

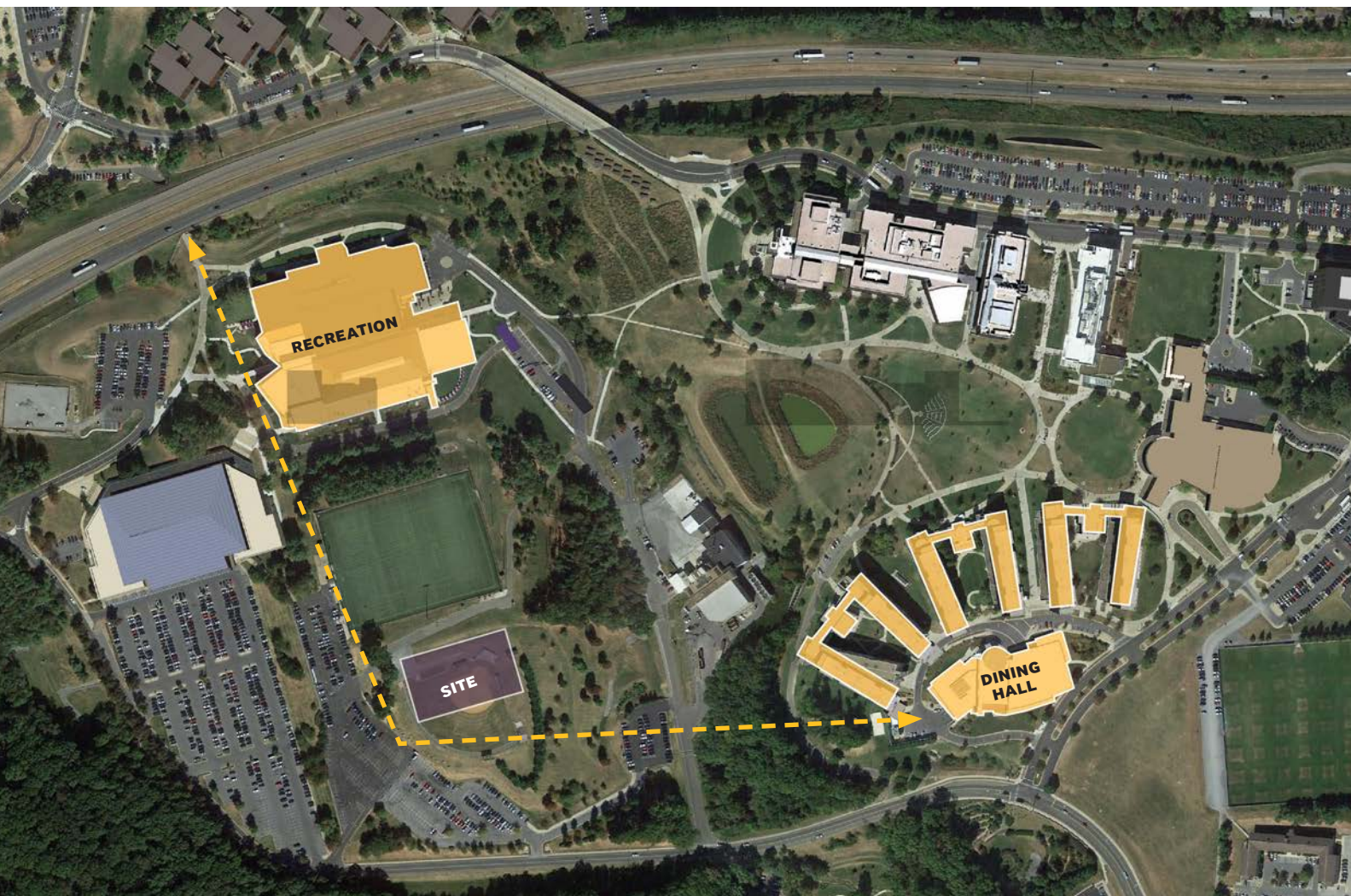
CENTER FOR THE BUILT ENVIRONMENT / ANNUAL LIVABLE BUILDINGS AWARD

PAUL JENNINGS HALL

JAMES MADISON UNIVERSITY — HARRISONBURG, VIRGINIA



VMDO



Making a Destination



A destination for first- and second-year students, the newest residence hall at James Madison University adds activity and life to a growing section of East Campus. Jennings Residence Hall establishes important connections with the nearby University Recreation building and East Campus Dining Hall – tying together East Campus through a cohesive architectural language, improved views and landscape connections, and enhanced accessibility through a new landbridge.

