

Living with Bushfires

The Use of an Internal Protective Core as an Integrated Adaptive Response for the Built Environment

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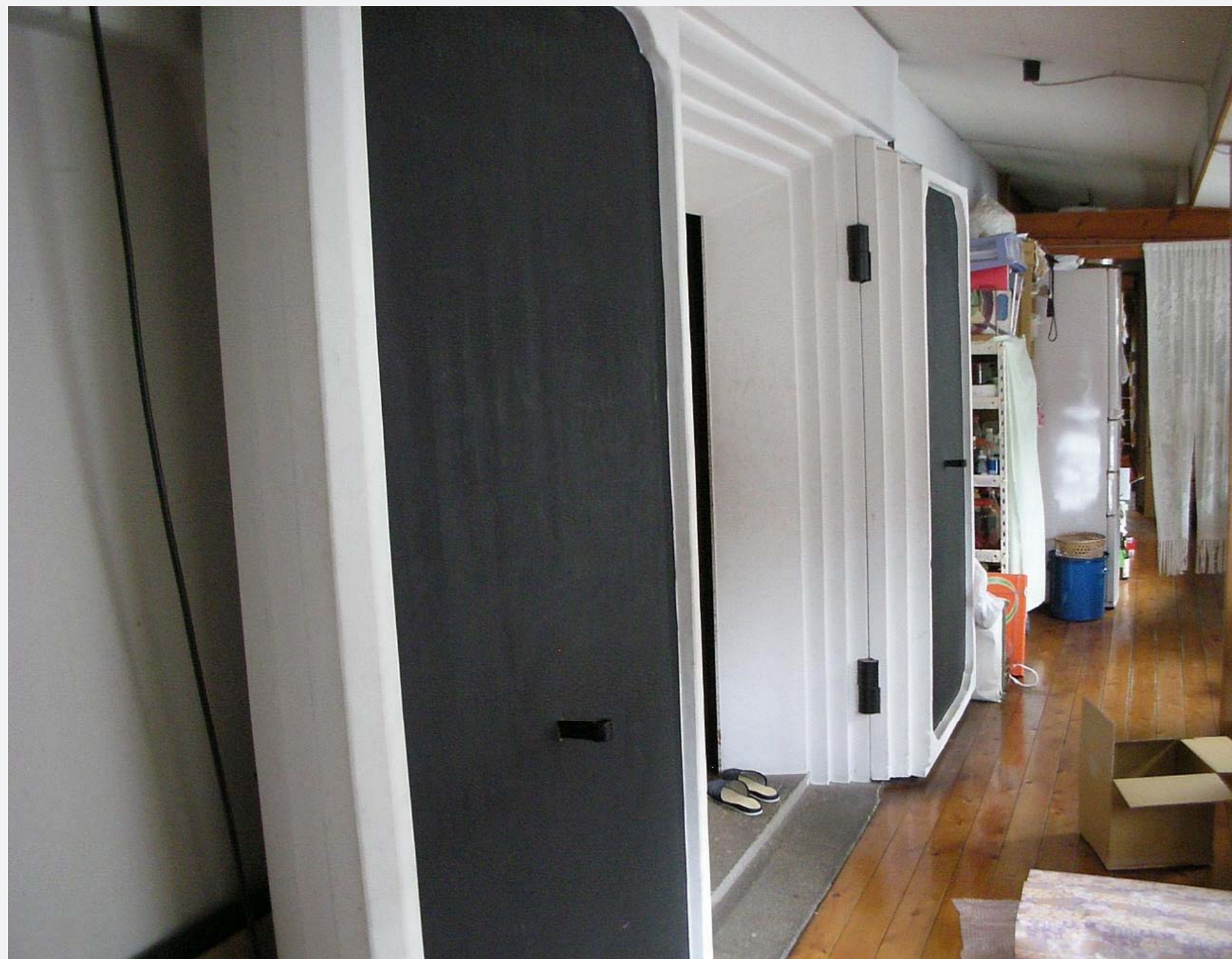
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Two Research Scenarios

Bushfire Attack Level - Flame Zone (BAL-FZ)

Integrated into current built form
- Japanese storehouse, a possible example -



Bushfire Attack Level more 100 (CATASTROPHIC)

New architectural form
- the Protective Core, a possible interior -



Overview

Investigate a different life cycle approach to bushfire architecture.

Equal emphasis placed on the pleasure of living in the space and its ability to provide a refuge for occupants during a bushfire.

Develop a set of design guidelines which enable new buildings to passively defend their central core against bushfires.

The use and incorporation of sustainable design principles should allow these build structures to function independently of the grid for electricity or water.

Look to the built form to prepare people psychologically for bushfires and their aftermath.

Both quantitative and qualitative research methods to be used.

Proposed Chapters

Building within its Landscape

Environmentally Sustainable Design

Building's fire proof core

Building's buffer zone

Building's outer renewable elements

Safety during a bushfire attack

Reduce length of displacement: life immediately after a bush fire attack

Establishment of draft design guidelines for sustainable buildings with a fully integrated internal safe area.

Three dimensional models and CAD imaging for some design solutions