

The Museum at Prairiefire

OVERLAND PARK, KANSAS



Stone and Fire: The Museum at Prairiefire Blends Natural and Man-Made Materials to Create an Architectural Icon on the Midwestern Prairie

The Museum at Prairiefire, located in Overland Park, Kansas, tells a story of geology, culture and the practice of prairie landscape management through intentional burns. The 41,000 sq. ft. architectural marvel, with a stone-clad backdrop that represents the undulating hillside, is alive with fiery sparks of color. The fire element is represented by a unique film material and the stones are

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He [Kharfen] was right on the money from the first sketches to final construction. It was his vision that brought the glass, Cordova veneer and natural stone together, to represent the char, smoke and colorful flames.

— Fred Merrill,
Founder and President of Merrill Companies

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in vast range of colors. The museum features a rotation of exhibits from New York City's American Museum of Natural History (AMNH).

The vision of Jonathan Kharfen, AIA, LEED senior associate, Verner Johnson Inc. of Boston, MA, the stonework is a mix of regionally-sourced natural limestone and manufactured stone veneer from Oldcastle's Echelon product line, set by the masterful hands of D&D Masonry. With a budget of \$17.1 million, the Museum at Prairiefire has won several awards and recently achieved a LEED Silver rating.

Because Mother Nature doesn't always have the colors you want in stock and

at the right price, Kharfen went with manufactured stone veneer for the darker spectrum to achieve the desired "charred" gradient effect. "We incorporated four standard Echelon Cordova veneer colors and then worked closely with Oldcastle to create two custom colors," said Kharfen.

For the second-floor stone balcony, with views of the wetlands park, a specialized wall system was required. "The design intent was for this cantilevered stone promontory to be completely wrapped in stone, even its sloping soffits," said Kharfen. With the help of an Oldcastle subsidiary, Kharfen became familiar with the IBP Fast Track Stone System, which allows kerfed stone to sit in a lipped track system, which mechanically holds the



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Quality Masonry Products from Oldcastle®

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Kharfen determined that a combination of stone—both natural limestone and man-made Oldcastle Cordova veneer - offered the range in terrain colors he was looking for.

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stone in place, despite the gravity load of the sloping soffit. The two long sides of each stone are secured in the track top and bottom.

Kharfen sloped the headers (and sometime sills) of all windows and doors located in the stone walls. Concerned about the stone cracking at these unique and sometimes extreme header geometries, Kharfen found a clever way to support the stone to minimize any potential cracking over time. Whereas a typical window lintel spans horizontally to the window jambs, Kharfen designed a double lintel with a horizontal leg as well as a sloped leg. The sloped leg only supports the minimal triangular area of stone directly above the window, with the horizontal leg supporting the rest of the stone above, thereby minimizing the potential for cracking. “You can’t tell when you see it, that there are two lintels above each window and door,” he said.

Like a proud parent, Kharfen beams with

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The use of Cordova veneer mixed with traditional Kansas Limestone was what allowed this project to come in on budget and under a very tight timeframe

— Jonathan Kharfen,
Verner Johnson, Inc.

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pride when he talks about the Museum at Prairiefire, with its seamless blend of natural and man-made materials and incredible colored film that creates a kaleidoscope of colors against the exquisitely crafted stone backdrop. Like a splendid Phoenix rising from the ashes, the Museum at Prairiefire will dazzle visitors for generations to come.

About Echelon™ Masonry

Echelon is the consolidated brand for all masonry products and services of Oldcastle Architectural including Trenwyth® Architectural Masonry, Artisan Masonry Stone Veneers®, Quik-Brik® Concrete Masonry Units, Amerimix® Bagged Goods and a complete portfolio of Performance Upgrades. As a single source masonry portfolio solution, Echelon delivers consistent, reliable product manufactured locally at more than 150 locations and delivered by an unrivaled logistics network. For more information, visit EchelonMasonry.com.

About Oldcastle® Architectural

Oldcastle Architectural is the largest concrete products manufacturer in North America. With more than 150 locations and a company culture characterized by a commitment to customer satisfaction, Oldcastle adheres to a level of service and consistency that no other supplier can match. Our combination of local market presence and national capabilities allows us to meet and exceed the demanding needs of an ever-changing industry. Learn more at Oldcastle.com.

Project Details

Manufactured by
Oldcastle

Project Size
41,000 SF

Products
Concrete Masonry Units:
Echelon Cordova Veneer
4 Standard and 2 Custom Colors

Project Type
Museum at Prairiefire, a mixed use
suburban development

Location
Overland Park, Kansas

Property Owner
Fred Merrill,
Founder and President of Merrill Companies

Architect
Jonathan Kharfen, AIA and LEED Sr. Assoc.,
Verner Johnson, Inc., Boston, MA

Masonry Contractor
D&D Masonry, Kansas City, MO