By pulling vibrant social and academic spaces into its residential setting, Jennings Hall gives students the flexibility to live, learn, gather, and play in one highly connected environment. Currently home to the Sports and Recreation Management Residential Learning Community, Jennings Hall's diverse interior public space is complemented by an active landscape of accessible courtyards, recreation fields, and outdoor rooms that support a wide range of activities for all abilities. The building and landscape work together to create a place where students want to be year-round.

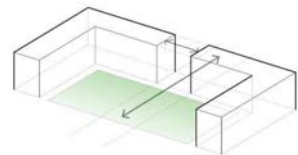


Encouraging Interaction

Jennings Hall is intentionally organized to encourage interaction and support the University's vision to develop Engaged Learners. As residents move through the building – starting at the front entrance, moving through a generous lobby, and finding a home in the learning commons and residential wings – students have an opportunity to naturally engage with friends or intentionally meet to work on collaborative projects.

A key feature of Jennings Hall is its centrally-located Common House which provides a public platform for cultivating an engaged academic community. The 2,500 square foot space is easily reconfigurable for different functions – from everyday informal gathering by residents to larger-scale lectures, campus-wide forums, and student organizational meetings.

With two active learning classrooms, ample study space, and a “pod” convenience store, the building is a fitting host for student collaboration. By co-locating these flexible first-floor learning spaces with opportunities for social gathering, the building encourages students to blend intentional learning into their daily lives.

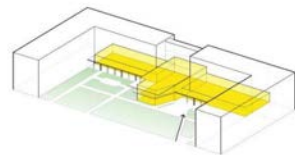


MAKING A CAMPUS PLACE

Creating a south-facing campus courtyard, open to the mountains and the Carrier Arboretum

Articulating landscape rooms for recreation, social interaction, and study

Maintaining 5 floors of programmatic connection while breaking down the building's scale in the middle

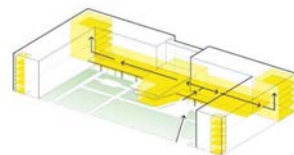


FORGING A COMMON HOUSE

Marking the entrance & making a destination, flexible and vital in use

An active community ground floor with transparency and openness

The porch helps to provide a welcoming and convenient entrance, encourages chance encounters, and scales the building down.

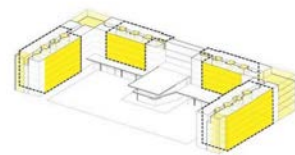


COMMUNITY-BUILDING ARMATURE

Building and floor-level arrival choreography encourages community interaction

Lantern-like floor lounges & studies express community to the campus, featuring views of the campus & blue ridge

House hub lounges provide living, dining, kitchen, laundry, and bathroom functions



RESIDENTIAL ROOMS & HALLS

Each core community of 28 enjoys a semi-private wet-core community bathroom

Porch-like room entrances moderate and activate the hallways, building community all scales of the project





CRAFT MEETS COFFEE
100% OF PROFITS SUPPORTS LOCAL COFFEE ROASTERS

MADISON
Purple Out



**PAUL JENNINGS' STORY
IS A COURAGEOUS,
DELIBERATE AND
SUCCESSFUL PURSUIT OF
THE RIGHT TO RISE.**

**MADISON
Purple**

Honoring Paul Jennings



Extending from the Common House into the lobby is an exhibit dedicated to the building's namesake – Paul Jennings. Born into slavery at Montpelier, Jennings served as James Madison's personal servant before and during Madison's time in the White House. After buying his freedom after Madison's death, Jennings established himself as prominent member of Washington DC's free black community and wrote a historically significant memoir that is considered the first memoir about life at the White House.

