

The Climate Resilient Housing Toolkit – Making It Work for Older Australians

The increasing frequency and severity of bushfires in Australia present significant risks to older adults residing in fire-prone regions. Retrofitting existing homes to enhance bushfire resilience, evaluating existing measures and compliance with standards through case studies in Bega Valley and Noosa Shire, and proposes cost-effective, priority-based strategies to enhance resilience.

Why the study is relevant:

- Bushfires in Australia are becoming more frequent and severe due to climate change, prolonged droughts, and rising temperatures, posing significant risks to older adults in fire-prone regions. The project aims to develop scalable retrofit pathways and communication strategies to enhance accessibility and engagement among homeowners, particularly older adults.

What we did:

- The research focused on older adults' challenges in retrofitting homes for bushfire resilience, using a case study design in two LGAs heavily impacted by the Black Summer bushfires.
- Data was gathered through focus groups, site visits, and interviews with homeowners to understand their retrofitting knowledge and challenges.
- A Property Assessment Protocol was developed to guide site visits, covering key property aspects like the roof, walls, windows, doors, subfloor, external features, outdoor areas, garage, storage, and garden.
- A DJI Mavic Mini 3 Pro drone and an Insta 360 X3 camera were used to capture aerial and 360° imagery of properties, assessing features like vegetation, roof condition, skylights, cladding outdoor areas, water tanks, and driveways to evaluate vulnerability and create a walk-through tour for analysis.

What we aim to achieve:

- The study identifies financial constraints, physical limitations, regulatory complexities, lack of accessible guidance, confusion over Bushfire Attack Level (BAL) ratings and Asset protection Zone (APZ), and shortages of qualified tradespeople as key barriers preventing older homeowners from retrofitting their properties to meet bushfire resilience standards.
- The adapted toolkit provides a novel framework for designing climate resilience communication tools tailored to vulnerable populations, integrating technical building standards with age-specific design considerations to help older Australians adopt retrofit measures and enhance their bushfire resilience.

