLIPS ON SHELF
ON SHELF
THICKNESS REQUIRED
CLIPS TO SIDE OF TRAY TO HANG LIGHT WEIGHT OBJECTS
SLIDES ON TRACK
WHITE BOARD MATERIAL TO KEEP NOTES
FOLDED FROM ONE SHEET
INDENT FO
PENCILS

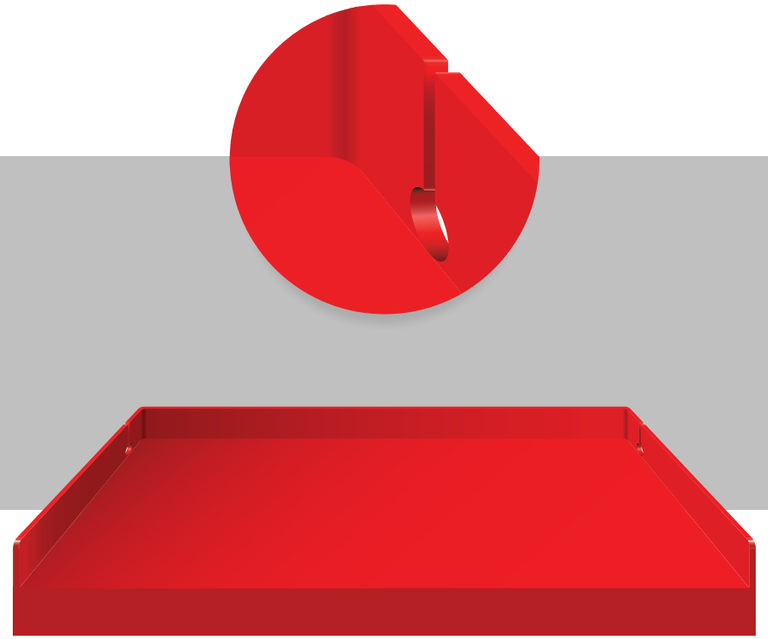
CONCEPT DEVELOPMENT



Version one provides **two cord holes** to accommodate both sides of the room.

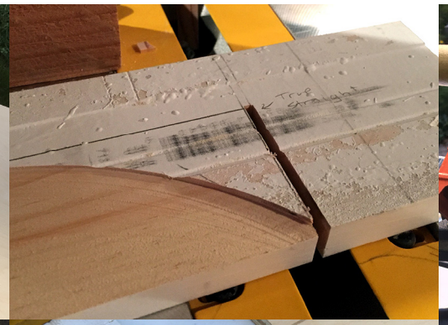


Version two simplifies the two cord holes into **one central hole**.

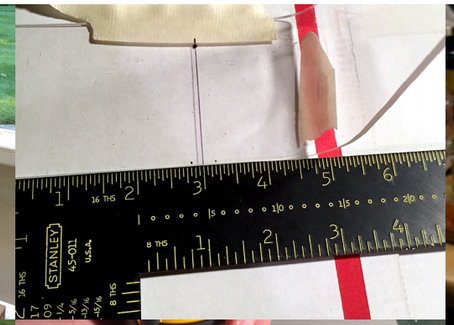


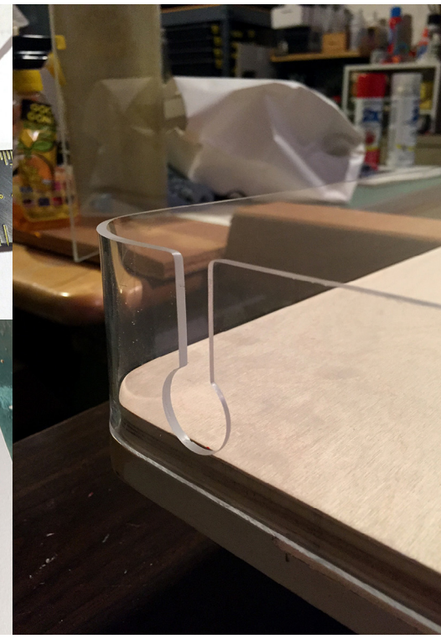
Version three places the cord holes on the lip to **avoid holes in the tray**.

