



## Eric Brand's "Exploration Lounge" - *The Science Behind Design Discovery*

### **C u + Z n <sup>2 +</sup> = B R A S S**

#### **Rain Drop Hammered Brass Console**

Copper and zinc are combined into a mold to solidify and become the brass sheet used in this piece. A process of hot rolling, cold rolling and finish rolling completes the process. Our craftsman then hand hammer each dimple on the sheet metal before it is applied to the console.

#### **Wisteria Lamps**

Wicker is one of the oldest forms of furniture craftsmanship. Some of the oldest surviving specimens of woven chests and boxes made of dried palms or reeds have been found in ancient Egyptian pyramids. Our wicker is dyed and woven by hand in the Philippines, in a remote city, known for lantern-parols craftsmanship.

#### **Resort Lounge Chair - origin: Philippines and China**

The bamboo spindles of the resort lounge chair are created using the lost wax casting process. The oldest archaeological and literary evidence of lost wax casting can be found in India dating back nearly 5,000 years. A mold is made of the original spindle and hot wax is poured into make an exact negative replica. The replica is then used to create a ceramic shell mold, which the molten brass is poured into. Once complete, the spindles are patinated with various acids.

#### **Stone Side Tables - origin: India**

The marble used in our outdoor side table is known as Makrana, one of the oldest and finest stone materials, it is the same marble that was used to build the Taj Mahal. Makrana is a calcite stone, consisting of 90-98% calcium carbonate. Makrana is a metaphoric rock, which is a transforming process of an igneous or sedimentary stone through great heat and pressure.

#### **Mylar Light Box**

With simple Mylar sheeting and plexi-glass we have created a kaleidoscope for you to use while exploring all the lights of the Exploratorium Gala. Japanese designer Taiko Matsumura developed this box. Point the box towards any light source and look through the opaque side to experience light distortion and reflections through the Mylar tubes.

From everyone at Eric Brand, have an adventurous and wonderful night at the new Exploratorium!

#### **Penshell - origin: Asia**

Penshell or Pinnidae used in our accessories is derived from salt-water clams found in Asia. The penshells are anchored to rocks with a material known as sea silk, that they produce. The outer layers of the shell are removed to extract the golden material below. Some species are used for food in Asia.



## **Eric Brand's "Exploration Lounge" - *The Science Behind Design Discovery***

### **Resort Lounge Chair - origin: Philippines and China**

The bamboo spindles of the resort lounge chair are created using the lost wax casting process. The oldest archaeological and literary evidence of lost wax casting can be found in India dating back nearly 5,000 years. A mold is made of the original spindle and hot wax is poured into make an exact negative replica. The replica is then used to create a ceramic shell mold, which the molten brass is poured into. Once complete, the spindles are patinated with various acids.

### **Acrylic Rings Side Table - origin: China**

The polymerization process to turn methyl methacrylate into polymethyl was discovered by German chemists in 1877. It was first used commercially in 1936 to produce safety glass. When two monomers are joined together the result is known as a copolymer. The monomer and a catalyst (such as organic peroxide) are poured into a mold where the reaction takes place providing a hard clear substance. To create our acrylic rings pattern we feed the tabletops into a computer numerical control machine (CNC) where the pattern is cut to exact specifications.

### **Wisteria Console - origin: Philippines**

Our Wisteria console is made of an iron structure treated by powder coating. The powder coating process was developed in the 1940's. The process involves finely ground particles of pigment and resin that are sprayed onto the substance. The charged powder particles adhere to the electrically grounded surface until heated and fused into a smooth coating in a curing oven.

### **Johnsonian Barstool - origin: China**

Stainless steel was developed in 1913 by Brown-Firth research lab while seeking an erosion-resistant alloy for gun barrels. Stainless steel is an alloy made from iron ore, carbon, nickel and chromium. The elements are melted together in an electric furnace for 8-12 hours of intense heat. Then it is cast into a solid form. After it is formed it goes through annealing process to soften the metal. The bases of our barstools are then polished to a high sheen. Stainless steel has stain resistant properties due to the amount of chromium in the alloy.

### **Wisteria Console - origin: Philippines**

Our Wisteria console is made of an iron structure and treated by powder coating. The powder coating process was developed in the 1940's in Europe in response to environmental pressures. The process involves spraying finely ground particles of pigment and polymers onto the structure. The charged powder particles adhere to the electrically grounded surface until heated and fused into a smooth coating in a curing oven. Powder coating is stronger than traditional painted surfaces and has near zero VOC emissions.

### **Stone Side Tables - origin: India**

The marble used in our outdoor side table is known as Makrana, one of the oldest and finest stone materials, it is the same marble that was used to build the Taj Mahal. Makrana is a calcite stone, consisting of 90-98% calcium carbonate. Makrana is a metaphoric rock, which is a transforming process of an igneous or sedimentary stone through great heat and pressure.