

## **Built for engineers: About the Fulton Schools Residential Community at Tooker House**

Tooker House, designed specifically for undergraduates in the Ira A. Fulton Schools of Engineering, is a seven-story, co-ed living and learning community on ASU's Tempe Campus. The residential hall was built by [American Campus Communities](#).

A goal for the project was to express the engineering and sustainable design elements of the community in as many forms as possible throughout the project's spaces to support a strong living/learning community. Two e-space classrooms provide a collaborative environment where engineering students can work on projects, develop new technologies and use maker tools like 3D printers and laser cutters.

### **Exterior design**

Solomon Cordwell Buenz's design approach took the vernacular of desert architecture as its point of departure to create a sustainable building that feels appropriate to its context. The community features a complementary color palette in desert tones and uses colors and materials able to withstand extreme UV exposure. The south façade features vertical perforated louvers positioned according to a sophisticated algorithm, presenting visual interest and ensuring appropriate daylight control unique to each window's location on the façade. Highly efficient glazing units with significant shading coefficients allow the development and interior spaces to gain transparency and daylight without detriment to thermal performance and comfort. Metal window canopies shade the windows from direct solar gain. The vertical metal fins also provide addition protection to the exterior enclosure from the elements.

### **Sustainability features**

- Targeting [LEED Gold certification](#)
- Exterior louvers and solar canopies limit solar heat
- High performance exterior enclosure composed of metal panels and EIFS provide continuous insulation to reduce thermal bridging
- Energy and water cost savings and use reductions (per [ASHRAE](#))
- Perforated metal cladding on open-air stairs, bridges and terraces provides solar protection while maintaining ventilation
- Desert-adapted plants
- Permeable courtyard surfaces reduce heat gain and improve storm water infiltration
- Passive rooftop water harvesting for nourishing landscape zones
- Underground storm water retention system
- Make-up air for the residential units are provided with energy recovery systems
- High efficiency condensing boilers for domestic hot water systems
- Low-flow plumbing fixtures
- LED lighting with occupancy controls
- Exterior LED lighting with photocell controls

## **Living spaces**

- Suites are fully furnished quad apartments with adjoining bathrooms
- Hardwood-style flooring
- Quartz stone countertops
- Microwaves and mini-refrigerators in each suite
- Ceiling fans

## **Community amenities**

- Full service 14,000 sq. ft., 525-seat dining facility
- Recreation center with modern student lounges, billiards and ping pong
- Modern fitness center with cardio machines and strength equipment
- Fully wi-fi accessible, with bandwidth to accommodate multiple devices per resident
- Full-service community kitchens
- On-site laundry facilities w/ Bluetooth (notifies students when cycles are complete)
- Academic success centers with private and semi-private study lounges
- Convenience store
- Courtyard with outdoor pavilions and covered terraces
- Gated community with 24-hour campus security and front-desk services
- Live-in residential staff

## **About Diane and Gary Tooker**

The Fulton Schools Residential Community at Tooker House is named for Diane and Gary Tooker. Diane Tooker is an alumnus of ASU's Mary Lou Fulton Teachers College (BAE '61) and a former business owner and elementary school teacher. Gary Tooker is an alumnus of the Fulton Schools of Engineering (BSE '62) and a former CEO of Motorola. Together, the Tookers have made significant contributions to ASU through the ASU Foundation for more than 30 years. The couple is committed to supporting the engagement of young adults in engineering and advancing the success of ASU and of Arizona's technology industry.

## **About American Campus Communities**

American Campus Communities (NYSE: ACC) is the nation's leading student housing company. In 2006, ASU formed a partnership with American Campus Communities designed to improve students' on-campus living options while minimizing costs to the university and to taxpayers. Projects have included apartment-style mixed-use housing serving upper-division undergraduates, a complete mixed-use honors college with housing, food service and academic faculty space; freshman housing and dining facilities on West Campus; redevelopment of an iconic campus landmark; and a residential village for the Greek life community (Greek Living Villages). In total, American Campus Communities has developed 7,719 beds for ASU, all without financial burden to the university or to taxpayers.