

FIRST TECH FEDERAL CREDIT UNION

HILLSBORO, OREGON, UNITED STATES

INTRODUCTION

First Tech Federal Credit Union is situated on 17 acres along Brookwood Parkway in Hillsboro's Dawson Creek Park. This beautiful mass-timber office allows staff to congregate at a central location with space for future growth and development. Open offices were designed with emphasis on equal access to natural light and views from every workstation. Building architects chose mass-timber construction over concrete and steel for its financial advantages, availability, and biophilic qualities. The building earned LEED Gold certification from the [U.S. Green Building Council](#) with an exemplary score in the regional materials category; all timber was sourced and refined within 500 miles of the site.

PROJECT DETAILS

Authorized Dealer [Sunbelt Controls](#) installed a Reliable Controls building automation system during construction of the facility. Networked devices include MACH-ProCom and MACH-ProWebCom controllers that host MACH-ProZone controllers that operate variable frequency drives, boilers, and rooftop units.

The boilers have primary and secondary lead-lag pumps and hot-water bypass valves regulated by the packaged controls. Control setpoints are based on system demand and outside-air temperature, and the hot-water pumps are sequenced based on differential hot-water pressure. Perimeter office zones are equipped with under-floor damper controllers for air distribution and hot-water convection. Internal office zones have manual damper diffusers that occupants can adjust to regulate air flow and temperature. Perimeter conference rooms have fan-terminal units with heating coils; internal conference rooms are supplied with fan-terminal units without heating coils. Both areas are operated by signals sent from the MACH-ProZone controllers. The main lobby has radiant-slab heating with a variable refrigerant flow system for cooling and air circulation.

Because the new building has open ceilings and no mechanical rooms, Sunbelt installed controllers under the floors, giving First Tech the ability to easily commission and troubleshoot equipment.

Sunbelt and Reliable Controls were pleased to meet the client's requirement for strong network security with RC-RemoteAccess software.



MARKET SEGMENT
Financial

PROJECT TYPE
New construction

INSTALLATION TYPE
HVAC

TOTAL AREA
14,493 m² (156,000 ft²)

PROTOCOL
BACnet

INSTALLED EQUIPMENT
1 MACH-ProCom™ controller
1 MACH-ProWebCom™ controller
42 MACH-ProZone™ controllers
40 SMART-Sensor™ EnOcean
Accesspoint devices
40 SPACE-Sensor™ EnOcean devices
77 SMART-Sensor™ LCD devices
RC-Archive® software
RC-RemoteAccess® software
RC-Studio® software
RC-WebView® software

INTEGRATED EQUIPMENT
LG variable refrigerant control system,
Lochinvar boilers, ABB variable frequency
drive, AAON rooftop units, Tridium JACE
controller

TOTAL SYSTEM OBJECTS
650

CERTIFICATION
LEED Gold

RELIABLE CONTROLS AUTHORIZED DEALER



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