



Tennyson Homes

EV fire-containment for underground residential parking

Overview

In 2022, Tennyson Reach – a high-end apartment development in Queensland, Australia – introduced Fire Cloak EV fire blankets as part of its approach to EV fire preparedness within underground residential parking.

The building owners and management team recognised the specific fire risks associated with EVs and lithium batteries, and wanted to provide their residents and staff with the very highest levels of fire safety throughout the property.

The challenge: EV fire risk in underground residential car parks

Underground car parks concentrate vehicles, structure and people in an enclosed environment. As EV ownership grows, building operators increasingly need to plan for lithium battery fire incidents. These incidents can be much harder to stabilise, producing intense heat and smoke, with the risk of reignition.

Tennyson Reach wanted a clear, site-ready solution to isolate a suspected EV fire incident quickly, helping reduce the risk to residents, visitors, nearby vehicles and the building, while emergency services are mobilised.

Requirements & Technical Criteria

Tennyson Reach required a solution that could be:

- Positioned across multiple levels of an underground residential car park
- Stored securely and visibly in a shared environment
- Supplied with robust wall-mount storage boxes to keep equipment protected and ready
- Practical for building management teams to maintain as part of day-to-day site readiness

Why Fire Cloak™

Fire Cloak was chosen as a practical EV fire-containment measure because of its effectiveness and suitability to residential parking environments, where access, visibility and durability matter:

Proven Performance & Rigour

For Tennyson Reach, the priority was a dedicated containment option for EV incidents in an underground residential car park setting – supporting early isolation and helping limit escalation in a close-parked, enclosed setting. Fire Cloak was judged to be the best fit, particularly for its practicality in this environment, ease of access, and durability in hot, humid conditions.

Independent Testing & Certification

Fire Cloak has been extensively tested in real-world EV fire demonstrations and independently certified to multiple international fire and flame-resistance standards, including DIN SPEC 91489:2024-11. For Tennyson Reach, that provided added confidence that the blanket is built to meet recognised benchmarks and is a credible, site-ready measure to include alongside existing fire safety equipment.

Ease Of Deployment

Fire Cloak is designed to be straightforward to store, quick to access and easy to deploy. The blankets were supplied with wall-mounted storage boxes, allowing fixed placement across the car park so the equipment is protected, visible and ready to retrieve in an emergency.

Operational Use

Tennyson Reach installed eight EV fire blankets with wall-mounted storage boxes, positioned across multiple levels of the underground residential car park. The aim was straightforward: to have EV containment equipment available on site, ready for use if an incident occurs.



Results & Impact

Stronger Residential Preparedness

The installation provides building owners and management teams with a practical on-site measure to support EV fire preparedness in shared residential parking.

A Reference Point For Other Residential Sites

It offers a real example for building owners, property managers and facilities teams considering how to add EV containment capability within underground parking.

Durability And Long-Term Value

Around two and a half years after installation, EVSAFE inspected the blankets and storage boxes across multiple levels and reported they remained in excellent condition, despite humid Queensland conditions. This supports long-term readiness on site and reinforces the value of the investment over time.