



# Thermatek *The Company To Warm To*

Frost Heave & Condensation Prevention Systems

## PRODUCT INFORMATION

### Pressure Equalisation Valve

This valve has been specially designed to equalise the varying internal / external pressures that occur in coldrooms. Changes in pressure occur in a number of circumstances, such as defrosting and bringing down to temperature, the opening and closing of doors and changes of ambient temperature.

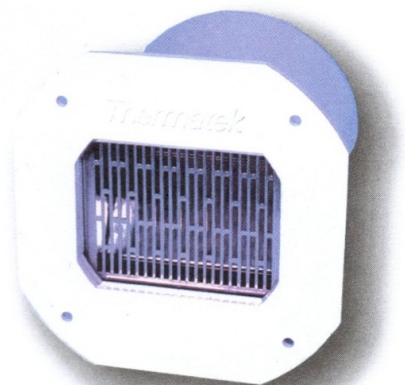
The valve has an ABS tube body of 110mm diameter with moulded front. Within the tube is an aluminium box containing stainless steel flaps hanging in two rows suspended on spigots and set at opposite angles to allow air to pass in both directions. The aluminium box is heated at 25 watts 220 / 240v. to prevent icing and ensure a clear airway at very low temperatures.

STANDARD: for wall thickness 75 - 100mm. EXTENDED: to order for walls over 100 mm

The valve has been designed for ease of both mechanical and electrical installation and is aesthetically compatible to the cold store environment.



Independent tests  
carried out  
by ADAS  
at Reading University  
confirm the air flow ratios.



### Innovative Features

Large aperture for air flow - Valve heated to prevent icing. - Front cover moulded ABS with main body of aluminium and Stainless steel - no rust or paint can fall within the coldroom. Electrical connection to rear of valve outside the room. Valve body adhered to moulded front to allow condensation to drain away. Simple to install. 'O' ring seal to coldroom wall. Steel painted external cover over electrical connections. To be located at a height suitable for routine maintenance.

### Suggested formula for calculating the number of valves required for a store

$$\text{No. of valves} = 1.4 \times V / T \times (273 - t)$$

V = Volume in cubic metres. T = Time variation in mins for 1 deg of change  
t = deg C change from ambient to lowest operating room temperature

Example V = 1000cu. Mtrs T = 3 min for 1 deg C t = 37  
 $1.4 \times 1000 / 3 \times (273 - 37) = 1.9$  valves ie. 2 valves

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