

Project Data

Total Project: \$43,000,000
Construction: \$26,000,000
MEP Const: \$8,000,000

Owner

Cedar Rapids Library
Bob Pasicznyuk, Director
319.739.0401

Team

Principal in Charge
Dwight Schumm, PE, LEED AP
Project Manager
Dwight Schumm, PE, LEED AP
Mechanical Engineer
Kelly Harrer, PE LEED AP
Electrical Engineer
Marc Foster, PE, LC

Architect

OPN Architects
Bradd Brown, AIA, LEED AP
319.363.6018
bbrown@opnarchitects.com

Acoustical and AV Consultant

Threshold Acoustics LLC
Carl Giegold, FAIA

Lighting Designer

Shuler Shook
Jody Kovalick, ASTC

Awards

2014 IES Illumination
Award of Merit
First Place, 2014 ASHRAE
Engineering Society Technology
Award - Midwest
2015 Library Journal
Landmark Library
2015 AIA/ ALA
Library Building Award
2015 1,000 Friends of Iowa
Best Development Award
2014 AIA Merit Award
Central States Region



Project History

The magnificent new 94,000 sf Cedar Rapids Public Library includes a 200-seat auditorium, offices, conference rooms, stack area, green roof, and a coffee shop. It's award-winning programming, architecture, and events came in response to the 2008 flood that damaged over 1,300 blocks of the city. CRPL and the neighboring Greene Square Park have become community hubs and beacons of the city's recovery.

Goals of the project included LEED Platinum rating, improved accessibility, increased urban green space, an exterior free of equipment, and clear sightlines through the building.

Heating & Cooling Design

Heating and cooling is supplied by a modular geothermal chiller/heater plant on the third floor. To reach LEED Platinum the systems were designed at high efficiencies with multiple distribution system types.

Single-zone displacement ventilation systems serve the 200-seat auditorium. The second-floor office and stack area utilize a 24" raised floor plenum for underfloor air distribution and individual room controls. The main entry supplements traditional VAV systems with a radiant floor system. Energy recovery units utilize enthalpy wheels to pretreat the required outdoor air for the building.

Green Roof System

The project goal of creating more green space along with the limited site resulted in the design of a 4,500 sf green roof plaza. The green roof is irrigated with captured rain water and building condensate which is collected into two 5,000 gallon storage tanks.

Electrical Design

The electrical distribution system separates loads into unique panel boards for measurement and verification of energy-savings strategies. A 1200A kirk-keyed switchboard in the loading dock allows for temporary installation of a spot-use generator should the need arise.

Lighting Design and Controls

Digitally-controlled high-efficiency lighting throughout includes a mix of color-tuned LED and fluorescent technologies. Unique fixtures and applications were designed around prominent features of the building, including cascading, interactive LED panels at the main lobby stairs and on the exterior of the building.