



BISON PRECAST

a Forterra brand

TECHNICAL GUIDANCE NOTE

Camber - 20 November 2017

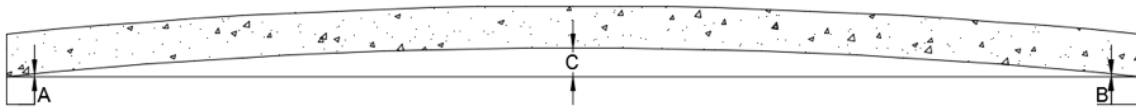
All prestressed concrete beams and slabs have camber which is formed as an upwards curve due to the compressive force near the bottom of the unit. The amount of camber within a unit depends on many factors with the biggest being the span and the number of prestressed tendons used in the product. As a guide the camber is predicted at span / 300 and is presented in table 1.

Table 1 – predicted camber of prestressed product

Span (mm)	Predicted Camber (mm)
3000	10
4000	13
5000	17
6000	20
7000	23
8000	27

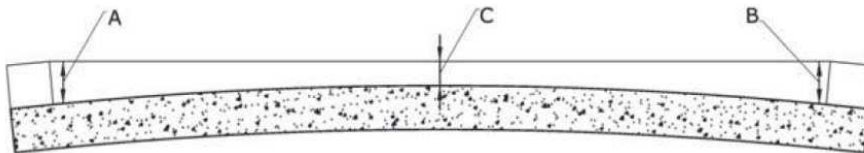
There are two methods available to measure camber depending if the product has been installed or not.

Measuring camber – not installed



Tightly pull a length of string across the span of the unit. The simplest method is to wrap the string around the bearers at both ends and pull the string tight. Measure the length between the string and the beams at C.

Measuring camber - installed



Tightly pull a length of string across the span of the unit, raised of the surface. The camber is $[A+B]/2 - C$

To keep the camber to a minimum the product needs to be stacked on site with minimum overhang at the ends along with the normal good practice such as on level ground etc. In addition the product should be installed as soon as possible to reduce the creep effect.

Should long spanning units be required on site then it may be necessary to reduce the bearing level on the internal leaf or change the specification of the top sheet to a thinner more thermally efficient material. These options should be discussed with one of our project managers / design team.