

Case Study

Location: Milwaukee, WI

Industry: Commercial & Office

Scope: BIM, Fire Protection, HVAC, Plumbing, Temperature Controls, Underground Utilities, Specialty Metals Fabrication

Contract Amount: \$2.7 MN



Fire protection system & fabricated metal stairs

Building SqFt: 280,000

Owner: Riverbend Place LLC

General Contractor: Gilbane

Architect: Eppstein Uhen Architects

Engineer: STS Consultants

Delivery Method: Design Build

Contract Type: Guaranteed Maximum Price

LEED: Gold NC Rating

Website: www.grunau.com

Manpower Headquarters

The employee services company, Manpower Inc., relied on Grunau Company to design and build its mechanical systems in their new 4-story corporate headquarters and the adjoining 7-story parking structure. Grunau's underground utilities started the process with rerouting chilled water lines, storm lines and a city water main to ensure the downtown building site was ready for construction.

The entire construction crew worked toward Manpower's goal to achieve LEED certification. An important component to help earn LEED points was the use of an underfloor HVAC system. Normally, air is circulated down from roof-top units through shafts and ducts, and out of ceiling diffusers. At Manpower, Grunau designed and installed a subfloor air distribution system where each floor uses seven mixing fans to pump air into a pressurized raised floor system and then out floor diffusers. This allows for individual temperature control in each work station. With extremely limited vertical space and many necessary floor supports, designing the intricate layout was accomplished using BIM (Building Information Modeling) technology to create a virtual 3-D model.

Grunau's plumbing team installed low flow fixtures to reduce water usage which also help toward LEED certification. As an aesthetic welcoming touch, Grunau designed and installed a 60-foot water wall on the exterior of the building.

Grunau Fire Protection installed eight wet pipe fire protection systems throughout the building and a class-one standpipe system in the exit staircases of both the office and the parking structure. The sprinkler systems required 2300 sprinkler heads and 25,000 lineal feet of piping to properly protect the facility. An antifreeze system was also installed to protect the building's unheated loading dock.

Grunau Metals designed and fabricated stairs and handrails throughout the office complex and around the exterior and river walk frontage. With the various trades all working together, Grunau was able to coordinate the job successfully on time, within budget, and surpassing Manpower's goals with a LEED Gold NC rating.

