

Case Study

Location: Racine, WI

Industry: Education

Scope: HVAC, Fire Protection, Plumbing

Contract Amount: \$1.6 MN



Artistic building design

Building SqFt: 60,000

Owner: The Prairie School

Owner's Rep: Scott Weas

General Contractor:
Bukacek Construction Inc

Architect: Zimmerman Design Group

Engineer: Grunau Company

Delivery Method: Design Build

Contract Type: Guaranteed Maximum Price

Website: www.grunau.com

Prairie School Field House

Grunau designed and installed the plumbing, HVAC, temperature controls, and fire protection systems for Prairie School's new field house addition. The existing gymnasium structure was expanded to include classrooms, office space, and a new, much larger gymnasium.

Grunau's work included a 200-ton air-cooled chilled water plant, a 6,000 Mbh hot water heating plant, 4 air handling units, ductwork, ventilation systems, natural gas piping, and direct digital control systems. The plumbing scope included a roof drainage system, waste and vent system, domestic water system and site utilities. Additionally, Grunau Fire Protection installed a complete fire protection system to ensure the school was secure from a life safety standpoint. To keep this project on an efficient schedule, Grunau used Lean Construction techniques including an on-site hardware box so crews would have all the hardware needed at their fingertips without having to stop at supply houses or deal with multiple vendor shipments.

Prairie School's campus design has a great deal of influence from architect Frank Lloyd Wright. New construction mimicked existing construction; therefore, much thought was put into ensuring services were well hidden and accommodated the curved walls and structure. The Grunau design team worked closely with the Zimmerman design team so all components were well placed and concealed to maintain the school's aesthetic qualities.



Duct being installed inside gymnasium