

# Telescoping RHS

Female (Outer)			Nominal Clearance		Male (Inner)		Female (Outer)			Nominal Clearance		Male (Inner)	
d	b	t	top	side	d	b	d	b	t	top	side	d	b
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
<b>SQUARE HOLLOW SECTIONS</b>							<b>RECTANGULAR HOLLOW SECTIONS</b>						
13	13	1.8	-	-	-	-	50	20	1.6	-	-	-	-
15	15	1.8	-	-	-	-	50	20	2	-	-	-	-
20	20	1.6	1.8	1.8	15	15	50	20	2.5	-	-	-	-
25	25	1.6	1.8	1.8	20	20	50	20	3	-	-	-	-
25	25	2	1	1	20	20	50	25	1.6	-	-	-	-
25	25	2.5	0	0	20	20	50	25	2	-	-	-	-
30	30	1.6	1.8	1.8	25	25	50	25	2.5	-	-	-	-
30	30	2	1	1	25	25	50	25	3	-	-	-	-
35	35	1.6	1.8	1.8	30	30	65	35	2	11	6	50	25
35	35	2	1	1	30	30	65	35	2.5	10	5	50	25
35	35	2.5	0	0	30	30	65	35	3	9	4	50	25
35	35	3	4	4	25	25	65	35	4	7	2	50	25
40	40	1.6	1.8	1.8	35	35	75	25	1.6	21.8	1.8	50	20
40	40	2	1	1	35	35	75	25	2	21	1	50	20
40	40	2.5	0	0	35	35	75	25	2.5	20	0	50	20
40	40	3	4	4	30	30	75	50	1.6	6.8	11.8	65	35
40	40	4	2	2	30	30	75	50	2	6	11	65	35
50	50	1.6	6.8	6.8	40	40	75	50	2.5	5	10	65	35
50	50	2	6	6	40	40	75	50	3	4	9	65	35
50	50	2.5	5	5	40	40	75	50	4	2	7	65	35
50	50	3	4	4	40	40	75	50	5	0	5	65	35
50	50	4	2	2	40	40	75	50	6	13	13	50	25
50	50	5	0	0	40	40	100	50	1.6	21.8	21.8	75	25
65	65	1.6	11.8	11.8	50	50	100	50	2	21	21	75	25
65	65	2	11	11	50	50	100	50	2.5	20	20	75	25
65	65	2.5	10	10	50	50	100	50	3	19	19	75	25
65	65	3	9	9	50	50	100	50	3.5	18	18	75	25
65	65	4	7	7	50	50	100	50	4	17	17	75	25
65	65	5	5	5	50	50	100	50	5	15	15	75	25
65	65	5	3	3	50	50	100	50	6	13	13	75	25
65	65	6	6	6	65	65	100	50	1.6	31.8	11.8	65	35
75	75	2	5	5	65	65	100	50	2	31	11	65	35
75	75	3	4	4	65	65	100	50	2.5	30	10	65	35
75	75	3.5	3	3	65	65	100	50	3	29	9	65	35
75	75	4	2	2	65	65	100	50	3.5	28	8	65	35
75	75	5	0	0	65	65	100	50	4	27	7	65	35
75	75	6	13	13	50	50	100	50	5	25	5	65	35
89	89	3.5	6.9	6.9	75	75	100	50	6	23	3	65	35
89	89	5	3.9	3.9	75	75	125	75	2	21	21	100	50
89	89	6	1.9	1.9	75	75	125	75	2.5	20	20	100	50
90	90	1.6	11.8	11.8	75	75	125	75	3	19	19	100	50
90	90	2	11	11	75	75	125	75	4	19	19	100	50
90	90	2.5	10	10	75	75	125	75	5	15	15	100	50
90	90	3	9	9	75	75	125	75	6	13	13	100	50
100	100	2	6	6	90	90	150	100	4	17	17	125	75
100	100	2.5	5	5	90	90	150	100	5	15	15	125	75
100	100	3	4	4	90	90	150	100	6	13	13	125	75
100	100	4	2	2	90	90	150	100	9	7	7	125	75
100	100	5	0	0	90	90	200	100	4	42	42	150	50
100	100	6	13	13	75	75	200	100	5	40	40	150	50
100	100	9	7	7	75	75	200	100	6	38	38	150	50
125	125	4	17	17	100	100	200	100	9	32	32	150	50
125	125	5	15	15	100	100	250	150	5	40	40	200	100
125	125	6	13	13	100	100	250	150	6	38	38	200	100
125	125	9	7	7	100	100	250	150	9	32	32	200	100
150	150	5	15	15	125	125							
150	150	6	13	13	125	125							
150	150	9	7	7	125	125							
200	200	5	40	40	150	150							
200	200	6	38	38	150	150							
200	200	9	32	32	150	150							
250	250	6	38	38	200	200							
250	250	9	32	32	200	200							

**NOTE**

RHS is not precision tube and all dimensions shown in the chart, although in accordance with the specifications, may vary marginally. Varying corner radii and the internal weld bead may need to be considered when a closer fit is required.

Sizes with a clearance less than 2.0mm are shown bolder in the charts. For tight fits it is recommended that some form of testing is carried out prior to committing material. Where telescoping over some length is desired, additional allowance may be needed for straightness.

HOW TO USE THIS CHART

1. Select the appropriate table for the type of hollow section required. Select the size of female (outer) member closest to your requirements for the left hand column.
2. Depending on the application select the clearance required between the two members. Members may need to slide freely inside each other, or be locked with a pin, spot welded or fixed with wedges. This means, in some cases, a sloppy fit may be suitable, while othersthe tightest fit possible may be more appropriate.
3. Having selected the most suitable clearance for your application, take appropriate size of the male (inner) section from the right hand column, eg:  

Female section (outer)	Clearance mm	Male Section (inner)
75 x 75 x 3.0	4.0 x 4.0	65 x 65

Note that clearance is total available difference between member dimensions, not the gap on both sides.

4. Where two telescoping sections are being used, thickness should be similar and will be determined by normal structural requirements.
5. RHS has the obvious advantage that its shape prevents rotation of the sections. When pipe is used it amy be need to be fixed against twisting by welding or bolting.
6. Press Fit. For short pieces with no need for separation or sliding an interference fit can be achieved using the available ductility of the steel.

Note: Sizes where clearance is shown as 0.00 will generally require a press fit.

