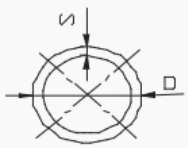
STANDARD PROFILE TOLERANCES

HOT EXTRUDED AND STRAIGHTENED - *HOLLOW SECTION*

A

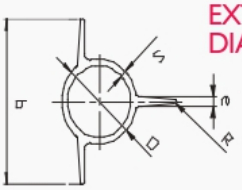


EXTERNAL DIAMETER D

Up to 50 mm:	± 0.5 mm
Over 50 mm:	± 1%
Thickness S:	± 10% of the nominal thickness

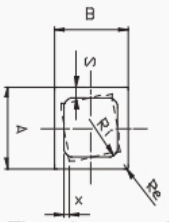
B

EXTERNAL DIAMETER D



Up to 50 mm:	± 0.5 mm
Over 50 mm:	± 1%
Thickness S:	± 15%
Thickness of fin e:	± 0.5 mm
Width of fin b:	± 2 mm (or less on agreement)

C



DISPLACEMENT OF INTERNAL FORM X: ± 1 MM

The tolerances of other hollow profile shapes must be agreed after study.
For all other tolerances see table for solid section profiles.

STANDARD PROFILE TOLERANCES

HOT EXTRUDED AND STRAIGHTENED - *SOLID SECTION*

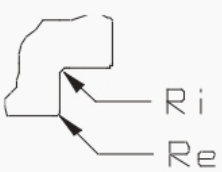
A

DIMENSIONAL TOLERANCES OF THE TRANSVERSE SECTION:

Less than 25 mm	± 0.5 mm
from 25 to 75 mm	± 0.8 mm
from 75 to 100 mm	± 1.0 mm
from 100 to 125 mm	± 1.2 mm
over 125 mm	± 1.4 mm

B

MINIMUM RADII:



Ri = internal radius:
minimum 4^{+2}_{-0} mm
Re = external radius:
minimum 1.5 ± 0.5 mm

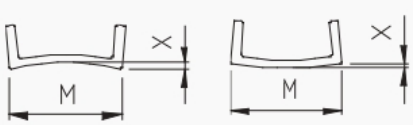
C

ANGULAR TOLERANCES:

Type 1 case ± 1°30' Type 2 case ± 0°30'

D

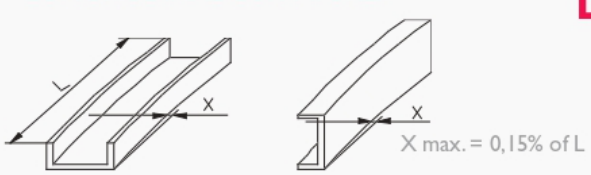
TRANSVERSE CURVATURE:



X max = 1% of M
(or less on agreement)

E

LONGITUDINAL CURVATURE:

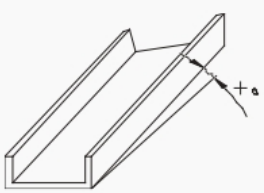


X max. = 0,15% of L

F

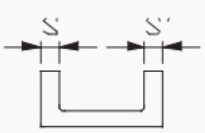
WARP:

Max. deviation of 1mm per metre, or less (on agreement) according to requirements.



G

DIMENSIONAL DIFFERENCES BETWEEN SYMMETRICAL PARTS:

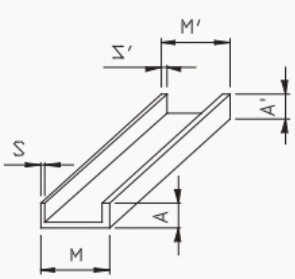


Max difference between S and S'
half tolerance of point A

e.g. S = S' = 28± 0.8 mm
max difference 0.8 mm
(hypothesis S = 27.6 S' = 28.4)

H

DIMENSIONAL DIFFERENCES BETWEEN SYMMETRICAL PARTS:



Max variation:
half tolerance at point A

e.g.: nominal values
M = M' = 80 ± 1 mm
A = A' = 40 ± 0.8 mm
S = S' = 15 ± 0.5 mm

Example:
M = 79.5 M' = 80.5
A = 39.4 A' = 40.2
S = 14.75 S' = 15.75

I

LONGITUDINAL BAR TOLERANCES:

a) from production ± 1 metre
b) fixed: ± 2 mm; from 0+10mm (or on request)
c) multiple: + 5 mm each multiple (or on request)
d) commercial: from 3 metres to 7 metres

SIDERVAL S.p.A.