THE BUILD_001

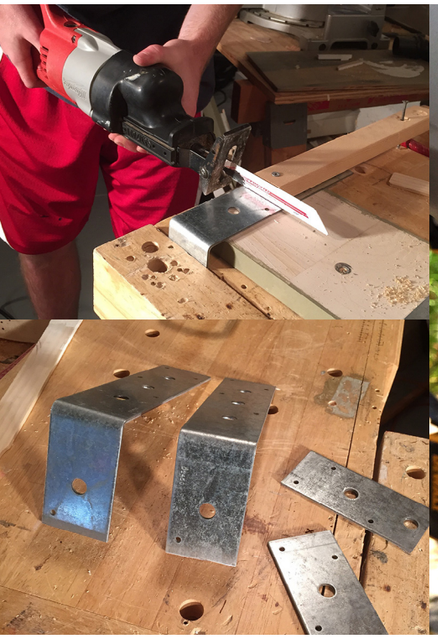


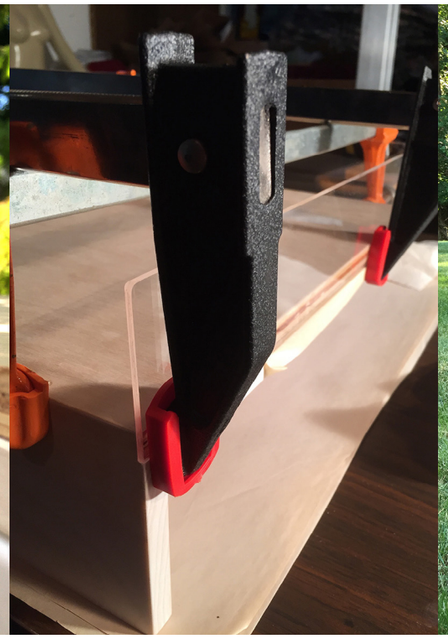






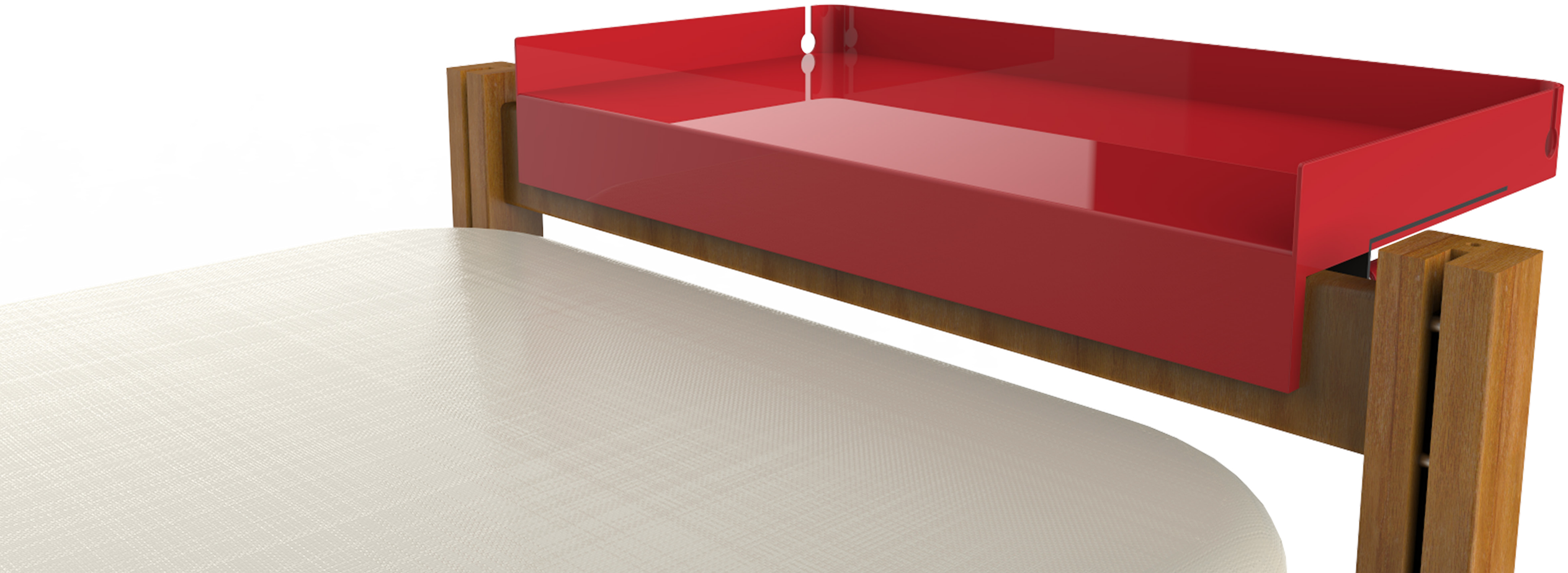

THE BUILD_002



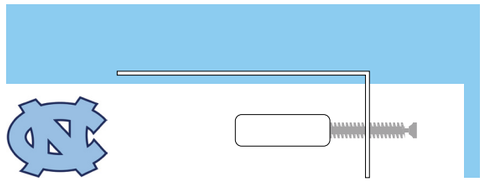


