Extruded aluminum battery housing

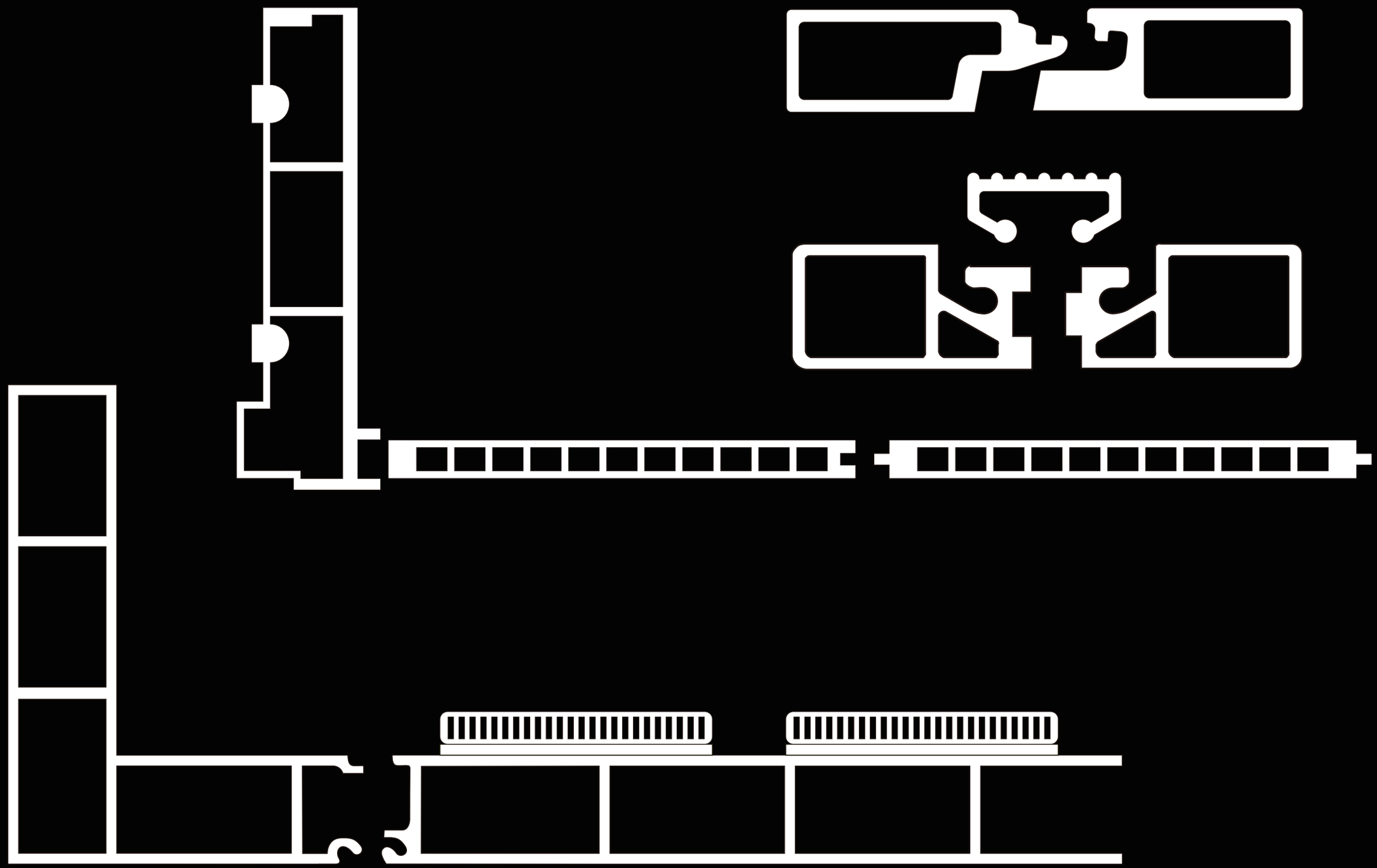
Extruded shapes provides thermal management and crash safety.

EV-Batteries have been increased in capacity for higher performance and longer driving distance, and their weights are increasing.
Required characteristics of EV-battery housing are thermal management that can properly maintain the battery temperature, and crash resistance that absorbs collision energy.
Extruded aluminum shapes meet these demands, and being increasingly used in battery housing for EV platforms.

Features of battery housing using extruded shapes

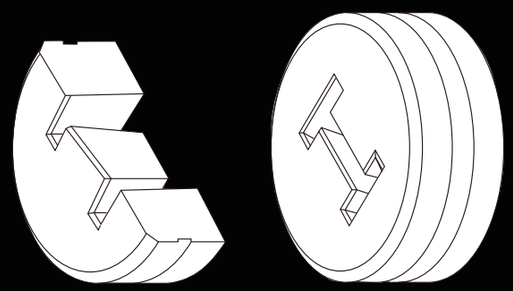
- Thermal technology developed for heat exchangers such as radiators.
- Manufacturing know-how for shock-absorbing materials such as bumpers.
- Crash safety structure using extruded shapes with good formability.
- Integrates with chassis structural members to achieve weight reduction.

Extruded shapes for fit joints



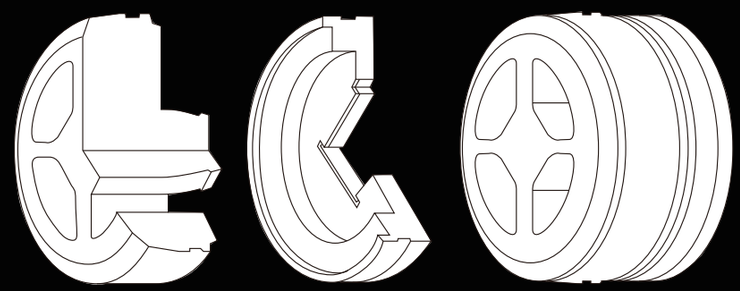
Classification of extruded shapes

■ Solid shape



Solid dies

■ Hollow shape



Male die　Female die　Hollow die

Multi-hole hollow shape

Cross-section of condenser tube