



Premier Mortgage Office

This design-build project consists of a two-story, 24,300 SF office building located on Tower Road in Rapid City, SD. The facility features a clearstory main lobby with office space throughout two wings of the building. Conference rooms are located on all levels and a board room is located on the second floor. Restrooms, storage, etc reside at each level of the building. Mechanical and electrical solutions included Vitreous China plumbing fixtures, gas-fire rooftops with Dx cooling and VAV controls, a DDC HVAC control system, parking and exterior accent lighting, a 1000A 208v service, and Fire Alarm and Data/Telephone wiring and connectivity.

Project Data

Owner

Premier Mortgage, Inc.

Location

Tower Road, Rapid City, SD

Building Type

Commercial

Building Area

24,300 SF

Mechanical Systems / Features

Vitreous China Plumbing Fixtures
VAV / Gas Rooftops w/DX Cooling
Gas-fired Condensing Boiler
VAV Boxes w/Hydronic Reheat Coils
DDC Temperature Controls

Electrical Systems / Features

Exterior Parking and Accent Ltg
1000A, 208V, 3Ph ILine Service
OH Projectors Infrastructure
Addressable Fire Alarm
Data/Tele Wiring and Connectivity

Estimated Construction Cost

\$4,000,000

Completion Date

Spring 2014

Mechanical Engineering

The plumbing systems consist of vitreous china flush valve fixtures. Two electric water heaters provide potable hot water to the sinks and lavatories within the building. The HVAC systems consist of (2) gas-fired packaged VAV rooftop units with direct expansion cooling. The offices spaces, conference rooms and adjoining spaces are zoned using VAV boxes. A high-efficient gas fired condensing boiler is used to provide heating hot water to the VAV box reheat coils. The return air main ductwork serving both units is lined. The return air path is primarily a plenum return for the building. In-line exhaust fans serve the restrooms, janitor's closets and other ancillary areas within the building requiring exhaust. This facility is equipped with a web based DDC Temperature Control system.

Electrical Engineering

Exterior accent lighting capitalizes on the project high-visibility for advertisement. Interior lighting design utilized fixtures of value with high-efficiency fluorescent lamping and ballast used throughout the facility. The atrium features architectural pendant cylinder combined with accent sconce lighting.

The power consist of a single main distribution panel of I-Line construction type feeder service panel on each wing of each floor.

Electrical systems designed for this facility included infrastructure of overhead projectors, a new fire alarm system, and horizontal communications wiring and connectivity.