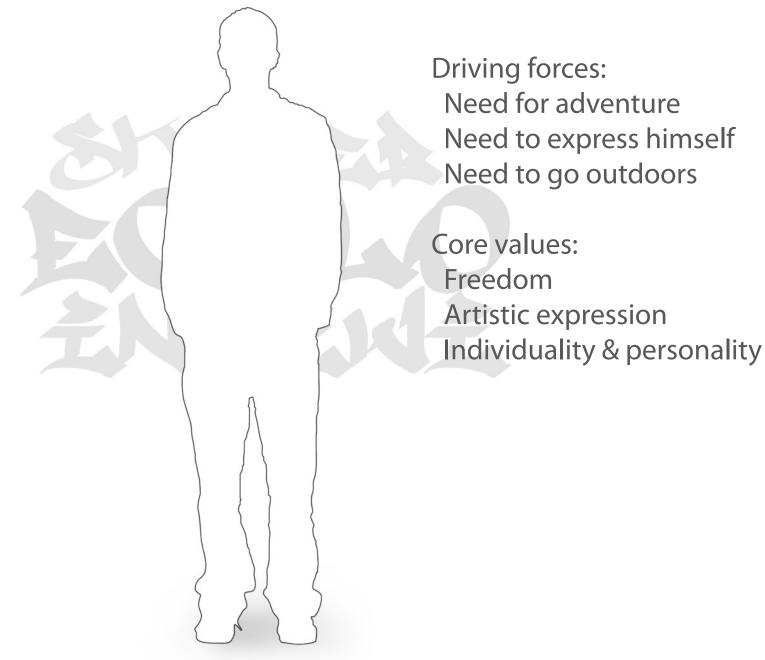


#### **Thomas Balaguer**

# **Consumer Profile**

Dave is an outgoing, smart, environmentalist. He does a lot of extreme sports such as snowboarding, skateboarding, and wakeboarding. Whether he's going camping, to the beach or out in the middle of the desert, Dave will always find a reason to go outside. He is very conscious of ecological problems and does what he can to help the situation.



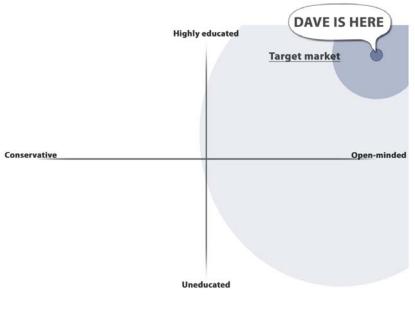
# Lifestyle

They live life to the fullest. These individuals never miss an opportunity to go outdoors and have fun. They are in touch with their emotions, spontaneous and energetic.



# Market placement

High performance Dave surounds himself with high quality tools, objects and products. He expects high performance from everything he buys.



**Ecological** - Dave is ecologicaly consious. He does his best to have as little of an impact on the earth.

**Economical** - Saving money is important for Dave. He always has plans for the near future and continualy saves money for trips and other events.



# Brand & Motivation

Element Brand:

Element is a skateboard and clothing brand wish is exponentially growing and has recently entered the consumer product world. This brand revolves around a set of philosophies and virtues wish are all related to ecology, art, and freedom.

Motivation: NEED TO BE CONSC -High performance Ô -Help saving the earth -Appealing artwork -Appealing lifestyle **Skate Camp** Power to the Planet Ad Pick Up The Parks Ever

### **ELEMENT - Current products**

#### vestalife | element

#### VESTALIFE / ELEMENT SKATEBOARDS LIMITED EDITION LADYBUG SPEAKER DOCK FOR IPOD

Element Skateboards is rich in culture and lifestyle. Music and art are two essential elements within the Element brand. The Element Skateboards Limited Edition Ladybug is a celebration of these two facets of skateboarding culture. Strong graphic imagery combined with premium sound quality. Just dock your iPod and spread the vibe. Featuring a built-in sub-woofer for lots of bass, a digital amplifier and one of the coolest soft-touch finishes you've ever experienced. The Element Skateboards Limited Edition Ladybug is a symbol of quality acoustics and aesthetics.

