



**CAST PIPE • FITTINGS • COUPLINGS**



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# Index

HUBLESS SOIL PIPE		Page
COUPLINGS	Reducing and Transition	4
	For Hubless - Regular	5-6
TOOLS	Nut Driver & Torque Wrench	7
PIPE	Hubless	35
FITTINGS		
Reducer	Increasesers/Reducers	8
	Increasesers/Reducers Tapped	8
Bends	Bends 1/4 - 90°	9
	Bends 1/8 - 45°	10
	Bends 1/6 - 60°	11
	Bends 1/16 - 22 1/2°	11
"TY"	"TY"	15,16,25
	"TY" Double (Cross)	18
	"TY" Tapped	21,24,25
	"TY" Ontario 45° MJ 1-1/2"	26
	"TY" Special 45° MJ 2" (Toronto)	27,28
	"TY" Reversible 45° Tapped	29
	"TY" with 90° Tapped	29
	"TY" Sanitary w/2" side open	30
	"TY" Apartment	23
	"Y"	"Y"
"Y" Double		18
"Y" + 1/8 Horizontal (Boston)		17,19
"Y" + 1/8 Vertical (Upright)		20
"Y" Tapped		22
Traps "P"	Running Traps w./ Single Vent	12
	Traps "P" Deap Seal	12
	Traps "P" Shallow	12
	Trap Seal Primer Connection	31
B.W.V.	Back Water Valves & Parts	34
Plugs & Cleanouts	Anthes (Malcolm)	33
	Barrett	33
	Iron Body w./ Brass Top	33-34
	Cleanouts Parts	33-34
	Plugs	34
Flanges	Floor Flange	31,32
	Urinal Fittings	31



# Reducing and Transition Couplings

Cast Iron to Cast Iron (Series 2000)

CODE	SIZE / IN.	SIZE / MM
t20110	1½ · 1½	38 · 38
t20150	2 · 1½	50 · 38
t20020	2 · 2	50 · 50
t24320	3 · 2	75 · 50
t20030	3 · 3	75 · 75
t24430	4 · 3	100 · 75
t20040	4 · 4	100 · 100
t20060	6 · 6	150 · 150
t20080	8 · 8	200 · 200
t20100	10 · 10	250 · 250
t20120	12 · 12	300 · 300
t20130	15 · 15	375 · 375

Cast Iron to Copper DWV

CODE	SIZE / IN.	SIZE / MM
t24130	1½ · 1¼	38 · 32
t24100	1½ · 1½	38 · 38
t24150	2 · 1¼	50 · 32
t24050	2 · 1½	50 · 38
t24020	2 · 2	50 · 50
t24120	3 · 1½	75 · 38
t24140	3 · 2	75 · 50
t24030	3 · 3	75 · 75

Cast Iron to Plastic DWV

CODE	SIZE / IN.	SIZE / MM
t20110	1½ · 1½	38 · 38
t20150	2 · 1½	50 · 38
t20020	2 · 2	50 · 50
t24320	3 · 2	75 · 50
t20030	3 · 3	75 · 75
t24430	4 · 3	100 · 75
t20040	4 · 4	100 · 100

Plastic DWV to Copper DWV

CODE	SIZE / IN.	SIZE / MM
t24130	1½ · 1¼	38 · 32
t24100	1½ · 1½	38 · 38
t24150	2 · 1¼	50 · 32
t24050	2 · 1½	50 · 38
t24020	2 · 2	50 · 50
t24120	3 · 1½	75 · 38
t24140	3 · 2	75 · 50
t24030	3 · 3	75 · 75

Plastic DWV to Plastic DWV

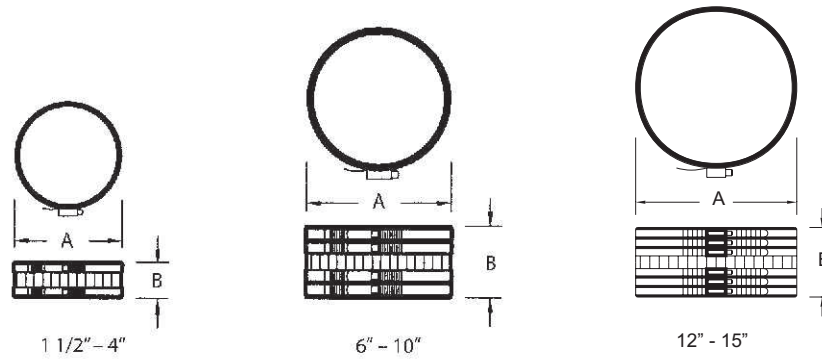
CODE	SIZE / IN.	SIZE / MM
t20110	1½ · 1½	38 · 38
t20150	2 · 1½	50 · 38
t20020	2 · 2	50 · 50
t24320	3 · 2	75 · 50
t20030	3 · 3	75 · 75
t24430	4 · 3	100 · 75
t20040	4 · 4	100 · 100



# Couplings for Hubless

## COUPLINGS – SERIES 2000 – CAST IRON TO CAST IRON

Code	Size	Qty / Box	A	B	Weight / Box
t20110	in. 1½ · 1½ mm 38 · 38	100	2 ⅛ 54	2 ⅜ 56	20.0 lb. 9.1 kg
t20020	in. 2 · 2 mm 50 · 50	100	2 ¾ 70	2 ⅜ 56	20.0 lb. 9.1 kg
t20030	in. 3 · 3 mm 75 · 75	100	3 ¾ 95	2 ⅜ 56	40.0 lb. 18.2 kg
t20040	in. 4 · 4 mm 100 · 100	100	4 ⅝ 117	2 ⅜ 6	50.0 lb. 22.7 kg
t20060	in. 6 · 6 mm 150 · 150	25	6 ⅞ 167	3 ⅜ 78	25.0 lb. 11.4 kg
t20080	in. 8 · 8 mm 200 · 200	10	8 ⅝ 219	4 ⅜ 103	18.0 lb. 8.2 kg
t20100	in. 10 · 10 mm 250 · 250	10	10 ¾ 273	4 ⅜ 103	21.0 lb. 9.5 kg
t20120	in. 12 · 12 mm 300 · 300	2	12 ¾ 324	5 ½ 140	7.0 lb. 3.2 kg
t20130	in. 15 · 15 mm 375 · 375	2	15 ¾ 400	5 ½ 140	9.0 lb. 4.1 kg

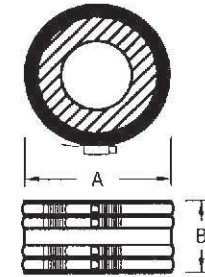
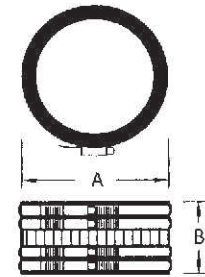




# Couplings for Hubless

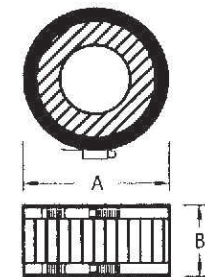
## COUPLINGS & REDUCING COUPLINGS – SERIES 2000 – CAST IRON TO COPPER DWV

Code	Size	Qty / Box	A	B	Weight / Box
t24100	in. 1½ · 1½ mm 38 · 38	24	2⅛ 54	2⅛ 54	6.0 lb. 2.7 kg
t24050	in. 2 · 1½ mm 50 · 38	24	2½ 64	2⅜ 56	9.0 lb. 4.1 kg
t24020	in. 2 · 2 mm 50 · 50	24	2½ 64	2⅜ 56	7.0 lb. 3.2 kg
t24120	in. 3 · 1½ mm 75 · 38	24	3½ 89	2⅜ 56	17.0 lb. 7.7 kg
t24130	in. 1½ · 1¼ mm 38 · 32	150	2⅛ 54	2⅛ 54	30.0 lb. 13.6 kg
t24140	in. 3 · 2 mm 75 · 50	24	3½ 89	2⅜ 56	17.0 lb. 7.7 kg
t24150	in. 2 · 1¼ mm 50 · 32	100	2½ 64	2⅜ 56	20.0 lb. 9.1 kg
t24030	in. 3 · 3 mm 75 · 75	24	3½ 89	2⅜ 56	12.0 lb. 5.4 kg



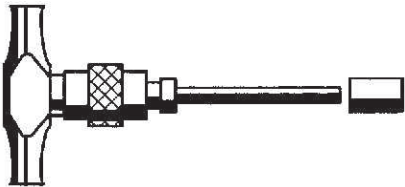
## REDUCING COUPLINGS – SERIES 2000 – CAST IRON TO CAST IRON

Code	Size	Qty / Box	A	B	Weight / Box
t20150	in. 2 · 1½ mm 50 · 38	100	2¾ 70	2⅜ 56	30.0 lb. 13.6 kg
t24320	in. 3 · 2 mm 75 · 50	100	3½ 89	2⅛ 54	60.0 lb. 27.2 kg
t24420	in. 3 · 3 mm 75 · 75	36	4⅞ 116	2⅛ 54	30.0 lb. 13.6 kg
t24430	in. 4 · 3 mm 100 · 75	60	4⅞ 116	2⅛ 54	48.0 lb. 21.8 kg

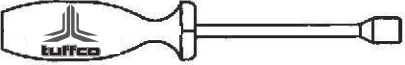


# Tools

## Torque Wrench

	Code	Inches	Pressure
	t60000	Reversible "T" torque	$\frac{5}{16}$ 60.0 lb./in.
	t60010	Socket	$\frac{5}{16}$

## Nut Driver

	Code	Inches
	t60020	Nut driver $\frac{5}{16}$



# Hubless Fittings (M.J.)

## INCREASERS / REDUCERS

Code	Size	A	Weight	Code	Size	A	Weight
t60310	in. 3 · 1½ mm 75 · 38	3⅝ 92	1.6 lb. 0.7 kg	t60860	in. 8 · 6 mm 200 · 150	4⅞ 124	8.9 lb. 4.0 kg
t60320	in. 3 · 2 mm 75 · 50	2¾ 70	1.2 lb. 0.5 kg	t61040	in. 10 · 4 mm 250 · 100	8⅞ 206	22.0 lb. 10.0 kg
t60420	in. 4 · 2 mm 100 · 50	3 76	1.8 lb. 0.8 kg	t61060	in. 10 · 6 mm 250 · 150	7⅞ 179	17.0 lb. 7.7 kg
t60430	in. 4 · 3 mm 100 · 75	2⅞ 73	1.2 lb. 0.5 kg	t61080	in. 10 · 8 mm 250 · 200	6 152	14.5 lb. 6.6 kg
t60620	in. 6 · 2 mm 150 · 50	4 102	4.6 lb. 2.1 kg	t61090	in. 12 · 4 mm 300 · 100	6½ 165	30.0 lb. 13.6 kg
t60630	in. 6 · 3 mm 150 · 75	4⅝ 118	3.0 lb. 1.4 kg	t61100	in. 12 · 6 mm 300 · 150	6½ 165	22.5 lb. 10.2 kg
t60640	in. 6 · 4 mm 150 · 100	3⅞ 98	4.2 lb. 1.9 kg	t61110	in. 12 · 8 mm 300 · 200	7⅞ 181	24.7 lb. 11.2 kg
t60830	in. 8 · 3 mm 200 · 75	4⅝ 118	8.8 lb. 4.0 kg	t61120	in. 12 · 10 mm 300 · 250	7 ⅞ 192	29.5 lb. 13.4 kg
t60840	in. 8 · 4 mm 200 · 100	5⅞ 132	8.2 lb. 3.7 kg	t61130	in. 15 · 4 mm 375 · 100	7 178	36.8 lb. 16.7 kg
				t61140	in. 15 · 6 mm 375 · 150	7⅞ 181	33.9 lb. 15.4 kg
				t61150	in. 15 · 8 mm 375 · 200	7 178	33.0 lb. 15.0 kg
				t61160	in. 15 · 10 mm 375 · 250	7 ⅞ 192	38.0 lb. 17.3 kg
				t61170	in. 15 · 12 mm 375 · 300	7 ¾ 197	42.8 lb. 19.4 kg




## INCREASERS / REDUCERS – TAPPED

Code	Size	A	Weight
t61800	in. 2 · 1¼ NPT mm 50 · 1¼ NPT	2 51	1.0 lb. 0.4 kg
t61810	in. 2 · 1½ NPT mm 50 · 1½ NPT	2 ½ 64	1.0 lb. 0.4 kg
t61820	in. 2 · 2 NPT mm 50 · 2 NPT	2 ½ 64	1.1 lb. 0.5 kg
t61830	in. 3 · 1¼ NPT mm 75 · 1¼ NPT	2 ½ 64	1.8 lb. 0.8 kg
t61840	in. 3 · 1½ NPT mm 75 · 1½ NPT	2 ½ 64	1.8 lb. 0.8 kg
t61850	in. 3 · 2 NPT mm 75 · 2 NPT	2 ½ 64	1.8 lb. 0.8 kg
t61860	in. 4 · 1¼ NPT mm 100 · 1¼ NPT	2 51	3.5 lb. 1.6 kg
t61870	in. 4 · 1½ NPT mm 100 · 1½ NPT	2 ½ 64	3.8 lb. 1.7 kg
t61880	in. 4 · 2 NPT	2 ½	3.5 lb.

