PIPE SIZE (mm)		TEMPERATURE OF WATER (°C)		
		TABLE 1 +0 °C	TABLE 2 +5 °C	TABLE 3 10 °C
		THICKNESS OF INSULATION (mm)		
NB	OD	MINERAL WOOL	MINERAL WOOL	MINERAL WOOL
15	21	30	25	20
20	27	40	30	25
25	34	40	30	25
32	42	50	30	25
40	48	50	30	30
50	60	50	40	30
65	76	50	40	30
80	89	50	40	30
100	114	50	40	30
125	140	60	50	40
150	168	60	50	40
200	219	60	50	40
250	273	65	50	40
300	324	65	60	40
Vessels and flat surfaces		80	65	50

Tables A, B, & C thickness are for condensation control as B.S.5422:2009 which exceeds thickness for Part L heat gains.

2) Environmental thickness of insulation for non-domestic hot water services. (BS 5422:2009 - Table 1)

TABLE 4

STEEL PIPE SIZE (mm)		WATER TEMPERATURE OF 60°C
		THICKNESS OF INSULATION (mm)
NB	OD	MINERAL WOOL
15	21	30
20	27	30
25	34	35
32	42	35
40	48	35
50	60	40
65	76	40
80	89	40
100	114	50
125	140	50
150	168	50
200	219	50
250	273	50
300	324	50
Vessels and flat		50

3) Environmental thickness of insulation for non-domestic heating installations to control heat loss. (BS 5422:2009- Table 15)

STEEL PIPE SIZE	HOT FACE TEMPERATURE OF INSTALLATION (°C)

(mm)		TABLE 5 +75 ºC	TABLE 6 +100 ºC	TABLE 7 +150 ºC
		THICKNESS OF INSULATION (mm)		
NB	OD	MINERAL WOOL	MINERAL WOOL	MINERAL WOOL
15	21	30	40	60
20	27	35	40	60
25	34	35	40	70
32	42	35	50	70
40	48	40	50	70
50	60	40	50	70
65	76	40	50	80
80	89	40	60	80
100	114	50	60	80
125	140	50	60	80
150	168	50	60	90
200	219	50	60	90
250	273	50	60	90
300	324	50	60	90
Vessels and flat		50	70	90

4) Minimum thickness of insulation required to give protection against freezing under specified commercial and institutional conditions. (Reference BS 5422:2009 - Table 23)

Initial water temperature; 2°C
Permitted ice formation; 50%
Evaluation period; 12 hours

PIPE SIZE (mm)		INDOOR UNHEATED AREAS (-6ºC)	OUTDOOR (-10ºC)
NB	OD		
15	21	25	50
20	27	20	25
25	34	15	20
32	42	15	20
40	48	15	20
50	60	15	20
65	76	15	20
80	89	15	20
100	114	15	20
125	140	15	20
150	168	15	20