**AVAILABLE ONLINE HERE** 

ENTER TO WIN!



SELECT AN IMAGE







#### CONSTRUCTIONS

#### PUSH 🔍

FEATHERLIGHT HELIUM W/ CARBON FIBER INLAY EPOXY STRENGTH INLAY DISPLACES SHOCK QUALITY YOU CAN SEE AND FEEL

#### FEATHERLIGHT HELIUM 🛃

FIVE PATENTED AIR FRAME CHAMBERS LIGHTER WEIGHT DUE TO WOOD DISPLACEMENT LIGHTEST FULL SIZE DECK STIFF AND RESPONSIVE FEEL

#### FIBERLIGHT

THINNEST FULL SIZE BOARD FIBERGLASS INLAY FIGERGLASS INLAY TRANSFERS ENERGY AWAY FROM BREAKING POINTS PRELOADED TENSION FOR BETTER POP

#### FEATHERLIGHT Ø

PREMIUM CONSTRUCTION INDUSTRY STANDARD THINNER VENEERS PERFORMANCE CONCAVE

#### FLATLIGHT C

FLATLIGHT IS A "PREMIUM" 7 PLY FLATLIGHT IS A "PREMIUM" 7 PLY CONSTRUCTION PRESSED IN A SOFTER CONCAVE MOLD WITH LOWERED NOSE AND TAIL ANGLES AND MORE FLAT BEHIND THE TRUCKS GIVING THE RIDER QUICKER RESPONDING OLLIES AND NOLLIES. FLATLIGHT CONSTRUCTION IS MADE WITH FEWER DIED VENEER IN EFFORTS TO LIGHTEN THE BOARD'S ENVIRONMENTAL FOOTPRINT

#### TWIG₿

#### THRIFTWOOD

TRADITIONAL SEVEN PLY MAPLE GREAT VALUE THICKER STIFFER

#### ВАМВОО 🕅

SIX PLYS OF TRADITIONAL MAPLE ONE PLY OF BAMBOO BAMBOO IS A RENEWABLE RESOURCE

#### **Recommended Shapes**

HEIGHT	WHEEL BASE	SHAPE #
3'11" and below	12" twig	
4'-4'4"	12.5" twig	21
4'5"—4'10"	13" twig	31
4'11"-5'2"	13.5" twig	
5'3"—5'7"	14"-14.25"	2-15
5'8"—6'	14.5"	16
6'1" and above	15"	19





04DC8I ELPP #2 7.5 X 31.25

TAVE TURMIO 04DC8F ELPP #16 8 X 31.625

FEATHERLIGHT 1060 04DC3R ELPP #8 7.625 X 31.125







DURATHANE | GUARANTEED TO NOT FLATSPOT FEATHERLIGHT

















DARRELL DIAMETRICAL 04WH2J ELPPI I 51MM 101a STANDARD

MUSKA GOLD CHAIN 04WH2K ELPP I 52MM 101a STANDARD

TIM TIM GOOD VS. EVIL 04WH1UELPP | 53MM 101a ROUND

BAM GOOD VS. EVIL 04WH1V ELPP | 54MM 101a ROUND

BAM CREATURES OF THE NIGHT 04WH2L ELPP | 53MM 101a SLIM

LEVI WELCOME BAM GNARLED 04WH2N ELPP I 50MM 101a 914WH20 ELPP I 51MM 101a 914WH20 ELPP I 51MM 101a 914WH20 ELPP I 51MM 101a



