

**Microflex UNO Single Carrier Pipe**

Average fluid temperature 170°F  $\Delta T=120^\circ\text{F}$  (76°C,  $\Delta T=66^\circ\text{C}$ )  
 Soil temperature 50°F (10°C) D= Insulation Thickness

UNO	BTUH/ft	d(in)	k=L/d	R-Value
M751"	17.80	0.68	0.41	2.44
M12540	15.80	1.30	0.21	4.76
M12550	19.20	1.10	0.25	4.00
M12563	25.40	0.84	0.33	3.00
M16040	12.40	1.93	0.14	7.14
M16050	15.10	1.73	0.16	6.25
M16063	19.20	1.47	0.19	5.26
M16075	23.30	1.24	0.22	4.55
M20075	18.50	1.90	0.15	6.67
M20090	22.65	1.61	0.17	5.88
M200110	30.20	1.22	0.23	4.35

W/m	d(mm)	k=L/d	U-Value
17.16	17.5	2.280	0.44
15.20	33.0	1.210	0.83
18.48	28.0	1.430	0.70
24.42	21.5	1.860	0.54
11.88	49.0	0.810	1.23
14.52	44.0	0.910	1.10
18.48	37.5	1.070	0.93
22.44	31.5	1.270	0.79
17.82	48.5	0.825	1.21
21.78	41.0	0.970	1.03
29.04	31.0	1.290	0.77

Table 11: Microflex UNO Thermal Resistivity Values

Metric System

**Microflex DUO Dual Carrier Pipe**

Average fluid temperature 170°F  $\Delta T=120^\circ\text{F}$  (76°C,  $\Delta T=66^\circ\text{C}$ )  
 Soil temperature 50°F D= Insulation Thickness

DUO	BTUH/ft	d(in)	k=L/d	R-Value
MD1251"	24.80	1.06	0.26	3.80
MD12532	24.80	1.06	0.26	3.80
MD16040	20.60	1.42	0.20	5.08
MD16050	28.00	1.14	0.25	4.06
MD20063	28.80	1.30	0.22	4.65

W/m	d(mm)	k=L/d	U-Value
21.0	27.0	1.50	0.67
23.8	27.0	1.50	0.67
19.8	36.0	1.10	1.02
27.0	29.0	1.38	0.72
27.7	33.0	1.21	0.83

Table 12: Microflex DUO Thermal Resistivity Values

Metric System

Thermal conductivity of ground	8.307 BTU.in/ft <sup>2</sup> .h.°F	1.2W/m <sup>°K</sup>
Thermal conductivity of PEX foam	0.277 BTU.in/ft <sup>2</sup> .h.°F	0.04W/m <sup>°K</sup>
Thermal conductivity of PEX Pipe	2.631 BTU.in/ft <sup>2</sup> .h.°F	0.38W/m <sup>°K</sup>
Heatloss	BTU/h*ft	1W/mK=6.923 BTU*in/h*ft <sup>2</sup> *F