Paul Jennings' exhibit is open to the public during set community hours and features three key narratives following different time periods in Jennings' life: 1) Jennings' early life, which chronicles the strength of the enslaved communities at Montpelier and the White House; 2) "Overcoming the Odds," a story of perseverance describing how Jennings connected liberty and learning in the service of freedom; and 3) "Right to Rise," a history of Jennings' descendants and their heritage of community leadership and achievement.

*Environmental Graphics by Iconograph







Building Community at Every Scale

Each wing of the building is broken down into smaller communities in order for each resident to develop a deeper sense of belonging. Not just limited to the first floor, study spaces and lounges are distributed throughout the building, encouraging students to gather and develop a sense of identity as a floor. Panoramic views from the pair of lounges on each floor connect students to a unique sense of place, including views to the arboretum and other unique features of East Campus.

The 500-bed residence hall is designed for first and second-year students alike, giving the University flexibility in its occupancy management. Small yet thoughtful details activate opportunities in the corridors for community-building. By clustering private bathrooms into a common location, the building offers the privacy that sophomores demand while generating the traffic flow that draws first year students out of their bedrooms and into a larger community.

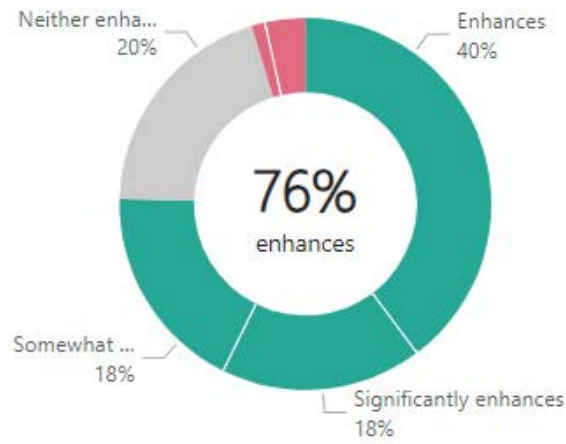




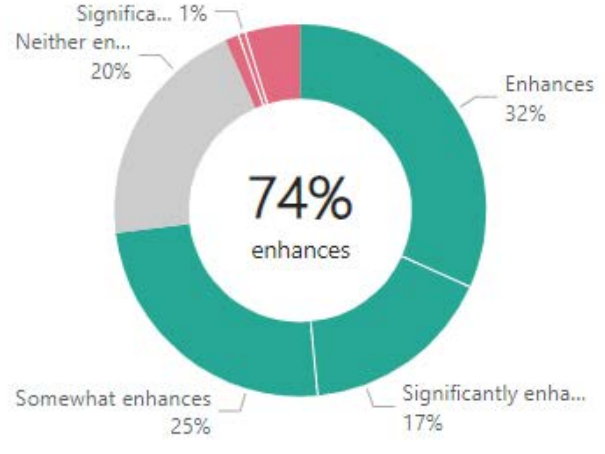
Designing for Health + Belonging



Jennings Hall was designed to be flexible, adaptable, inclusive, and responsive to student needs. Our post-occupancy evaluation included questions around safety, accessibility, belonging, and privacy to explore how well we are achieving these goals, and how we can improve along these lines in future projects.

