

Bar reinforcements - shapes to BS 8666:2000

Reinforcements can be supplied cut and/or bent to the Shape Codes detailed in BS 8666:2000, as illustrated below.

Table 1 Standard shapes, their method of measurement and calculation of length

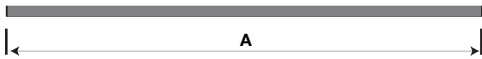

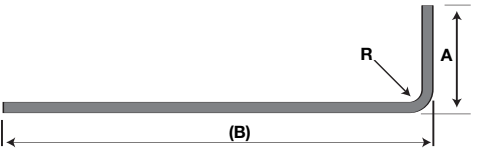
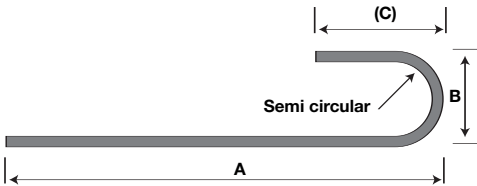
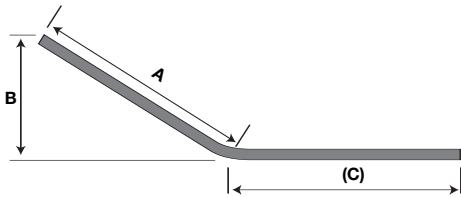

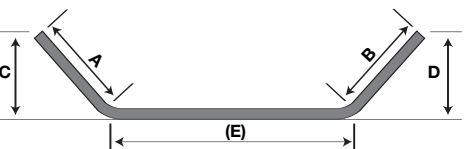
Shape code	Shape	Total length of bar (L) measured along centre line (mm)
00		A
11		$A + (B) - \frac{1}{2}r - d$ Neither A nor B shall be less than A in Table 3
12		$A + (B) - \frac{1}{2}r - d$ Neither A nor B shall be less than A in Table 3 nor less than $(R - 6d)$
13		$A + 0.57B + (C) - 1.57d$ Neither A nor B shall be less than A in Table 3 nor less than $(\frac{1}{2}B + 5d)$ B shall not be less than $2(r + d)$ See note 2
15		$A + (C)$ Neither A nor C shall be less than A in Table 3 See note 1
21		$A + B + (C) - r - 2d$ Neither A nor C shall be less than A in Table 3
25		$A + B + (E)$ Neither A nor B shall be less than A in Table 3 If E is the critical dimension, schedule as 99 and specify A or B as the free dimension. See note 1

Table 1 (continued) Standard shapes, their method of measurement and calculation of length

