## Apartment Residence Hall Project



## **SUSTAINABLE BUILDING FEATURES**

- Thermal characteristics of building envelope designed for maximum R-value to reduce energy costs and consumption
- EPDM roof material designed to absorb energy to reduce heating costs in the most energy-intensive months of the year
- DOAS unit with fan coil units provide year-round comfort with no harmful chemical or refrigerants used in mechanical system
- Wood chips from selective site preparation recycled and used to stabilize soils during construction prevented erosion & sedimentation
  - Compact, condensing, firetube water heater with advanced fuel-saving design up to 97% thermal efficiency rating Energy Star certified
  - Energy Star compliant unit appliances specified
  - Advanced stormwater management systems in the site design to reduce impact to surrounding properties

- Use of commissioning services to support project requirements for energy, water, indoor air quality, and durability
- Incorporated high-performance glazing/fenestration/window placement to maximize natural daylight and resist solar gain
- Compact/dense site design conserves land and building placement leverages existing utility infrastructure; walkable to campus core and transit - leverages existing utilities while minimizing impervious surfaces
- Site design maximizes scenic views of forested and landscaped vistas
- Operable windows for fresh air DOAS unit with filtration and air exchanges for great indoor air quality - no harmful refrigerants/chemicals
- Features studio for exercise and fitness activities
   Walkable to academic campus core and transit
- Use of building materials with low volatile organic companyings (VOC)



## Carbon Emissions

- Investing in purchasing renewable energy stake in solar energy farm
- LED lighting with occupancy sensors and dark sky compliant lighting
- · Use of building automation controls to make heating and cooling more efficient
- · Use of ultra high-efficiency boilers for hot water production

## PROJECT FEATURES USE OF CROSS-LAMINATED TIMBER (CLT) DECKING IN PORTIONS OF THE BUILDING. CLT ADVANTAGES:

- Carbon storage CLT stores carbon and can even capture carbon. This material is far less intensive to fabricate compared to steel and concrete and has much lower embodied carbon footprint
- CLT has quicker construction time
- CLT is much lighter than typical concrete and steel
- CLT is renewable it's clean with much less waste on site



Conserves land with slender, vertical design - leverages existing utilities

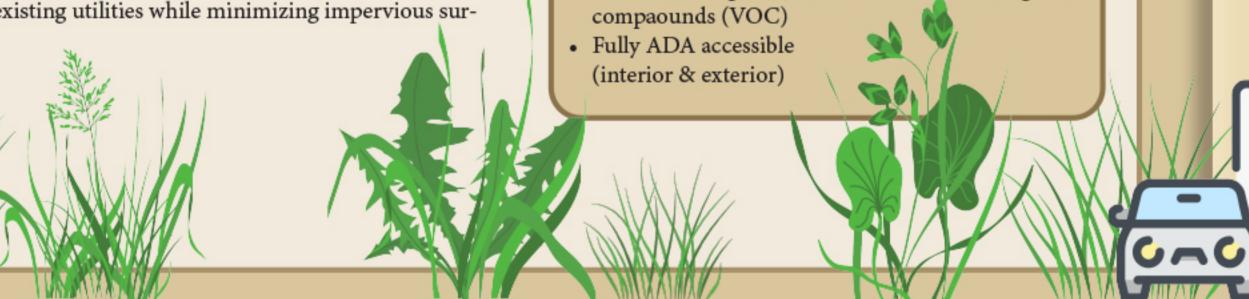


Reduces heat island effect - obtained variance to omit 900 parking spaces required by local zoning code...saved 5.5 acres of impervious surfaces that will now remain as green space



Conserves water with low fixtures, efficient mechanical systems, and building-wide submetering with displays

More electric vehicle charging stations





Sustainability New Construction