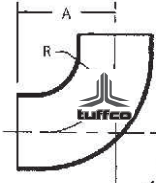




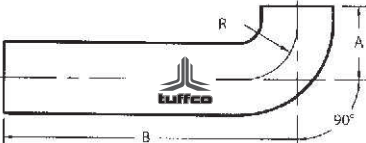
**BENDS – ¼ – 90° SHORT TURN**

	Code	Size	A	R	Weight
	<b>t31410</b>	in. 1½ mm 38	2⅞ 73	1¾ 45	1.6 lb. 0.7 kg
	<b>t31420</b>	in. 2 mm 50	3 ⅛ 79	2 51	1.5 lb. 0.7 kg
	<b>t31430</b>	in. 3 mm 75	4 ⅛ 105	3 76	3.5 lb. 1.5 kg
	<b>t31440</b>	in. 4 mm 100	5 ⅛ 130	4 102	5.8 lb. 2.6 kg
	<b>t31450</b>	in. 5 mm 125	5 ⅜ 137	4½ 114	11.0 lb. 5.0 kg
	<b>t31460</b>	in. 6 mm 150	6 ⅞ 175	5 127	15.2 lb. 6.9 kg
	<b>t31480</b>	in. 8 mm 200	8 ⅛ 206	6 152	24.1 lb. 10.9 kg
	<b>t31400</b>	in. 10 mm 250	9 ⅛ 232	7 178	43.0 lb. 19.5 kg
	<b>t31380</b>	in. 12 mm 300	12¾ 324	10 254	54.5 lb. 24.7 kg
	<b>t31390</b>	in. 15 mm 375	14¾ 375	11½ 292	108.2 lb. 49.1 kg

**BENDS – ¼ – 90° LONG PATTERN**

	Code	Size	A	R	Weight
	<b>t31500</b>	in. 2 mm 50	4 ½ 114	3 76	2.5 lb. 1.1 kg
	<b>t31510</b>	in. 3 mm 75	5 ⅛ 130	3½ 89	4.8 lb. 2.1 kg

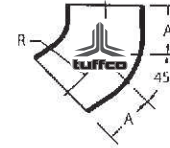
**EXTENDED QUARTER BENDS – ¼ – 90°**

	Code	Size	A	B	R	Weight
	<b>t33290</b>	in. 3 · 19 mm 75 · 495	2⅞ 73	19½ 495	3 76	10.0 lb. 4.5 kg



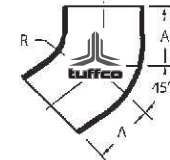
**BENDS- 1/8" - 45° SHORT TURN**

Code	Size	A	R	Weight
<b>t31810</b>	in.	1½	1⅞	1.0 lb.
	mm	38	48	0.4 kg
<b>t31820</b>	in.	2	1 <sup>15</sup> / <sub>16</sub>	1.3 lb.
	mm	50	49	0.6 kg
<b>t31830</b>	in.	3	2 <sup>5</sup> / <sub>8</sub>	2.7 lb.
	mm	75	60	1.2 kg
<b>t31840</b>	in.	4	2 <sup>3</sup> / <sub>4</sub>	4.0 lb.
	mm	100	70	1.8 kg
<b>t31850</b>	in.	5	1 <sup>7</sup> / <sub>8</sub>	7.0 lb.
	mm	125	48	3.2 kg
<b>t31860</b>	in.	6	3 <sup>5</sup> / <sub>16</sub>	10.1 lb.
	mm	150	100	4.6 kg
<b>t31880</b>	in.	8	5 <sup>1</sup> / <sub>4</sub>	15.0 lb.
	mm	200	133	6.8 kg
<b>t31800</b>	in.	10	5	26.1 lb.
	mm	250	127	11.8 kg
<b>t31890</b>	in.	12	6 <sup>3</sup> / <sub>4</sub>	34.2 lb.
	mm	300	171	15.5 kg
<b>t31900</b>	in.	15	7 <sup>7</sup> / <sub>8</sub>	68.8 lb.
	mm	375	194	31.1 kg

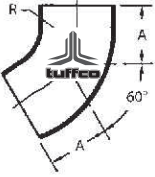


**BENDS- 1/8" - 45° LONG PATTERN**

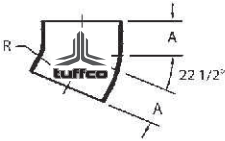
Code	Size	A	R	Weight
<b>t31760</b>	in.	2	1½	1.9 lb.
	mm	50	38	0.7 kg
<b>t31770</b>	in.	3	1½	3.2 lb.
	mm	75	38	1.5 kg



**BENDS—  $\frac{1}{16}$  — 60°**

	<b>Code</b>	<b>Size</b>	<b>A</b>	<b>R</b>	<b>Weight</b>
	<b>t30620</b>	in. 2 mm 50	2 $\frac{1}{4}$ 57	2 51	1.2 lb. 0.5 kg
	<b>t30630</b>	in. 3 mm 75	2 $\frac{7}{8}$ 73	3 76	3.0 lb. 1.4 kg
	<b>t30640</b>	in. 4 mm 100	3 $\frac{1}{4}$ 83	4 102	4.8 lb. 2.2 kg
	<b>t30660</b>	in. 6 mm 150	4 $\frac{3}{4}$ 121	5 127	11.3 lb. 5.1 kg
	<b>t30680</b>	in. 8 mm 200	5 $\frac{9}{16}$ 141	6 152	18.5 lb. 8.4 kg

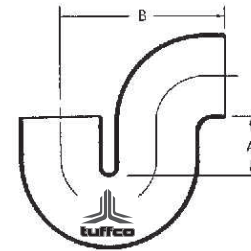
**BENDS—  $\frac{1}{16}$  — 22  $\frac{1}{2}$ °**

	<b>Code</b>	<b>Size</b>	<b>A</b>	<b>R</b>	<b>Weight</b>
	<b>t31610</b>	in. $\frac{1}{2}$ mm 38	2 $\frac{1}{8}$ 54	2 $\frac{3}{4}$ 70	1.0 lb. 0.4 kg
	<b>t31620</b>	in. 2 mm 50	1 $\frac{1}{2}$ 38	2 51	0.9 lb. 0.4 kg
	<b>t31630</b>	in. 3 mm 75	1 $\frac{3}{4}$ 45	3 76	1.9 lb. 0.9 kg
	<b>t31640</b>	in. 4 mm 100	1 $\frac{5}{16}$ 49	4 102	2.1 lb. 1.0 kg
	<b>t31660</b>	in. 6 mm 150	3 $\frac{1}{8}$ 79	5 127	7.2 lb. 3.3 kg
	<b>t31680</b>	in. 8 mm 200	3 $\frac{5}{8}$ 92	6 152	18.0 lb. 8.2 kg



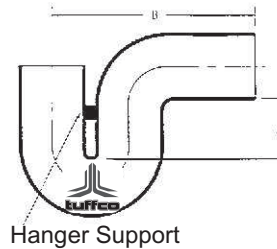
**“P” TRAPS SHALLOW**

Code	Size	A	B	Weight
t62110	in. 1½ mm 38	1⅝ 41	6⅜ 162	2.8 lb. 1.3 kg
t62120	in. 2 mm 50	1½ 38	7⅝ 181	3.7 lb. 1.7 kg
t62130	in. 3 mm 75	1⅝ 49	7⅝ 181	6.8 lb. 3.1 kg
t62140	in. 4 mm 100	2¼ 57	8⅝ 227	11.3 lb. 5.1 kg



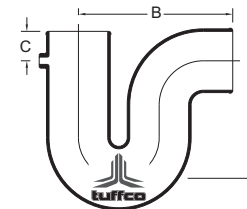
**“P” TRAPS DEEP SEAL**

Code	Size	A	B	Weight
t62320	in. 2 mm 50	4 9/16 116	9⅝ 238	6.0 lb. 2.7 kg
t62330	in. 3 mm 75	4 1/16 103	9 229	11.1 lb. 5.0 kg
t62340	in. 4 mm 100	4 5/16 110	13¾ 349	21.1 lb. 9.6 kg
t62360	in. 6 mm 150	4½ 114	14½ 368	45.0 lb. 20.0 kg



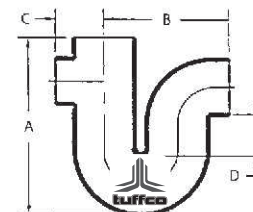
**“P” TRAPS DEEP SEAL WITH ½” PRIMER TAP**

Code	Size	A	B	C	Weight
t62170	in. 3 mm 75	5 ½ 140	9 229	2 51	8.9 lb. 4.0 kg
t62180	in. 4 mm 100	6½ 165	10½ 267	2 51	16.6 lb. 7.5 kg

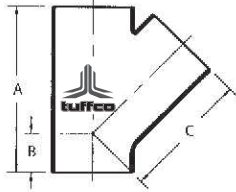


**Running Traps with Single Vent**

Code	Size	A	B	C	D	Weight
t62640	in. 4 mm 100	12½ 318	10¼ 260	4 102	2⅝ 67	18.5 lb. 8.4 kg



“Y”

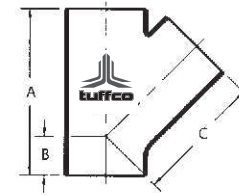


Code	Size	A	B	C	Weight
<b>t40110</b>	in. 1½ · 1½ mm 38 38	6 <sup>1</sup> / <sub>16</sub> 154	1 <sup>13</sup> / <sub>16</sub> 46	4 102	2.0 lb. 1.0 kg
<b>t40220</b>	in. 2 · 2 mm 50 50	6 152	1½ 38	4 <sup>3</sup> / <sub>8</sub> 111	2.5 lb. 1.1 kg
<b>t40310</b>	in. 3 · 1½ mm 75 38	6 <sup>1</sup> / <sub>8</sub> 156	1 <sup>1</sup> / <sub>16</sub> 27	5 <sup>1</sup> / <sub>8</sub> 130	3.1 lb. 1.4 kg
<b>t40320</b>	in. 3 · 2 mm 75 50	6 <sup>3</sup> / <sub>16</sub> 157	1 <sup>3</sup> / <sub>16</sub> 30	5 <sup>3</sup> / <sub>16</sub> 132	4.2 lb. 1.9 kg
<b>t40330</b>	in. 3 · 3 mm 75 75	7 <sup>1</sup> / <sub>16</sub> 195	1 <sup>5</sup> / <sub>16</sub> 49	5 <sup>3</sup> / <sub>4</sub> 146	5.2 lb. 2.4 kg
<b>t40410</b>	in. 4 · 1½ mm 100 38	6 <sup>3</sup> / <sub>8</sub> 162	<sup>3</sup> / <sub>4</sub> 19	6 152	5.3 lb. 2.4 kg
<b>t40420</b>	in. 4 · 2 mm 100 50	6½ 165	<sup>7</sup> / <sub>8</sub> 22	6 <sup>3</sup> / <sub>16</sub> 157	5.6 lb. 2.5 kg
<b>t40430</b>	in. 4 · 3 mm 100 75	7 <sup>5</sup> / <sub>8</sub> 194	1 <sup>7</sup> / <sub>16</sub> 36	6 <sup>7</sup> / <sub>16</sub> 164	8.0 lb. 3.6 kg
<b>t40440</b>	in. 4 · 4 mm 100 100	9¼ 235	2 <sup>3</sup> / <sub>16</sub> 56	7 <sup>1</sup> / <sub>16</sub> 179	8.4 lb. 3.8 kg
<b>t40620</b>	in. 6 · 2 mm 150 50	7 <sup>5</sup> / <sub>8</sub> 194	<sup>3</sup> / <sub>8</sub> 9	7¼ 184	10.1 lb. 4.6 kg



