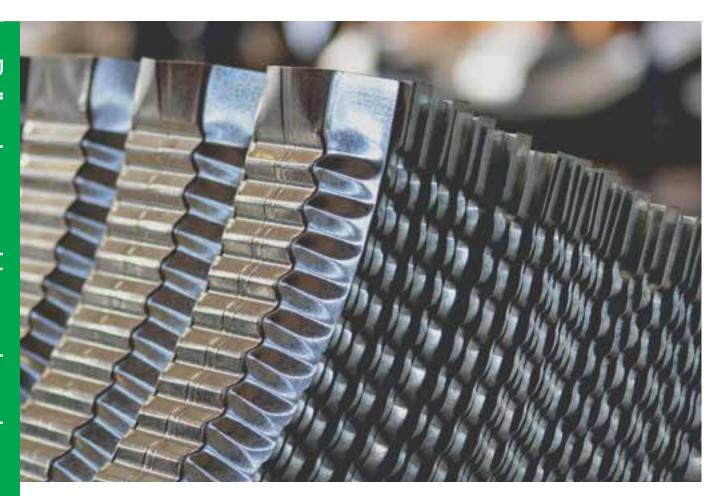
Bullnosing, cranking and curving







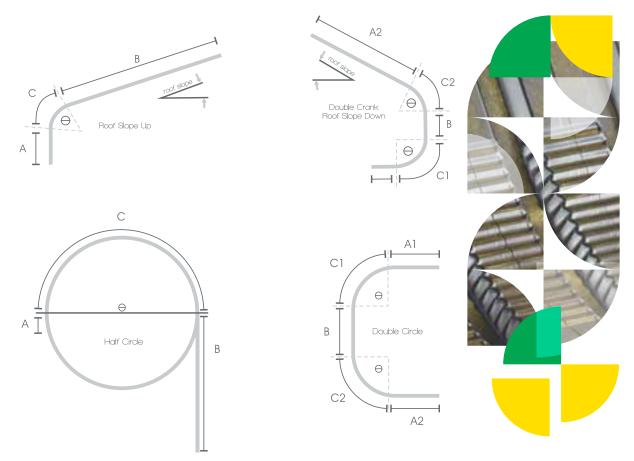
Bullnosing, cranking and curving

For roofing

Clotan Steel's IBR, Corrugated and Widespan sheets can be bullnosed, cranked, curved or smooth curved to customer requirements.

Bullnoses and centre cranks

Bullnosing and centre-cranking of a profiled sheet incorporates lateral rib indentations pressed in at a uniform distance of 25 mm. Standard bullnoses are made with narrow flute uppermost and the bend away from the angular inclination. Reverse bullnoses are made with the bend into the narrow flute. Bullnoses and cranks can be at the end of a sheet or at any position along the length. Bullnoses and centre cranks can be manufactured in radii ranging from 350 mm to 800 mm for bullnoses which are bent through $0-135^\circ$. High tensile material can only be bullnosed and cranked to a minimum radius of 450 mm.



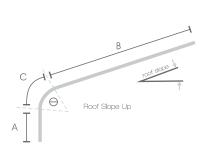
Larger radii will be classified as a forward crank.

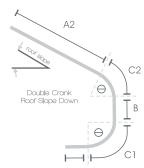
The maximum sheet length which can be bullnosed is 15 m, with a maximum height of 2 m. The minimum run-out from the bullnose is 30 mm on one side with a minimum of 500 mm on the other side of the sheet. It is important to clearly identify the critical end of the bullnose in order to ensure that consistent lengths are supplied to the customer.

The maximum height (after cranking) of centre and off-centre cranks which can be manufactured is 2 m, with a limitation of 10 m total sheet length, due to handling and transport limitations. (Height in this case is from ground level to highest point of bullnose sheet.)

Crank curving

IBR, Widespan and Corrugated material can be crank curved with the same process used for bullnosing, but with manual handling and with an increased distance between indentations in order to achieve the larger radius. In the case of pre-painting sheeting the colour can be specified on either side of the sheet. Due to the manual process involved, bullnoses will be priced as curves when the radius exceeds 800 mm. The maximum height of curves which can be handled is 2 m, with a maximum sheet length of 10 m. (Height in this case is from ground level to highest point of bullnosed sheet.)





Smooth curving

In addition to other processes described above, corrugated sheets can be curved using a rolling process to achieve a smooth rolling finish on the sheet. High tensile material (550 MPA) is not suitable for curving due to the hardness of the material. It is therefore essential that only 0.58 mm and 0.80 mm material be used for smooth curving. The minimum radius for curving on 0.58 mm ISQ300 material is 900 mm and on 0.80 mm ISQ230 material it is 600 mm. When tight bend radii are specified, edge ripple on the roof sheets might prevail. When only a part of the sheet is curved and bullnosed, slight crease marks on the sheets can be expected.

Sheet length is limited to 10 m with a maximum height of 2 m. (Height in this case is from ground level to highest point of bullnose sheet).

