



Bridge abutments - Pier for artificial tunnels and underpasses

Precast walls can be assembled as bridge abutments or pier for artificial tunnels. The precast abutments have been designed out of the need to substitute current construction techniques that are still on the market. The main improvements present in our element are of a technical but, above all, of an economical nature. In fact, with our system, the weight of the reinforced concrete deck of the bridge is supported



directly by the precast elements and not by the land adjacent to the wall. This produces a significant reduction in the cost of the structure, given that not only is the length of the concrete deck reduced, but also the concrete cast and the quantity of rebars used in the abutment. The element is similar to the precast retaining wall, with the counterforts

proportionally thicker. In the upper part, an abutment cap is built close to the wall. It is connected through the rebars of the counterforts and can be either precast (in case of reduced size) or cast-in-place. The aim of the abutment cap is to distribute the weight of the beams. Its size is established by the designer of the bridge and varies according to the load on the reinforced concrete deck. The foundation slab of the precast element has a variable section and is provided with steel bar divisions to connect between them each panels.