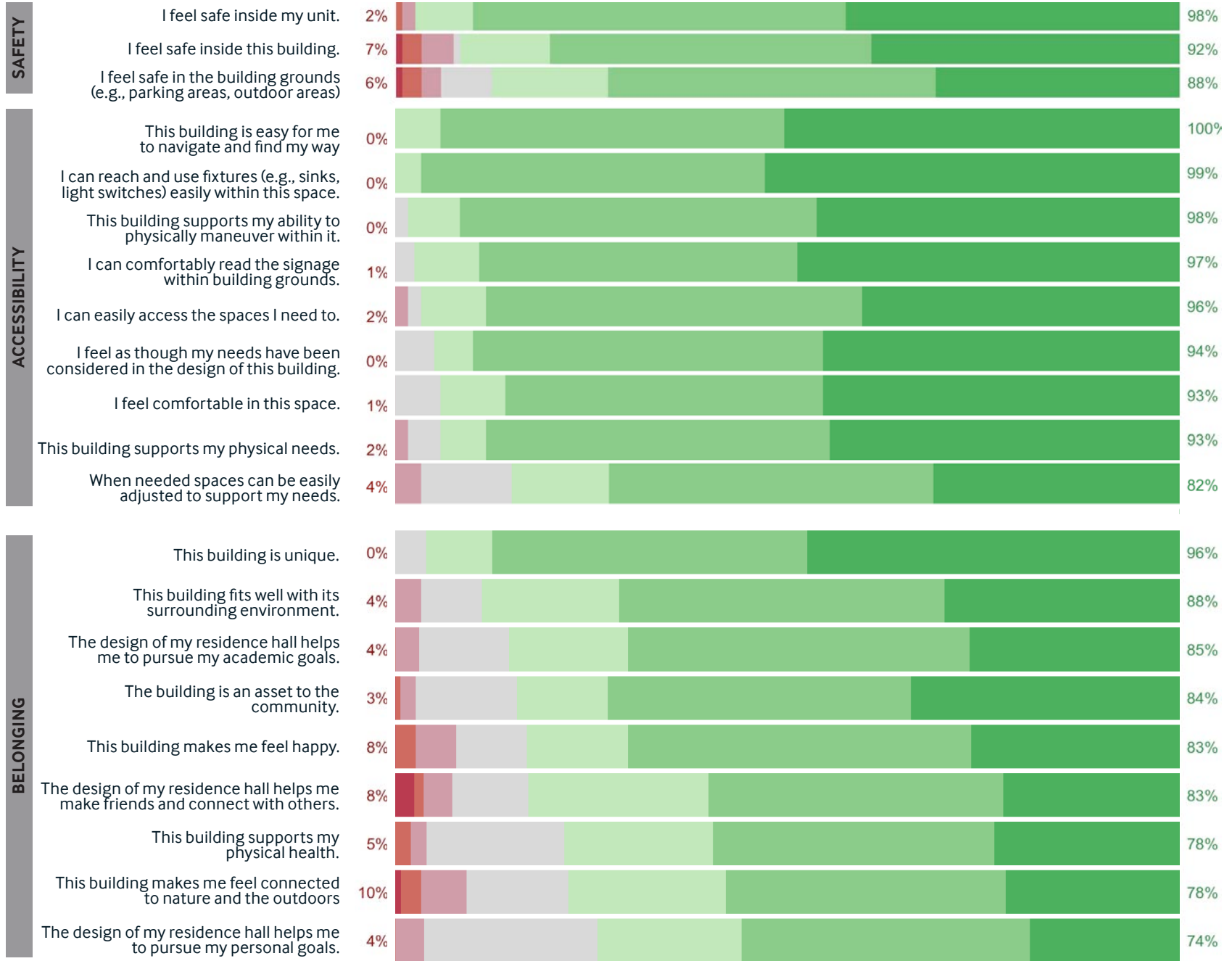


Sense of Community (Floor)