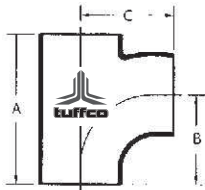
“Y” (continued)

Code	Size	A	B	C	Weight	
<b>t40630</b>	in.	6. 3	9¼	1⅞	7 <sup>15</sup> / <sub>16</sub>	13.8 lb.
	mm	150 75	235	28	202	6.3 kg
<b>t40640</b>	in.	6. 4	10 <sup>5</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>16</sub>	8 <sup>5</sup> / <sub>16</sub>	14.1 lb.
	mm	150 100	270	40	211	6.4 kg
<b>t40650</b>	in.	6. 5	12½	2½	10¼	20.0 lb.
	mm	150 125	318	64	260	9.1 kg
<b>t40660</b>	in.	6. 6	14¼	3 <sup>5</sup> / <sub>8</sub>	10 <sup>7</sup> / <sub>8</sub>	26.0 lb.
	mm	150 150	362	92	276	11.8 kg
<b>t40830</b>	in.	8. 3	11¼	1 <sup>5</sup> / <sub>16</sub>	10 <sup>3</sup> / <sub>16</sub>	26.3 lb.
	mm	200 75	286	24	275	12 kg
<b>t40850</b>	in.	8. 5	12 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>8</sub>	11	36.0 lb.
	mm	200 125	327	54	279	16.4 kg
<b>t40860</b>	in.	8. 6	15½	3¼	12¼	42.0 lb.
	mm	200 150	394	83	311	19.0 kg
<b>t40880</b>	in.	8. 8	18½	4 <sup>1</sup> / <sub>16</sub>	13 <sup>7</sup> / <sub>8</sub>	52.5 lb.
	mm	200 200	470	119	352	23.9 kg
<b>t41040</b>	in.	10. 4	11½	¼	12½	34.0 lb.
	mm	200 100	292	6	318	15.4 kg
<b>t41060</b>	in.	10. 6	14¾	2¼	13¼	46.0 lb.
	mm	250 150	375	57	349	20.1 kg
<b>t41080</b>	in.	10. 8	18	3½	15 <sup>5</sup> / <sub>8</sub>	64.3 lb.
	mm	250 200	455	89	391	29.2 kg
<b>t41000</b>	in.	10. 10	21 <sup>7</sup> / <sub>8</sub>	5½	17 <sup>1</sup> / <sub>16</sub>	77.0 lb.
	mm	250 250	556	140	433	35.0 kg
<b>t41120</b>	in.	12. 12	25½	5 <sup>5</sup> / <sub>8</sub>	19 <sup>7</sup> / <sub>8</sub>	90.2 lb.
	mm	300 300	648	143	505	40.9 kg
<b>t42150</b>	in.	15. 15	30	6½	23¼	164.5 lb.
	mm	375 375	762	165	591	74.7 kg





“TY ” – SANITARY TEE

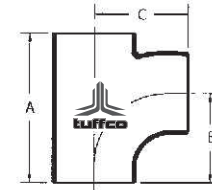


Code	Size	A	B	C	Weight
<b>t50110</b>	in. 1½ · 1½ mm 38 · 38	5¼ 133	3 76	3 76	2.0 lb. 0.9 kg
<b>t50210</b>	in. 2 · 1½ mm 50 · 38	6⅝ 172	4¼ 108	4½ 114	2.5 lb. 1.1 kg
<b>t50220</b>	in. 2 · 2 mm 50 · 50	5½ 140	3⅝ 79	3⅝ 79	2.6 lb. 1.2 kg
<b>t50310</b>	in. 3 · 1½ mm 75 · 38	6½ 165	4⅝ 111	5⅝ 130	4.0 lb. 1.8 kg
<b>t50320</b>	in. 3 · 2 mm 75 · 50	5⅞ 141	3⅞ 78	3½ 89	4.0 lb. 2.0 kg
<b>t50330</b>	in. 3 · 3 mm 75 · 75	7 178	4⅞ 105	4⅞ 105	4.5 lb. 2.0 kg
<b>t50420</b>	in. 4 · 2 mm 100 · 50	5½ 140	3⅞ 78	4⅞ 103	4.5 lb. 2.0 kg
<b>t50430</b>	in. 4 · 3 mm 100 · 75	7 178	4 102	4⅞ 116	6.0 lb. 2.7 kg
<b>t50440</b>	in. 4 · 4 mm 100 · 100	8⅝ 213	5 127	5⅝ 130	9.5 lb. 4.3 kg



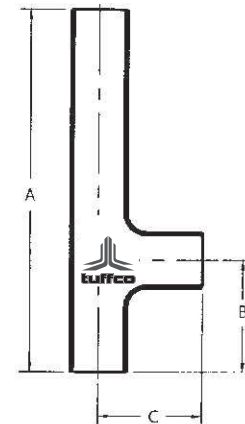
**“TY ” – SANITARY TEE (CONTINUED)**

Code	Size	A	B	C	Weight
t50620	in. 6 · 2 mm 150 50	6 <sup>11/16</sup> 170	3 <sup>3/4</sup> 95	4 <sup>15/16</sup> 125	9.3 lb. 4.2 kg
t50630	in. 6 · 3 mm 150 75	8 <sup>1/2</sup> 216	5 127	5 <sup>11/16</sup> 145	10.3 lb. 4.7 kg
t50640	in. 6 · 4 mm 150 100	9 <sup>3/4</sup> 248	5 <sup>7/8</sup> 149	5 <sup>7/8</sup> 149	13.0 lb. 5.9 kg
t50660	in. 6 · 6 mm 150 150	12 <sup>1/2</sup> 318	7 <sup>1/8</sup> 181	6 <sup>7/8</sup> 175	21.8 lb. 9.9 kg
t50840	in. 8 · 4 mm 200 100	12 <sup>5/16</sup> 313	6 <sup>7/16</sup> 164	7 <sup>1/2</sup> 191	28.0 lb. 12.7 kg
t50860	in. 8 · 6 mm 200 150	14 356	7 <sup>1/2</sup> 191	7 <sup>15/16</sup> 202	34.4 lb. 15.6 kg
t50880	in. 8 · 8 mm 200 200	15 <sup>1/2</sup> 394	8 <sup>7/16</sup> 214	8 <sup>7/16</sup> 214	40.0 lb. 18.2 kg
t50200	in. 10 · 10 mm 250 250	19 <sup>1/4</sup> 489	11 <sup>1/4</sup> 286	12 305	80.0 lb. 36.3 kg



**EXTENDED “TY”**

Code	Size	A	B	C	Weight
t50190	in. 2 · 2 mm 50 · 50	26 660	11 279	5 <sup>5/8</sup> 143	10.0 lb. 4.5 kg



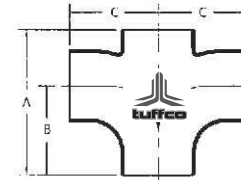
**DOUBLE COMBINATION "Y" WITH 1/8 BEND (DOUBLE BOSTON)**

	Code	Size	A	B	C	Weight
	<b>t46220</b>	in. 2 · 2 mm 50 · 50	6 <sup>5</sup> / <sub>8</sub> 168	5 <sup>5</sup> / <sub>8</sub> 143	6 152	6.0 lb. 2.7 kg
	<b>t46320</b>	in. 3 · 2 mm 75 · 50	6 <sup>5</sup> / <sub>8</sub> 168	5 <sup>1</sup> / <sub>2</sub> 140	6 <sup>3</sup> / <sub>4</sub> 171	7.4 lb. 3.4 kg
	<b>t46330</b>	in. 3 · 3 mm 75 · 75	7 <sup>3</sup> / <sub>4</sub> 197	6 <sup>3</sup> / <sub>16</sub> 157	6 <sup>9</sup> / <sub>16</sub> 167	11.2 lb. 5.1 kg
	<b>t46420</b>	in. 4 · 2 mm 100 · 50	6 <sup>5</sup> / <sub>8</sub> 168	5 <sup>5</sup> / <sub>8</sub> 143	7 <sup>5</sup> / <sub>16</sub> 186	9.0 lb. 4.1 kg
	<b>t46430</b>	in. 4 · 3 mm 100 · 75	8 <sup>7</sup> / <sub>8</sub> 225	7 <sup>1</sup> / <sub>4</sub> 184	8 <sup>1</sup> / <sub>2</sub> 216	12.0 lb. 5.4 kg
	<b>t46440</b>	in. 4 · 4 mm 100 · 100	11 <sup>1</sup> / <sub>2</sub> 292	9 <sup>3</sup> / <sub>8</sub> 238	10 <sup>1</sup> / <sub>4</sub> 260	18.5 lb. 8.4 kg



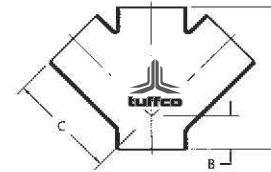
**DOUBLE "TY" (CROSS)**

Code	Size	A	B	C	Weight	
<b>t56110</b>	in.	1½ · 1½	6½	4¾	4 <sup>5</sup> / <sub>16</sub>	2.5 lb.
	mm	38 · 38	165	121	110	1.1 kg
<b>t56220</b>	in.	2 · 2	5 <sup>5</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	2.8 lb.
	mm	50 · 50	135	79	79	1.3 kg
<b>t56320</b>	in.	3 · 2	5 <sup>9</sup> / <sub>16</sub>	3 <sup>1</sup> / <sub>16</sub>	3 <sup>5</sup> / <sub>8</sub>	4.0 lb.
	mm	75 · 50	141	78	92	1.8 kg
<b>t56330</b>	in.	3 · 3	7	4	4 <sup>1</sup> / <sub>8</sub>	5.2 lb.
	mm	75 · 75	178	102	105	2.4 kg
<b>t56420</b>	in.	4 · 2	6 <sup>7</sup> / <sub>8</sub>	4½	5½	7.0 lb.
	mm	100 · 50	175	114	140	3.2 kg
<b>t56430</b>	in.	4 · 3	6 <sup>5</sup> / <sub>8</sub>	3 <sup>15</sup> / <sub>16</sub>	4 <sup>7</sup> / <sub>16</sub>	6.1 lb.
	mm	100 · 75	168	100	113	2.8 kg
<b>t56440</b>	in.	4 · 4	9 <sup>3</sup> / <sub>8</sub>	5¾	5 <sup>5</sup> / <sub>8</sub>	11.8 lb.
	mm	100 · 100	238	146	143	5.4 kg
<b>t56460</b>	in.	6 · 4	10 <sup>1</sup> / <sub>16</sub>	6	6½	14.4 lb.
	mm	150 · 100	256	152	165	6.5 kg

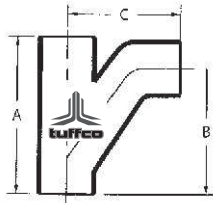


**DOUBLE "Y"**

Code	Size	A	B	C	Weight	
<b>t42220</b>	in.	2 · 2	6	1 <sup>1</sup> / <sub>16</sub>	4¾	3.6 lb.
	mm	50 · 50	152	43	121	1.6 kg
<b>t42320</b>	in.	3 · 2	6¼	1 <sup>7</sup> / <sub>16</sub>	5	4.1 lb.
	mm	75 · 50	159	37	127	1.9 kg
<b>t42330</b>	in.	3 · 3	7 <sup>1</sup> / <sub>16</sub>	1 <sup>15</sup> / <sub>16</sub>	6 <sup>1</sup> / <sub>16</sub>	6.8 lb.
	mm	75 · 75	195	49	154	3.1 kg
<b>t42420</b>	in.	4 · 2	6 <sup>5</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>	5¼	6.4 lb.
	mm	100 · 50	168	35	133	2.9 kg
<b>t42430</b>	in.	4 · 3	7 <sup>1</sup> / <sub>16</sub>	1 <sup>7</sup> / <sub>16</sub>	6¼	9.8 lb.
	mm	100 · 75	195	37	159	4.4 kg
<b>t42440</b>	in.	4 · 4	9 <sup>1</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>16</sub>	7 <sup>3</sup> / <sub>8</sub>	13.1 lb.
	mm	100 · 100	243	52	187	5.9 kg

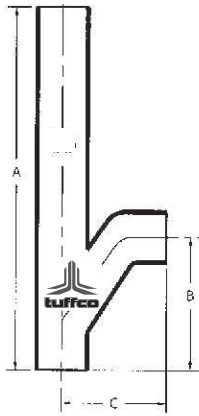


COMBINATION "Y" WITH 1/8 BEND (BOSTON)



