



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

SERVICE PIPE/CASING: COPPER/SPIRAL GALV STEEL

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:

Z275 Galv Steel (k = 50 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Z275 Galvanized steel--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																				2.1	2.2	
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																				2.3	2.5	
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																				2.4	2.9	
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																				2.8	3.5	
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																		3.0	4.0	
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																		3.9	5.8	
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																4.6	7.6	
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																6.1	10.3	
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90														7.8	15.4	
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79												9.4	21.5	
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68										12.8	30.0	
203.2	8"	7.2	2.03	199.1													25.4	1.17	50.9	2.56								17.6	48.7	
228.6	9"	8.1	2.64	223.3															38.2	1.82	50.7	2.50						22.4	61.6	
254	10"	7.3	2.64	248.7																38.0	1.78	73.0	3.75				24.7	73.3		
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62		33.3	103.6		
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	38.6	134.2	
406	16"	TBC	3.0	400.0																						51.0	2.35	44.3	170.0	

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

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



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

SERVICE PIPE/CASING: COPPER/SPIRAL OFF WHITE

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:**

Painted Steel (k = 50 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Off White--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	1½"	52.9	0.91	10.9	44.7	4.39	57.2	6.04																					2.1	2.2
19.1	¾"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																					2.3	2.5
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																					2.4	2.9
31.8	1 ¼"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																					2.8	3.5
38.1	1 ½"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																			3.0	4.0
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																			3.9	5.8
63.5	2 ½"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																	4.6	7.6
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																	6.1	10.3
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90															7.8	15.4
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79													9.4	21.5
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68											12.8	30.0
203.2	8"	7.2	2.03	199.1													25.4	1.17	50.9	2.56									17.6	48.7
228.6	9"	8.1	2.64	223.3															38.2	1.82	50.7	2.50							22.4	61.6
254	10"	7.3	2.64	248.7																	38.0	1.78	73.0	3.75					24.7	73.3
305	12"	TBC	3.0	299.0																			47.5	2.24	72.5	3.62			33.3	103.6
355	14"	TBC	3.0	349.0																					47.5	2.20	76.5	3.76	38.6	134.2
406	16"	TBC	3.0	400.0																							51.0	2.35	44.3	170.0

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





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

SERVICE PIPE/CASING: COPPER/SPIRAL CAUFIELD GREEN

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:

Painted Steel (k = 50 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Caufield Green--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																				2.1	2.2	
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																				2.3	2.5	
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																				2.4	2.9	
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																				2.8	3.5	
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																		3.0	4.0	
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																		3.9	5.8	
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																4.6	7.6	
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																6.1	10.3	
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90														7.8	15.4	
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79												9.4	21.5	
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68										12.8	30.0	
203.2	8"	7.2	2.03	199.1											25.4	1.17	50.9	2.56										17.6	48.7	
228.6	9"	8.1	2.64	223.3													38.2	1.82	50.7	2.50							22.4	61.6		
254	10"	7.3	2.64	248.7															38.0	1.78	73.0	3.75					24.7	73.3		
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62		33.3	103.6		
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	38.6	134.2	
406	16"	TBC	3.0	400.0																						51.0	2.35	44.3	170.0	

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



The Insulation Contractors Association of Australia

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



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

SERVICE PIPE/CASING: COPPER/SPIRAL HERITAGE RED

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:**

Painted Steel (k = 50 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Heritage Red--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 (m <sup>2</sup> K/W)		PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/W)	PUR_Thk (mm)	R-Val (m <sup>2</sup> K/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																			2.1	2.2		
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																			2.3	2.5		
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																			2.4	2.9		
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																			2.8	3.5		
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																	3.0	4.0		
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																	3.9	5.8		
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79															4.6	7.6		
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12															6.1	10.3		
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90													7.8	15.4		
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79											9.4	21.5		
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68									12.8	30.0		
203.2	8"	7.2	2.03	199.1											25.4	1.17	50.9	2.56									17.6	48.7		
228.6	9"	8.1	2.64	223.3													38.2	1.82	50.7	2.50							22.4	61.6		
254	10"	7.3	2.64	248.7															38.0	1.78	73.0	3.75					24.7	73.3		
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62		33.3	103.6		
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	38.6	134.2	
406	16"	TBC	3.0	400.0																						51.0	2.35	44.3	170.0	

