

BS EN 10056-2 : 1993

Structural steel equal and unequal leg angles

Part 2. Tolerances on shape and dimensions

Tolerances on shape and dimensions

Leg length (a or b)

The deviation from nominal on leg length shall be within the tolerance given in table 1.

For unequal leg angles, the longer leg length (a) shall be used to determine the tolerance band.

Section thickness (t)

The deviation from nominal on thickness shall be within the tolerances given in table 1.

Out-of-squareness (k)

Out-of-squareness of the section shall not exceed the maximum given in table 1.

For unequal leg angles, the longer leg length (a) shall be used to determine the tolerance band.

Straightness (q)

The deviation from straightness shall not exceed the tolerances given in table 1.

For unequal leg angles, the longer leg length (a) shall be used to determine the tolerance band.

Tolerances on mass

The deviation from the nominal mass of any individual piece shall not exceed:

- a) $\pm 6\%$ for thickness for $t \leq 4\text{mm}$; or
- b) $\pm 4\%$ for thickness for $t > 4\text{mm}$.

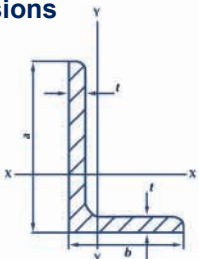
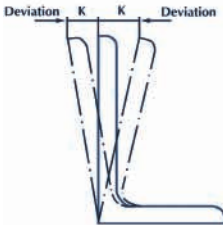

The deviation from the nominal mass is the difference between the actual mass of the batch or piece and the calculated mass. The calculated mass shall be determined using a density of 7.85 kg/dm^3 .

Tolerances on length

The tolerance on ordered length shall be either:

- a) $\pm 50 \text{ mm}$; or
- b) $+^{100}_0 \text{ mm}$ where minimum lengths are requested.

Table 1. Dimensional tolerances for structural steel I and H sections

Dimensions	Leg length		Section Thickness		
	Length mm	Tolerance mm	Thickness (t) mm	Tolerance mm	
	$a \leq 50$	± 1.0	$t \leq 5$	± 0.50	
	$50 < a \leq 100$	± 2.0	$5 < t \leq 10$	± 0.75	
	$100 < a \leq 150$	± 3.0	$10 < t \leq 15$	± 1.00	
	$150 < a \leq 200$	± 4.0	$15 \leq t$	± 2.00	
	$200 < a$	$+6.0$ -4.0			
Squareness 	Out-of-squareness Leg length (a) mm		Tolerance		
			(k) mm		
	$a \leq 100$		1.0		
	$100 < a \leq 150$		1.5		
	$150 < a \leq 200$		2.0		
$200 < a$		3.0			
Straightness 	Leg length	Tolerance over full bar length	Leg length	Tolerance over any part	
	a	q	a	Length considered	q
	mm	mm	mm	mm	mm
	$a \leq 150$	$0.4\% L$	$a \leq 150$	1500	6
	$150 < a \leq 200$	$0.2\% L$	$150 < a \leq 200$	2000	3
$200 < a$	$0.1\% L$	$200 < a$	3000	3	

