TLX™ CARGO

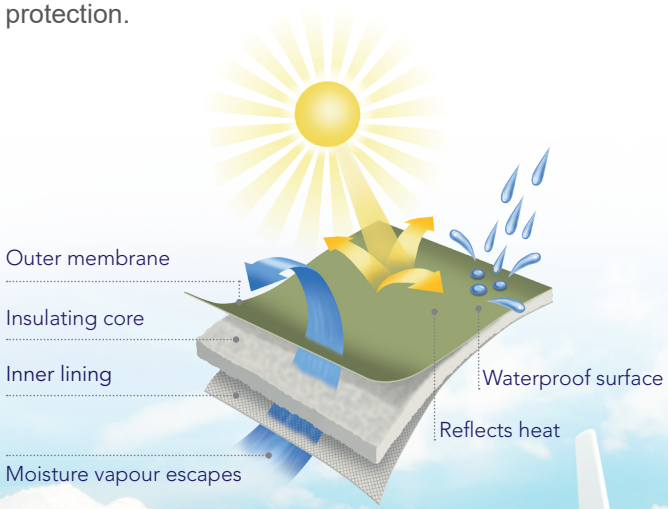
# UNRIVALLED SUPPLY CHAIN PROTECTION FOR TEMPERATURE SENSITIVE PRODUCTS




MADE IN BRITAIN

TLX Cargo™ is part of TLX Insulation Ltd, the world leading manufacturer of thin reflective insulation. As industry leaders, we've been setting standards of excellence in high performance building insulation for nearly 25 years. In the last 12 years our technology has been applied to all kinds of projects ranging from the London 2012 Olympics to many historic and public buildings.

TLX Cargo cover systems are designed to minimise heat build-up in the most hostile environments. Using Phase Change Material, nano technology and convection inhibitors, our materials are waterproof and breathable with high reflectance and exceptional thermal performance. The systems deliver 360° thermal protection.




There are four TLX Cargo products: TLX2, TLX4, TLX8 and TLX PCM. These unique innovations give unrivalled protection to valuable cargo, What's more, as a UK science-based manufacturer of specialist insulation, we are always at the end of a phone line if you need technical support. Just call our TLX Cargo Hotline on +44 (0)1204 695666.

# Introducing TLX PCM with Fibre-Flex Technology...

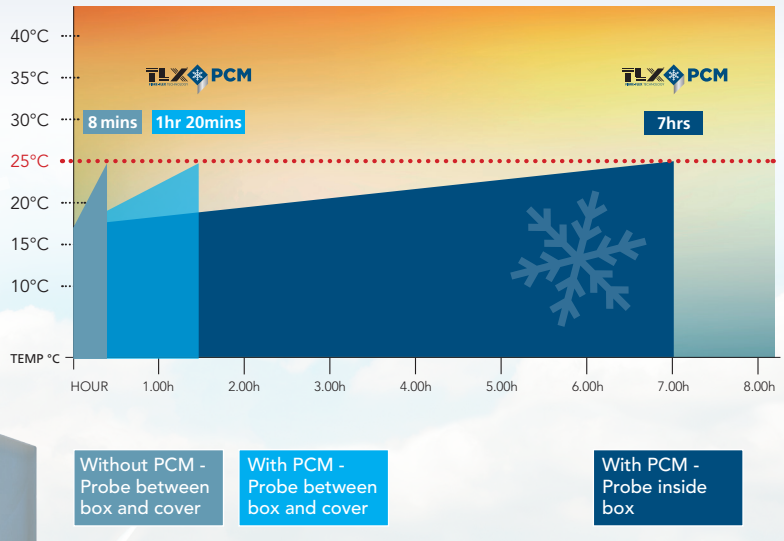
TLX PCM is the first cargo cover to incorporate Phase Change Material (PCM) into its structure. The smart technology allows the cover to self-regulate its performance according to the external conditions by freezing at 18°C and absorbing heat up until 25°C. Being able to encapsulate PCM within the physical structure of the cover gives a simple to use all in one product. This unique system delivers an easy to handle solution that's ultra-lightweight, robust yet thin and flexible.

