



2013 AWARDS
OF EXCELLENCE

CATEGORY:
**EXTENSIVE
INSTITUTIONAL**

MORE THAN ARTISTIC EXPRESSION

The Kauffman Performing Arts Center in downtown Kansas City, MO, is one of the most technically and architecturally advanced performing arts centers in the nation, is built in a landscape setting of equal acclaim. The 285,000 square foot Arts Center includes two separate halls, both housed within a dramatic overarching shell featuring a glass roof and glass walls fronting a green roof and city skyline. The Arts District Garage is a 1,000 car underground parking structure attached to the new Kauffman Performing Arts Center. The green roof atop both structures is designed as a 4.4 acre high performance open space park with the distinction of being the first permitted green roof stormwater detention facility in the State of Missouri—and the largest.

The drainage system design was comprised of a variety of unique solutions. Three independent drainage systems optimize stormwater management by removing excess water with both active and passive harvesting for

“THE SUCCESS OF INNOVATIVE PROJECTS REQUIRES EXCEPTIONAL COLLABORATION, COMMUNICATION AND AN UNWAVERING BELIEF IN THE SOUNDNESS OF THE SOLUTION. WE LIVE FOR THESE TYPES OF TECHNICAL CHALLENGES AND THIS PROJECT DELIVERED IT ALL.”

JEFFREY BRUCE, PRINCIPAL, JEFFREY L. BRUCE & COMPANY LLC

landscape use. The growing media was designed to accept and store surface water for use by the landscape, thereby reducing water needs. When the growing media reaches material field capacity, the system releases excess water into the thin composite drainage boards, and using the slope of the deck, gravity fed water finds its way into the roof drains which are routed to an underground cistern for capture. There, it is recycled as irrigation water for the vegetated roof and site landscaping, saving the city \$56,000 in water costs per year and supplying over 84 percent of the annual 1.2 million gallon irrigation demand.

The green roof is at grade on the north side and two stories above grade on the south. The six and eight-inch deep growing

media supports groundcovers like Switchgrass (the seed of which provides food for songbirds) and Monkeygrass. The green roof also includes trees such as red oaks and Colorado spruce. Over 95 percent of the landscape materials and furnishings were sourced within 20 miles of the site.

The green roof, is part of the public tours program which informs thousands each year about the design and history of the facility. The City of Kansas City and the Missouri Department of Conservation also use the green roof as a case study for public stormwater permitting. The landscape will function as a community center and will give neighbors and wall provide urban green spaces while integrating ecological benefit and function in multiple ways.

TEAM

PROJECT:

Kauffman Performing Arts Center & District Garage, Kansas City, MO, 193,000 square foot green roof

LANDSCAPE ARCHITECT:

*Jeffrey L. Bruce & Company LLC
(Award Winner)*

DESIGN LANDSCAPE ARCHITECT:

Reed-Hilderbrand Assoc.

PARKING GARAGE CONSULTANT:

Carl Walker, Inc.

GARAGE GENERAL CONTRACTOR:

Walton Construction

PERFORMING ARTS CENTER (PAC) DESIGN ARCHITECT:

Safdie Architects

GARAGE ARCHITECT:

Moody Nolan, Inc.

GARAGE CIVIL ENGINEER:

George Butler & Assoc.

PAC ARCHITECT OF RECORD:

BNIM Architects

PAC GENERAL CONTRACTOR:

J.E. Dunn Construction Co

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