

Perth Zoo, South Perth, WA



Perth Zoo, located in the suburb of South Perth is recognised as a world-leading conservation zoo. To reinforce this status for decades to come, the Government of Western Australia has outlined their Zoo Master Plan 2040, which includes the construction of new precincts, expansions and amenities. The redevelopment of the long serving Function Centre and Visitor Café is one of the major projects set for completion in the second half of 2023.

Termimesh was selected as the termite management system for both these amenities to meet the Department of Finance's tender requirements.

Requirement

Christou Design Group specified a TMA stainless steel termite barrier mesh for installation to ensure compliance with the Australian Standard for Termite Protection (AS 3660.1). When selected for Government projects, the Termimesh System is typically specified for perimeter installation, service penetrations and control joints. However, this project was specified with full under slab termite mesh protection to align with the Zoo Master Plan objectives.

Approach

Protecting the Function Centre from termite infestation and ensuring structural longevity, a full mesh barrier system was installed. A total of 332m of mesh was installed along the entire perimeter of the slab, including

perimeter cold joints and cold joints to rammed earth walls. One hundred and forty-four Termiflange termite mesh collars were installed and embedded around both singular and clustered vertical slab penetrations.



Termiflange termite mesh collars installed around clustered vertical slab penetrations

In addition, this full under slab installation specification saw the Termimesh stainless steel barrier installed between the damp proof membrane and reinforced concrete ground slab. In total, Termimesh certified technicians installed over 1,500 m² of Termimesh for this portion of the project with each sheet requiring overlap and folding to ensure integrity of the barrier.

Delivering complete protection for this project was a well-executed logistical exercise. The size of the project required multiple concrete slab pours over several days. Over one hundred slab penetrations and eighty-six structural columns required precise measuring, cutting and securing of the mesh flanges before the concrete slabs could be poured.

Protecting the raised Visitor Café, two hundred and fifty-eight Termimesh termite mesh caps were installed around the top of all columns supporting the suspended floor. The installation of these termite mesh caps helps ensure termites will not gain access to the installed decking system. Sixty-five termite mesh collars were also installed on all service pipes entering under the building.



Termimesh termite mesh caps installed around the top of columns supporting the new Visitor Café

Results

Specification of the Termimesh System will prevent termite entry to these new amenities for the practical life of the buildings. Manufactured with proprietary TMA stainless steel, Termimesh guarantees the wellbeing of Perth Zoo guests and animals. Specifying a physical termite mesh barrier negates the need to use poisonous chemicals both in the initial construction stage and for the future.

A detailed report outlining the installation of the Termimesh System was provided to the client, along with Pledge Guarantee documentation. The Pledge Guarantee is unique in that it delivers ten-years up-front protection. The warranty can be continuously extended with an approved annual termite inspection during the initial ten-year term and onward.

Architect: Christou Design Group
Builder: Crothers Construction
Photography: Supplied by Termimesh



Termimesh sheets installed above the damp proof membrane of the new Function Centre