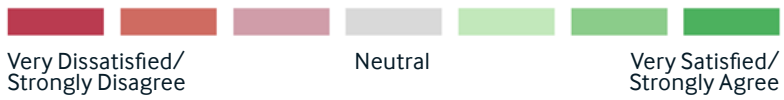
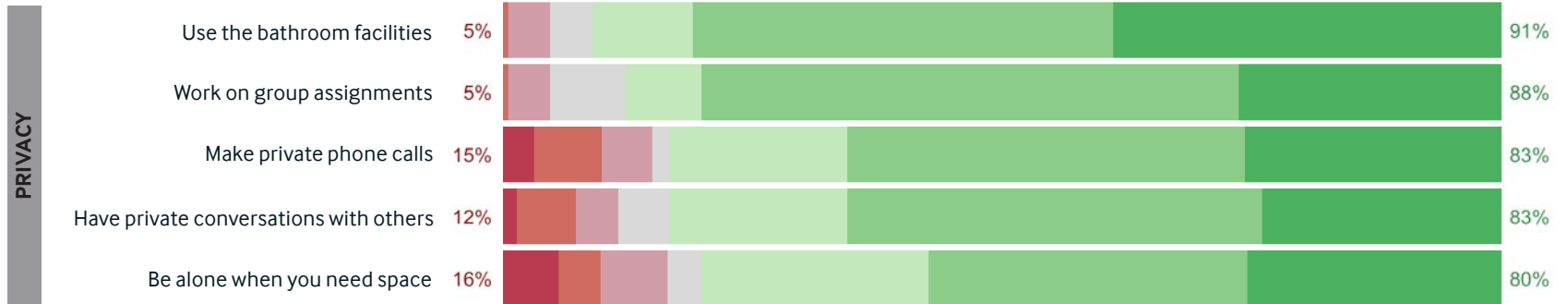


Sense of Community (Building)

Please indicate the degree to which you agree or disagree with the following statements:



How satisfied are you with your ability to:



Improving Performance

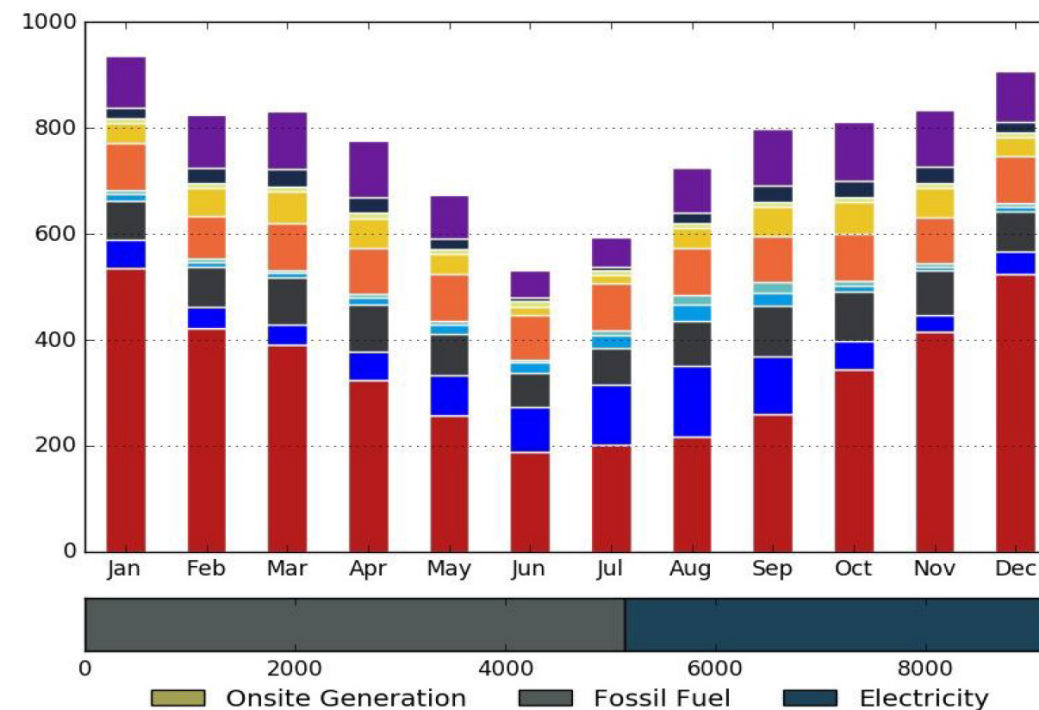
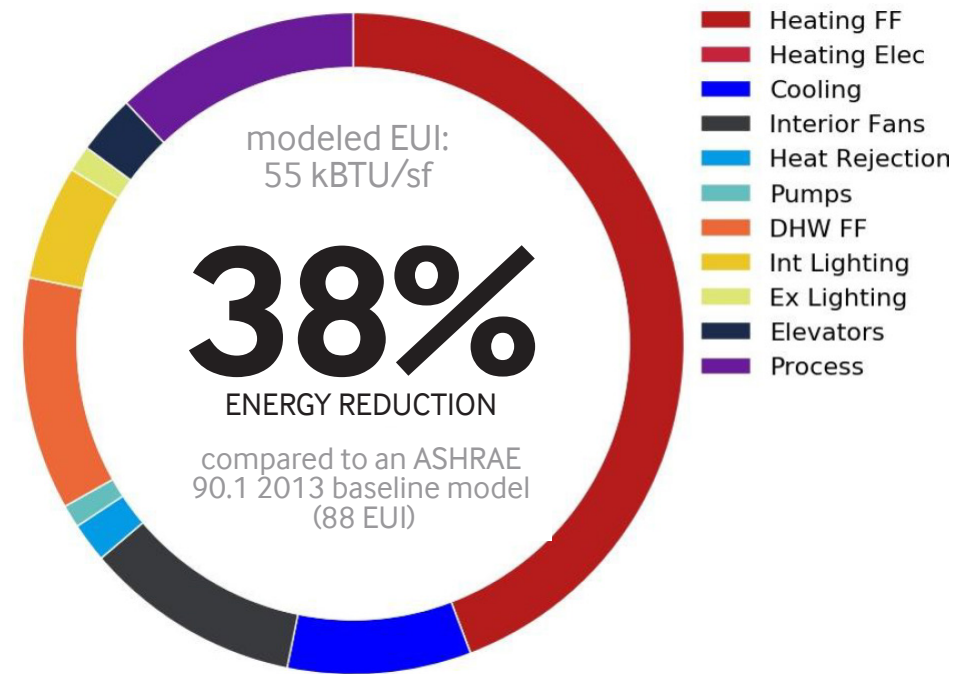
Jennings Hall is designed to comply with the Virginia Energy Conservation and Environmental Standards (VEES), a state-modified version of the 2018 International Green Construction Code.

