

# iH<sup>2</sup>O INSULATED PIPE



## HEATING WATER iH2O PRE-INSULATED PIPING (R>1.5)

SERVICE PIPE/CASING: COPPER/SPIRAL ALUMINUM

FUNCTIONAL OPERATING TEMP: -30°C TO +85°C (PUR) ; -20 °C TO +120 °C (PIR)

All R-values are calculated based on PUR factors

**Service Pipe Material:**

Type B Copper (k = 325 W/m<sup>0</sup>K)

**Insulation Material:**

DPE1783R PUR (k = 0.024 W/m<sup>0</sup>K)

**Casing Material:**

Aluminum (k = 205 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Aluminum--Spiral Wound) --- Outer Diameter (mm)																										Dry & Wet mass of iH2O insulated pipe* (standard stock items)	
					102		127		152		178		203		229		254		305		330		400		450		508					
		PUR_Thk (mm)	R-Val (m²K/W)		PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	PUR_Thk (mm)	R-Val (m²K/W)	Dry Mass of insulated pipe (kg/m)	Wet Mass of insulated pipe (kg/m)		
12.7	1/2"	52.9	0.91	10.9	44.7	4.39	57.2	6.04																				1.3	1.4			
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																				1.5	1.7			
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																				1.7	2.1			
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																				2.0	2.7			
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																		2.2	3.2			
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																		3.0	4.8			
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																3.3	6.3			
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																5.0	9.2			
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90														6.4	14.0			
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79												7.9	19.9			
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68										11.0	28.3			
203.2	8"	7.2	2.03	199.1													25.4	1.17	50.9	2.56								15.3	46.4			
228.6	9"	8.1	2.64	223.3															38.2	1.82	50.7	2.50						20.1	59.3			
254	10"	7.3	2.64	248.7																38.0	1.78	73.0	3.75					22.3	70.8			
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62			30.3	100.5			
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	35.2	130.9			
406	16"	TBC	3.0	400.0																						51.0	2.35	40.5	166.1			

RED BLOCKS DENOTE STANDARD STOCK ITEMS

\*Dry mass of insulated pipe = Service pipe mass + PUR insulation mass + Casing mass,

Wet mass of insulated pipe = Dry mass of insulated pipe + Service fluid (water) mass