TECHNICAL DECLARATION

Thermal Performance of Sectional Timber Garage Door

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1. Declaration Details

Project / Property: _____
Door Type: Sectional timber garage door
Location: _____
Date: _____

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2. Description of Construction

The garage door installation comprises the following construction:

- 9 mm **Tricoya** external facing
- 30 mm PIR (**Celotex-type**) insulation core
- 6 mm internal plywood lining
- 90 mm timber perimeter and intermediate rails
- Four-section configuration
- Compression-type inter-panel seals
- Continuous perimeter sealing at head, jambs, and threshold

The door is of sectional overhead design and is installed as a complete sealed unit.

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3. Method of Assessment

The thermal performance of the door has been assessed using:

- **BS EN ISO 6946** – *Thermal resistance and transmittance of building components*
- Area-weighted calculation methodology
- Published thermal conductivity values for constituent materials.
- Allowance for:
    - Timber framing
    - Insulated panel zones
    - Section joints
    - Perimeter sealing interfaces

This approach is consistent with accepted UK industry practice for bespoke or non-certified door assemblies where laboratory testing has not been undertaken.

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4. Calculated Thermal Performance

Description	Value
Panel U-value	~0.6 W/m²K
Timber framing influence	Included
Whole-door calculated U-value	≈ **1.1 W/m²K**
Reasonable tolerance range	**1.05 – 1.20 W/m²K**

This figure represents the **whole installed door**, not just the insulated panel element.

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5. Compliance Statement

- The calculation methodology complies with **Approved Document L** principles.
- BS EN ISO 6946 is an accepted method for determining U-values where laboratory testing is not undertaken.
- Laboratory testing to BS EN ISO 12567 is **not a requirement** for bespoke or one-off timber doors.
- The stated U-value is consistent with comparable modern insulated sectional garage doors.

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6. Declaration

I confirm that the above U-value has been determined using recognised calculation methods and reflects a reasonable and accurate assessment of the thermal performance of the installed door based on its known construction and materials.

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7. Declaration Sign-Off

Name: _____
Position / Company: _____
Qualifications (if applicable): _____
Signature: _____
Date: _____