MUSKA NYC

04WH1W ELPP | 52MM



MIKE V HAZARD



NEON CLASSICS FRESH

04WH1Y ELPP 152MM 101a STANDARD 04WH2P ELPP 149MM 101a STANDARD STANDARD









RASTA SEAL LOGO 04WH2B ELPP 151MM 101a SLIM

STANDARD THRIFTWOOD





RASTA TONE 52 04WH2T ELPP | 52MM 95a STANDARD SECTION 50 04WH2U ELPP I 50MM 95a STANDARD

SECTION 52

04WH36 ELPP | 52MM 95a 04WH2V ELPP | 54MM 95a STANDARD STANDARD



SECTION 54

ENDURE THE ELEMENTS 
 SMOKE 54
 FIRE 57

 04WH2W ELPP 154MM 85a
 04WH2X ELPP 157MM 85a
ROUND

FOR LIFE

ENDURE THE ELEMENTS ROUND

RED SECTION 65 04WH2Y ELPP 165MM 85a FULL



WIND 04WH2E ELPP I 50MM 95a STANDARD

ENHANCED PERFORMANCE



 WATER
 FIRE
 EARTH
 LEVEL
 QUADRANT

 04WH2F ELPP I 52MM 95a
 04WH2G ELPP I 53MM 95a
 04WH2H ELPP I 54MM 95a
 04WH1H ELPP I 52MM 95a
 04WH1H



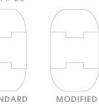


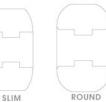


TRUCK SIZE RECOMMENDATIONS

TRUCK	AXLE LENGTH	BOARD SIZE	RECOMMENDED SHAPE #	
4.75	7.375"	7.25"—7.625"	1T—8	
5.0	7.625"			
5.25	7.875"	7.625"—8.125"	5—16 AND 19	
5.5	8.125"	7.875"—8.375"		
6.0	8.625"	8.375"-8.875"	20 AND POOL SHAPES	
7.0	9.625"	9.375"—10"	CRUSIERS AND POOL SHAPES	

WHEEL SHAPES STANDARD







MUSKA TRUCK TRPRFM55 - 5.5 WHLSE \$13.00 MSRP \$24.00 CHROME 04AH54 ELPP-4.75 04AH55 ELPP-5.0 DAW 04AH60 ELPP-4.75 04AH61 ELPP-5.0 RAW III TRLGFPR6-6.0 TRLGGPR7-7.0 WHLSE \$15.00 MSRP \$25.00 BLACK 04AH64 ELPP-4.75 04AH51 ELPP-5.0 TRINITY 04AH73 ELPP-4.75 04AH74 ELPP-5.0 PHASE III TRUCKS LARGER SIZES | MEDIUM PROFILE MODIFIED GEOMETRY FOR CONSISTENT TURN-GOLD 04AH52 ELPP - 4.75 04AH53 ELPP - 5.0 MIKE V. 04AH75 ELPP-5.25 ING UPDATED HANGER FOR LONGER GRIND LIFE







