How do Residents in Bushfire Prone Areas View the Risk of their Homes?

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Research Questions
How do residents living in bushfire prone areas view the bushfire risk of their local area and does this assessment match that of their state fire authority? Does this risk perception change when different building materials are used in the construction of their home? What architectural interventions might change resident’s perception of the bushfire risk of their homes?

The research considers the survey finding of 254 responses (74 pilot & 178 field) from residents living in eight selected villages of the Blue Mountains and the Central Coast of NSW. Questions examined building construction by asking about the materials used in the outer membrane of the house - the outside walls, roof, door and window frames. Regarding sheltering in their home during a bushfire attack, respondents were asked which parts of their home they would seek shelter in during a bushfire and which parts they would avoid and why?

Further questions looked at which alterations / additions to their home they believed would improve its bushfire performance.

Survey Responses from Mount Wilson, NSW
In collaboration with the NSW Rural Fire Service at a Community Protection Plan (CPP) Meeting in July 2012 the questionnaires were distributed to residents in Mount Wilson. The graphs below represent the 28 responses from Mount Wilson residents.

Possible Research Application
- By identifying which parts of a house residents in bushfire prone areas would shelter in during a bushfire, future home designs can improve the fire performance of these specific areas. This adds another building option to the current model of total AS 3959 compliance for new dwelling construction.
- The great majority of homes in bushfire prone areas are not AS 3959 compliant this research helps to identify which building improvements residents see as most worthwhile. If these do reduce ember entry and minimise the effect of flame contact, they could be used in proposals made to state and federal funding agencies who wish to improve the bushfire resilience of existing building stock.
- The survey responses may be useful in future government advertising campaigns. For example, the question “When is the bushfire season in your locality?” produced a range of 13 different answers from the 28 Mount Wilson residents.