

Zahner Factory Expansion

case study
By Yijin Zhao

Location: Kansas City, United States



Architect: Crawford Architects

Owner: N/A

Year of completion: 2011

Climate: Humid Continental Climate

Material of interest: Metal

Application: Structure; Exterior; Interior;

Properties of material: Encapsulating these values means understanding that Zahner has built their reputation on knowing the intricacies of metal, its chemical properties, and how they can be manipulated. Following this notion through intensive design research, the form for the façade was derived from metal oxidation patterns inspired by those found on Zahner's campus. The final graphite concept sketch drew inspiration from multiple patterns to create a form that was specific to the proportions and context of the expansion. Articulation of the abstractly based model was closely developed with Zahner's engineers and utilizes a variation of the ZEPP (Zahner Engineered Proprietary Panel) system. The system's key components are vertically oriented DT* fins made from a half-circle shaped aluminum extrusion riveted to a water jet cut 3/16" aluminum plate.

Sources:

Architect Website: www.archdaily.com/169206/zahner-factory-expansion-crawford-architects