BISON PRECAST
a Forterra brand

MANUFACTURE

Omnia Bridge Deck

Factory controlled production ensures accuracy in plank size, reinforcement position and cover to the soffit.

Omnia Bridge Deck is manufactured to all relevant British Standards and the 'Specification for Highway Works', using C50 concrete in planks 300mm wide x 60mm deep, although special widths can be manufactured up to 600mm wide for use as infill panels at transverse beams or abutments.

Each 300mm wide Omnia Bridge Deck plank has an Omnia lattice girder centrally placed and the plank is reinforced with either 3 or 4 steel bars 10-16mm dia.

The upper surface of the Omnia planks has a Class 2 finish as required by the 'Specification for Highway Works' to expose the aggregate. This surface accommodates the horizontal shear stresses at the precast/in-situ interface. The manufacturing tolerances and soffit finish (Type F2), are also as specified and the production process is controlled by the procedures set out in our model specification.

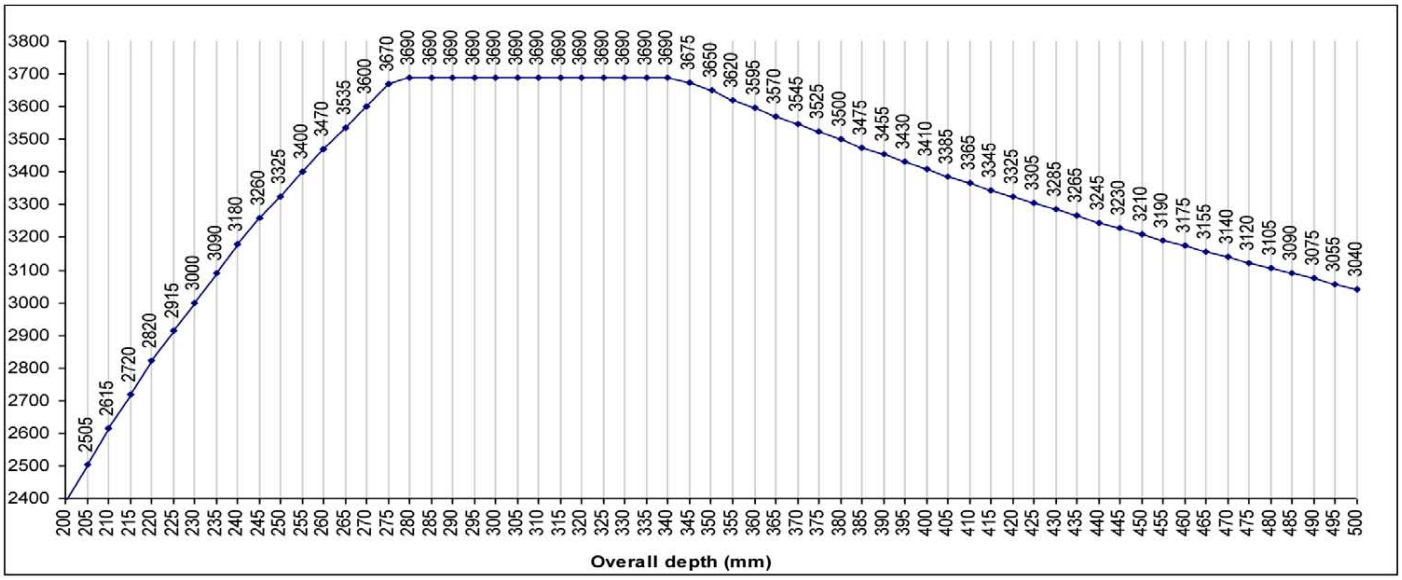
The Omnia lattice girder is at the heart of all of the Omnia product range and is responsible for ensuring that the panels will span the required distance in the temporary condition. The lattice also acts as a physical link between the precast panel and the in-situ portion, and as lifting points during erection. We will also endeavour wherever possible to provide a lattice girder that is set at the correct height for placing of the top mat of reinforcement.

Dimensions

Omnia Bridge Decking can be manufactured in lengths up to 3.80m and depending on the overall slab depth can be used for clear spans of 3.69m with a preferred bearing of 55mm at each end. The graph below shows the maximum clear span for a range of slab depths:-

The long edges are formed with a chamfer to the underside, so that when placed adjacent to each other, the effect of a birds-mouth joint at 300mm centres can be seen on the soffit.

Planks can be manufactured with skewed ends to suit the shape of the structure if necessary, however as the maximum plank length can be no greater than 3.80m, the clear span will be reduced.



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