

VERTICAL HARVEST FARMS



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Location:
Jackson, Wyoming

Recognition Category:
Integrated Lighting and Horticultural Controls

Building Type:
Greenhouse

Canopy Area:
14,429 sq. ft.

Project Partners:  **RESOURCE INNOVATION INSTITUTE**

Data captured by the control system is used to modify lighting, HVAC, and irrigation strategies. This helps set strategies seasonally to best meet crop health needs and manage resources responsibly.



VHF uses a carousel system combined with vertical farming to grow lettuces, petite greens, microgreens, and tomatoes. Cultivation area is three times the footprint of the facility.

Priva integrated controls system manages lighting, HVAC, and watering processes.



Using the integrated control system in tandem with facility design changes allowed VHF to improve energy productivity (kBtu/lb) by 52%, water productivity (gal/lb) by 66%, and overall crop productivity (lb/ft²) by 74%.

Inclusive hiring model focused on workforce development for marginalized populations. Over 40% of employees have a disability.



The control system includes light sensors that turn luminaires off once a target threshold is reached. As a result, plants receive full daily light integral (DLI) from a combination of natural and supplemental lights.