Energy. The building has modeled at 55 EUI, a 38% reduction from its ASHRAE 90.1 baseline model, which is exemplary given the fact that the owner's preference was for a fan coil system connected to a central plant. Measured data is not yet available: the first two years of its occupation was under varying densities because of COVID, and a malfunctioning electric meter (repaired in September 2023) has meant that a year of accurate data is not yet available.

Water. Strategies to reduce potable water use include low-flow fixtures, water-efficient equipment, and eliminating outdoor irrigation.

IAQ + Materials. Ample daylighting and views, low-emitting materials, high ventilation rates and MERV-13 filtration support occupant health and well-being. 54% of building materials by cost met criteria for recycled content, recyclability, and bio-based and local content, including 100% FSC Doors, wood ceiling grids, and countertops

Site + Habitat: 75% of non-turf plantings are native species. Green infrastructure, including bioswales and bioretention areas help slow, convey, and treat stormwater. Full cutoff lighting protects the night sky.



While its actual energy use is not yet available, the team has performed post-occupancy analysis on Jennings Hall in a number of areas, including:

Whole-Building Air-Barrier Testing

An initial test on July 15, 2020 revealed an initial air leakage rate of 0.262 CFM @ 75 Pascals, slightly above the project target of 0.25 CFM. The team made several improvements to the building, including adding door sweeps at doors to stairs, apartments, and building entrances, and providing additional air sealing at the circulation hall connector and roof access wings. A retest on May 20, 2021, revealed a final air leakage rate of 0.248 CFM @ 75 Pascals, 38% better than is required by code.