TIE DIE BLUESMAN 04WH2Q ELPP 152MM 101a 04WH2R ELPP 156MM 101a 04WH2S ELPP 158MM 99a STANDARD STANDARD BULLIT/SLIM

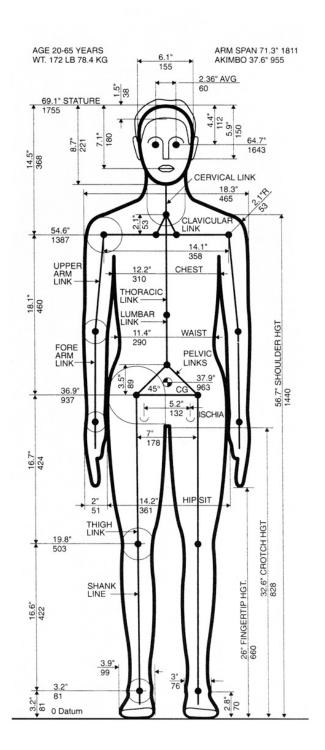
GUMMY

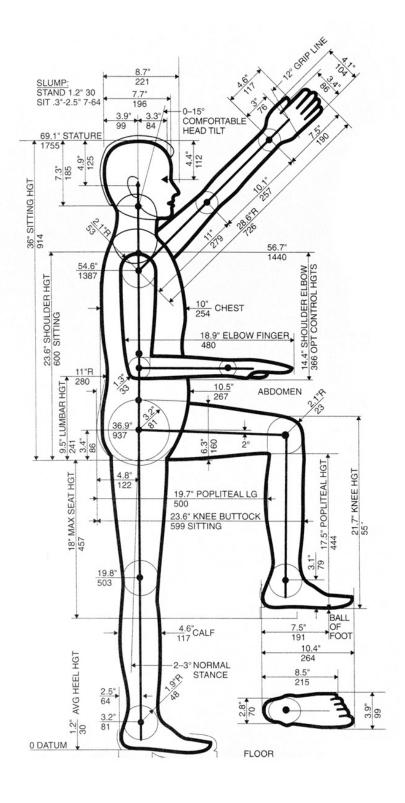
# Sustainability

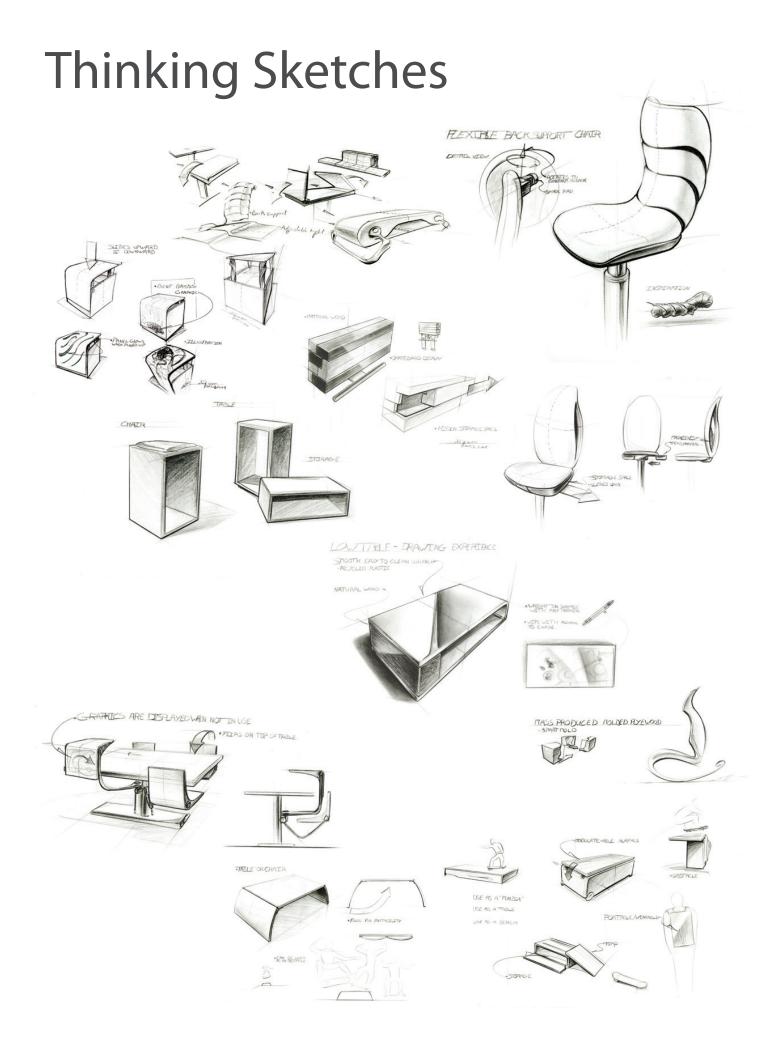
This furniture piece will be made from ecological materials. Wooden parts will be certified by the Forest Stewardship Council. Cushions will be made out off BIOH Soy-based foam, hemp fabric and cotton padding. Hinges, legs and hardware will be made from steel so that they may fully be recycled.