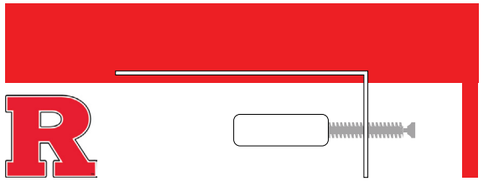
bedmate

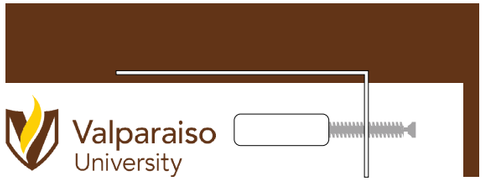
NO STRINGS ATTACHED

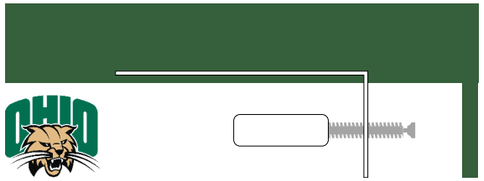


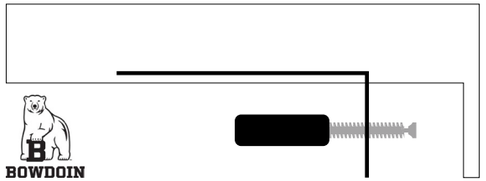
MAKE IT YOURS!



