

# 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

## HEALTH & WELLNESS

- 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 compounds (VOC)
- Fully ADA accessible (interior & exterior)

## CUTTING

# 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**

EV



**More electric vehicle charging stations**



**Bryant University**

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