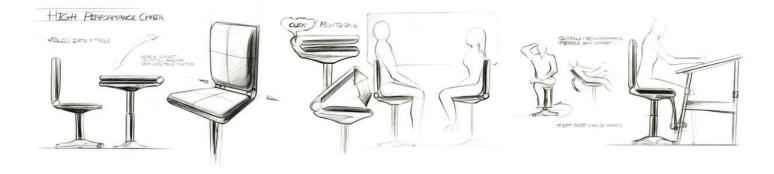
### Ergonomics

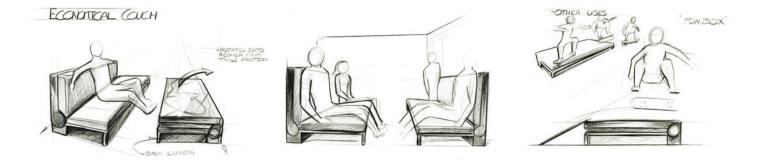




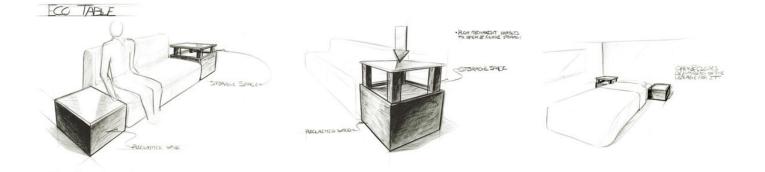


### Storyboards

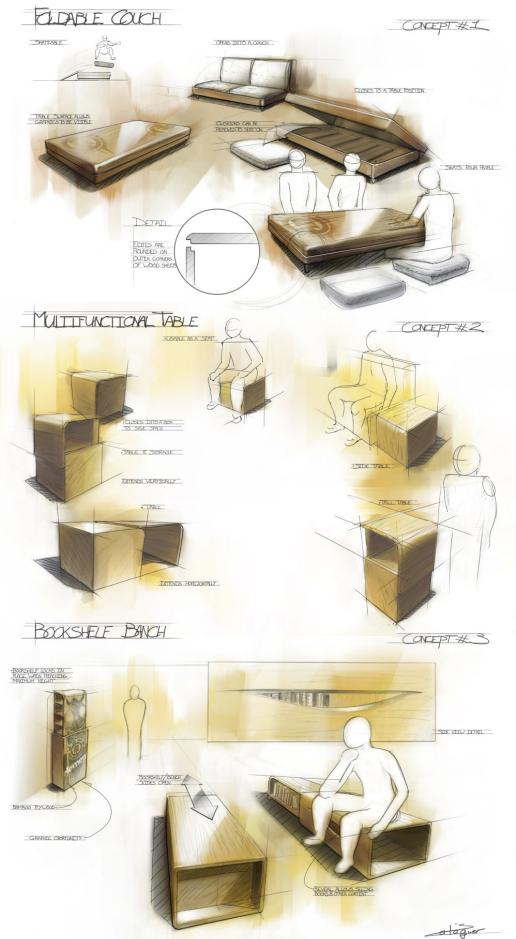


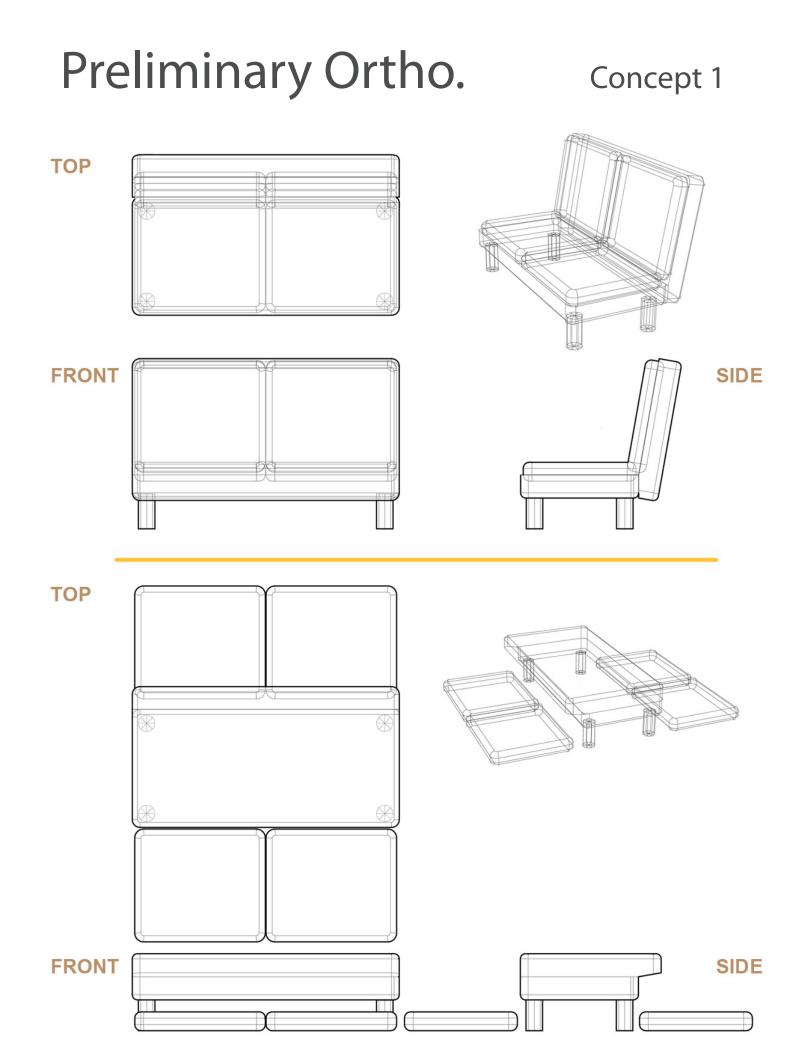






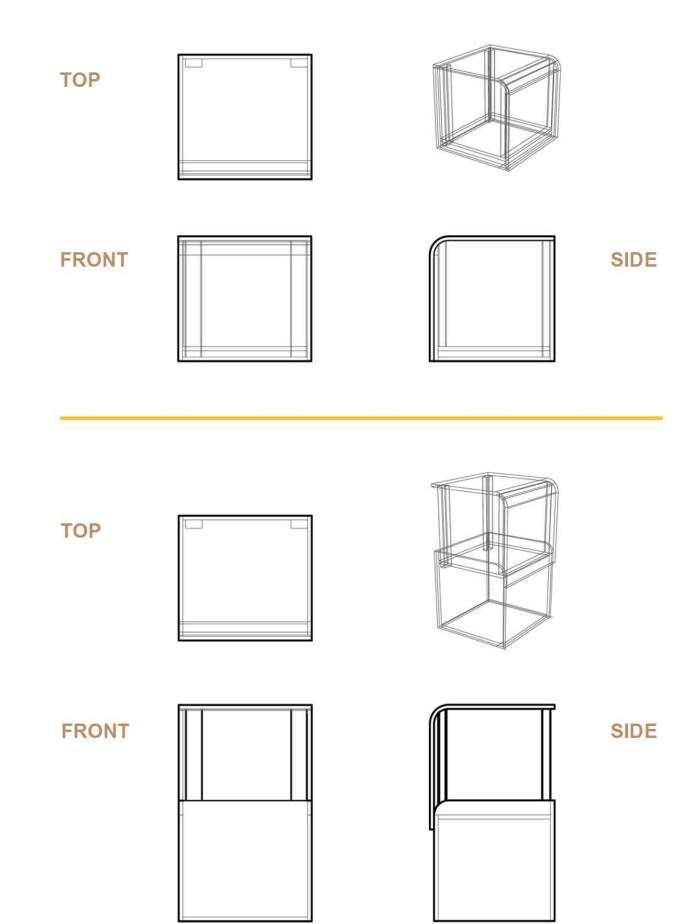
### Final 3 Directions





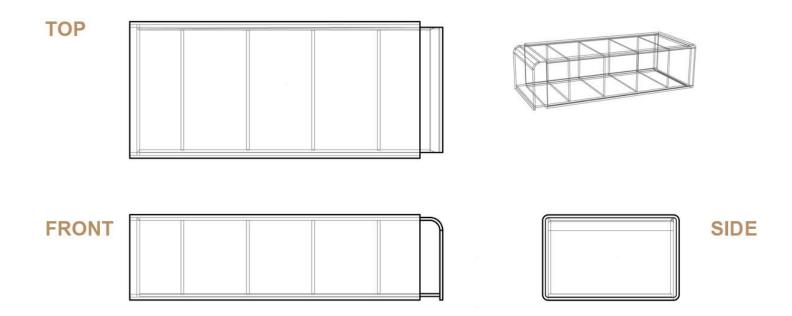
## Preliminary Ortho.

#### Concept 2

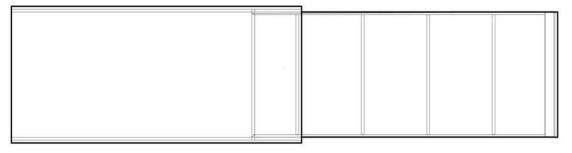