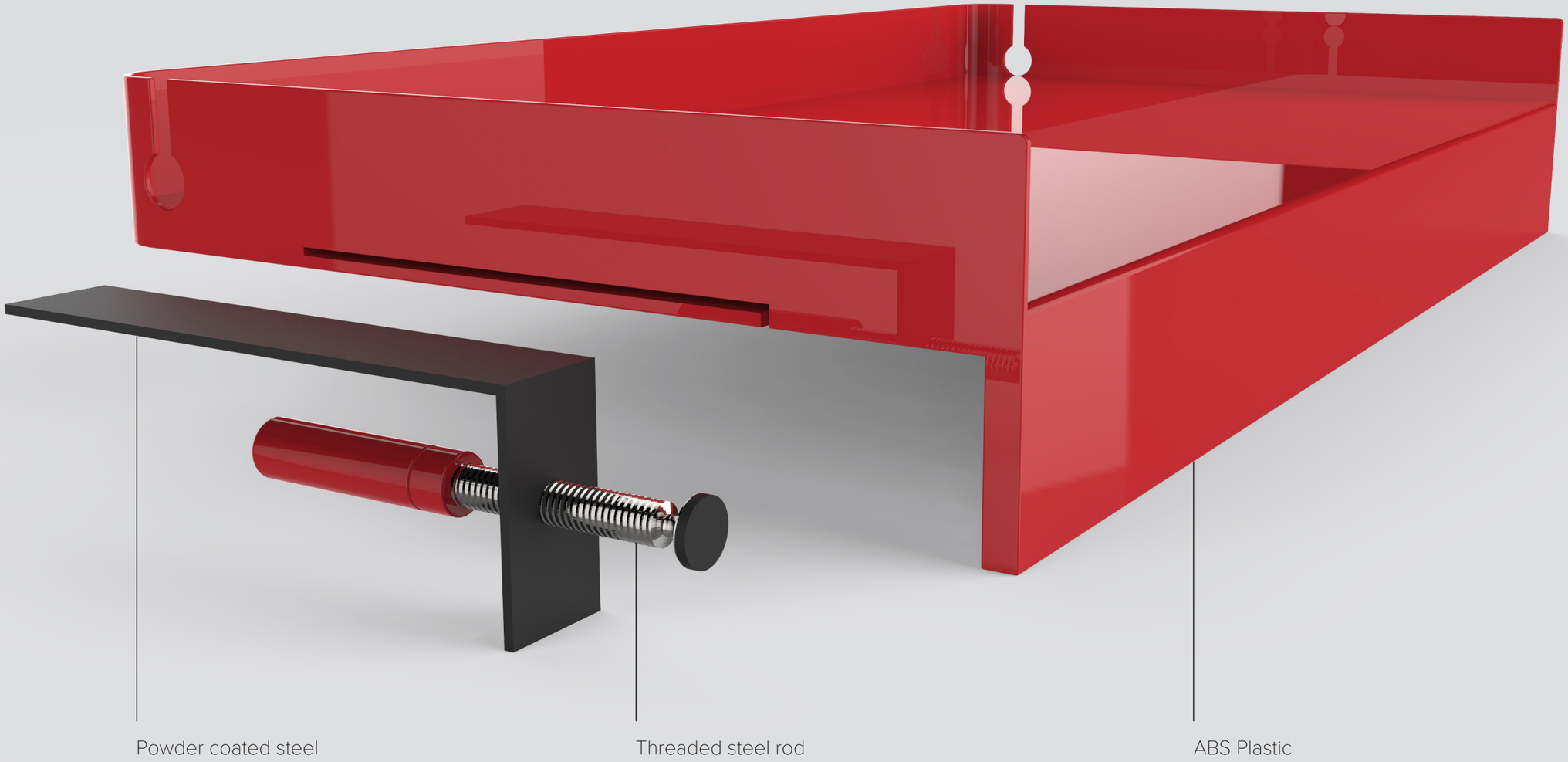


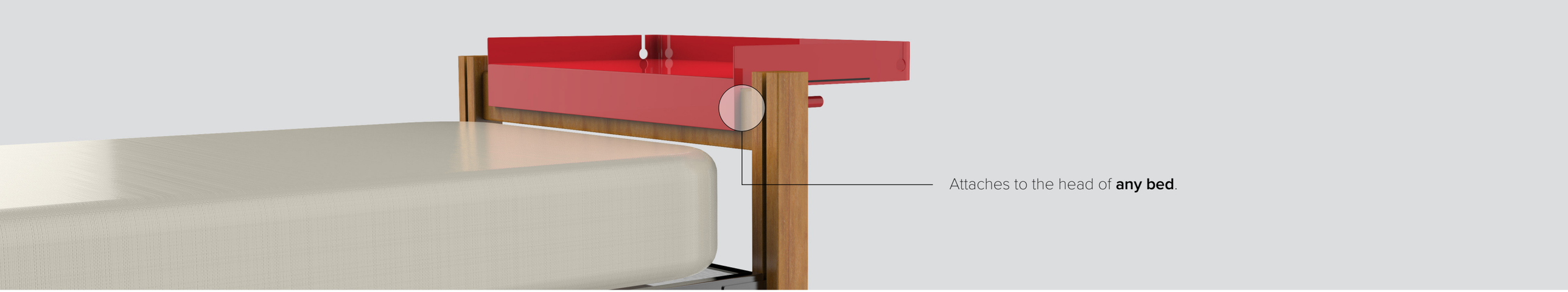


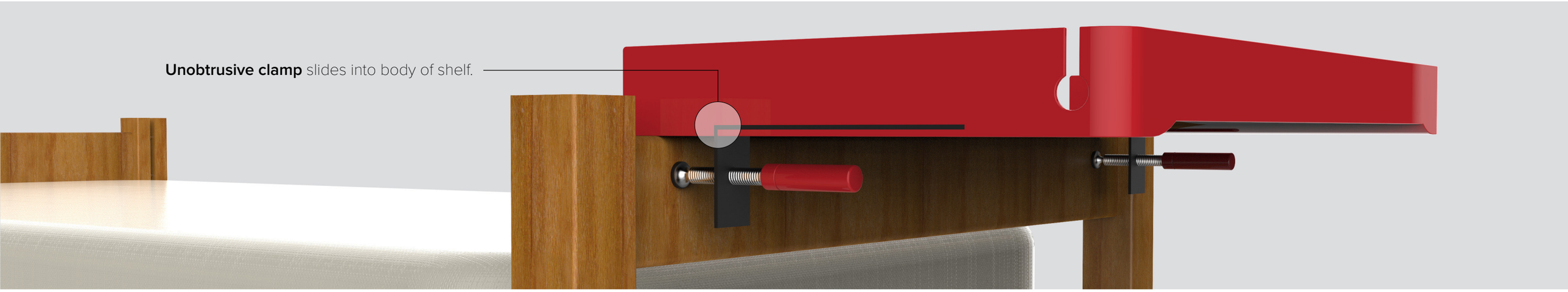




MATERIALS



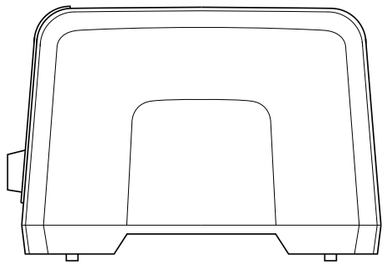

Attaches to the head of **any bed**.


Unobtrusive clamp slides into body of shelf.

