

# Tolerances

## Large Bore Tubing

### Overview

These tolerances are a general guide and are 'unless otherwise specified'. Invariably any item that has a doubt attaining house tolerance will be specified at time of quoting or clarified during 'contract review'.

Large bore tubes with wall thickness greater than 4mm revert to ISO 3302-1: 2014 Tolerances included in Table 2

Table 1 – Working Tolerances on Large Bore Tubing

Tube ID	Tolerance on ID	Tolerance on Wall thickness				
		1mm wall	2mm wall	3mm wall	4mm wall	> 4mm wall
30mm	± 0.80	± 0.15	± 0.20	± 0.25	± 0.35	E1
35mm	± 0.80	± 0.30	± 0.25	± 0.25	± 0.35	E1
40mm	± 0.80	± 0.35	± 0.25	± 0.25	± 0.35	E1
45mm	± 1.00	± 0.35	± 0.25	± 0.25	± 0.35	E1
50mm	± 1.00	± 0.40	± 0.25	± 0.30	± 0.40	E2
55mm	± 1.00	± 0.40	± 0.25	± 0.30	± 0.40	E2
60mm	± 1.00	± 0.40	± 0.30	± 0.35	± 0.40	E2
65mm	± 1.30	N/A	± 0.30	± 0.35	± 0.40	E2
70mm	± 1.60	N/A	± 0.35	± 0.40	± 0.50	E2
75mm	± 2.00	N/A	± 0.35	± 0.40	± 0.50	E2
80mm	± 2.00	N/A	± 0.35	± 0.40	± 0.50	E2
85mm	± 2.50	N/A	± 0.35	± 0.40	± 0.50	E2
90mm	± 3.00	N/A	± 0.40	± 0.45	± 0.70	E2
95mm	± 3.00	N/A	± 0.40	± 0.45	± 0.70	E2
100mm	± 3.00	N/A	± 0.40	± 0.45	± 0.70	E2

All values in millimetres

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Table 2 – ISO 3302-1: 2014 tolerances for wall thickness greater than 4mm

Above	Nominal Dimension		Class E1	Class E2	Class E3
		Up to and including	±	±	±
<b>0.0</b>		1.5	0.15	0.25	0.40
<b>1.5</b>		2.5	0.20	0.35	0.50
<b>2.5</b>		4.0	0.25	0.40	0.70
<b>4.0</b>		6.3	0.35	0.50	0.80
<b>6.3</b>		10.0	0.40	0.70	1.00
<b>10.0</b>		16.0	0.50	0.80	1.30
<b>16.0</b>		25.0	0.70	1.00	1.60
<b>25.0</b>		40.0	0.80	1.30	2.00
<b>40.0</b>		63.0	1.00	1.60	2.50
<b>63.0</b>		100.0	1.30	2.00	3.2
<b>100.0</b>		-	1.3%	2%	3.2%

All values in millimetres