



SPECIFICATION GUIDELINE CDE-0998

Electrical underfloor comfort heating: T2Red

Purpose :

The purpose of the under-floor heating system is to provide a comfortable (18-27°C) floor temperature under wooden, laminate, carpeted or tiled flooring.

The Product shall be supplied and delivered by:
Tyco Thermal Controls (UK) Ltd.
3 Rutherford Road
Stephenson Industrial Estate
Washington, Tyne & Wear
NE37 3HX
Contact no: 0800 969 013
E-mail: Salesuk@tycothermal.com

Specification :

All under-floor heating cables shall be of the energy efficient self-regulating type as manufactured by Tyco Thermal Controls and known as **T2Red**.

The Heating Cable shall be capable of variable output along its entire length for increased energy efficiency and shall be capable of demonstrating a lifetime in excess of 15 years, with a warranty not less than 12 years.

The heating cable shall have fluoropolymer electrical insulation, tinned copper braid and fluoropolymer over jacket for protection against chemical ingress.

The under-floor heating system shall be installed, tested and commissioned strictly in accordance with the manufacturers instructions. The recommendations of the floor manufacturer shall also be observed. Best practices available upon request from Tyco Thermal Controls.

All under-floor heating cables should be capable of a maximum circuit length of 100 metres and be protected by a Type C circuit breaker at 10Amps, in compliance with IEE guidelines. An earth leakage current protection switch (30mA, 100ms) is required.

The termination of the self-regulating heating cable shall be made using components as approved by the manufacturer. For T2Red, terminations and connections shall be made using components as manufactured by Tyco Thermal Controls.

Product, technical, and performance requirements :

Cable:

- Product must be self regulating.
- Product must provide 10W/m @ 25°C.
- Product must have a Fluoropolymer overjacket for protection against chemical ingress.
- Product must have a full braid for electrical protection and mechanical durability.

Monitoring and Control :

All heating circuits shall be controlled and monitored via the Raychem range of thermostats. The floor heating system shall be controlled by one of the following methods depending on project requirements:

- a) Floor or room temperature sensing digital thermostat with booster function, known as **Raychem TA Control**.
- b) Programmable digital floor temperature sensing thermostat with integrated timer and boost function, known as **Raychem TC Control**.

Wiring between the Control Panel, Thermostat(s) and the under-floor heating circuit shall be by a qualified electrical installer.

The manufacturer shall provide a 12 year product warranty for the under floor heating system provided all product and components are that of the manufacturer.