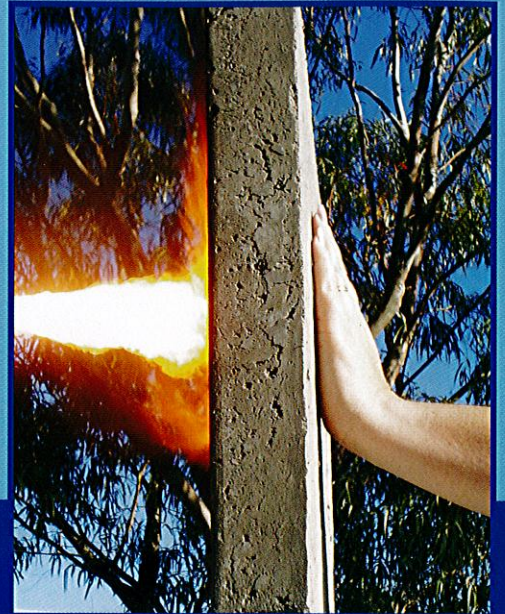


case study



Precast Fire Shelters

With a wall of flames heading your way what do you need for protection?

A full precast concrete room is impact resistant and offers up to 4 hours fire resistance (the maximum resistance level possible under AS3600-2001 Section 5 Design for Fire Resistance). Not only that, but your bunker needs to:

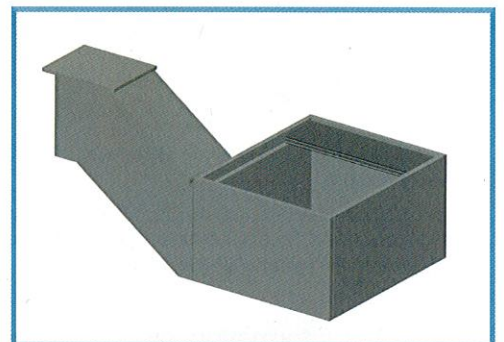
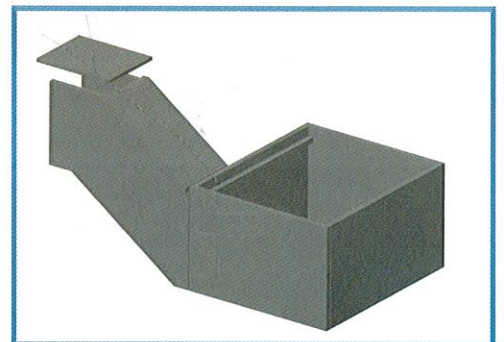
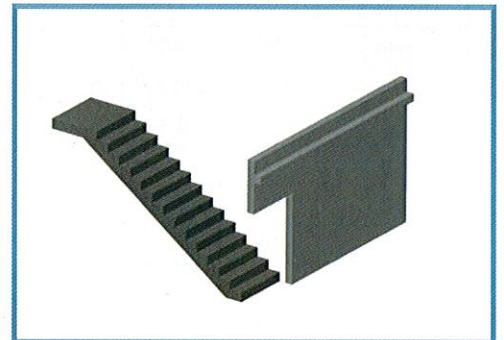
- Protect you from radiant heat.
- Provide adequate oxygen.
- Provide protection from falling embers, trees and branches.
- Provide a safe place after the fire.

Hollow Core Concrete Pty. Ltd. is working with Monash University and Victoria University to provide the safest solution in bushfire regions.

By having a bushfire bunker you have many options; if you choose to evacuate you can store all of your valuables and priceless possessions in a safe, fire proof location.

But of course bush fires don't occur every day, so it is important to consider the practical aspects of such a structure, and by choosing to construct an additional 'room' on your property you can use this as a studio, spare bedroom, office, guest room, games room, gym, theatre, the list goes on...

Two standard bunkers are available to cater for your specific needs; either above ground or below ground both with a usable internal space of 4.5m x 4.8m (2.4m high) and both with a protected entry corridor. However, variations are possible to suit your specific requirements.



