

# Erase the Lines

## Pushing Boundaries with Innovative Openings

By Kit Kollmeyer, Project Manager/ Robert Edson Swain Architecture + Design

Walking into the Queen Anne Pavilion feels like being under a covered porch in a lush garden. Columns are exposed and beams reach outward into the landscape. The walls melt away with spectacular views of Puget Sound.

Despite the seemingly permanent openness, windows rise out of a steel wall and doors appear from nowhere. With crafted details and determination the pavilion is a flexible, responsive space which can be used through all of Seattle's moderate seasons.

Blurring the lines between indoor

and out is a common modernist mantra. But contemporary window and door systems are bulky, making it difficult to achieve a smooth transition between interior and exterior.

As limiting as this can be, we've found that the modular nature of these systems can be equally freeing. The lines created by thick jambs, sills, and heads can be stripped away and virtually disappear. Today, rather than striving to "blur the lines", we say "erase them."

For the pavilion, we were able to deconstruct the doors into something that functions well with the indoor/outdoor concept. In our kit of parts is a head, sill, interlocks between panels, and jambs. Removing the jamb at the corner column al-

lows us to express the structure of the building. To seal the door at the corner column in absence of the jamb, we used an interlock. The small interlock, manufactured to seal between panels, serves the same function as the bulky jamb. Attaching it directly to the column allowed us to eliminate the jamb completely.

To further push the envelope, the doors completely disappear from view. To achieve this, we specified longer lengths than the opening so the doors could slide past the corner of the building. Attaching the head and sill to structural steel angles allows the doors to cantilever from the structure without sagging.

The curved window wall of the pavilion, is inspired by an early modernist structure, the Villa Tugendhat by Mies van der Rohe in 1929. Much

**By extending the head and sill away from the building, we were able to cantilever the entire door stack just out of view.**



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**A stunning view of the pavilion with windows open.**





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A creative approach with two manufactured door and window systems allows the pavilion to be completely outdoors when open.

Like the windows in the Villa Tugendhat, the windows seamlessly disappear into the wall below.

To design and fabricate these windows, we worked with a local window manufacturer, who creates custom windows using a standardized alumi-

num extrusion. Like a single-hung window, we used a standard aluminum extrusion with integrated gaskets and channels for sliding up and down. To support the weight of these large windows, pulleys and supports are suspended within the wall below.

To improve the illusion of disappearing windows, we designed the head to seat perfectly flush with the sill below.

Because the jambs are thick, we carefully integrated them into the structure. When open the jamb seems like a flange on the structural column.

Windows in the curved wall disappear when open.



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Erasing the lines created by contemporary openings can be difficult with thick energy efficient profiles. Modifying available products to create custom items is an excellent approach to cater doors and windows exactly to our clients needs.

Thank you to our friends at Krekow Jennings, Goldfinch Brothers, Northstar Woodworks, and Architectural Elements. Without your dedication this project would certainly not be the same.

For more information visit: [www.robertedsonswain.com](http://www.robertedsonswain.com). ■