COMBAT FLOODING WITH SPECIALISED INFRASTRUCTURE

As Australia's weather becomes increasingly extreme and heavy rainfall and flooding becomes more commonplace, the time to invest and protect against flood damage is now. Integrate flood protection seamlessly into infrastructure with AWMA.

WMA Water Control Solutions is an Australian turn-key manufacturer of specialised water control infrastructure, including flood barriers, water control gates and self-cleaning screens. Based in regional Victoria, AWMA has established specialist design, manufacturing and installation teams with the capacity and experience to service domestic and international markets.

CASE STUDY: FLOOD BARRIERS IN ACTION

The Ballarat GovHub, a new Victorian Government office located in the heart of the city, accommodates 1,000 government employees and features a multi-level basement car park with approximately 220 car spaces.

The location of GovHub is prone to overland flooding during heavy rain events, especially the basement carpark, so AWMA was engaged to design, construct and install a flood barrier from the FloodFree range, that would automatically deploy without the need for external power.

The self-actuating barrier can automatically deploy via floatation and integrates into existing infrastructure seamlessly.

Should floodwaters rise to a predetermined height, an alarm will sound and the barrier will automatically rise to prevent water from entering the basement car park. The flood barrier continues to rise with increasing floodwater depth, to protect the entrance from waters up to the nominated flood height.

"A strip drain was inserted into the driveway at the basement entrance to intercept water overflows," AWMA's Peter Ebenwaldner said.

"Water drains into a pit which, if it fills to capacity, floats the flood barrier into position to prevent water ingress flooding the basement."

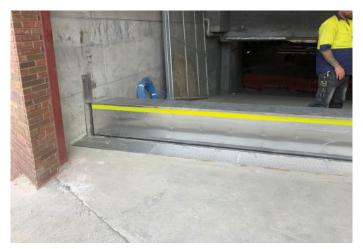
The 7.8m wide barrier was constructed to raise up to 800mm high, based on the 'one- in-100-year flood' level predicted, which would produce a water depth of 500mm at the barrier, leaving 300mm of freeboard.

"This type of calculation is made on every project we undertake, which translates into every AWMA product being individually designed and manufactured to suit the characteristics of the site and expected flood water such as flow, debris and height," Mr Ebenwaldner said.

The GovHub building has a suspended slab in the driveway so the flood barrier was custom-designed and manufactured to be installed within a reinforced pocket recess, making it virtually invisible when not deployed.



The Flood Barrier, when not deployed, integrates seamlessly into existing infrastructure.



AWMA Flood Barrier deployed in the Ballarat GovHub basement carpark.

AWMA's FloodFree barriers offer a range of products including options for manual, powered and passive (buoyant) flood protection.

AWMA's world class flood barriers protect many commercial office buildings and high end apartment blocks across Australia, New Zealand and South East Asia.

To learn more about AWMA Water Control Solutions, go to: https://www.awmawatercontrol.com.au/ or for more information on AWMA's FloodFree range of Barriers, go to: https://www.floodfree.com.au/