## WHY USE PCM IN A CARGO COVER?

Phase Change Materials are ideal for thermal energy storage as they are highly cost effective, stable and environmentally friendly. PCMs are ideal for cold chain transportation/storage of temperature controlled packaging containing food and pharmaceuticals. TLX PCM cargo covers give consistency in performance over a substantial number of cycles, helping to maintain a constant temperature through the release and absorption of energy.

- Unique, non-leak PCM system
- Strong, flexible, easy to handle
- Waterproof
- Ideal for pharmaceutical, chemical, perishable and healthcare shipments

### TLX PCM vs the same cover without PCM



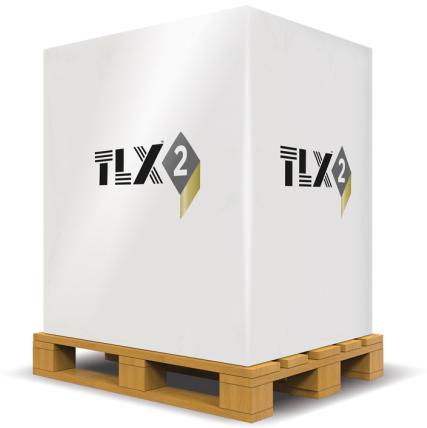




*TEST CONDITIONS: Ambient temperature 40°C, 38°C simulated tarmac temperature and 20% mass of product.

The entire product can be recycled, is breathable and waterproof allowing the exchange of air and water vapour through the material, this helps the internal moisture levels within the pallet not to reach harmful levels. This technology is combined with a reflective brilliant white outer skin which reflects a great amount of the visible spectrum solar radiation.

- 1mm BREATHABLE COVER - Releases moisture and provides exceptional protection from extreme temperatures
- Recyclable
- Waterproof
- Protects the good transported from sun light, heat, cold, rain, snow, front and humidity
- Used for high value perishables, chemical and pharmaceutical shipments
- 1-2 minutes to fit, available in all standard pallet sizes from stock

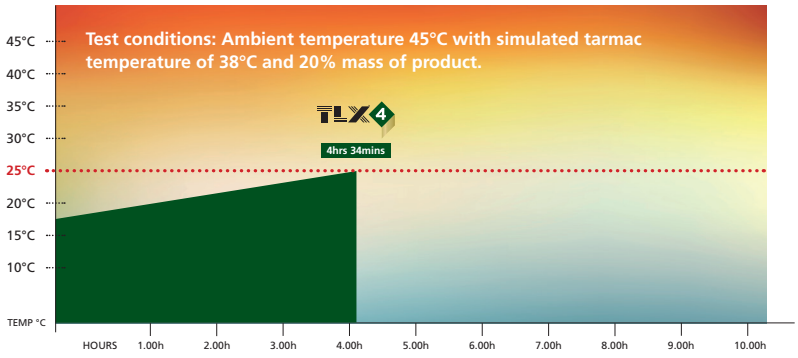


RECYCLE

Designed to give extended protection for goods being shipped between 2-8°C and 15-25˚C. The entire cover is waterproof and reflects 97% of thermal radiation over the measured spectrum.

- Extended protection
- 1mm thick
- Waterproof
- Reflects 97% of thermal radiation
- Used for perishables, chemical and pharmaceutical shipments
- 1-2 minutes to fit, available in all standard pallet sizes from stock






**TLX TEST PROTOCOL**

Since the outcome of a test can be influenced disproportionately by the density of the load, the input temperature of the load, the start temperature of the chamber, control of the heat within the chamber and the temperature at which the load is tested.

Our test loads are at a mass of 20%. The test load is always the same. The chamber is pre-heated to 45˚C and the air circulated throughout the chamber by a fan. Probes are placed throughout the heat chamber and pallet both inside and outside the cartons. The number of probes and their position is always the same. Each load is pre-conditioned to 18˚C (plus or minus 1˚C). There is a hot plate underneath the load to replicate tarmac temperatures. Tests are repeated to ensure that the results are consistent. Performance of the cover is measured at the first probe within a carton to exceed 25˚C i.e. worst case scenario.

TLX Insulation - Web Dynamics, Moss Lane, Station Road, Blackrod, Lancs BL6 5JB. Telephone: +44 (0)1204 695666

**www.tlxcargo.com**