



TECHNICAL BULLETIN NO. 13

PRODUCT: XFLAM® INSULATION

MARCH 2013

SITUATION: LOW TEMPERATURE INSULATION

APPLICATION: CHILLERS, FREEZERS, COLD STORAGE

ISSUE: R-VALUE AT DIFFERENT TEMPERATURES

BACKGROUND: The thermal resistance or R-Value of XFLAM is temperature dependant. To ensure appropriate panel thicknesses are specified the following table provides guidance on R-Value for various panel thicknesses and temperatures.

FLAT WALL PANEL WITH AIR FILMS (zones 1-6, wind speed <7m/s)

XFLAM PANEL R-VALUE (m²K/W)

NCC Specification J

MEAN TEMP	PANEL THICKNESS								
	50	75	100	125	150	175	200	250	300
15°C	1.71	2.49	3.27	4.06	4.84	5.62	6.4	7.96	9.52
0°C	1.82	2.65	3.48	4.31	5.15	5.98	6.81	8.48	10.14
-20°C	1.98	2.89	3.8	4.72	5.63	6.54	7.46	9.28	11.11

METRIC ROOF PANEL WITH AIR FILMS (zones 1-6, wind speed <7m/s)

XFLAM PANEL R-VALUE (m²K/W)

NCC Specification J

MEAN TEMP	PANEL THICKNESS								
	50	75	100	125	150	175	200	250	
15°C	1.85	2.63	3.41	4.19	4.97	5.75	6.54	8.1	
0°C	1.96	2.79	3.62	4.46	5.29	6.12	6.96	8.62	
-20°C	2.13	3.04	3.96	4.87	5.78	6.7	7.61	9.44	

Approval

Technical Manager
XFLAM Pty Ltd