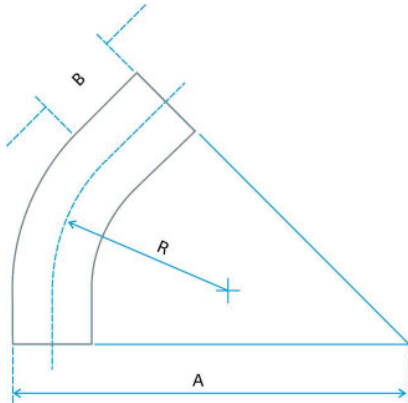


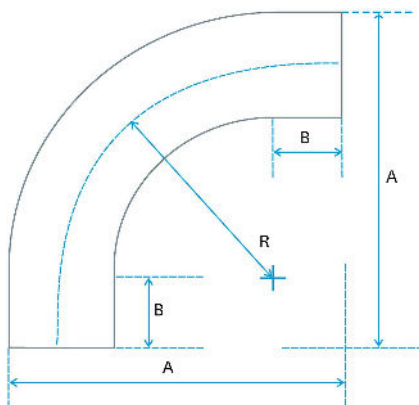
## Specification Guide

### Bend Dimension Tolerances

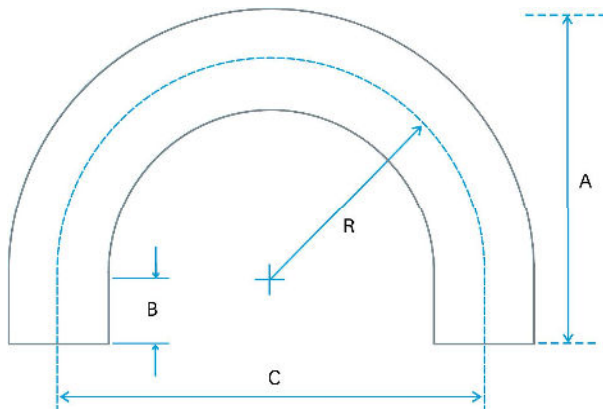
Where an international or official standard applies to the product class, tolerances from these standards are applied. Where there is no official standard for dimensions Ultibend Industries Ltd. applies reasonable in-house calculated tolerances, which are generally tighter than industry norms.



45° New Zealand/Uni (AS 1528.3)/Long Leg/US (2KS)		
	METRIC	IMPERIAL
Ovality	± 0.50% of OD	± 0.50% of OD
Square	Target 0.20mm; Max 0.40mm	Target 0.0079"; Max 0.0157"
Dim A	±1.50mm	±0.059"
Dim B*	Nominal	Nominal
Radius*	Nominal	Nominal
Wall Thickness	+0.00 -0.1mm;	+0.00 -0.006"



90° New Zealand /Zetan (2WCL) /Long Leg/Uni (AS 1528.3)/US (2S)		
	METRIC	IMPERIAL
Ovality	± 0.50% of OD	± 0.50% of OD
Square	Target 0.20mm; Max 0.40mm	Target 0.0079"; Max 0.0157"
Dim A	+1.00mm -0.00	+0.039" -0.00
Dim B*	Nominal	Nominal
Radius*	Nominal	Nominal
Wall Thickness	+0.00 -0.1mm;	+0.00 -0.006"


**180° New Zealand/Uni (AS 1528.3)**

	<b>METRIC</b>	<b>IMPERIAL</b>
<b>Ovality</b>	± 0.50% of OD	± 0.50% of OD
<b>Square</b>	Target 0.20mm; Max 0.40mm	Target 0.0079"; Max 0.0157"
<b>Dim A</b>	±1.00mm	±0.039"
<b>Dim B*</b>	Nominal	Nominal
<b>Radius*</b>	Nominal	Nominal
<b>Wall Thickness</b>	+0.00 -0.1mm;	+0.00 -0.006"

\*Typically a bend is formed to a slightly tighter radius to allow for radial growth and springback. The 'A' dimension (height) will always be correct. If the radius dimension is critical to your end use please contact us to discuss options.