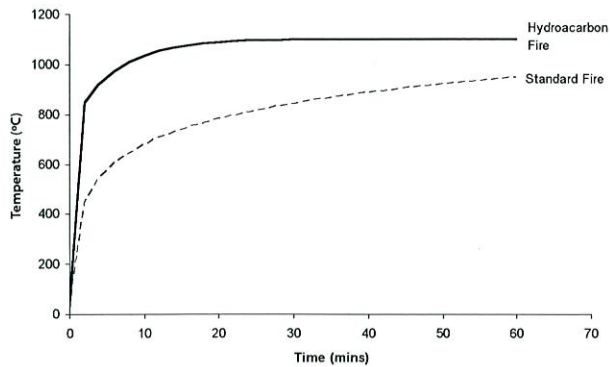
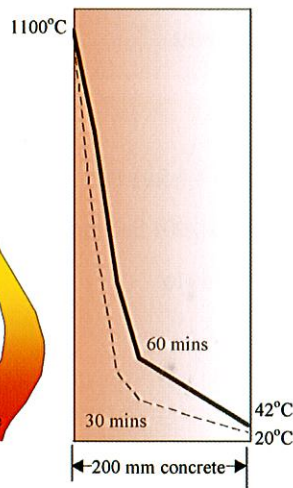
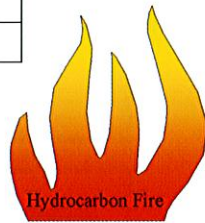
Below ground bunker

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Further benefits of utilising precast elements, include:

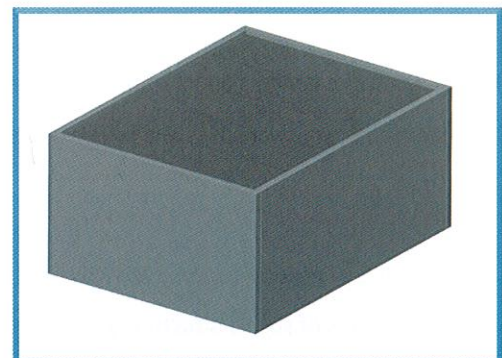
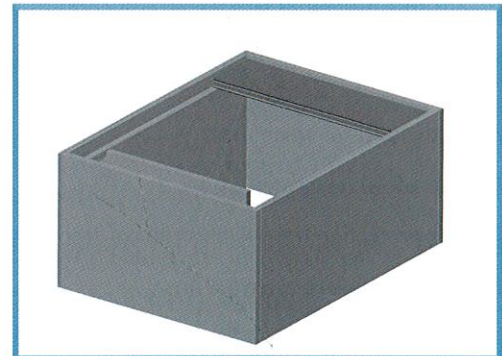
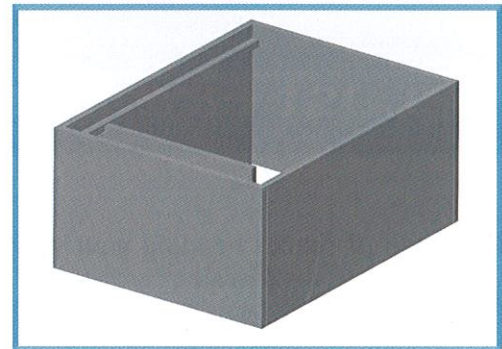
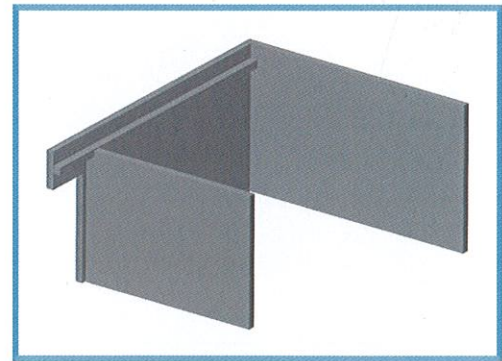
- Non Flammable and fire retardant
- Low maintenance
- Structures are constructed quickly and efficiently
- Environmentally friendly
- Excellent thermal and acoustic properties
- Quality guaranteed
- Parallel construction with precast elements being produced while site is prepared
- Full design and construction provided
- Precast elements are only limited by your imagination!

Distance from fire face	30 min	60 min
mm	°C	°C
0	1098	1100
25	547	826
50	181	424
75	106	221
200	20	42



Data obtained from tests carried out at Monash University and published in American Concrete Institute:

Guerrieri, M., Sanjayan, J.G., Collins, F.G., "Effect of Slag on the Performance of Concretes in Hydrocarbon Fire", Special Publication: Designing Concrete Structures for Fire Safety, American Concrete Institute, SP-255, 2008, pp. 23-46.



Above ground bunker

For further information, please contact:

JMA11010

HOLLOWCORE
HOLLOW CORE CONCRETE PTY LTD

P.O. Box 241, Altona North, Vic 3025. 12-14 Maria Street, Laverton North, VIC 3026, Australia.
Tel: +61 3 9369 4944 Fax: +61 3 9369 2025 Email: info@hollowcore.com.au Web: www.hollowcore.com.au