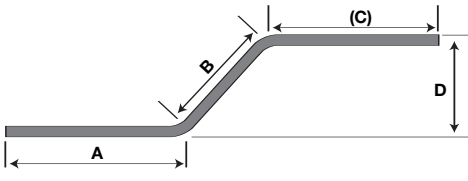
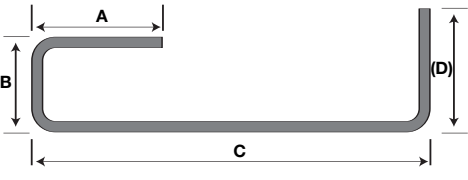
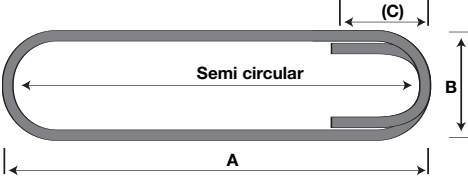
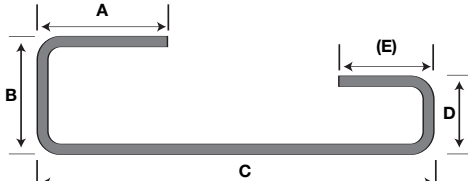
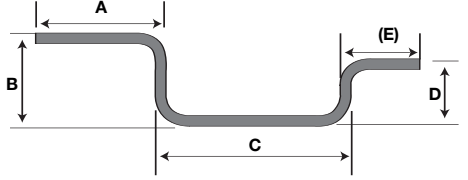
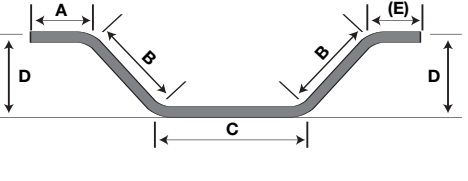
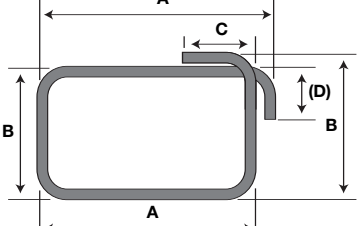
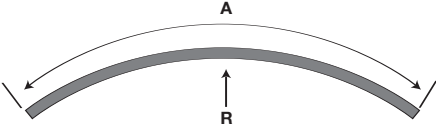
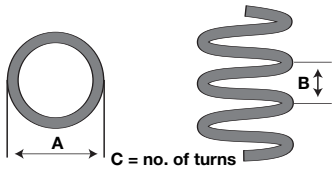
Shape code	Shape	Total length of bar (L) measured along centre line (mm)
26		<p>$A + B + C$ Neither A nor C shall be less than A in Table 3</p>
31		<p>$A + B + C + (D) - 1\frac{1}{2}r - 3d$ Neither A nor D shall be less than A in Table 3</p>
33		<p>$2A + 3B + 17d$ A shall not be less than $12d + 30mm$ B shall not be less than $2(r + d)$ See note 2</p>
41		<p>$A + B + C + D + (E) - 2r - 4d$ Neither A nor E shall be less than A in Table 3</p>
44		<p>$A + B + C + D + (E) - 2r - 4d$ Neither A nor E shall be less than A in Table 3</p>
46		<p>$A + 2B + C + (E)$ Neither A or E shall be less than A in table 3 See note 1</p>
51		<p>$2(A + B + C) - 2\frac{1}{2}r - 5d$ C and D shall be equal and not more than a or B nor less than A in Table 3</p>

Table 1 (continued) Standard shapes, their method of measurement and calculation of length

Shape code	Shape	Total length of bar (L) measured along centre line (mm)
67		<p style="text-align: center;">A See clause 10</p>
77		<p style="text-align: center;">$C\pi (A - d)$</p> <p>Where B is greater than A/5 this equation no longer applies and L shall be calculated</p>
99	<p>To be calculated.</p> <p>All shapes where standard shapes cannot be used. No other shape code number, form of designation or abbreviation shall be used in scheduling. With the exception of rectangular links, 5 bends or more are undesirable and may be impractical within permitted tolerances but they shall be drawn out in full and coded 99.</p> <p>A dimensioned sketch shall be drawn over the dimension columns A to E. Every dimension shall be specified and the dimension that is to allow for permissible deviations shall be indicated in parenthesis, otherwise the fabricator is free to choose which dimension shall allow for the tolerance.</p>	

For all shapes other than 12, 13, 33 and 67 the radius of bend shall be not less than the minimum specified in Table 3.

The dimensions in parentheses are the free dimensions. If a shape given in this table is required but a different dimension is to allow for the possible deviations, the shape code shall be drawn out and given the shape code 99 and the free dimension shall be indicated in parentheses.

The length of the straight between two bends shall be at least 4d, see Figure 6.

Note 1. The length equations for shapes 15, 25 and 46 are approximate and where the bend angle is greater than 45° the length should be calculated more accurately allowing for the difference between the specified overall dimensions and the true length measured along the central axis of the bar or wire. When the bending angles approach 90°, it is preferable to specify shape code 90 with a fully dimensioned sketch.

Note 2. For shapes with straight and semicircular lengths (e.g. shape codes 13 and 33) the largest practical radius for the production of a continuous curve is 200mm, and for larger radii the curve may be produced by a series of straight sections.

www.corusireland.com

Care has been taken to ensure that this information is accurate, but Corus Group plc, including its subsidiaries, does not accept responsibility or liability for errors or information which is found to be misleading.

Corus Service Centre

Moira Road

Lisbrun

Co Antrim

BT28 2SN

T +44 (0) 28 9266 0747

F +44 (0) 28 9266 0748

E reinforcements@corusgroup.com

Corus Service Centre

Tivoli Industrial Estate

Tivoli

Cork

T +353 (0) 214 500 166

T +353 (0) 214 500 902

E reinforcements@corusgroup.com