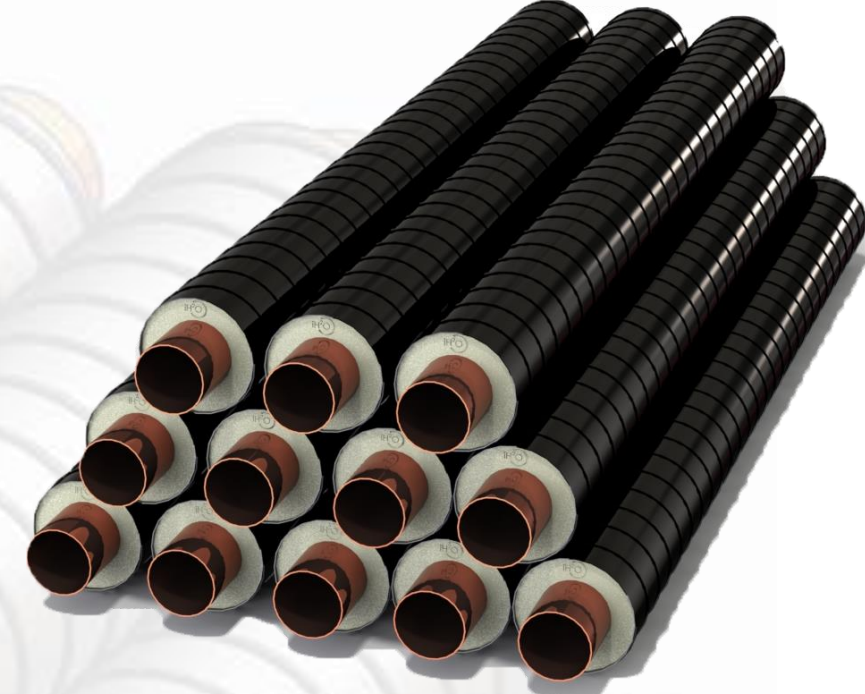
RED BLOCKS DENOTE STANDARD STOCK ITEMS

\*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



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



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

SERVICE PIPE/CASING: COPPER/SPIRAL EBONY

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:

Painted Steel (k = 50 W/m<sup>0</sup>K)

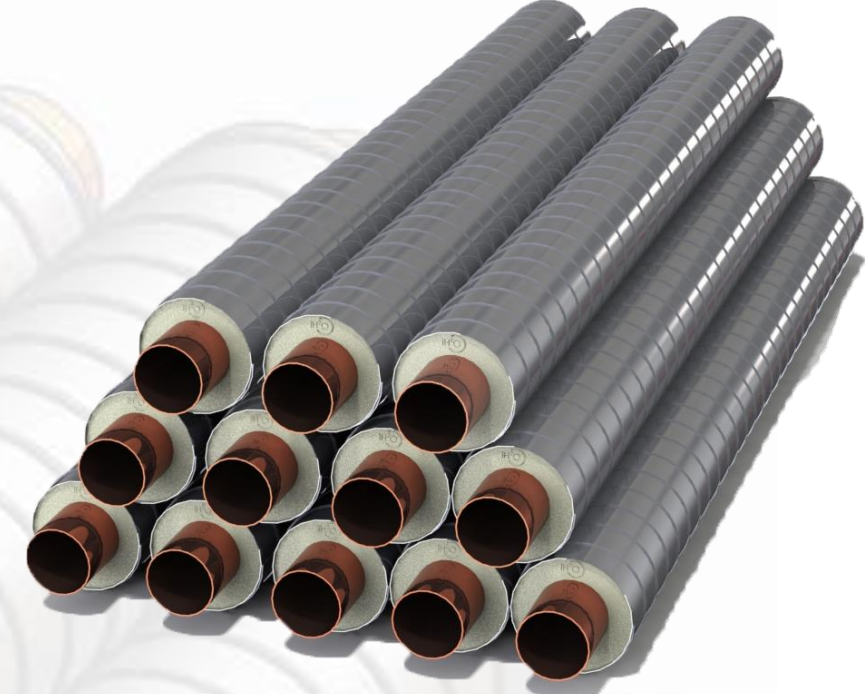
Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (Ebony--Spiral Wound) --- Outer Diameter (mm)																								Dry & Wet mass of iH2O insulated pipe* (standard stock items)	
					102		127		152		178		203		229		254		305		330		400		450		508			
		PUR_Thk (mm)	R-Val (m²K/W)		PUR_Thk (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																				2.1	2.2	
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																				2.3	2.5	
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																				2.4	2.9	
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																				2.8	3.5	
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																		3.0	4.0	
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																		3.9	5.8	
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																4.6	7.6	
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																6.1	10.3	
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90														7.8	15.4	
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79												9.4	21.5	
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68										12.8	30.0	
203.2	8"	7.2	2.03	199.1													25.4	1.17	50.9	2.56								17.6	48.7	
228.6	9"	8.1	2.64	223.3															38.2	1.82	50.7	2.50						22.4	61.6	
254	10"	7.3	2.64	248.7																38.0	1.78	73.0	3.75				24.7	73.3		
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62		33.3	103.6		
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	38.6	134.2	
406	16"	TBC	3.0	400.0																						51.0	2.35	44.3	170.0	