## Preliminary Ortho.

#### Concept 3



#### TOP

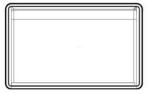




#### FRONT

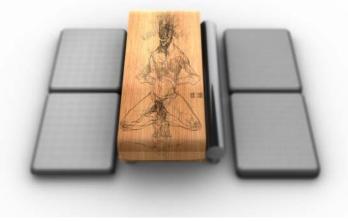
N	 	

#### SIDE

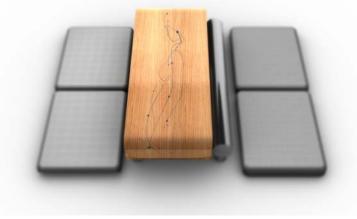


# Preliminary Graphic Study

#### Rene Almanza



Rubens LP



Ashley Wood

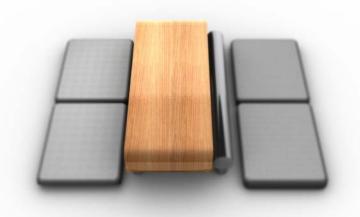


Element Logo



#### Kahori Maki





### Fabric Color Studies



# **Design Brief**

Duality is a sustainable, economical furniture piece, designed for young energetic individuals. Folding from a couch to a table, it utilizes its environment to fit into limited spaces. A collection of graphic decals add customizability to the furniture experience while expanding the product's lifespan.



### **Design Experience**



### **Graphic Choice**





Interchangeable, scratch resistant vinyl decals add graphic choice to the design. Non-permanent adhesive backing allows for the peel off skins to be removed without glue residue. Vinyl decals can be rolled and reused or recycled after being used.



