

## Public Square Architecture Installation

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This public square architecture installation in Riverpark Square Atrium, Spokane, Washington, was temporary and site specific. Its purpose was to raise public awareness about contemporary architecture during AIA National Architecture Week 2010.

Created within extreme budget constraints, the project entailed parametric modeling and scripting for rapid prototype R+D to generate the design and for fabrication rather than to simply represent a design outcome. The project brief emphasized public interface in the enclosed public square to materially demonstrate performativity - architectures enduring capacity to speak tectonically, for example by configuring spatial relations and by the play of light on material surfaces. Tectonic digital design and fabrication research in this installation entailed the creative articulation of space defining surfaces and enclosures responsive to site circumstances. Light weight, inexpensive and transportable material components were used for quick set up and take down. Component connections were designed as integral elements.

Project research and development involved parametric modeling and prototype fabrication with Rhino software and a Grasshopper paneling script. A laser cutter was used to aid design prototype R+D and to fabricate the final rigid, lightweight, modular skin system. The skin system consisted of laser cut cardboard panels with fold tabs along panel edges. Fold tabs joined the panels together but were hidden from view. Fold seams between panels were visible and created a tessellated, geometric pattern across the envelope. Each of the 800 or so cardboard panels was a unique, triangulated, ruled surface. In some places, the cardboard panels were laser etched, some others were perforated. Vertical OSB ribs supported the installation envelope and were form fitted along the interior of the envelope. The ribs and panel system tabs were joined with wood dowels.

The installation is scaled to loosely fit a circular floor mosaic existing in the public square. The plan and section of the installation explore that circle without literally following it. In this way the installation establishes open spaces and harboring spaces, inviting the public to experience the installation at different scales and levels of commitment within the atrium. Usability and meaning are partially conveyed through material form, spatiality, and environmental fit. Such design traits are elsewhere described as human-centered-ecological affordances (Kripendoroff, 2007). An affordance is similar to what the Dutch modernist architect, Herman Hertzberger, called an offering: subtly configuring design elements and spaces to suggest potential and improvisational uses without dictating a single use. One way the installation subtly re-configured its host site was by working with existing circulation pathways to tangentially ply existing flows of people in and out of the atrium, establishing little eddies in the human streams. The eddies were anticipated and projected and inspired the overall form of the installation. Installation panels highlighting recent built work served to draw people in closer and propel them through suggested gathering areas and pathways (offerings and affordances) of the installation.