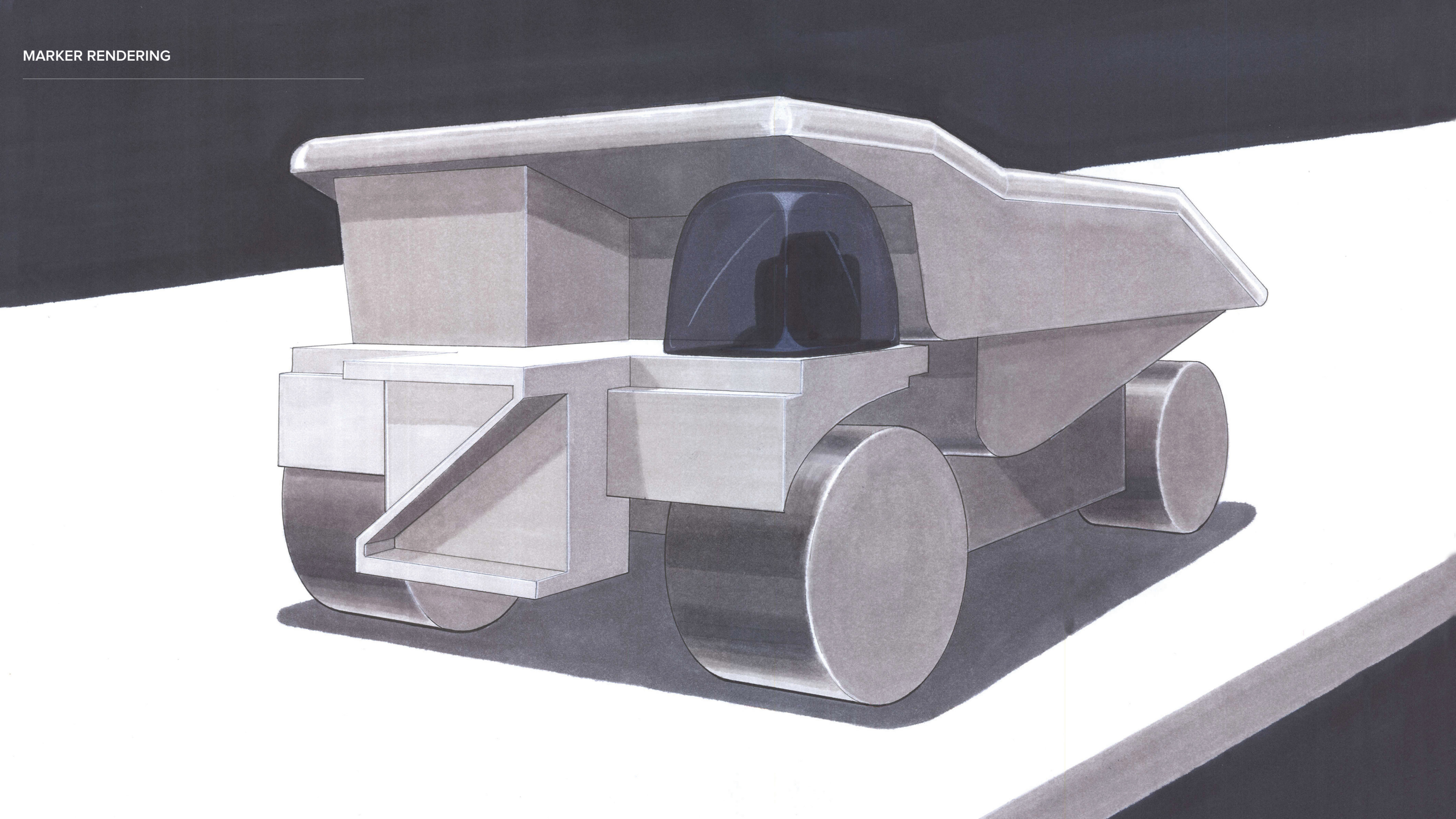

Easy access **cord slot** for electronic necessities.