### Graphics



**Alexis Marcou** 



**Alexis Marcou** 



**Stamatis Laskos** 



lain macarthur



lain macarthur Jan Piasek





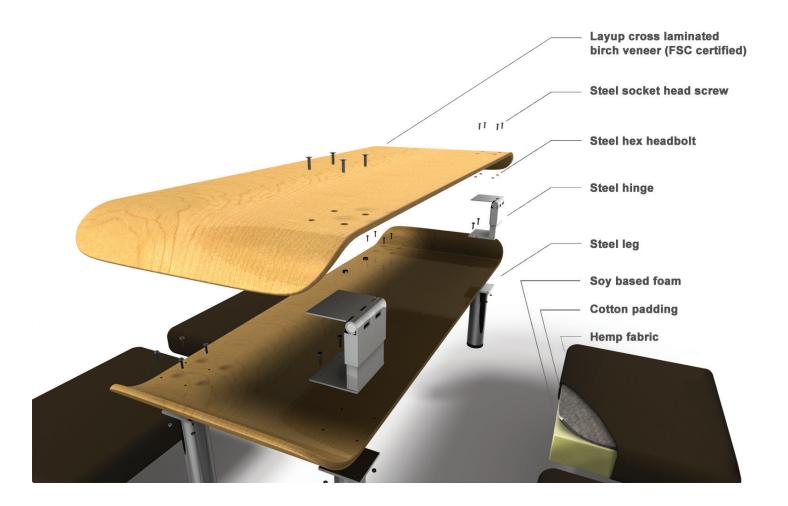
**Dmitry Ligay** 



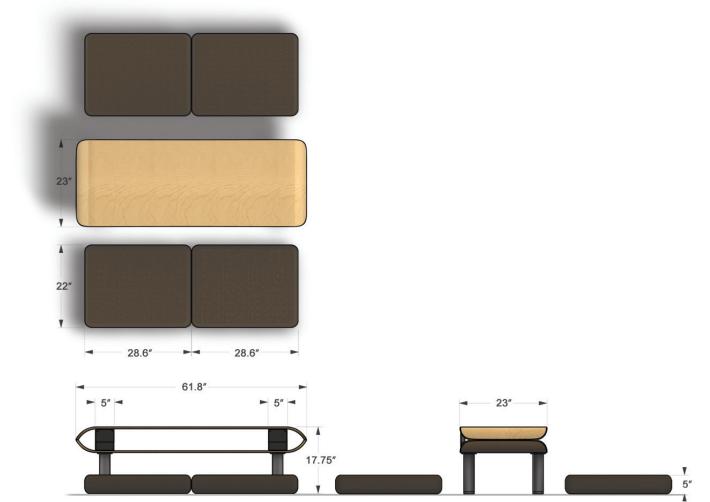
**Rene Almanza** 

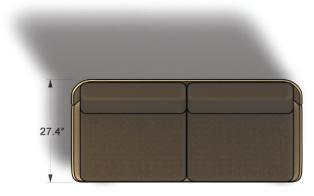
### Materials & Assembly

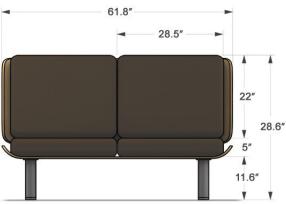
Sustainable materials are used throughout this design and all parts are designed for disassembly. The cushions are made out of soy-based foam, cotton padding and hemp fabric. Hinges, legs and hardware are made from steel and can fully be recycled. Veneer is certified by the Forest Stewardship Council, an international non-profit organization dedicated to lower ecological impact.



## Measurements









### **Prototype Process**

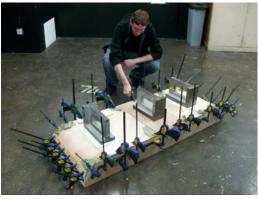


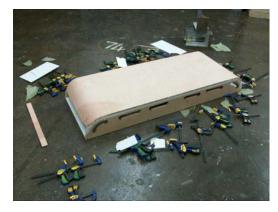
After learning about the Kerfing technique I started making one sample after another. This allowed me to figured out the right spacing proportions for the plywood to bend properly while having enough surface contact to stay strong.





In the mean time of the trial and error phase I refined the "buck". Once the Kerfing technique had been proven to work, I used the same slit spacing to the full size plywood sheets; clamps and weights were then used to keep the two sheets tight together and to the "buck".





When I removed all of the clamps and weights the bent plywood stayed at the desired shape and was far stronger than expected. I had achieved a smooth, accurate bent curvature. I then trimmed the edges and sanded the two sheets down to a flat edge.





After the edges were sanded down I applied a veneer to cover the kerfing slits. I then trimmed the veneer to size and sanded sharp edges.