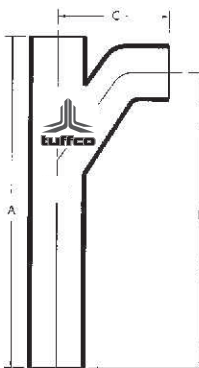
Code	Size	A	B	C	Weight
t43220	in. 2- 2 mm 50- 50	6 <sup>5</sup> / <sub>16</sub> 168	5 <sup>1</sup> / <sub>4</sub> 133	6 <sup>1</sup> / <sub>8</sub> 156	2.3 lb. 1.0 kg
t43320	in. 3- 2 mm 75- 50	6 <sup>5</sup> / <sub>16</sub> 168	5 <sup>1</sup> / <sub>2</sub> 140	6 <sup>3</sup> / <sub>4</sub> 172	4.5 lb. 2.0 kg
t43330	in. 3- 3 mm 75- 75	7 <sup>1</sup> / <sub>8</sub> 200	7 <sup>9</sup> / <sub>16</sub> 186	8 203	6.0 lb. 2.7 kg
t43420	in. 4- 2 mm 100- 50	6 <sup>1</sup> / <sub>4</sub> 159	5 127	6 <sup>5</sup> / <sub>16</sub> 157	6.0 lb. 2.7 kg
t43430	in. 4- 3 mm 100- 75	7 <sup>3</sup> / <sub>4</sub> 197	6 <sup>1</sup> / <sub>16</sub> 154	6 <sup>15</sup> / <sub>16</sub> 176	7.5 lb. 3.4 kg
t43440	in. 4- 4 mm 100- 100	9 <sup>3</sup> / <sub>4</sub> 248	7 <sup>7</sup> / <sub>8</sub> 194	8 <sup>3</sup> / <sub>16</sub> 208	11.8 lb. 5.4 kg
t43660	in. 6- 6 mm 150- 150	14 <sup>1</sup> / <sub>16</sub> 357	13 <sup>3</sup> / <sub>8</sub> 346	14 <sup>3</sup> / <sub>8</sub> 365	32.0 lb. 14.5 kg

COMBINATION "Y" WITH 1/8 BEND (EXTENDED BOSTON)



Code	Size	A	B	C	Weight
t43450	in. 4- 3 mm 100- 75	24 610	6 <sup>1</sup> / <sub>16</sub> 154	6 <sup>15</sup> / <sub>16</sub> 176	19.5 lb. 8.8 kg

COMBINATION "Y" WITH 1/8 BEND (EXTENDED BOSTON)

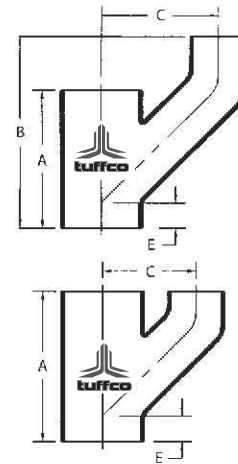


Code	Size	A	B	C	Weight
t43460	in. 4- 4 mm 100- 100	26 660	23 <sup>1</sup> / <sub>4</sub> 603	8 <sup>3</sup> / <sub>16</sub> 208	23.0 lb. 10.4 kg



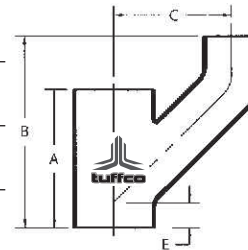
**UPRIGHT "Y" WITH 1/8 BEND**

Code	Size	A	B	C	E	Weight
<b>t46990</b>	in. 3 · 3	8 <sup>7</sup> / <sub>8</sub>	–	4 <sup>7</sup> / <sub>8</sub>	2	8.0 lb.
	mm 75 · 75	225	–	123	51	3.6 kg
<b>t47000</b>	in. 4 · 3	8 <sup>7</sup> / <sub>8</sub>	–	4 <sup>7</sup> / <sub>8</sub>	2	10.3 lb.
	mm 100 · 75	225	–	123	51	4.7 kg
<b>t47150</b>	in. 2 · 2	7	10 1/4	5 1/2	2	5.0 lb.
	mm 50 · 50	178	262	140	51	2.3 kg
<b>t47170</b>	in. 3 · 2	5 7/8	7 7/8	5 1/2	1 5/16	5.3 lb.
	mm 75 · 50	149	194	140	33	2.4 kg



**UPRIGHT "Y" WITH 1/8 BEND (EXTENDED)**

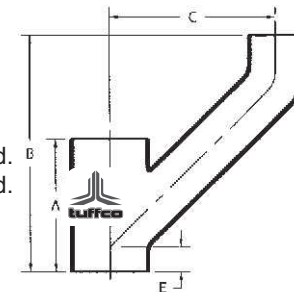
Code	Size	A	B	C	E	Weight
<b>t47220</b>	in. 2 · 2	6	11 1/8	7 3/8	1 3/4	5.3 lb.
	mm 50 · 50	152	283	187	44	2.4 kg
<b>t47180</b>	in. 3 · 2	6	9	7 7/8	1 5/16	6.2 lb.
	mm 75 · 50	152	229	187	33	2.8 kg
<b>t47020*</b>	in. 3 · 3	7 3/8	12	7 7/8	2	8.9 lb.
	mm 75 · 75	187	305	187	51	4.0 kg
<b>t47040*</b>	in. 4 · 3	7 13/16	10 13/16	6 1/2	1 7/16	9.5 lb.
	mm 100 · 75	199	275	165	36	4.3 kg
<b>t47050*</b>	in. 4 · 3	8	11 1/8	7 3/8	1 7/16	14.1 lb.
	mm 100 · 75	203	283	187	36	6.4 kg



\* When a 3 · 3 upright "Y" ordered, part #47020 will be supplied unless otherwise specified.  
 When a 4 · 3 upright "Y" ordered, part #47050 will be supplied unless otherwise specified.

**UPRIGHT "Y" WITH 1/8 BEND (EXTENDED)**

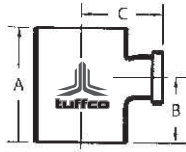
Code	Size	A	B	C	E	Weight
<b>t47140*</b>	in. 3 · 3	7 3/4	14	9 1/2	2	11.5 lb.
	mm 75 · 75	197	336	229	51	5.2 kg
<b>t47290*</b>	in. 4 · 3	7 13/16	13 3/4	9	1 7/16	15.0 lb.
	mm 100 · 75	199	349	229	36	6.8 kg



\* When a 3 · 3 upright "Y" ordered, part #47020 will be supplied unless otherwise specified.  
 When a 4 · 3 upright "Y" ordered, part #47050 will be supplied unless otherwise specified.

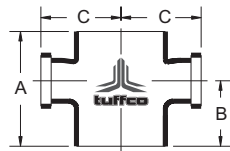


“TY” – TAPPED



Code	Size	A	B	C	Weight	
t51800	in.	2 · 1¼ NPT	5 ½	3¼	2 <sup>7</sup> / <sub>8</sub>	2.8 lb.
	mm	50 · 1¼ NPT	140	83	73	1.3 kg
t51810	in.	2 · 1½ NPT	5 <sup>5</sup> / <sub>8</sub>	3¼	2 <sup>15</sup> / <sub>16</sub>	2.9 lb.
	mm	50 · 1½ NPT	143	83	75	1.3 kg
t51820	in.	2 · 2 NPT	5 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3.5 lb.
	mm	50 · 2 NPT	143	86	79	1.6 kg
t51830	in.	3 · 1¼ NPT	5 <sup>5</sup> / <sub>8</sub>	3¼	3 <sup>3</sup> / <sub>8</sub>	3.8 lb.
	mm	75 · 1¼ NPT	143	83	86	1.7 kg
t51840	in.	3 · 1½ NPT	5 <sup>5</sup> / <sub>8</sub>	3¼	3 <sup>3</sup> / <sub>8</sub>	3.8 lb.
	mm	75 · 1½ NPT	143	83	86	1.7 kg
t51850	in.	3 · 2 NPT	5 <sup>5</sup> / <sub>8</sub>	3¼	3 <sup>1</sup> / <sub>16</sub>	4.6 lb.
	mm	75 · 2 NPT	143	83	94	2.1 kg
t51860	in.	4 · 1¼ NPT	5 ½	3 <sup>1</sup> / <sub>8</sub>	3 <sup>15</sup> / <sub>16</sub>	4.6 lb.
	mm	100 · 1¼ NPT	140	79	100	2.1 kg
t51870	in.	4 · 1½ NPT	5 <sup>5</sup> / <sub>8</sub>	3¼	3 <sup>15</sup> / <sub>16</sub>	4.8 lb.
	mm	100 · 1½ NPT	143	83	100	2.2 kg
t51880	in.	4 · 2 NPT	5 <sup>5</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>16</sub>	4.6 lb.
	mm	100 · 2 NPT	143	86	106	2.1 kg

DOUBLE “TY” – TAPPED (CROSS)

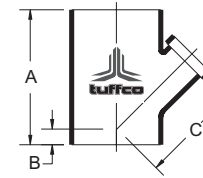


Code	Size	A	B	C	Weight	
t57800	in.	2 · 1¼ NPT	5 <sup>3</sup> / <sub>4</sub>	3	2 <sup>3</sup> / <sub>8</sub>	4.3 lb.
	mm	50 · 1¼ NPT	146	76	60	2.0 kg
t57810	in.	2 · 1½ NPT	5 <sup>3</sup> / <sub>4</sub>	3	2 <sup>3</sup> / <sub>8</sub>	4.1 lb.
	mm	50 · 1½ NPT	146	76	60	1.9 kg
t57820	in.	2 · 2 NPT	5 <sup>3</sup> / <sub>4</sub>	3	2 <sup>3</sup> / <sub>8</sub>	3.9 lb.
	mm	50 · 2 NPT	146	76	60	1.8 kg
t57830	in.	3 · 1¼ NPT	5 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	4.0 lb.
	mm	75 · 1¼ NPT	143	79	92	1.8 kg
t57840	in.	3 · 1½ NPT	5 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	3 <sup>5</sup> / <sub>8</sub>	4.6 lb.
	mm	75 · 1½ NPT	143	79	92	2.1 kg
t57850	in.	3 · 2 NPT	5 <sup>5</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>8</sub>	2 <sup>13</sup> / <sub>16</sub>	4.0 lb.
	mm	75 · 2 NPT	143	79	71	1.8 kg
t57860	in.	4 · 1¼ NPT	6	3 <sup>5</sup> / <sub>16</sub>	3¼	5.9 lb.
	mm	100 · 1¼ NPT	152	84	83	2.7 kg
t57870	in.	4 · 1½ NPT	6	3 <sup>5</sup> / <sub>16</sub>	3¼	6.1 lb.
	mm	100 · 1½ NPT	152	84	83	2.8 kg
t57880	in.	4 · 2 NPT	6	3 <sup>5</sup> / <sub>16</sub>	3¼	6.8 lb.
	mm	100 · 2 NPT	152	84	83	3.1 kg



