

Center of Developing Entrepreneurs Building

OVERVIEW

The Center of Developing Entrepreneurs (CODE) building project is a **seven-story commercial development** that addresses the rising need for flexible, environmentally responsible working environments to support entrepreneurial activity in Central Virginia. Driven by the growing demand for sustainable workplaces, this innovative project was **designed with a commitment to energy efficiency and the welfare of its occupants**. Design choices were informed by a careful integration of design process, energy modeling, and an ongoing assessment of the carbon emissions associated with the materials used for construction, **helping the team lower the carbon footprint of the project even before the building opened**.



CHALLENGES

A notable challenge was **optimizing the building shell and systems without impacting their visual appeal**, all while maximizing limited roof space. Collaboration between the design team led to innovative design solutions and a careful selection of sustainable technologies, while meeting the building's aesthetic and functional requirements.



Features like the **courtyard, amphitheater, rooftop terraces**, and **rainwater harvesting** connect the building to nature and promote a sense of community.

The **Virginia Energy Efficiency Council**, a member-based 501c3, launched the Energizing Efficiency Campaign in 2023 to further the mission of advancing EE across the state by showcasing incredible work being done in our communities and inspiring others to act. Learn more at [VAEEC.org/Energizing-Efficiency-Campaign](https://www.vaeec.org/Energizing-Efficiency-Campaign).



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RESULTS

The sustainable MEP/FP design not only **enhances energy efficiency** but also **increases fresh air exchange and natural ventilation**, resulting in a **healthier and more comfortable environment** for occupants.

Energy modeling **predicted a 46% energy utilization reduction compared to the ASHRAE 90.1-2010 baseline**. The building **ventilation system provides more than twice the standard flow of fresh air—but with an energy use 1/3 that of a typical office building**.

Essential to these savings were the mechanical, electrical, plumbing, and fire protection design strategies, incorporating high-efficiency HVAC systems, a heat recovery chiller system, rainwater harvesting, an advanced BAS with localized demand limiting, and high-efficiency LED lighting.

To ensure that the building's desired energy performance is maintained as space is leased throughout the building, **tenants are required to comply with base building requirements**. 2RW is helping to ensure that goals are met by reviewing the designs for the individual tenant spaces to **verify compliance** with those requirements.



The building's success in combining state-of-the-art design with sustainable principles serves as a showcase for what can be achieved with thoughtful planning and innovative technology. By exceeding the standard energy efficiency benchmarks and providing tangible benefits to its occupants and community, **the CODE building is poised to inspire more energy efficiency work in the future.**

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