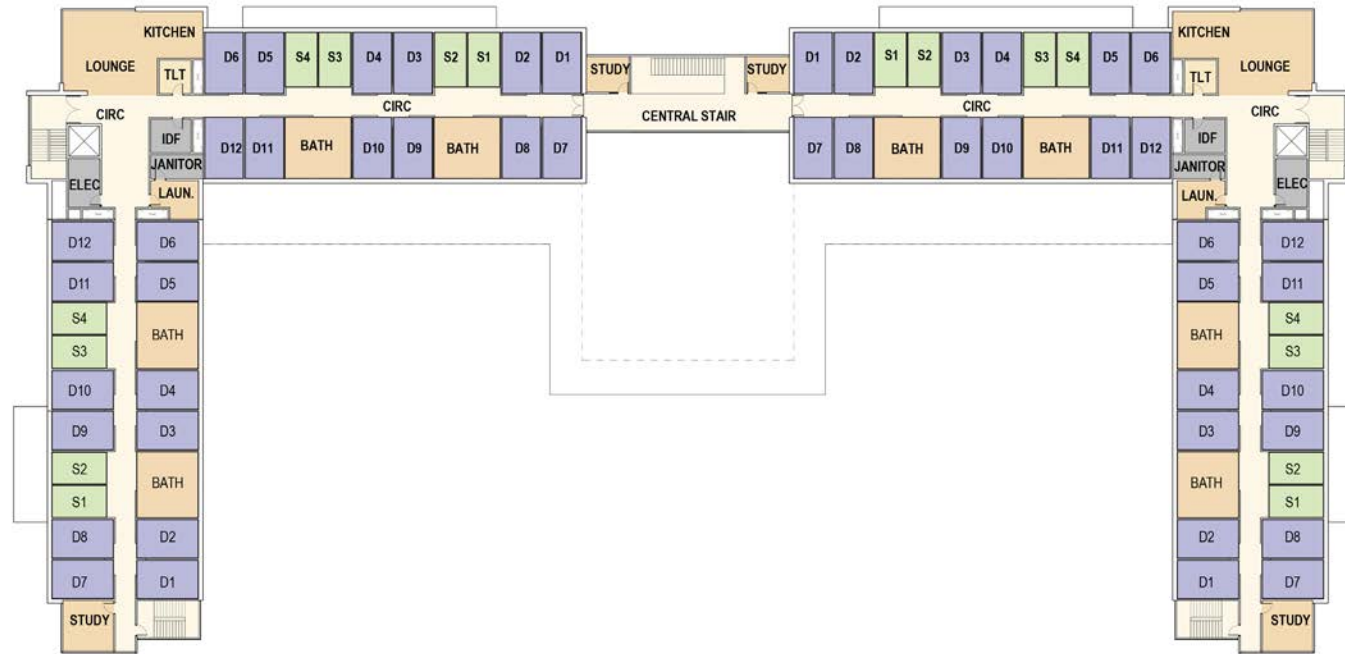
Thermal Scans

Given its location in a heating-dominated climate, a thermal scan of the building was performed to identify potential areas of thermal bridging, which can significantly impact occupant comfort while also reducing building performance. A few areas of inconsistent insulation were discovered at wall to roof transitions, along circulation areas at storefront, and within the laundry room. Some of these were not remediable, but insulation was added where possible to reduce thermal bridging and improve comfort.

Passive House Gap Analysis

In 2020, VMDO conducted an internal research project focused on improving residence hall performance across our firm and used Jennings Hall as a case study of how to improve our best practices. The firm engaged Steven Winter Associates to perform a Passive House gap analysis, and convened a forum with SWA and two of our MEP partners to identify what recommendations could be adopted into our upcoming projects. These recommendations included:

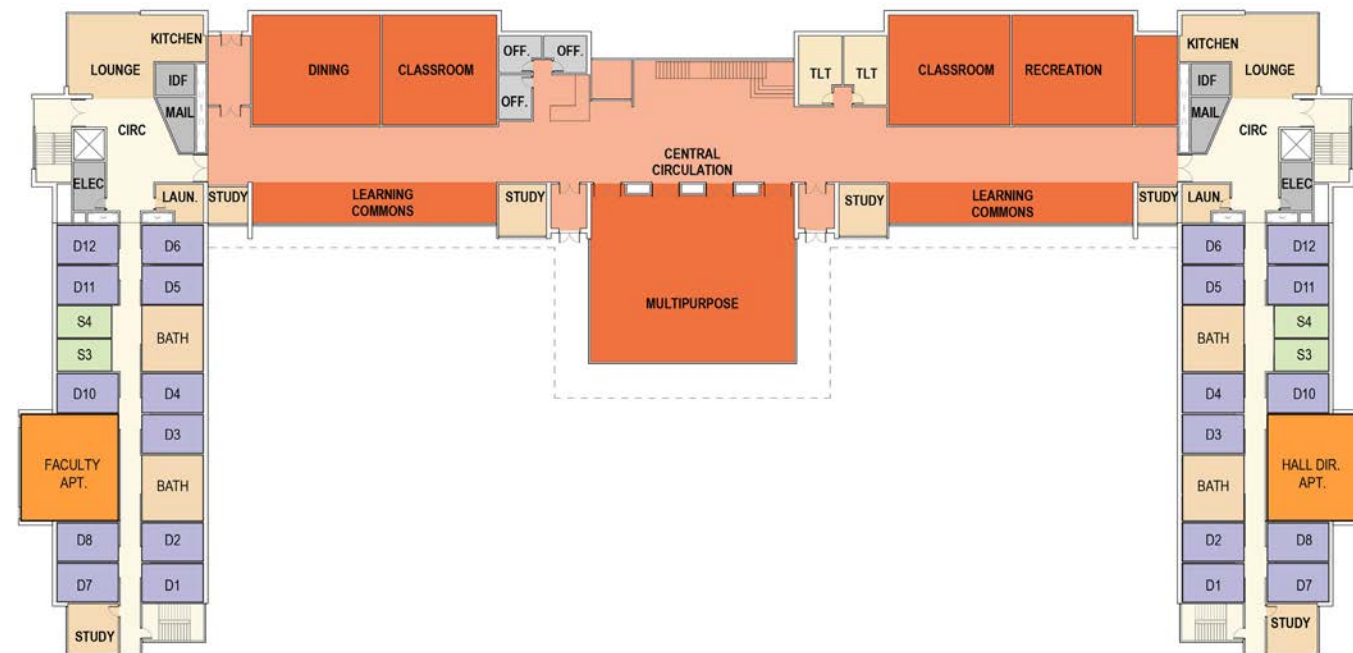
- Smarter ventilation: Passive House requires much lower ventilation rates than what was used at Jennings Hall, but the Jennings hall design rates were high due to concerns about humidity levels in the bathrooms. Moving forward, the team has reduced overall building ventilation rates but increased ventilation rates at sleeping rooms—using residence room exhaust to provide further ventilation at bathrooms, thereby reducing humidity concerns while improving building performance and resident health.
- Improved envelope performance: from the SWA analysis and our own zero-energy work, we have since improved the R-value of our walls and roofs and the overall airtightness of our buildings to <0.15 CFM @ 75 Pa.



TYPICAL RESIDENTIAL FLOOR PLAN

“This was an incredibly important project for JMU as it not only began the development of a new area of campus but also helped shed a new light on our university’s namesake. The design of the hall itself was based on our need for flexibility in how it might be used in the future. It works equally well for first year or continuing students, traditional gendered room assignments or inclusive communities, and the learning commons and classrooms will allow us to grow our residential learning communities on campus. With VMDO’s help we have added a truly unique and exciting space to our campus.”

Kevin Meaney
Former Director of Residence Life
James Madison University



ENTRY LEVEL PLAN

Project Team + Cost

Project Team:

- Prime Architect: **VMDO Architects**
- MEP Engineering: **Lawrence Perry + Associates**
- Structural Engineering: **Dunbar Milby**
- Civil Engineering: **VHB**
- Landscape Architecture: **O’Shea Wilson Siteworks**
- Interiors: **SMBW**
- Cost Estimating: **Forella**
- Contractor: **W.M. Jordan Company**

Project Cost:

Final Construction Cost	\$42,350,000
Cost/SF	\$281/sf