

Armaflex Condensation Control Chart

(1) Air Distribution Systems

Recommended thickness (mm) of Armaflex MC for air distribution systems

Ambient Temperature	28°C				30°C								35°C							
Relative Humidity	65%	70%	75%	80%	75%	78%	80%	83%	85%	88%	90%	75%	78%	80%	83%	85%	88%	90%		
Air duct (+14°C)	6	6	9	13	9	13	13	16	19	25	32	13	16	19	25	25	38	44		
Raised floor system (+17~20°C)	6	6	6	9	9	9	13	13	19	19	25	13	13	19	19	25	25	38		

(2) Typical Cold Water, Chilled Water and Refrigeration Systems

Recommended thickness (mm) of Armaflex MC for typical cold water, chilled water and refrigeration systems

Ambient Temperature	28°C				30°C				35°C			
Relative Humidity	65%	70%	75%	80%	75%	80%	85%	90%	75%	80%	85%	90%
cold water +18°C (e.g. condensate)												
Pipe up to 35 mm O.D.	6	6	6	9	9	9	13	19	13	13	19	25
Pipe 42 - 60 mm O.D.	9	9	9	9	9	9	13	19	13	13	19	25
Pipe 67 - 140 mm O.D.	9	9	9	9	9	13	19	25	13	19	25	32
Pipe above 140 mm O.D.	9	9	9	9	9	13	19	25	13	19	25	32
chilled water +5 ~+7°C												
Pipe up to 35 mm O.D.	9	13	13	19	19	19	25	32	19	19	25	38
Pipe 42 - 60 mm O.D.	9	13	19	19	19	19	25	38	19	25	32	44
Pipe 67 - 140 mm O.D.	13	13	19	19	19	25	32	44	25	25	32	50
Pipe above 140 mm O.D.	13	13	19	25	19	25	32	50	25	32	38	57
refrigeration to 0 °C												
Pipe up to 35 mm O.D.	13	13	19	19	19	25	32	38	19	25	32	44
Pipe 42 - 60 mm O.D.	13	13	19	25	19	25	32	44	25	32	38	50
Pipe 67 - 140 mm O.D.	13	19	19	25	25	32	38	57	25	32	38	57
Pipe above 140 mm O.D.	13	19	25	32	25	32	38	57	25	32	44	70
refrigeration to -10 °C (e.g. ice thermal storage)												
Pipe up to 35 mm O.D.	19	19	19	25	25	32	38	50	25	32	38	57
Pipe 42 - 60 mm O.D.	19	19	25	32	25	32	38	57	32	32	50	64
Pipe 67 - 140 mm O.D.	19	25	32	32	32	38	50	64	32	38	50	76
Pipe above 140 mm O.D.	19	25	32	38	32	38	50	76	32	44	57	88

Note: The above recommendations are based on calculations using ISO EN12241:1998. Information is based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended by the recipient.

Calculations are based on an external surface coefficient of 9 W/(m²·K) and still air conditions. Thickness should be recalculated in circumstances where the Armaflex will be covered with a reflective finish (eg. metal cladding).