

BATTERY SAFETY THERMAL PROTECTION SOLUTIONS

Passive Thermal Barriers for

- EV Batteries
- Energy Storage Systems
- Battery Transportation



Thermal
Barrier



Fire
Protection



Lightweight



Passive
Safety

Reliable Protection. Smarter Energy. Safer Future.

WHY PASSIVE THERMAL PROTECTION MATTERS

When a battery cell enters thermal runaway due to overheating, mechanical abuse, internal short circuit or abnormal conditions, it may release high-temperature gas, flame, smoke and intense heat, affecting adjacent cells, modules and battery structures.

Passive thermal barrier materials are designed to delay heat propagation, reduce thermal impact and protect critical components, providing more time for monitoring, venting and emergency response.



Delay Heat
Propagation



Reduce Thermal
Impact



Lightweight



Thin Design



Custom
Fabrication

TYPICAL BATTERY SAFETY APPLICATIONS

APPLICATIONS

- ✓ Cell-to-Cell Thermal Barrier
- ✓ Module Thermal Barrier
- ✓ Battery Pack Protection
- ✓ Vent Path Protection
- ✓ ESS Cabinet Protection
- ✓ Battery Transportation
- ✓ Electrical Equipment Protection
- ✓ Thermal Runaway Test Systems

RECOMMENDED PRODUCTS

- 📦 Microporous Board
- 📦 PCW Paper
- 📦 PCW Ultra Thin Blanket
- 📦 Soluble Fiber Paper
- 📦 Ceramic Fiber Expansion Paper
- 📦 Fabricated Parts



PASSIVE THERMAL BARRIER SOLUTIONS



1 Cell Barrier

Cell-to-Cell Barrier

Delay heat propagation between cells.



2 Battery Module

Module Protection

Improve module-level thermal isolation.



3 Battery Pack

Battery Pack Protection

Protect pack structures from thermal impact.



4 Vent Path

Vent Path Protection

Maintain passive protection around exhaust areas.

ESS & BATTERY TRANSPORTATION

Energy Storage System



Battery Transport Box



RECOMMENDED PRODUCTS



Microporous Board

High thermal insulation
Low thickness



PCW Paper

Thin thermal barrier
Lightweight



PCW Ultra Thin Blanket

Flexible & lightweight
Easy to install



Soluble Fiber Paper

Easy to install
Good thermal resistance



Ceramic Fiber Expansion Paper

High temperature resistance
Expandable structure



Fabricated Components

Cutting, punching,
customized shapes

ADVANCED BATTERY SAFETY SOLUTIONS



Global
Projects



Engineering
Support



Custom
Fabrication



Stable
Quality



Global
Supply



Warehouse
Support



GLOBAL PROJECT SUPPORT

Double Egret Thermal Insulation Co., Ltd

📍 Add: Minying Industrial Park
Development Zones,
Zibo, Shandong, China

✉ Email: info@ccewool.com

www.ceramicfibres.com
www.ceramicfiber.com
www.ccewool.com

U.S. WAREHOUSE STOCK SUPPLY & LOCAL PROJECT SUPPORT

CCEWOOL Thermomax Inc.

📍 1203 Galleria Blvd,
Rock Hill, SC 29730, USA

☎ Tel: +1-704-740-2348

✉ Email: salesusa@ccewool.com