

Breadth Topics

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Structural Breadth

In a geothermal heating system there is no need to have any outdoor equipment, meaning the rooftop air handlers are no longer necessary. However ventilation system is a dedicated outdoor air system. This equipment will be placed on the roof; since they are smaller than a conventional air handler, the current roof structure will be oversized for the equipment. Due to the reduction of the loads on the roof a small roof structure will be developed. All options will be considered: smaller steel members, a thinner roof deck, or a combination of the previous two options.

Electrical Breadth

Along with structural changes, electrical demand will be altered. With the addition of new pumps and equipment being eliminated from the schedule a new electrical system to serve the mechanical system will be explored. This will include making adjustments at the panel box that serve the equipment, the feeders to the panel boxes, and the total amount of power supplied to the building will be adjusted.