



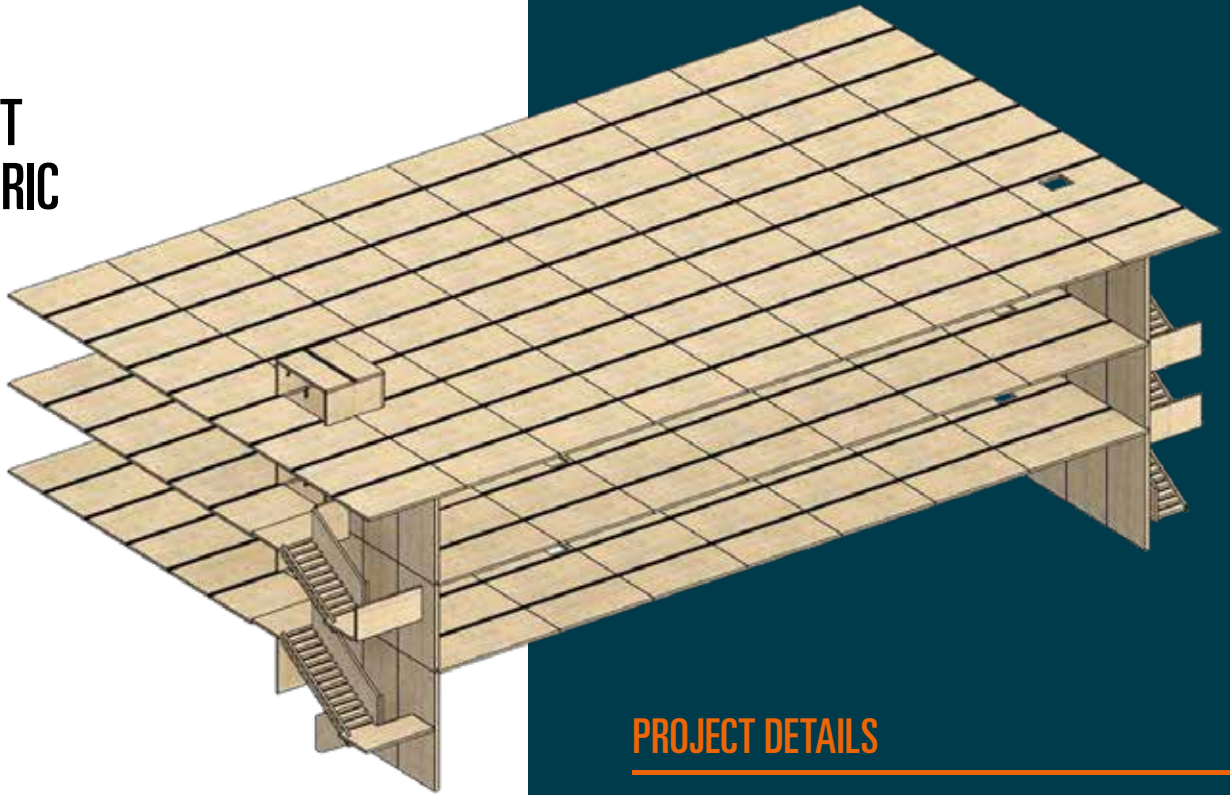
STAR LOFTS

Des Moines, IA

This multi-family housing project met both budget and sustainability goals by combining mass timber, including cross-laminated timber (CLT) decking and glue-laminated timber (glulam) columns and beams, with dimension lumber for a smart hybrid system. Sterling Structural also provided the prefabricated shaft walls for this project.

Mass timber brought efficiencies in terms of schedule and sequencing; it also helped the developer save money by avoiding the cost of interior drywall because the wood could be left exposed. The light-frame dimension lumber added value in other ways; it was simple for crews to frame and insulate, and the contractor was able to easily run mechanical, electrical, and plumbing (MEP) systems from floor to floor while also meeting fire resistance and acoustical design requirements. An innovative flooring assembly achieves a 55 STC/50 IIC rating while leaving the top layer as exposed concrete, providing a finished floor surface that helped the project stay on budget.

PROJECT ISOMETRIC



PROJECT DETAILS

YEAR BUILT: 2024

OF STORIES: 3

SQ FT: 22,770

BLDG SYSTEMS: V-B

BUILDING TYPE: Multi-Family (Apartments, Condos)

MATERIAL TYPES: Mass Timber
Cross-Laminated Timber
Glue-Laminated Timber
Light-Frame
Lumber

PROJECT TEAM: Owner/Dev. – Cutler Development
Cont./Installer – Capital Homes Iowa
Engineer – KPFF
Architect – ID8 Architects, PLC

The project achieved a 70% reduction in embodied carbon. Built on the site of a dilapidated gas station, Star Lofts is Iowa's first Zero Carbon-certified building accredited by the International Living Future Institute (ILFI).

