

SCHNEIDER CONTAINMENT

THE GOLD STANDARD IN LITHIUM SAFETY

Schneider Garage Prevention & Containment-V2-1

A fully integrated 3-layer lithium fire prevention & containment architecture engineered for premium residential and commercial garages.



SLEEP SAFELY. EVEN WHEN CHARGING.

The Schneider Garage Prevention & Containment System is a fully integrated 3-layer safety architecture designed to detect, suppress, and contain lithium-ion battery incidents before they escalate into catastrophic thermal runaway.

Unlike conventional fire protection systems that respond only after ignition, this solution intervenes at the earliest possible stage: single-cell failure detection. By identifying hydrogen off-gassing and early chemical indicators before visible fire, the system drastically reduces the likelihood that suppression or containment layers are ever required.

Delivered as one engineered system, pre-configured and commissioned by certified local experts, it ensures seamless integration into high-end residential, commercial, or mixed-use environments.

THE 3-LAYER ARCHITECTURE

In high-value residential villas, electric vehicles are increasingly charged inside attached garages. As EV adoption rises, so does the risk of lithium-ion battery incidents.



LAYER 1

PRIMARY PREVENTION LAYER

Early Gas Detection Before Ignition.

- Hydrogen detection below 10% LFL
- Off-gas detection prior to thermal runaway
- < 5 second response time
- Modbus / CAN integration
- Real-time monitoring & alarm trigger

PURPOSE:

Identify battery instability at the earliest chemical stage, automatically interrupt charging, and prevent escalation before flames occur.



LAYER 2

TARGETED UNDERBODY SUPPRESSION

Cool and suppress at the source.

- Direct under-vehicle positioning
- Localized cooling & suppression
- Lateral spray protection
- Stainless steel 304 construction
- Multi-bay configuration possible
- No overhead water damage

PURPOSE:

Attack the battery pack area directly without flooding the entire garage.



LAYER 3

FIRE CONTAINMENT & ISOLATION

Isolate. Contain. Protect the structure.

- Automatic high-temperature blanket deployment
- Up to 1200°C continuous resistance
- Controlled gas discharge
- Protects structure and adjacent spaces
- Prevents structural water damage

PURPOSE:

Contain fire spread and shield the building envelope.

VALUE TO CUSTOMERS



Early Intervention = Reduced Escalation

Layer 1 detects single-cell failure at an ultra-early stage, dramatically lowering the probability that Layer 2 and 3 are activated.



Multi-Layer Security

If escalation occurs, the system automatically transitions to underbody suppression and finally full containment & isolation.



Delivered as One Integrated System

Pre-engineered, pre-configured and shipped as a single solution, ready for installation and commissioning by certified local experts.



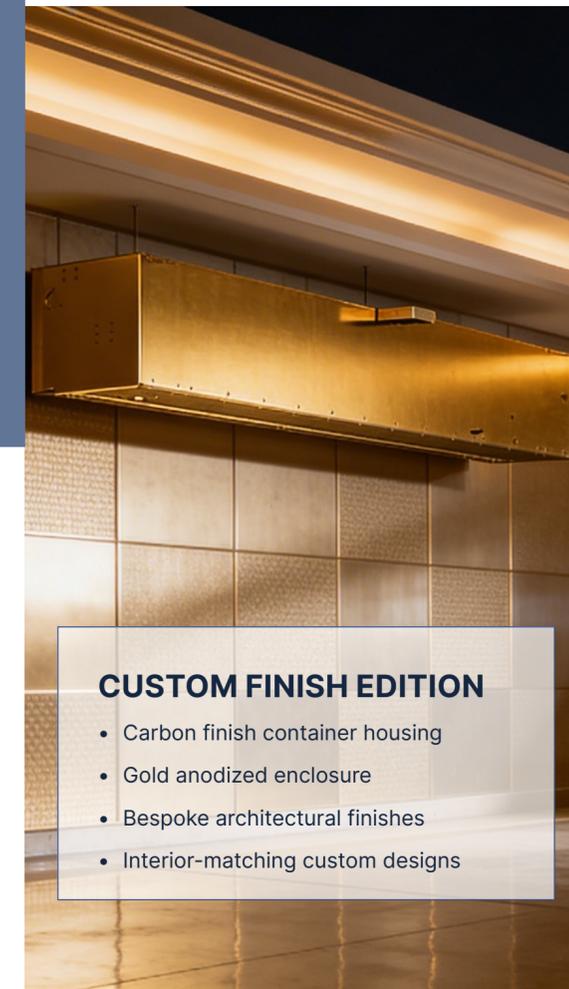
Designed for High-End Environments

Aesthetic integration into premium garages without industrial appearance.



No Structural Water Damage

Targeted suppression and containment prevent widespread building damage.



Get in touch with our specialists

Request technical specifications, integration guidance, or a tailored quotation for your project.

SCHNEIDER CONTAINMENT

Schneider Containment B.V.
Bruynvisweg 7
1531 AX Wormer
The Netherlands

E info@schneidercontainment.com
T +31 6 54 65 70 80
W schneidercontainment.com

CUSTOM FINISH EDITION

- Carbon finish container housing
- Gold anodized enclosure
- Bespoke architectural finishes
- Interior-matching custom designs

TECHNICAL SPECIFICATIONS

LAYER 1

EARLY WARNING GAS DETECTION

- Ultra-sensitive hydrogen detection (<10% LFL)
- Off-gas detection before ignition
- 5-second response time
- Modbus / CAN integration
- Single-cell failure monitoring

LAYER 2

TARGETED UNDERBODY SUPPRESSION

- Underbody water suppression system
- Lateral spray protection
- Stainless steel 304 architecture
- Multi-bay configuration available
- Precision cooling, no ceiling discharge

LAYER 3

FIRE CONTAINMENT & ISOLATION

- Automatic fire blanket deployment
- High-temperature resistance up to 1200°C
- Controlled gas discharge
- Full vehicle isolation
- No structural building compromise