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

# 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





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

SERVICE PIPE/CASING: COPPER/SPIRAL STAINLESS STEEL

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:

316L Stainless Steel (k = 13 W/m<sup>0</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (316L Stainless Steel--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																				2.0	2.1			
19.1	3/4"	39.7	1.02	17.1	41.5	3.53	54.0	4.97																				2.2	2.4			
25.4	1"	35	1.02	23.4	38.3	2.93	50.8	4.22																				2.4	2.8			
31.8	1 1/4"	27.8	1.22	29.4	35.1	2.46	47.6	3.63																				2.7	3.4			
38.1	1 1/2"	23	1.22	35.7	32.0	2.08	44.5	3.16	57.0	4.35																		2.9	3.9			
50.8	2"	17.1	1.22	48.4	25.6	1.47	38.1	2.40	50.6	3.44																		3.8	5.6			
63.5	2 1/2"	13.7	1.22	61.1			31.8	1.82	44.3	2.74	57.3	3.79																4.2	7.1			
76.2	3"	15.2	1.63	72.9			25.4	1.34	37.9	2.17	50.9	3.12																6.0	10.2			
101.6	4"	12	1.63	98.3					25.2	1.27	38.2	2.06	50.7	2.90														7.6	15.2			
127	5"	9.6	1.63	123.7							25.5	1.24	38.0	1.97	51.0	2.79												9.2	21.3			
152.4	6"	10	2.03	148.3									25.3	1.20	38.3	1.93	50.8	2.68										12.6	29.8			
203.2	8"	7.2	2.03	199.1													25.4	1.17	50.9	2.56								17.3	48.4			
228.6	9"	8.1	2.64	223.3															38.2	1.82	50.7	2.50						22.1	61.3			
254	10"	7.3	2.64	248.7																38.0	1.78	73.0	3.75				24.4	73.0				
305	12"	TBC	3.0	299.0																		47.5	2.24	72.5	3.62		33.0	103.2				
355	14"	TBC	3.0	349.0																				47.5	2.20	76.5	3.76	38.2	133.8			
406	16"	TBC	3.0	400.0																						51.0	2.35	43.8	169.5			

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

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



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

SERVICE PIPE/CASING: COPPER/HDPE BLACK

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>o</sup>K)

Insulation Material:

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

Casing Material:

PE100 S1 HDPE (k = 0.43 W/m<sup>o</sup>K)