Other Work

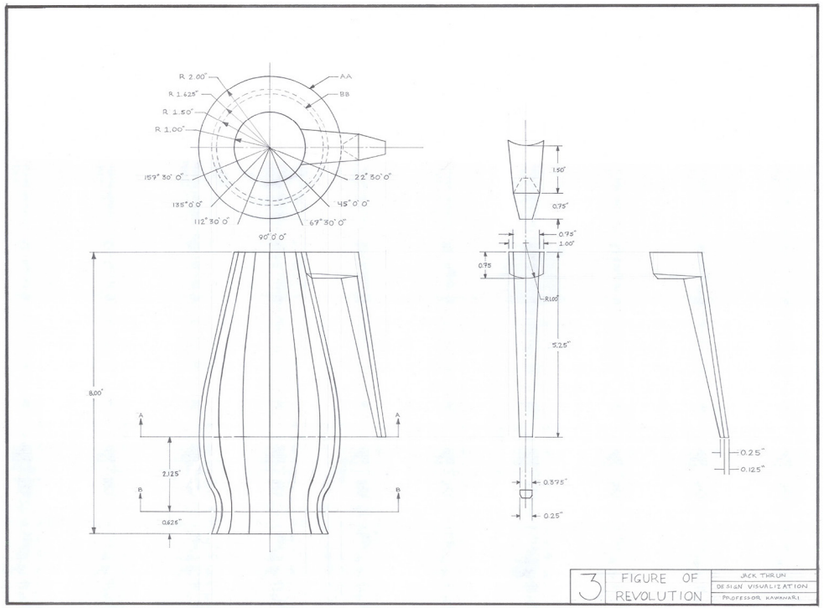
Selected work from Design Visualization

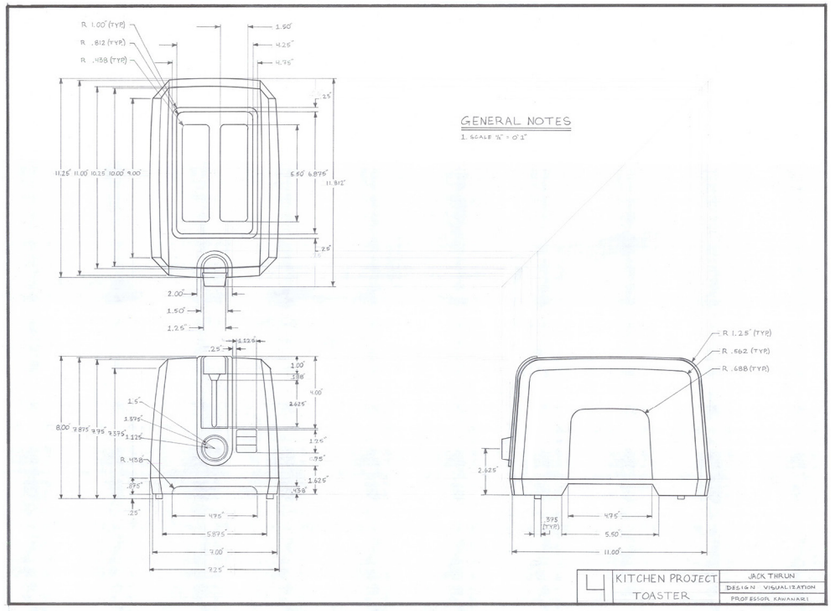


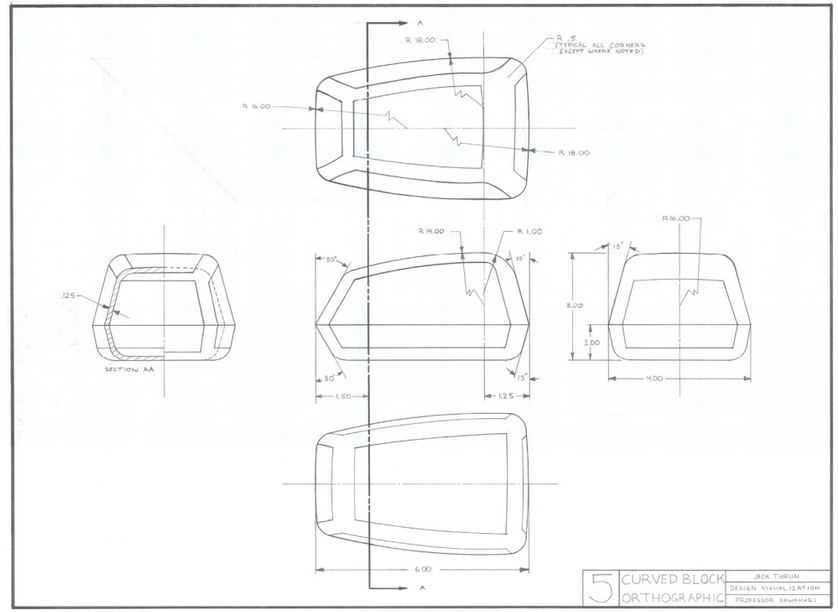
MARKER RENDERING



TECHNICAL DRAWINGS







THANK YOU!

See more work at **jackthrun.com**

jackthrun@gmail.com
973.349.0160