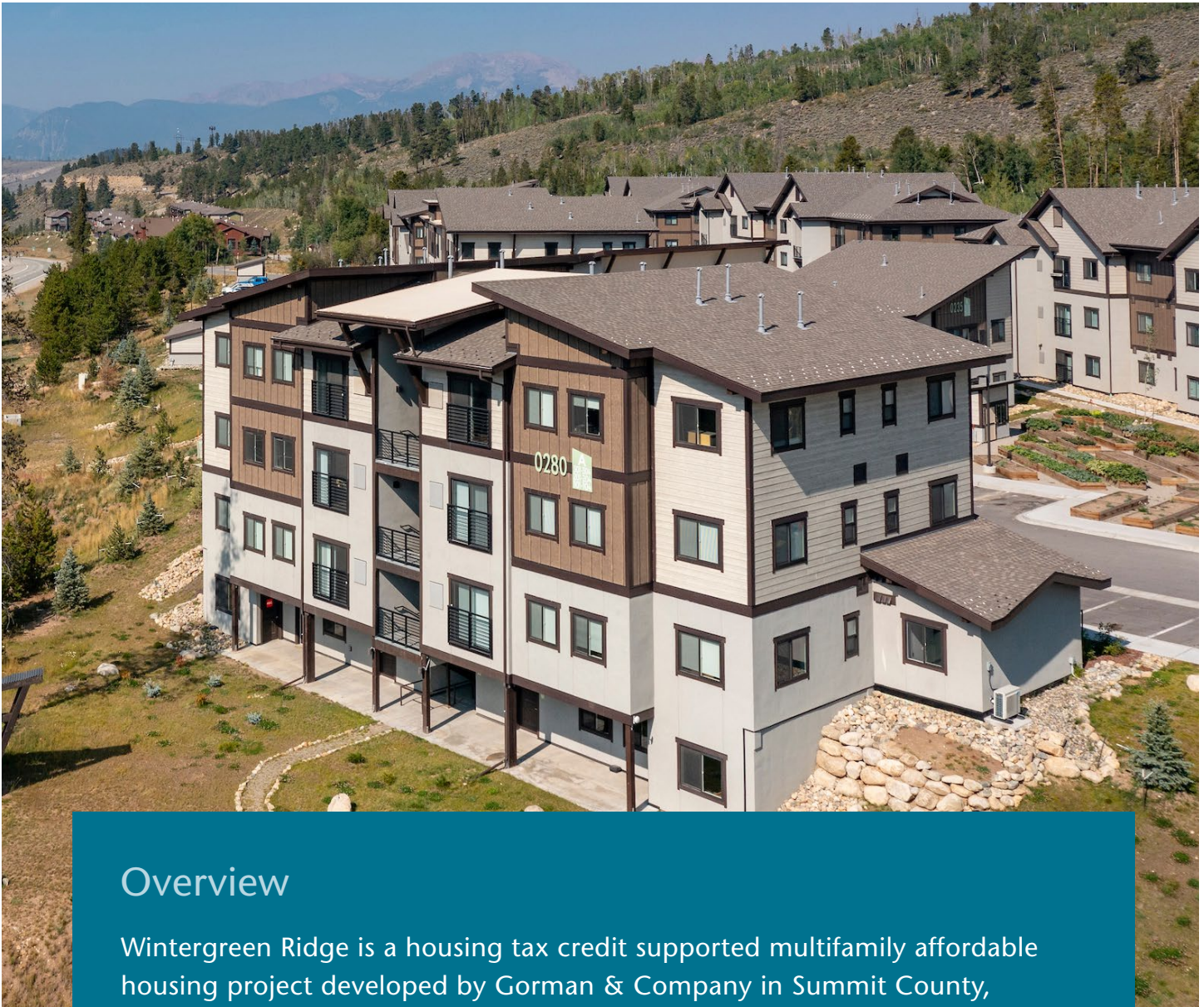


colorado affordable housing

Wildfire Resilience at Wintergreen Ridge | Keystone, Colorado



Overview

Wintergreen Ridge is a housing tax credit supported multifamily affordable housing project developed by Gorman & Company in Summit County, Colorado. The site is located in a wildfire prone area that is part of the wildland-urban interface (WUI). To protect the site from climate hazards, the project team integrated a comprehensive suite of fire-resistant strategies into its design and construction.

Mitigation strategies



Collaboration with the Local Fire Department

The team worked closely with the local fire department during site selection and design, conducting preliminary meetings and site walks to address fire risks. This process informed fire safety strategies, ensured compliance with local regulations, and helped educate the team around best practices for wildfire resilience.



Defensible Space and Strategic Placement

Wintergreen Ridge includes carefully designed defensible spaces around each building. Vegetation was cleared, and fire-safe zones were established to reduce fuel for potential wildfires. Structures were strategically positioned to maximize natural firebreaks, maintain appropriate setbacks from forested areas, and minimize exposure to wildfire pathways.



Class A Roof Materials and Fire-Resistant Assemblies

The buildings feature Class A fire-rated roofing materials, including laminated fiberglass asphalt shingles, which provide superior resistance to fire and embers. Fire-resistant assemblies compliant with International Building Code (IBC) standards were utilized, incorporating gypsum sheathing and other materials to meet or exceed fire safety requirements. Roof overhangs were designed with vented soffits using non-combustible fiber-cement boards to reduce ignition risks.



Fire-Resistant Building Envelope

The building exteriors were clad in fiber-cement siding and stucco, materials known for their non-combustibility and ability to resist flame spread. These materials not only enhance fire resistance but also add durability and aesthetic appeal to the development. Additionally, treated wood was used for structural components to improve fire performance.



Landscaping and Setbacks

Landscaping near the property setbacks was carefully planned with fire-resistant plants and non-combustible ground coverings. The design minimizes flammable materials near windows, vents, and other vulnerable building elements. Setbacks between buildings and the surrounding vegetation further reduce fire risks while allowing fire personnel easier access during emergencies.



Automatic Sprinkler Systems and Standpipes

The development incorporates NFPA 13R-compliant automatic sprinkler systems throughout all residential units, significantly reducing the risk of internal fire spread. Standpipes were installed in all stairwells to facilitate fire suppression efforts by first responders.

Lessons learned and recommendations

Wintergreen Ridge benefited from collaboration with stakeholders, including the fire authority, during early design. This proactive approach enabled the project team to incorporate resilience strategies into budgets and planning from the very beginning. The development also incorporated resident education around wildfire preparedness into lease up activities, further strengthening built environment hazard mitigation strategies and community safety.

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