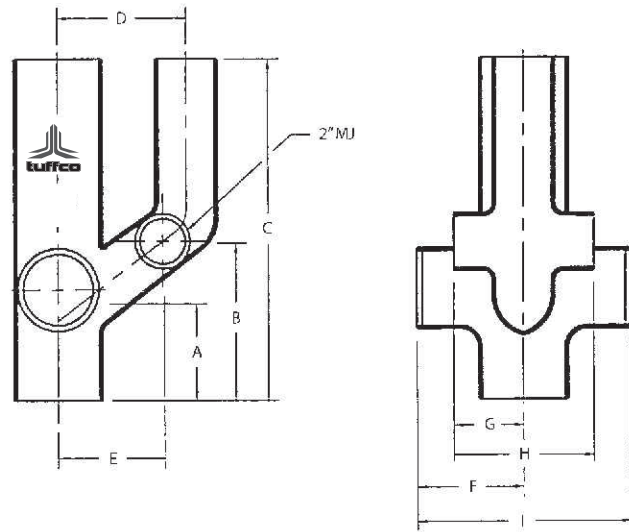
**“Y” – TAPPED**

Code		Size	A	B	C	Weight
<b>t41800</b>	in.	2 · 1¼ NPT	6 ⅞	1¾	4 <sup>7</sup> / <sub>16</sub>	2.8 lb.
	mm	50 · 1¼ NPT	156	44	113	1.3 kg
<b>t41810</b>	in.	2 · 1½ NPT	6	1 <sup>9</sup> / <sub>16</sub>	5	3.0 lb.
	mm	50 · 1½ NPT	152	40	127	1.4 kg
<b>t41820</b>	in.	2 · 2 NPT	6 <sup>5</sup> / <sub>16</sub>	1¾	4 <sup>3</sup> / <sub>8</sub>	4.0 lb.
	mm	50 · 2 NPT	168	44	111	1.8 kg
<b>t41830</b>	in.	3 · 1¼ NPT	6 <sup>5</sup> / <sub>16</sub>	1 <sup>5</sup> / <sub>16</sub>	5¼	3.8 lb.
	mm	75 · 1¼ NPT	160	33	130	1.7 kg
<b>t41840</b>	in.	3 · 1½ NPT	6 <sup>5</sup> / <sub>8</sub>	1¼	4 <sup>3</sup> / <sub>8</sub>	4.1 lb.
	mm	75 · 1½ NPT	168	32	111	1.9 kg
<b>t41850</b>	in.	3 · 2 NPT	6 <sup>5</sup> / <sub>8</sub>	1¼	5 <sup>1</sup> / <sub>8</sub>	4.5 lb.
	mm	75 · 2 NPT	168	32	130	2.0 kg
<b>t41860</b>	in.	4 · 1¼ NPT	6 <sup>3</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	6 <sup>3</sup> / <sub>16</sub>	5.5 lb.
	mm	100 · 1¼ NPT	162	17	157	2.5 kg
<b>t41870</b>	in.	4 · 1½ NPT	6 <sup>5</sup> / <sub>8</sub>	¾	5 <sup>1</sup> / <sub>8</sub>	5.3 lb.
	mm	100 · 1½ NPT	168	19	130	2.4 kg
<b>t41880</b>	in.	4 · 2 NPT	6 <sup>5</sup> / <sub>8</sub>	¾	5 <sup>15</sup> / <sub>16</sub>	6.0 lb.
	mm	100 · 2 NPT	168	19	151	2.7 kg



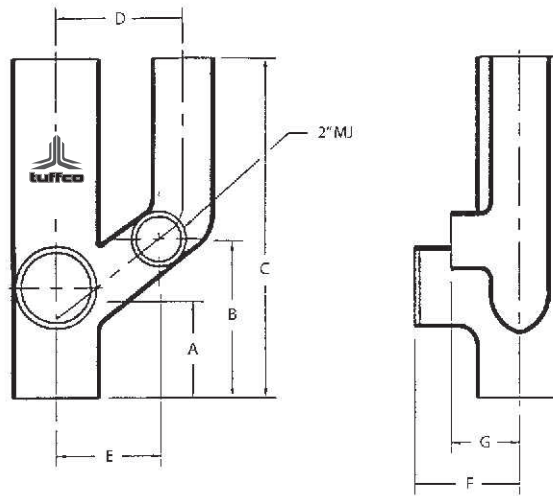
### DOUBLE APARTMENT FITTINGS (CROSS)

Code	Size	A	B	C	D	E	F	G	H	I	Weight
t55330	in. 3 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>4</sub>	22	7 1/2	4 1/2	4 1/4	3	6	8 1/2	23.8 lb.
	mm 75 · 75	111	184	559	191	114	108	76	152	216	10.8 kg
t55340	in. 4 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	22	7 1/2	4 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	3	6	9 1/2	33.5 lb.
	mm 100 · 75	111	187	559	191	124	121	76	152	241	15.2 kg



### SINGLE APARTMENT FITTINGS (TEE)

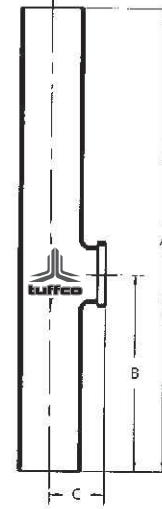
Code	Size	A	B	C	D	E	F	G	Weight
t55320	in. RH 3 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>4</sub>	22	7 1/2	4 1/2	4 1/4	3	20.8 lb.
	mm 75 · 75	111	184	559	191	114	108	76	9.4 kg
t55310	in. LH 3 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>1</sup> / <sub>4</sub>	22	7 1/2	4 1/2	4 1/4	3	20.8 lb.
	mm 75 · 75	111	184	559	191	114	108	76	9.4 kg
t55360	in. RH 4 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	22	7 1/2	4 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	3	26.1 lb.
	mm 100 · 75	111	187	559	191	124	121	76	11.8 kg
t55350	in. LH 4 · 3	4 <sup>3</sup> / <sub>8</sub>	7 <sup>3</sup> / <sub>8</sub>	22	7 1/2	4 <sup>7</sup> / <sub>8</sub>	4 <sup>3</sup> / <sub>4</sub>	3	26.1 lb.
	mm 100 · 75	111	187	559	191	124	121	76	11.8 kg



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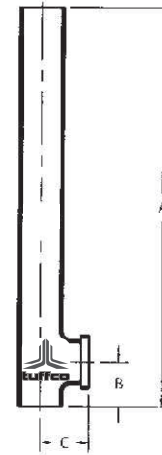
EXTENDED "TY" 26" TAPPED (REVERSIBLE)

Code	Size	A	B	C	Weight
t52000	in. 3 · 1¼ NPT	26	11	3 ⅙	16.5 lb.
	mm 75 · 1¼ NPT	660	279	78	7.5 kg
t52010	in. 3 · 1½ NPT	26	11	3 ⅙	17.0 lb.
	mm 75 · 1½ NPT	660	279	78	7.7 kg



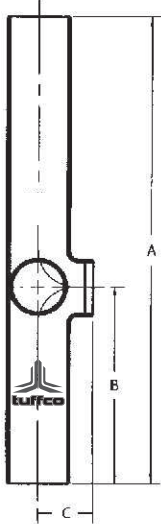
EXTENDED "TY" 22" TAPPED

Code	Size	A	B	C	Weight
t51700	in. 2 · 2 NPT	22 ⅝	3 ⅙	3	8.5 lb.
	mm 50 · 2 NPT	567	78	76	3.9 kg



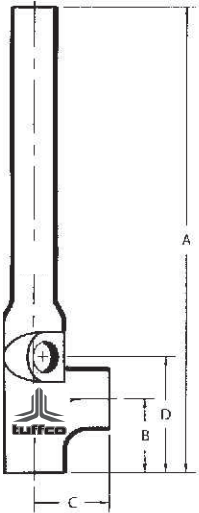
**EXTENDED DOUBLE "TY" 90° TAPPED (REVERSIBLE)**

Code	Size	A	B	C	Weight
<b>t52020</b>	in. 3 · 1¼	26	11	3	16.5 lb.
	mm 75 · 1¼ NPT	660	279	76	7.5 kg
<b>t52030</b>	in. 3 · 1½ NPT	26	11	3	16.5 lb.
	mm 75 · 1½ NPT	660	279	76	7.5 kg



**"TY" REDUCING – 45° TAPPED**

Code	Size	A	B	C	D	E	Weight
<b>t52150**</b>	in. 3 · 2 · 3 · 1½ NPT	26	4 ⅛	4 ⅛	6 ½	2 ⅝	13.8 lb.
	mm 75 · 50 · 75 · 1½ NPT	660	105	105	165	60	6.3 kg
<b>t52170*</b>	in. 3 · 2 · 3 · 1½ NPT	26	4 ⅛	4 ⅛	6 ½	2 ⅝	14.0 lb.
	mm 75 · 50 · 75 · 1½ NPT	660	105	105	165	60	6.4 kg

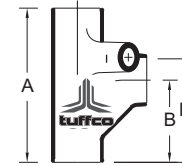


\* RH  
 \*\* LH (LH is shown).



**“TY” SHORT W / MJ 1 1/2 ” – 45° (ONTARIO)**

Code	Size	A	B	C	D	E	Weight
<b>t51940**</b>	in. 3 · 3	10 1/4	5 3/8	4 9/16	6 13/16	4 7/8	8.5 lb.
	mm 75 · 75	260	137	116	173	124	3.9 kg
<b>t51950*</b>	in. 3 · 3	10 1/4	5 3/8	4 9/16	6 13/16	4 7/8	8.5 lb.
	mm 75 · 75	260	137	116	173	124	3.9 kg



**NOTE: Also Available with 1 1/2 ” NPT– 45° – Tap Connection**

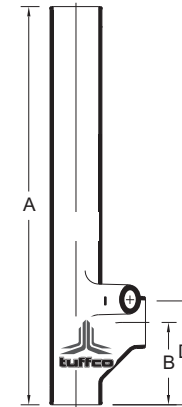
<b>t52100**</b>	in. 3 · 3	9 7/8	4 3/4	4 11/16	6 7/8	2 1/4	8.5 lb.
	mm 75 · 75	251	105	119	175	57	3.9 kg
<b>t52110*</b>	in. 3 · 3	9 7/8	4 1/8	4 11/16	6 7/8	2 1/4	8.5 lb.
	mm 75 · 75	251	105	119	175	57	3.9 kg

\* RH

\*\* LH (LH is shown).

**“TY” LONG W / MJ 1 1/2 ” – 45° (ONTARIO)**

Code	Size	A	B	C	D	E	Weight
<b>t51920**</b>	in. 3 · 3	26	5 3/8	4 9/16	6 13/16	4 7/8	16.5 lb.
	mm 75 · 75	660	137	116	173	124	7.5 kg
<b>t51930*</b>	in. 3 · 3	26	5 3/8	4 9/16	6 13/16	4 7/8	16.5 lb.
	mm 75 · 75	660	137	116	173	124	7.5 kg

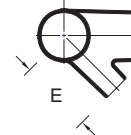


**NOTE: Also Available with 1 1/2 ” NPT – 45° – Tap Connection**

<b>t52040**</b>	in. 3 · 3	26	4 1/8	4 1/8	5 3/8	2 1/4	16.5 lb.
	mm 75 · 75	660	105	105	137	57	7.5 kg
<b>t52050*</b>	in. 3 · 3	26	4 1/8	4 1/8	5 3/8	2 1/4	16.5 lb.
	mm 75 · 75	660	105	105	137	57	7.5 kg

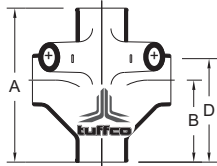
\* RH

\*\* LH (LH is shown).





**DOUBLE "TY" SPECIAL MJ SHORT PATTERN (TORONTO)**



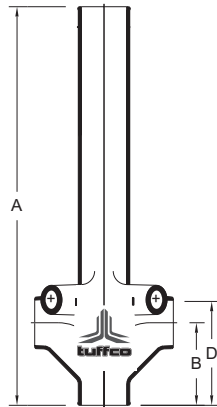
	Code	Size	A	B	C	D	E	Weight
t52460*	in.	3 · 3 · 2	10¼	5⅝	5⅝	6⅞	5	9.9 lb.
	mm	75 · 75 · 50	260	137	137	175	127	4.5 kg
t52470**	in.	3 · 3 · 2	10¼	5⅝	5⅝	6⅞	5	9.9 lb.
	mm	75 · 75 · 50	260	137	137	175	127	4.5 kg

**NOTE: Also Available with NPT – 45° – Tap Connection**

t52420*	in.	3 · 3 · 1½	10¼	5 <sup>7</sup> / <sub>16</sub>	5¼	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	9.9 lb.
	mm	75 · 75 · 1½	260	138	133	94	60	4.5 kg
t52440**	in.	75 · 75 · 1½	10¼	5 <sup>7</sup> / <sub>16</sub>	5¼	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	9.9 lb.
	mm	75 · 75 · 2	260	138	133	94	60	4.5 kg
t52430*	in.	3 · 3 · 2	10¼	5 <sup>7</sup> / <sub>16</sub>	5¼	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	9.9 lb.
	mm	75 · 75 · 50	260	138	133	94	60	4.5 kg
t52450**	in.	75 · 75 · 2	10¼	5 <sup>7</sup> / <sub>16</sub>	5¼	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	9.9 lb.
	mm	75 · 75 · 2	260	138	133	94	60	4.5 kg

