Hollowcore Plank Provides Cost and Schedule Advantages for Multi-Family Housing Complex

Solutions: Expansive, open parking garage beneath multi-story structure, shortened construction schedule.

Within the Minneapolis Arts District, construction of a four-story multi-family housing complex began in late 2019. The 112-unit building plans to accommodate a variety of tenants, offering studios and several layout options for the one-bedroom and two-bedroom units. Fitness enthusiasts will appreciate the complex’s proximity to biking trails in addition to its own fitness center, yoga studio, and bike repair workshop.

Project architect and engineer, Tuschie Montgomery Architects considered every detail and design element to make this residential building a beautiful, functional community landmark. To minimize shadowing on neighboring residential homes, the architects set the building back on its eastern side. Although the complex is new to the area, they wanted it to be built as if it was always there – avoiding disruptions to existing structures. In an effort to maximize functional space, a rooftop deck space will also be available to tenants, featuring a firepit, grilling area, outdoor movie screen, and an unbeatable view of downtown Minneapolis.

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The four-story building is comprised of two below grade and one above grade concrete levels that provide structural support for the three-story wooden frame above. County Materials' Hollowcore Roof and Floor Systems were specified for their high load capacities that allow for long, open spans without the need for additional support columns. The below grade levels will serve as a tenant parking garage that can accommodate up to 119 vehicles. Hollowcore's ability to create open, column-less spaces without sacrificing strength or durability makes it a trusted choice for architects and contractors alike.

County Materials manufactured precast columns and inverted tee beams, along with more than 34,300 sq. ft. of 8-inch and 12-inch depth hollowcore plank and solid plank at its Roberts, WI facility and delivered it to the jobsite in June 2020. During the manufacturing process, the prestressed planks are cut to specified lengths and accommodate unique angles and curves outlaid in the project design. Hollowcore arrives on-site ready for installation. Once set, the planks serve as a stable work deck, which further reduces construction schedules and project costs. Zachman, the project erector, estimated the hollowcore installation would conclude within 10 workdays. The complex is expected to open in spring 2021.

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