

## Museum at Prairiefire

### Overland Park, United States of America

As the signature building of a new 60-acre suburban live-work-play development, the Museum at Prairiefire was designed as a civic hub featuring world-class traveling exhibits from the American Museum of Natural History. The design concept evokes the imagery of one of the most unique aspects of the local Kansas region: the tallgrass prairie burns. These burns are important for the maintenance of the prairie ecosystem by suppressing trees and shrubs from overtaking native tallgrasses, and the project's LEED Silver Certification attests to its environmentally sound design and construction practices, echoing the architectural concept rooted in sustainability.

From siting, to massing, forms, materials, color, and detailing, all design decisions cultivate this 'burn' concept. Rolling 'hills' of stone, evocative of the soft prairie landscape, form the backdrop for colorfully vibrant and angular 'lines of fire'. The 'hill' forms are horizontal stone-clad 'boxes', housing exhibit and support areas, softly sculpted in plan with undulating profiles, and gently shifting in relation to one another. The fire forms engulf and connect the two main stone-clad 'hill' forms, and form the Grand Hall (lobby), which opens through the building to a wetlands park behind the Museum. Historically, horses dragging lighted torches in a line set prairie

fires. To emulate this, overlapping, jaggedly shaped walls clad in materials dynamically shifting in color and reflection form the 'fire'.

These materials are multi-colored iridescent LIC stainless steel panels and dichroic glass, both of which shift in hue depending on the viewing angle, echoing the constant movement of a live fire. Light Interference Color (LIC) stainless steel panels were laid out in a vertical gradient, using 4 different base colors in 3 different finishes. The patterns echo flame bursts and sparks in a painterly manner, with bluish-purple at the base, through burgundy and burnt orange, to gold at the top. Used in a standard flat-seam application, there are over 10,000 individual stainless steel panels on the façades, all laid out in the construction documents in a paint-by-number manner. The cutting-edge insulated dichroic glass was developed exclusively for this project, and is considered the first North American application. Its unique color changing, rippled, and streaked mirror effects are remarkably evocative of flames. Though only one type of glazing was used, the glass color appears in a range from red, orange, yellow and even light green depending on the viewing angle, and at a close distance, creates a vertical gradient of these same colors.

In contrast to the vibrant and energetic warm color spectrum reflected on the exterior, the dichroic glass transmits the opposite color spectrum. In the interior, calming blue and purple transmitted light imparts a peaceful sense of awe, enhanced by the column-less, soaring spaces of the Grand Hall.

The design goal of the Museum at Prairiefire was to

celebrate the region's unique identity. By embodying the story of the region in a building design, and emotionally engaging people with its architecture, the Museum at Prairiefire has become a symbol that connects people spiritually to where they live, allowing the suburb to become a proud, independent and sustainable community.



Environment:	urban
Use:	panel façade
Material:	304 with a light interference color
Fabricator:	Millenium Form
Architects:	Verner Johnson
More information:	vernerjohnson.com millenniumfoam.com



*Picture courtesy of David Arbogast*