Pipe Diameter Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (PE100 S1 HDPE Black) --- OD/ID (mm)																												Dry & Wet mass of iH2O insulated pipe* (standard stock items)	
					110	103	160	150	200	188	225	211	250	235	280	263	315	296	355	338	400	380	450	430	500	476	560	533						
		Pressure (Bar)	Thickness (mm)		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	45.3	4.48	68.8	7.69																					1.8	1.9				
19.1	3/4"	39.7	1.02	17.1	42.1	3.61	65.6	6.42																					2.0	2.2				
25.4	1"	35	1.02	23.4	39.0	3.00	62.5	5.53																					2.2	2.6				
31.8	1 1/4"	27.8	1.22	29.4	35.8	2.52	59.3	4.83																					2.5	3.2				
38.1	1 1/2"	23	1.22	35.7	32.6	2.14	56.1	4.27																					2.7	3.7				
50.8	2"	17.1	1.22	48.4	26.3	1.52	49.8	3.38	68.5	5.09																			4.7	6.6				
63.5	2 1/2"	13.7	1.22	61.1			43.4	2.69	62.2	4.23																			5.1	8.0				
76.2	3"	15.2	1.63	72.9			37.1	2.12	55.8	3.52																			6.3	10.5				
101.6	4"	12	1.63	98.3			24.4	1.23	43.1	2.40	54.9	3.22																	9.0	16.6				
127	5"	9.6	1.63	123.7					30.4	1.53	42.2	2.24	53.9	3.00															10.0	22.0				
152.4	6"	10	2.03	148.3							29.5	1.44	41.2	2.12	55.3	2.99													15.3	32.6				
203.2	8"	7.2	2.03	199.1											29.9	1.42	46.4	2.32	67.2	3.56									21.9	53.1				
228.6	9"	8.1	2.64	223.3													33.7	1.60	54.5	2.74									26.8	65.9				
254	10"	7.3	2.64	248.7															41.8	2.01	63.2	3.20							29.4	78.0				
305	12"	TBC	3.0	299.0																	37.7	1.76	62.7	3.09					38.7	108.9				
355	14"	TBC	3.0	349.0																			37.7	1.74	60.3	2.90			44.7	140.3				
406	16"	TBC	3.0	400.0																					34.8	1.58	63.3	3.02	54.0	179.6				

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





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

SERVICE PIPE/CASING: COPPER/HDPE WHITE

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>o</sup>K)

### Insulation Material:

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

### Casing Material:

PE100 S1 HDPE (k = 0.43 W/m<sup>o</sup>K)

Pipe Diameter (mm)	Equivalent Imperial (in)	Class		NB (mm)	Casing (PE100 S1 HDPE White) --- OD/ID (mm)																												Dry & Wet mass of iH2O insulated pipe* (standard stock items)	
					110	103	160	150	200	188	225	211	250	235	280	263	315	296	355	338	400	380	450	430	500	476	560	533						
		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	45.3	4.48	68.8	7.69																				1.8	1.9					
19.1	3/4"	39.7	1.02	17.1	42.1	3.61	65.6	6.42																				2.0	2.2					
25.4	1"	35	1.02	23.4	39.0	3.00	62.5	5.53																				2.2	2.6					
31.8	1 1/4"	27.8	1.22	29.4	35.8	2.52	59.3	4.83																				2.5	3.2					
38.1	1 1/2"	23	1.22	35.7	32.6	2.14	56.1	4.27																				2.7	3.7					
50.8	2"	17.1	1.22	48.4	26.3	1.52	49.8	3.38	68.5	5.09																		4.7	6.6					
63.5	2 1/2"	13.7	1.22	61.1			43.4	2.69	62.2	4.23																		5.1	8.0					
76.2	3"	15.2	1.63	72.9			37.1	2.12	55.8	3.52																		6.3	10.5					
101.6	4"	12	1.63	98.3			24.4	1.23	43.1	2.40	54.9	3.22																9.0	16.6					
127	5"	9.6	1.63	123.7					30.4	1.53	42.2	2.24	53.9	3.00														10.0	22.0					
152.4	6"	10	2.03	148.3							29.5	1.44	41.2	2.12	55.3	2.99												15.3	32.6					
203.2	8"	7.2	2.03	199.1											29.9	1.42	46.4	2.32	67.2	3.56								21.9	53.1					
228.6	9"	8.1	2.64	223.3													33.7	1.60	54.5	2.74								26.8	65.9					
254	10"	7.3	2.64	248.7															41.8	2.01	63.2	3.20						29.4	78.0					
305	12"	TBC	3.0	299.0																	37.7	1.76	62.7	3.09				38.7	108.9					
355	14"	TBC	3.0	349.0																				37.7	1.74	60.3	2.90		44.7	140.3				
406	16"	TBC	3.0	400.0																					34.8	1.58	63.3	3.02	54.0	179.6				

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