Initially conceptualized as a response to solar shading needs, the design for the Flower Wall was inspired by the natural beauty of phototropic response from flowers, such as a sunflower or morning glory. As an exterior facade, the tunable wall optimizes interior environments by adapting to changing outdoor environments. For building performance and comfort, flowers can be arranged to strategically shade morning to afternoon sun, control views and privacy, and control cross ventilation air flows. An automated array can respond to commands from a smart building control system based on outside weather conditions, or can be operated manually by occupants with a smart phone or tablet interface. For an experiential effect, flowers can be programmed to create dynamic patterns across an array or an entire facade. Programmed arrays can also provide an interactive response to human proximity, maintaining a one to one scale interface of human and system interaction.

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**Type:** Dynamic Responsive Facade, Flower Wall, Phototropism, Digital Fabrication, Environmental Performance, Building Control System, Interactive

**Date:** 2010- Present