



SPECIFICATION GUIDELINE CDE-0308

Fire escape stairway heat-tracing (Metal treads) (Wintergard FS-C-2X)

Purpose :

The purpose of the stair heating is to prevent impeded exit from buildings, car parks etc due to snow and icy conditions.

All stair heating elements shall be of the self-regulating type, as manufactured by Tyco Thermal Controls and known as Wintergard FS-C-2X. The self-regulating heating cable shall be capable of demonstrating a lifetime in excess of 25 years and shall be capable of design to a maximum circuit length of 90 metres.

Specification :

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

The metal stairs shall consist of a solid tread.

The stair heating system shall be installed to include two runs of heating cable per stair tread.

The system shall include affixing of the self-regulating heating cable to the underside of each stair tread, insulation and environmental sealing of each stair tread.

The stairway heating systems shall be installed, tested and commissioned strictly in accordance with the manufacturers instructions and preferably by a specialist installer named by the supplier.

The Wintergard cable shall be attached to the underside of each stair tread or landing at a 150 mm spacing using aluminium tape. The underside of each stair tread shall be insulated (K factor 0.03 to 0.04K/mK at 10°C) to a spacing using aluminium tape.

The tread shall be suitably environmentally sealed in order to keep the insulation dry.

To operate the system at optimum efficiency the control system shall be capable of detecting ambient temperature.

The stair heating system should be energised when the temperature falls below the set point (e.g. 3°C). The circuits shall be switched via a contactor.

Each stairway heating circuit shall be protected electrically by an MCB to BS EN 60898 type C or D or equivalent.

Additionally a residual current device of 30 mA sensitivity that trips within

100 mS should be used. These shall form an integral part of the motor control panel or local distribution board.

Wiring between the control thermostat, the contactor, the distribution board and stairway heat-tracing circuits terminal boxes shall be done by an electrical contractor.

Isolators for each circuit shall be provided as an integral part of the local motor control panel or local distribution board.