

*TESSELLATE*

## **CHUCK HOBERMAN**

### **DESCRIPTION:**

TESSELLATE'S CONTINUALLY SHIFTING AND EVOLVING PATTERNS ARE DRIVEN BY ROTATIONALLY TRANSLATING MULTIPLE PERFORATED STEEL PANELS. AS THESE PATTERNS ALIGN AND DIVERGE, THE VISUAL EFFECT IS OF SPARSE GEOMETRIC PATTERNS - HEXAGONS, CIRCLES, SQUARES, AND TRIANGLES - THAT BLOSSOM INTO AN OPAQUE, LIGHT-DIFFUSING MESH. THE RESULT IS A KINETIC SURFACE THAT SPANS 38 SQUARE METERS AND IMBUES THE BUILDING WITH THE FUNCTIONAL CAPACITY TO DYNAMICALLY CHANGE ITS OPACITY AND SCULPT THE QUALITY OF LIGHT AND SHADOWS WITHIN - DEMONSTRATING NEW TECHNOLOGIES FOR ADAPTIVE BUILDING FAÇADES THAT ENABLE BUILDINGS TO PHYSICALLY TRANSFORM AND RESPOND TO ENVIRONMENTAL CHANGES IN REAL TIME.

US & INTERNATIONAL PATENTS PENDING  
FABRICATED BY A. ZAHNER CO.

## *TRANSFORMING GATE*

**CHUCK HOBERMAN**

### **DESCRIPTION:**

WHERE CONVENTIONAL ART GATES ARE DESIGNED AS TWO-DIMENSIONAL ARTWORKS THAT ARE ONLY COMPLETE WHEN CLOSED, HOBERMAN'S GATE RESOLVES ITS OPEN AND CLOSED STATES INTO TWO DISTINCT DIMENSIONALITIES AND WAS DESIGNED BEGINNING WITH ITS OPEN FORM. PARAMETRICALLY GENERATED BY THE PLANAR SLICING OF A TWISTED CUBIC GEOMETRY, THE STACKED FORM CREATES TWISTING, OPEN VOLUMES - A PLAY ON POSITIVE AND NEGATIVE SPACE - WITH DYNAMIC SIGHT LINES THAT CHANGE AS VISITORS WALK AROUND IT. WHEN CLOSED, ITS LAYERS UNFOLD TO CREATE AN UNDULATING FIELD OF CURVED, INTERSECTING LINES.

FABRICATED BY A. ZAHNER CO.

*BLUE UNIVERSE 243 AND RED UNIVERSE 243*

**SCOTT DRAVES AND THE ELECTRIC SHEEP, 2010**

DESCRIPTION:

21:34 AND 20:40 MINUTE 720P VIDEO LOOPS. EDITION 3/4 AND 2/4.

*PORTRAITS OF PHYSICISTS*

**MIRIAM CAROTHERS**

DESCRIPTION:

19 PRINTS. 20"X 30".

PHYSICISTS PORTRAYED (FROM LEFT TO RIGHT):

MACHIKO HATSUDA, MARTIN ROCEK, LUCA MAZZUCATO, JONATHAN HECKMAN, JUAN MALDACENA, MINA AGANAGIC

*PORTRAITS OF PHYSICISTS*

**MIRIAM CAROTHERS**

DESCRIPTION:

19 PRINTS. 20"X 30".

PHYSICISTS PORTRAYED (FROM LEFT TO RIGHT):

MICHAEL DOUGLAS, CUMRUN VAFA, SERGEI GUKOV, C.N. YANG, NIKITA NEKRASOV,  
ALEXANDER POLYAKOV, FREDERIK DENEF

*PORTRAITS OF PHYSICISTS*

**MIRIAM CAROTHERS**

DESCRIPTION:

19 PRINTS. 20"X 30".

PHYSICISTS PORTRAYED (FROM LEFT TO RIGHT):

SERGIO CECOTTI, JIHYE SEO, LEONARDO RASTELLI, HIROSI OOGURI, DOMENICO ORLANDO, SUSANNE REFFERT

*DOUBLE TORUS STONEHENGE*

**HELAMAN FERGUSON**

DESCRIPTION:

28 SILICON BRONZES. (6"x 32"x 32"). 1990

*THE MAGIC BOXES*

**HOUDINI COLLECTIVE**

DESCRIPTION:

ACRYLIC AND METAL. VARIOUS DIMENSIONS. 2011



*THE BIG X*

**PI (ANDREW LOGAN)**

DESCRIPTION:

BRONZE SCULPTURE. 2011.

*SPIDER IN ALEPH 0*

**LYDIA NESTOR**

DESCRIPTION:

SCULPTURE. 2011.

*ONE IDEA COMING UP*

**PETER NICKS**

DESCRIPTION:

BRONZE SCULPTURE. 2011.

*SPINAL CUTTLE CUTTER*

**ROBERT MICHAEL SMITH**

DESCRIPTION:

STAINLESS STEEL. 19"x36"x21".

*BLACK APPLES*

**KIKI SMITH**

**DESCRIPTION:**

BRONZE. 38 UNITS RANGING IN SIZE FROM 2 1/2" X 1" TO 3 1/2" X 4"

*SPIDER RULER OF THE UNIVERSE*

**JI CHOI**

DESCRIPTION:

SCULPTURE. 2011.

*BLUE*

**TATJANA BUSCH, WITH MUSIC COMPOSED BY WOLFGANG SCHMID-GRANDY**

DESCRIPTION:

ALUMINUM SCULPTURE. 2011.

*ICONIC WALL*

**CONCEPT: NINA DOUGLAS**

**DESIGN: NINA DOUGLAS, TONY PHILLIPS**

**DESCRIPTION:**

GRAPHICS BY KRISTINA STOYANOVA, KAOLIAN PETKOV, CHARILAOS PAPADOPOULOS

SCIENTIFIC INPUT FROM SCGP, SBU MATH AND PHYSICS DEPARTMENTS

2010-2011