\* Have four inlets  
 \*\* Have two inlets

**DOUBLE "TY" SPECIAL MJ LONG PATTERN (TORONTO)**

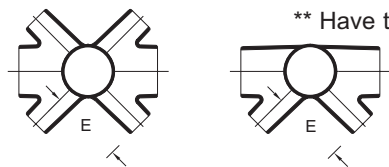


	Code	Size	A	B	C	D	E	Weight
t52750*	in.	3 · 3 · 2	24	5⅝	5⅝	6⅞	5	17.0 lb.
	mm	75 · 75 · 50	610	137	137	175	127	7.7 kg
t52760**	in.	3 · 3 · 2	24	5⅝	5⅝	6⅞	5	23.5 lb.
	mm	75 · 75 · 50	610	137	137	175	127	10.7 kg

**NOTE: Also Available with NPT– 45° – Tap Connection**

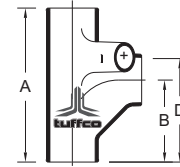
t52710*	in.	3 · 3 · 1½	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	23.5 lb.
	mm	75 · 75 · 1½	610	138	135	94	60	10.7 kg
t52720**	in.	75 · 75 · 1½	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	23.5 lb.
	mm	75 · 75 · 1½	610	138	135	94	60	10.7 kg
t52730*	in.	3 · 3 · 2	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	23.5 lb.
	mm	75 · 75 · 2	610	138	135	94	60	10.7 kg
t52740**	in.	3 · 3 · 2	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	2 <sup>3</sup> / <sub>8</sub>	23.5 lb.
	mm	75 · 75 · 2	610	138	135	94	60	10.7 kg

\* Have four 2 inlets  
 \*\* Have two 2 inlets



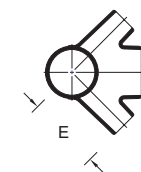
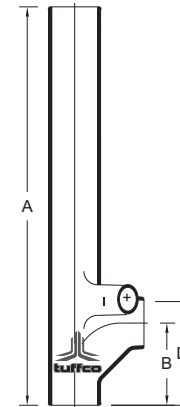
**“TY” SPECIAL MJ SHORT PATTERN (TORONTO)**

Code	Size	A	B	C	D	E	Weight	
<b>t52370</b>	in.	3 · 3 · 2	10 <sup>1</sup> / <sub>4</sub>	5 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	5	9.9 lb.
	mm	75 · 75 · 50	260	137	137	175	127	4.5 kg
<b>NOTE: Also Available with NPT – 45° – Tap Connection</b>								
<b>t52400</b>	in.	3 · 3 · 1 <sup>1</sup> / <sub>2</sub>	10 <sup>1</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	3 <sup>11</sup> / <sub>16</sub>	9.9 lb.
	mm	75 · 75 · 1 <sup>1</sup> / <sub>2</sub>	260	138	133	165	94	4.5 kg
<b>t52410</b>	in.	3 · 3 · 2	10 <sup>1</sup> / <sub>4</sub>	5 <sup>7</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	3 <sup>11</sup> / <sub>16</sub>	9.9 lb.
	mm	75 · 75 · 2	260	138	133	165	94	4.5 kg



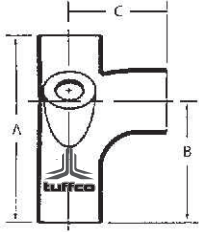
**“TY” SPECIAL MJ LONG PATTERN (TORONTO)**

Code	Size	A	B	C	D	E	Weight	
<b>t52550</b>	in.	3 · 3 · 2	24	5 <sup>3</sup> / <sub>8</sub>	5 <sup>3</sup> / <sub>8</sub>	6 <sup>7</sup> / <sub>8</sub>	5	19.0 lb.
	mm	75 · 75 · 50	610	137	137	175	127	8.3 kg
<b>NOTE: Also Available with NPT – 45° – Tap Connection</b>								
<b>t52510</b>	in.	3 · 3 · 1 <sup>1</sup> / <sub>2</sub>	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	3 <sup>11</sup> / <sub>16</sub>	19.0 lb.
	mm	75 · 75 · 1 <sup>1</sup> / <sub>2</sub>	610	138	133	165	94	8.3 kg
<b>t52520</b>	in.	3 · 3 · 2	24	5 <sup>7</sup> / <sub>16</sub>	5 <sup>1</sup> / <sub>4</sub>	6 <sup>1</sup> / <sub>2</sub>	3 <sup>11</sup> / <sub>16</sub>	19.0 lb.
	mm	75 · 75 · 2	610	138	133	165	94	8.3 kg



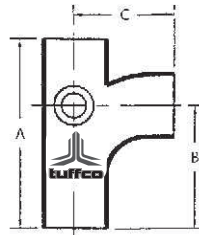
**“TY” (TEE) WITH 2 IN. VERTICAL TAP – 45°**

Code		Size	A	B	C	Weight	
<b>t53350</b>	in.	Right	3 · 3	6 5/8	3 7/8	4	4.9 lb.
	mm		75 · 75	168	98	102	2.2 kg
<b>t53360</b>	in.	Left	3 · 3	6 5/8	3 7/8	4	4.9 lb.
	mm		75 · 75	168	98	102	2.2 kg



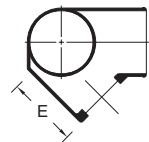
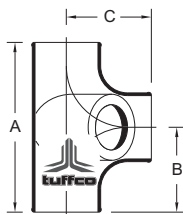
**“TY” (TEE) WITH NPT TAP – 90° SINGLE TAP**

Code		Size	A	B	C	Weight	
<b>t53370</b>	in.	Right	3 · 3 · 1 1/2	6 7/8	3 3/16	4	5.1 lb.
	mm		75 · 75 · 1 1/2	175	97	102	2.3 kg
<b>t53380</b>	in.	Left	3 · 3 · 1 1/2	6 7/8	3 3/16	4	5.1 lb.
	mm		75 · 75 · 1 1/2	175	97	102	2.3 kg
<b>t53390</b>	in.	Right	3 · 3 · 2	6 7/8	3 3/16	4	4.9 lb.
	mm		75 · 75 · 2	175	97	102	2.2 kg
<b>t53400</b>	in.	Left	3 · 3 · 2	6 7/8	3 3/16	4	4.9 lb.
	mm		75 · 75 · 2	175	97	102	2.2 kg



**“TY” (TEE) WITH TAPPED @ 45° (REVERSIBLE)**

Code		Size	A	B	C	Weight	
<b>t53320</b>	in.	single	3 · 3 · 1 1/2	8	4	3 3/8	6.0 lb.
	mm	Tap	75 · 75 · 1 1/2	203	102	98	2.7 kg
<b>t53200</b>	in.	single	3 · 3 · 2	8	4	3 3/8	6.0 lb.
	mm	Tap	75 · 75 · 2	203	102	98	2.7 kg
<b>t53220</b>	in.	double	3 · 3 · 1 1/2	8	4	3 3/8	6.0 lb.
	mm	Tap	75 · 75 · 1 1/2	203	102	98	2.7 kg

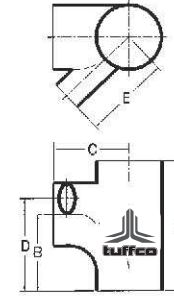


E = 3 1/2



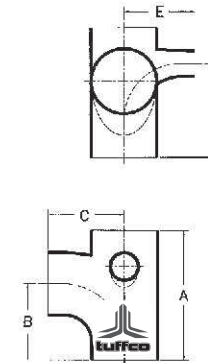
**SANITARY TEE – WITH 2" 45° SIDE OPENING ABOVE CENTER**

Code	Size	A	B	C	D	E	Weight
t52300	in. mm 3 LH	8½ 216	5 127	5 127	6 152	5½ 137	6.0 lb. 2.7 kg
t52310	in. mm 3 RH	8½ 216	5 127	5 127	6 152	5½ 137	6.0 lb. 2.7 kg
t52320	in. mm 4 LH	9½ 232	5½ 140	5½ 140	6½ 165	6½ 156	9.3 lb. 4.2 kg
t52330	in. mm 4 RH	9½ 232	5½ 140	5½ 140	6½ 165	6½ 156	9.3 lb. 4.2 kg



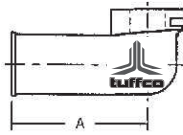
**SANITARY TEE – WITH 2" 90° SIDE OPENING ABOVE CENTER**

Code	Size	A	B	C	D	E	Weight
t52200	in. mm 3 LH	8½ 216	5 127	5 127	6 152	4½ 114	6.3 lb. 2.9 kg
t52210	in. mm 3 RH	8½ 216	5 127	5 127	6 152	4½ 114	6.3 lb. 2.9 kg
t52220	in. mm 3 R&L	8½ 216	5 127	5 127	6 152	4½ 114	7.3 lb. 3.3 kg
t52230	in. mm 4 LH	9½ 232	5½ 140	5½ 140	6½ 165	5 127	9.5 lb. 4.3 kg
t52240	in. mm 4 RH	9½ 232	5½ 140	5½ 140	6½ 165	5 127	9.5 lb. 4.3 kg
t52250	in. mm 4 R&L	9½ 232	5½ 140	5½ 140	6½ 165	5 127	10.0 lb. 4.5 kg



### URINAL FITTINGS

Code	Size	A	B	Weight
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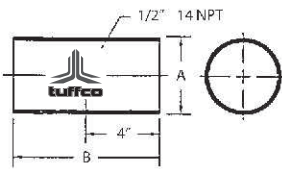


<b>t65230</b>	in.	2- 2 NPT	3 3/4	2 1/4	3.3 lb.
	mm	50- 2 NPT	95	57	1.5 kg



### TRAP SEAL PRIMER CONNECTION

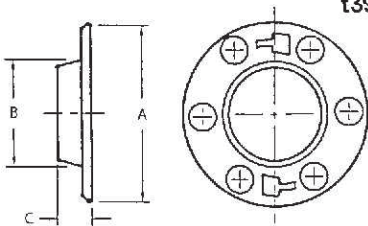
Code	Size	A	B	Weight
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<b>t62390</b>	in.	3	3 3/8	8	4.0 lb.
	mm	75	86	203	1.8 kg
<b>t62400</b>	in.	4	4 3/8	8	5.4 lb.
	mm	100	111	203	2.3 kg

### FLANGES (FOR CLOSET BEND) – CAULKING

Code	Size	A	B	C	Weight
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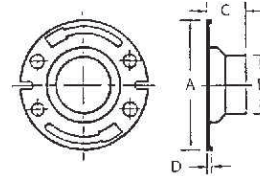


<b>t39000</b>	in.	4	7 1/4	5	1 1/16	2.8 lb.
	mm	100	184	127	37	1.3 kg



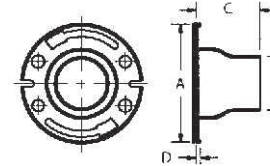
### FLOOR FLANGES – BRASS

Code	Size	A	B	C	D	Weight
t35090	in. 4 · 3 · 2½ mm 100 75 · 54	7¼ 184	4⅝ 110	2⅝ 54	1⅞ 17	2.5 lb. 0.9 kg



### CLOSET FLANGE (SLOT & NOTCH)

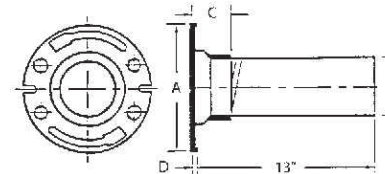
Code	Size	A	B	C	D	Weight
t35140	in. 4 · 3 · 3½ mm 100 75 · 88	6⅞ 155	3⅝ 90	3½ 88	¾ 10	4.0 lb. 1.8 kg



### EXTENDED FLOOR FLANGE (WITH TEST PLUG)

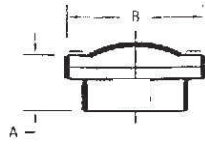
Code	Size	A	B	C	D	Weight
t35120*	in. 4 · 3 · 13 mm 100 75 · 330	7⅝ 187	3⅝ 86	2¼ 57	¾ 10	9.5 lb. 4.3 kg
t35130	in. 4 · 4 · 12 mm 100 100 · 305	7⅝ 187	4⅝	1¼	¾ 10	8.7 lb.

\* Cast iron floor flange 4-3 c/w 13 in. extension and test plug.



