



System:	Thermal Insulation
Brand:	<b>JUMBO Insulation</b>
Thickness:	135mm
Roll Size:	5m x 1200mm
m <sup>2</sup> per Roll:	6m <sup>2</sup>
Fire Properties:	Class B/B1/B2
Thermal Properties:	R-Value 2.70 (m <sup>2</sup> .k)/W
Density:	10.1kg/m <sup>3</sup>
Material Description:	Polyethylene Terephthalate
Recommended Areas:	Bloemfontein, Cape Town, Port Elizabeth, Johannesburg, Uppington, Kimberly
Specification:	Lay 135mm JUMBO Insulation on the ceiling ensuring that it fits tightly between the tie beams. JUMBO Insulation should be cut 50mm wider than the distance between the tie beams. Cut JUMBO Insulation out around down lights. Cut JUMBO Insulation out around trap doors. Stick the cut section to the back of the trap door using a good quality contact adhesive. Wrap JUMBO Insulation around cold and hot water pipes ensuring that there is 10mm overlap. Secure the JUMBO Insulation using cable ties at 300mm centres.

**Map of the Climatic Zones and Recommended Levels of Insulation in your area.**



Legend	Zone	Description	Major Centres	R-Value	Thickness
	1	Cold Interior	Johannesburg, Bloemfontein	3.38	135mm
	2	Temperate Interior	Pretoria, Polokwane	2.88	115mm
	3	Hot Interior	Louis Trichardt, Nelspruit	2.50	100mm
	4	Temperate Coastal	Cape Town, Port Elizabeth	3.38	135mm
	5	Sub-tropical Coastal	East London, Durban, Richards Bay	2.50	100mm
	6	Arid Interior	Uppington, Kimberly	3.38	135mm

**Recommended Levels of Insulation to Achieve Deemed-To-Satisfy Rule for Energy Efficiency in an Unventilated Roof and Ceiling Construction**

Climate Zones	1	2	3	4	5	6
Minimum required Total R-Value (m <sup>2</sup> .K/W) (for roof solar absorptance of more than 0.55)	3.7	3.2	2.7	3.7	2.7	3.5
Direction of heat flow	Up	Up	Down and Up	Up	Down	Up
Estimated Total R-Value (m <sup>2</sup> .K/W) of roof and ceiling materials (Roof covering & plasterboard only)	0.35 - 0.40			0.41 - 0.53		0.35 - 0.40
Estimated Minimum added R-Value of Insulation (m <sup>2</sup> .K/W)	2.30 - 3.35			2.15 - 2.29		3.10 - 3.15

Generic Insulation Product	Density kg/m <sup>3</sup>	Thermal conductivity W(m.k.)	Example: Roof construction description: metal/tile roof 22°- 45° pitch with horizontal ceiling. DTS - Recommended deemed-to-satisfy min thickness (mm) of bulk insulation product only: or RB: System option with addition of Radiant barrier over rafters - approx (mm) of bulk insulation required.													
			DTS product	RB system	DTS product	RB system	DTS product	RB system	DTS product	RB system	DTS product	RB system	DTS product	RB system		
Flexible Polyester Blanket	11.5	0.16	160	120	140	100	120	80	160	120	110	75	150	120		