

# STANDARD TOLERANCES TO BS EN 755

## ROUND & SQUARE BARS



WIDTH/DIAMETER		TOLERANCE
OVER	UP TO & INC	MM
8	18	+/- 0.22
18	25	+/- 0.25
25	40	+/- 0.30
40	50	+/- 0.35
50	65	+/- 0.40
65	80	+/- 0.45
80	100	+/- 0.55

## ROUND TUBES



DIAMETER (OD or ID)		TOLERANCE
OVER	UP TO & INC	MM
8	18	+/- 0.60
18	30	+/- 0.70
30	50	+/- 0.90
50	80	+/- 1.10
80	120	+/- 1.40
120	200	+/- 2.00
200	350	+/- 3.00

## TOLERANCES ON WALL THICKNESS

NOMINAL THICKNESS		TOLERANCE	
OVER	UP TO & INC	OD < 150	OD > 150
-	3	+/- 0.70	+/- 0.90
3	5	+/- 0.60	+/- 0.80
5	-	+/- 0.50	+/- 0.70

## SQUARE & RECTANGULAR HOLLOW SECTIONS



WIDTH, DEPTH OR WIDTH ACROSS FLATS		TOLERANCE ON WIDTH, DEPTH OR ACROSS FLATS			
OVER	UP TO & INC	CD ≤ 100		100 < CD ≤ 200	
		Alloy 1	Alloy 2	Alloy 1	Alloy 2
		MM	MM	MM	MM
-	10	+/- 0.25	+/- 0.40	+/- 0.30	+/- 0.50
10	25	+/- 0.30	+/- 0.50	+/- 0.40	+/- 0.70
25	50	+/- 0.50	+/- 0.80	+/- 0.60	+/- 0.90
50	100	+/- 0.70	+/- 1.00	+/- 0.90	+/- 1.20
100	150	-	-	+/- 1.10	+/- 1.50
150	200	-	-	+/- 1.30	+/- 1.90

Note: Alloy 1 = 6060, 6063 & 6005 Alloy. Alloy 2 = 6082 Alloy

## TOLERANCES ON WALL THICKNESSES

NOMINAL WALL THICKNESS		TOLERANCE ON WALL THICKNESS FOR CD			
OVER	UP TO & INC	CD ≤ 100		100 < CD ≤ 300	
		Alloy 1	Alloy 2	Alloy 1	Alloy 2
		MM	MM	MM	MM
0.5	1.5	+/- 0.20	+/- 0.30	+/- 0.30	+/- 0.40
1.5	3	+/- 0.25	+/- 0.35	+/- 0.40	+/- 0.50
3	6	+/- 0.40	+/- 0.55	+/- 0.60	+/- 0.70
6	10	+/- 0.60	+/- 0.75	+/- 0.80	+/- 1.00
10	15	+/- 0.80	+/- 1.00	+/- 1.00	+/- 1.30
15	20	+/- 1.20	+/- 1.50	+/- 1.50	+/- 1.80

## CONCAVITY/CONVEXITY

### SQUARE & RECTANGULAR HOLLOW SECTIONS

WIDTH w		MAX ALLOWANCE DEV	
OVER	UP TO & INC	THK ≤ 5mm	THK > 5mm
-	3	0.30	0.20
30	60	0.40	0.30
60	100	0.60	0.40
100	150	0.90	0.60
150	200	1.20	0.80

## RECTANGULAR BARS



WIDTH w		TOLERANCE w		THICKNESS 'T' TOLERANCE				
OVER	UP TO & INC	MM		2 ≤ T ≤ 6	6 < T ≤ 10	10 < T ≤ 18	18 < T ≤ 30	30 < T ≤ 50
10	18	+/- 0.25	+/- 0.20	+/- 0.25	+/- 0.25			
18	30	+/- 0.30	+/- 0.20	+/- 0.25	+/- 0.30	+/- 0.30		
30	50	+/- 0.40	+/- 0.25	+/- 0.25	+/- 0.30	+/- 0.35	+/- 0.40	
50	80	+/- 0.60	+/- 0.25	+/- 0.30	+/- 0.35	+/- 0.40	+/- 0.50	
80	120	+/- 0.80	+/- 0.30	+/- 0.35	+/- 0.40	+/- 0.45	+/- 0.60	
120	180	+/- 1.00	+/- 0.40	+/- 0.45	+/- 0.50	+/- 0.55	+/- 0.60	
180	240	+/- 1.40		+/- 0.55	+/- 0.60	+/- 0.65	+/- 0.70	

## CONCAVITY/CONVEXITY RECTANGULAR BARS

WIDTH w		TOLERANCE
OVER	UP TO & INC	+/- MM
> 10	30	0.2
30	50	0.3
50	80	0.4
80	120	0.6
120	180	0.9
180	240	1.2
240	350	1.5