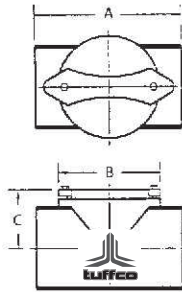
**MALCOLM – END CLEANOUTS BOLTED COVER ANTHES STYLE HUBLESS (MJ)**

Code	Size	A	B	Weight	Cover Only	
<b>t64320</b>	in.	2	4 <sup>1</sup> / <sub>4</sub>	4 <sup>3</sup> / <sub>8</sub>	3.8 lb.	<b>69200</b>
	mm	50	108	111	1.7 kg	
<b>t64330</b>	in.	3	2 <sup>7</sup> / <sub>16</sub>	5 <sup>5</sup> / <sub>16</sub>	2.4 lb.	<b>64530</b>
	mm	75	59	135	1.1 kg	
<b>t64340</b>	in.	4	2 <sup>7</sup> / <sub>16</sub>	6	3.5 lb.	<b>64550</b>
	mm	100	59	152	1.6 kg	
<b>t64360</b>	in.	6	2 <sup>9</sup> / <sub>16</sub>	8 <sup>3</sup> / <sub>16</sub>	7.7 lb.	<b>64560</b>
	mm	150	75	208	3.5 kg	
<b>t64380</b>	in.	8	3 <sup>1</sup> / <sub>4</sub>	9 <sup>13</sup> / <sub>16</sub>	11.7 lb.	<b>64580</b>
	mm	200	83	249	5.3 kg	
<b>t64390</b>	in.	10	3 <sup>1</sup> / <sub>8</sub>	12	15.7 lb.	<b>64700</b>
	mm	250	84	305	7.1 kg	



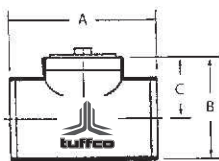
**BARRETT LINE CLEANOUTS BOLTED COVER HUBLESS (MJ)**

Code	Size	A	B	C	Weight	Cover Only	
<b>t64320</b>	in.	2	6 1/4	4 1/8	2 1/4	6.2 lb.	<b>69200</b>
	mm	50	159	105	57	2.8 kg	
<b>t64230</b>	in.	3	7	4 7/16	2 5/8	6.2 lb.	<b>64550</b>
	mm	75	178	113	67	2.8 kg	
<b>t64240</b>	in.	4	8	5 9/16	3 3/16	8.8 lb.	<b>64650</b>
	mm	100	203	141	81	4.0 kg	
<b>t64260</b>	in.	6	11 1/2	7 1/2	4 1/4	28.2 lb.	<b>64660</b>
	mm	150	292	191	108	12.8 kg	



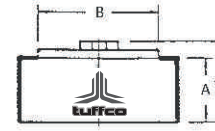
**LINE CLEANOUTS C/W BRASS PLUG HUBLESS (MJ)**

Code	Size	A	B	C	Weight	Cover Only	
<b>t63960</b>	in.	1/2	5	2 5/8	1 3/4	3.0 lb.	<b>66280</b>
	mm	38	127	67	44	1.4 kg	
<b>t63970</b>	in.	2	6 1/4	3 5/8	2 1/2	4.0 lb.	<b>66220</b>
	mm	50	159	92	64	1.8 kg	
<b>t63980</b>	in.	3	7 3/4	4 1/2	2 3/4	6.0 lb.	<b>66230</b>
	mm	75	197	114	70	2.7 kg	
<b>t63990</b>	in.	4	7 3/4	5	2 7/8	7.5 lb.	<b>66240</b>
	mm	100	197	127	73	3.4 kg	
<b>t63800</b>	in.	6	12 1/2	8 1/8	5	20.7 lb.	<b>66210</b>
	mm	150	318	206	127	9.0 kg	



### IRON BODY CLEANOUTS BRASS TOP (MJ)

Code							Code Cover Only		
R	C	Size	A	B	C	Weight	R	C	
<b>t63900</b>	<b>t63820</b>	in. 2 mm 50	2 1/2 64	2 1/4 57	3 1/4 83	0.5 lb. 0.2 kg	<b>t63120</b>	n/a	
<b>t63910</b>	<b>t63830</b>	in. 3 mm 75	2 3/4 70	2 3/4 70	3 3/8 86	1.3 lb. 0.6 kg	<b>t63130</b>	n/a	
<b>t63920</b>	<b>t63840</b>	in. 4 mm 100	2 1/2 64	4 102	3 1/4 83	3.4 lb. 1.5 kg	<b>t63140</b>	n/a	
<b>t63930</b>	<b>t63930</b>	in. 6 mm 150	3 76	4 102	3 1/2 89	2.2 lb. 1.0 kg	<b>t63160</b>	n/a	
<b>t63940</b>	n/a	in. 8 mm 200	3 1/4 83	6 3/8 162	4 102	5.3 lb. 2.4 kg	<b>t63160</b>	n/a	
<b>t63950</b>	n/a	in. 10 mm 250	3 3/8 92	7 1/8 181	4 1/4 121	7.3 lb. 3.3 kg	<b>t63160</b>	n/a	



R = Raised Head  
C = Countersunk

### PLUGS - HUBLESS (MJ)

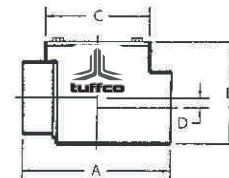
Code	Size	A	Weight
<b>t63010</b>	in. 1 1/2 mm 38	1 1/2 38	0.5 lb. 0.2 kg
<b>t63020*</b>	in. 2 mm 50	2 51	1.0 lb. 0.4 kg
<b>t63030*</b>	in. 3 mm 75	2 51	1.5 lb. 0.7 kg
<b>t63040*</b>	in. 4 mm 100	2 51	2.5 lb. 1.1 kg
<b>t63060*</b>	in. 6 mm 150	3 76	5.8 lb. 2.6 kg
<b>t63080*</b>	in. 8 mm 200	3 76	17.5 lb. 8.0 kg
<b>t63100*</b>	in. 10 mm 250	3 3/4 95	18.5 lb. 8.4 kg
<b>t62990*</b>	in. 12 mm 300	3 3/8 98	24.7 lb. 11.2 kg
<b>t63000*</b>	in. 15 mm 375	4 1/4 108	40.6 lb. 18.4 kg



\* Can be used for hub & spigot pipe & fittings.

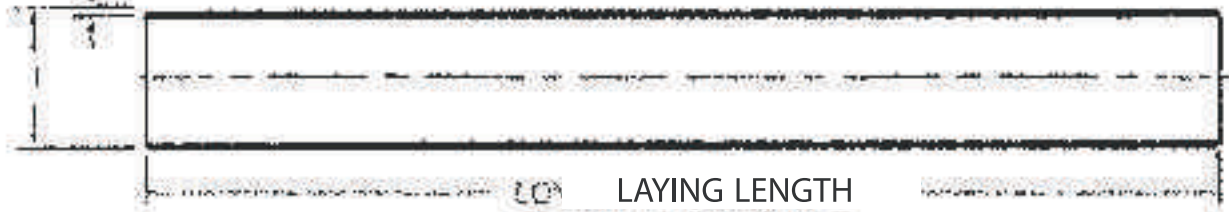
### BACK WATER VALVES - HUBLESS (MJ)

Code	Size	A	B	C	D	Weight	Cover Only	Flapper Only
<b>t65030</b>	in. 3 mm 75	8 203	5 1/2 140	5 5/8 143	3/4 19	9.9 lb 4.5 kg	<b>t64650</b>	<b>t65060</b>
<b>t65040</b>	in. 4 mm 100	9 229	6 3/8 162	6 1/2 165	5/8 16	14.8 lb. 6.7 kg	<b>t65200</b>	<b>t65070</b>
<b>t65110</b>	in. 6 mm 150	14 1/2 369	8 3/4 222	8 7/8 225	5/8 16	52.0 lb. 23.6 kg	<b>t65220</b>	<b>t65080</b>





## Hubless Pipe (M.J.)



### 10 Foot Lengths

Code	Size	Weight	Per Bundle Qty	Weight
<b>t11500</b>	in. 1½ mm 38	30.0 lb. 13.6 kg	54	1,620 lb. 735 kg
<b>t12100</b>	in. 2 mm 50	40.0 lb. 18.2 kg	54	2,160 lb. 981 kg
<b>t13100</b>	in. 3 mm 75	65.0 lb. 29.5 kg	36	2,340 lb. 1,062 kg
<b>t14100</b>	in. 4 mm 100	80.0 lb. 36.3 kg	30	2,400 lb. 1,090 kg
<b>t16100</b>	in. 6 mm 150	130.0 lb. 59.0 kg	18	2,340 lb. 1,062 kg
<b>t18100</b>	in. 8 mm 200	190.0 lb. 86.3 kg	10	1,900 lb. 863 kg
<b>t10100</b>	in. 10 mm 250	300.0 lb. 136.2 kg	8	2,400 lb. 1,090 kg
<b>t17120</b>	in. 12 mm 300	350.0 lb. 158.9 kg	6	2,100 lb. 954 kg
<b>t17150</b>	in. 15 mm 375	500.0 lb. 227.0 kg	2	1,000 lb. 454 kg

### Sizes of Cast Iron Soil Pipe (mm)

Size	1½ in. 38 mm	2 in. 50 mm	3 in. 75 mm	4 in. 100 mm	6 in. 150 mm	8 in. 200 mm	10 in. 250 mm	12 in. 300 mm	15 in. 375 mm
J. min.	46.0	57.0	83.0	109.0	160.0	213.0	267.0	318.0	397.0
J. max.	50.0	62.0	87.5	114.0	166.0	219.0	271.0	322.0	402.0
T. min.	3.0	3.0	3.3	3.8	3.8	4.3	5.6	5.6	7.6

Note: Cast iron soil pipe and fittings are made to CSA B70 standard (for more specific information see the standard).





the standard in safety

Underwriters  
Laboratories

August 20, 2009

Paul Zeppieri  
Tuffco Inc.  
80 Millwick Dr.  
North York, ON M9L 1Y3  
CA

Reference: File SV17944 Project 09CA40456

Subject: Surface Burning Characteristics of Tuffco Cast Iron Pipe with No Hub Couplings

Dear Mr. Zeppieri,

Samples of the subject product were tested at our Toronto facility in accordance with the requirements of CAN/ULC-S102.2-07, *Standard Method of Test For Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*, 6th Edition.

This letter will serve to report that all tests on the subject product have been completed. We have issued a test report and you should expect to receive it in the near future. Please review these documents carefully for errors and omissions.

This completes our work under the scope of Project 09CA40456 and we will be closing it shortly. Should you have any questions or comments concerning the above, please feel free to contact us.

Sincerely,

Stanis Yu  
Project Handler  
Building Materials / Life Safety & Securities

Reviewed by:

G. Abbas Nanji, P. Eng.  
Section Manager  
Building Materials / Life Safety & Securities



Summary of Investigation  
For  
Tuffco Inc., North York ON

Subject: Surface Burning Characteristics of Tuffco Cast Iron Pipe  
with No-Hub Couplings  
Reference: SV17944 / 09CA40456

August 20, 2009

The following is a summary of the test results obtained on pipe and piping equipment designated by Tuffco Inc. as "Tuffco Cast Iron Pipe with No-Hub Couplings" under Project 09CA40456. The testing was conducted at ULC's test facility in Toronto and completed on August 19, 2009.

The tests were conducted in accordance with the Standard, CAN/ULC-S102.2-07, *Standard Method of Test For Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*, 6th Edition.

The issuance of this Report does not imply Listing, Classification, or Recognition by ULC and does not authorize the use of ULC Listing, Classification, or Recognition Marks or any other reference to Underwriters Laboratories of Canada on or in connection with the product or assembly.

Underwriters Laboratories of Canada authorizes the above named company to reproduce this Report provided it is reproduced in its entirety. Underwriters Laboratories Canada did not witness the production of the test samples nor were we provided with information relative to the formulation or identification of component materials used in the test samples. The test results relate only to the items tested and may not apply to subsequently produced samples or assemblies.

The sole purpose of this investigation was to provide fire test data for the pipe and piping equipment submitted and tested in accordance with the requirements of CAN/ULC-S102.2-07. This data should not be considered representative of test results for other pipe and piping equipment in the absence of testing the pipe and piping equipment in accordance with CAN/ULC-S102.2-07.

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Very truly yours,

Stanis Yu  
Project Handler  
Building Materials / Life Safety & Securities

Reviewed by:

G. Abbas Nanji, P.Eng.  
Section Manager  
Building Materials / Life Safety & Securities



**TEST METHOD:**

The tests were conducted in accordance with the CAN/ULC-S102.2-07, *Standard Method of Test For Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies*, 6th Edition.

Tuffco Inc. submitted six 50-mm (2 in.) diameter pipe and coupling assemblies for testing. Each assembly consisted of twelve 610-mm (2 ft.) long, “Tuffco”, cast iron pipes connected with eleven couplings designated as “No-Hub Couplings” to create a 7320-mm long pipe assembly. The ends of the pipe assemblies were not fitted with couplings. Two pipe assemblies were tied with wire to nominal 6-mm thick non-combustible cement boards spaced 200-mm on center for each test specimen. Three test specimens were prepared and conditioned to constant mass at a temperature of  $23 \pm 3^{\circ}\text{C}$  and relative humidity of  $50 \pm 5\%$ .

For each test, the test specimens were laid on the floor of the tunnel furnace. A 350 mm long by 560 mm wide by 1.6 mm thick, uncoated, steel plate was placed on the specimen mounting ledge at the fire end of the tunnel furnace “upstream” from the gas burners to complete the 7620 mm chamber length. An airtight water seal was maintained around the furnace lid during the test.

**RESULTS:**

During each test, charring on the surface of the cast iron pipe was observed and delamination of the surface coating was evident at the end of the 10-min test. The couplings positioned 610-mm from the gas burners ignited during all three tests. The couplings ignited at 6-minutes and 25-seconds during Test No. 1, 5-minutes and 56-seconds during Test No. 2 and 6-minutes and 7-seconds during Test No. 3. The ignition of the couplings did not propagate along the test specimen to the other couplings. No other significant observations were made.

A summary of test results is tabulated below. Graphical plots of flame spread, and light transmission data are attached. The test results relate only to the actual samples tested.

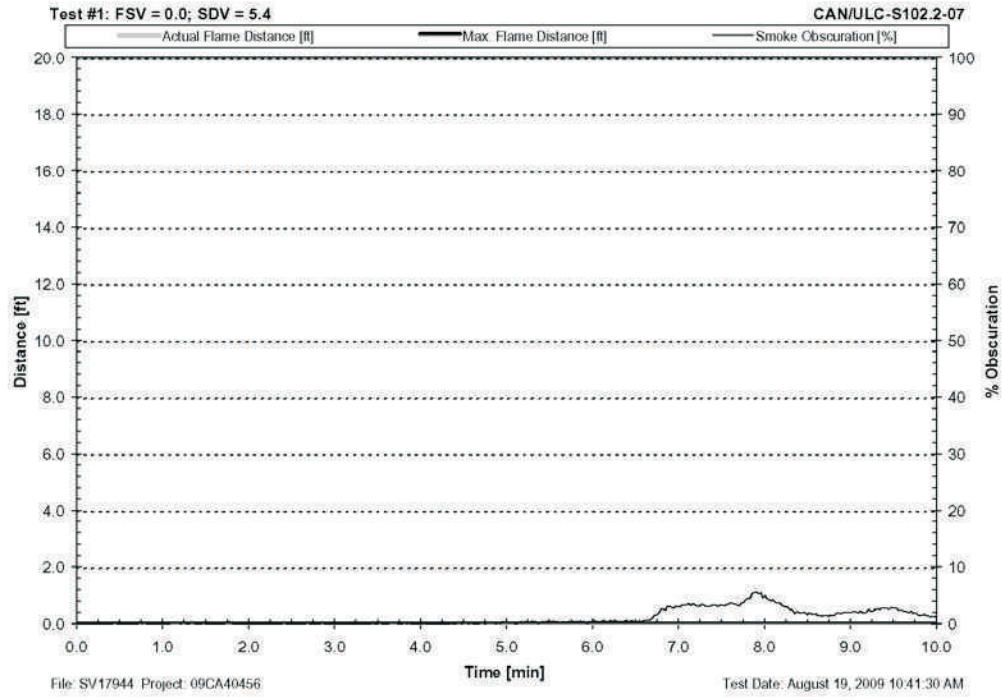
Test No.	Sample Description	Calculated Values	
		Flame Spread Value (FSV)	Smoke Developed Value (SDV)
1	Cast Iron Pipe with No-Hub Couplings	0.0	5.4
2	Cast Iron Pipe with No-Hub Couplings	0.0	4.0
3	Cast Iron Pipe with No-Hub Couplings	0.0	11.3

The surface burning characteristics of Tuffco Cast Iron Pipe with No Hub Couplings described herein warrants the assignment of the following rating or classification in comparison to untreated red oak as 100 and inorganic reinforced cement board as 0.

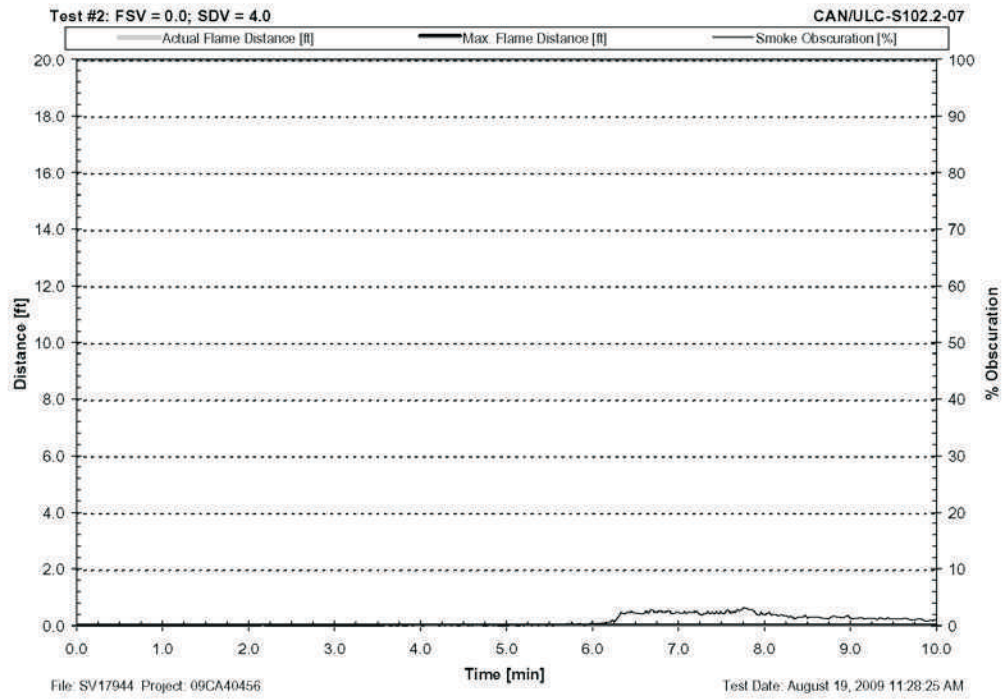
Material Details	Rating or Classification	
	Flame Spread Rating (FSR)	Smoke Developed Classification (SDC)
Tuffco 50-mm Diameter Cast Iron Pipe with No-Hub Couplings spaced every 600-mm OC	0	5



**SURFACE BURNING CHARACTERISTICS**  
**TUFFCO INC**  
 Nominal 50-mm Diameter, Tuffco Cast Iron Pipe with No-Hub Couplings spaced every 600-mm OC

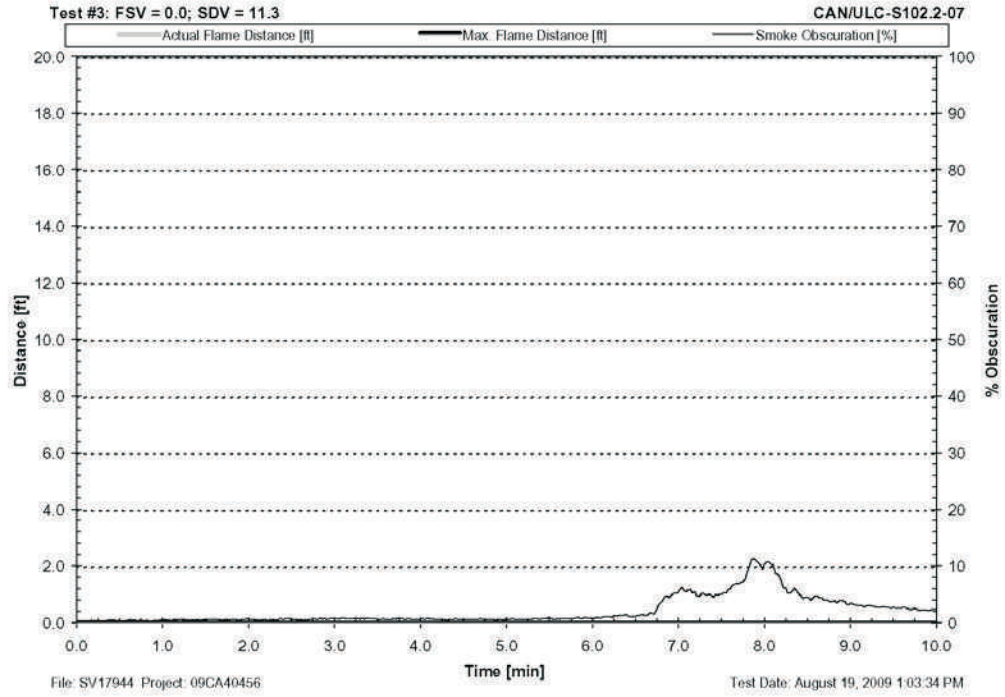


**SURFACE BURNING CHARACTERISTICS**  
**TUFFCO INC**  
 Nominal 50-mm Diameter, Tuffco Cast Iron Pipe with No-Hub Couplings spaced every 600-mm OC



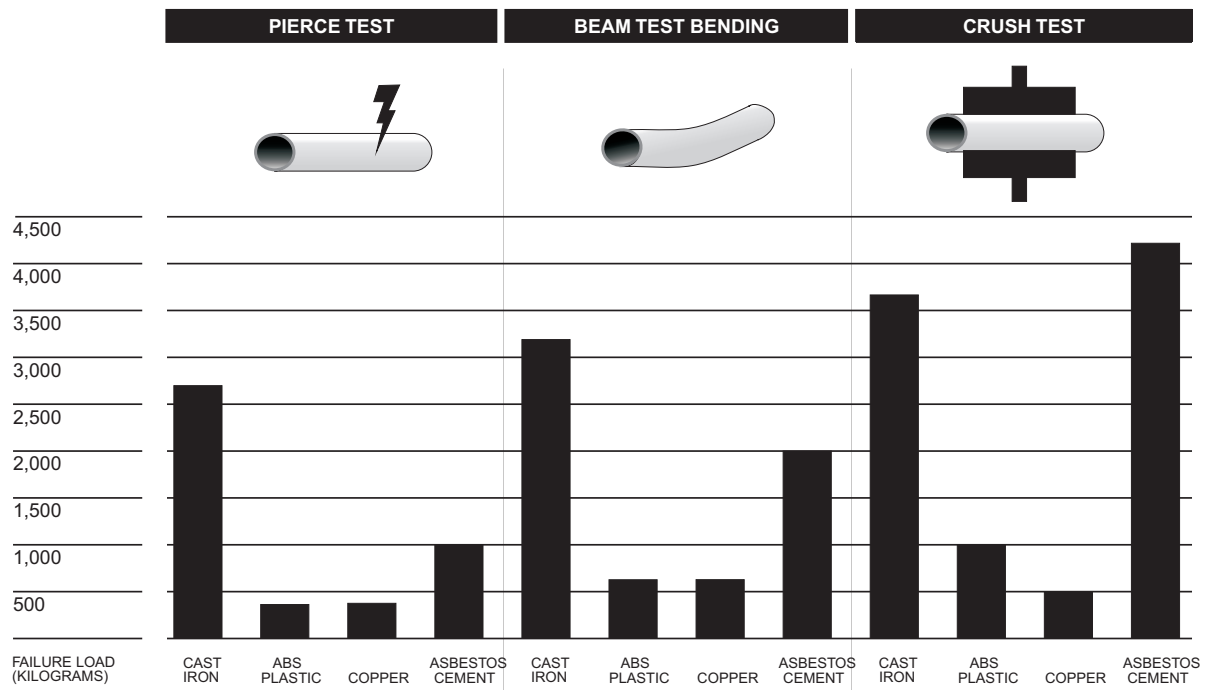
SURFACE BURNING CHARACTERISTICS  
TUFFCO INC

Nominal 50-mm Diameter, Tuffco Cast Iron Pipe with No-Hub Couplings spaced every 600-mm OC



# Strength

## Test Results



*Performed by an independent test lab*



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## **The Cast Iron Advantage.**

- **Strength**
- **Longevity**
- **Superior Noise Suppression**
- **Easy to Assemble, Install, Service**
- **Fire Resistance**
- **Low Thermal Expansion Rates**
- **Corrosion Resistance**





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