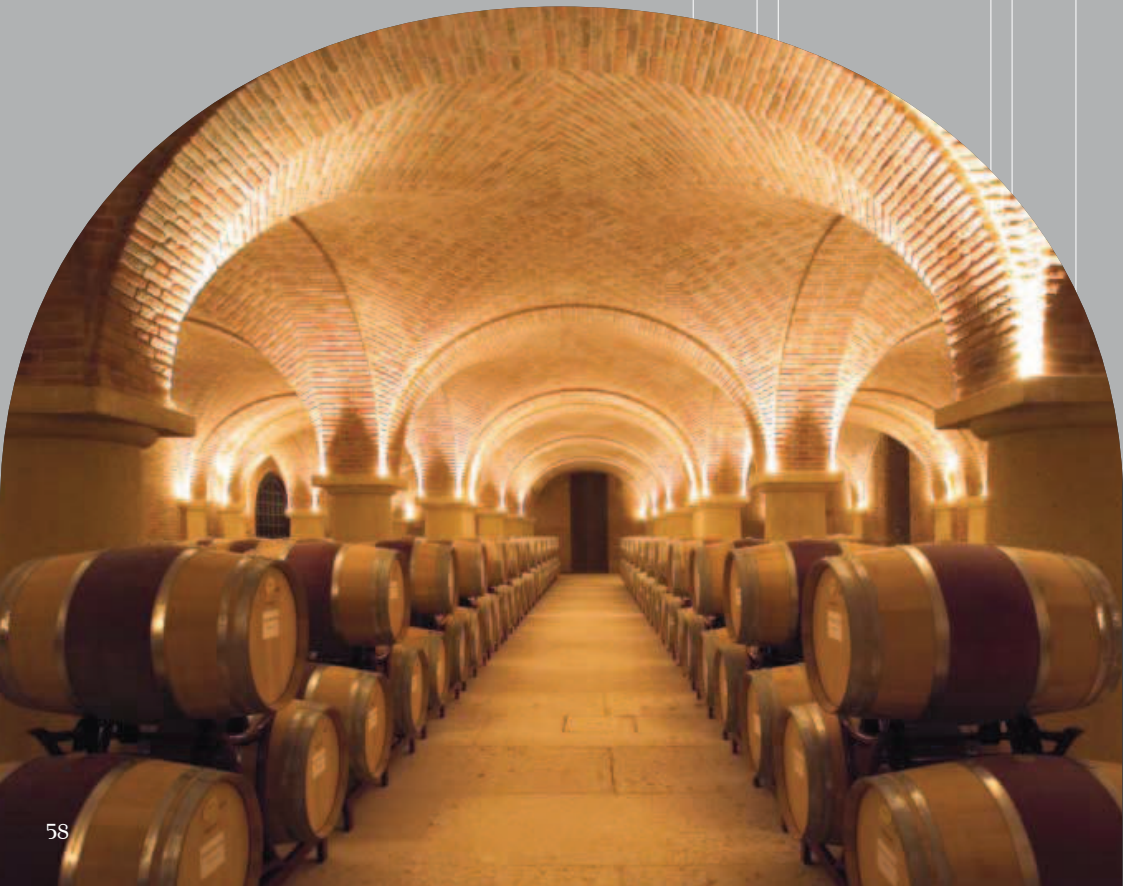


FORMWORKS FOR VAULTS

Cross-vaults, barrel-vaults, sail-vaults, and tent-vaults are structures that are in demand not only for reconstruction of old buildings but also for construction of new ones. A vault is an architectural element of antique charm and meets both aesthetic and structural requirements. Arbloc offers formworks of blown-out polystyrene, cut in sizes on request and lined with various materials depending on particular requirements, from laying of bricks to concreting.

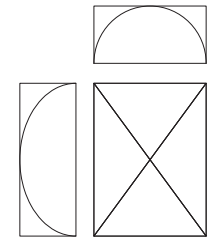


typology

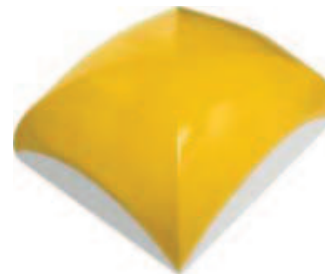
CROSS VAULT



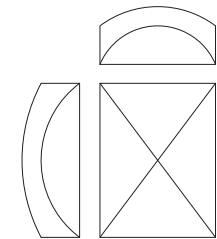
It is formed by crossing two barrel-vaults. They can be made with any type of curve, of any size and even have a rectangular foot. This formwork can be deprived of reinforcement and recycled.



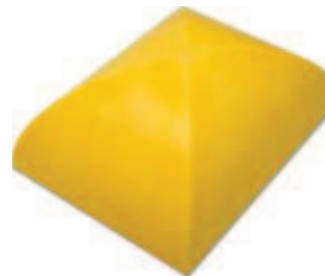
CROSS VAULT WITH SAIL



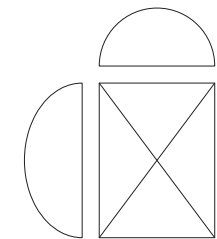
It differs from a sail-vault by having diagonals. The central part is raised over the top of the lateral arches forming 4 sail curves. The sizes are upon request. Sail vaults can be produced without demonstrating the cross of the diagonals.



TENT-VAULT



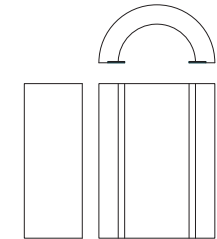
It is formed by crossing 2 barrel-vaults without outside arches. The curves are tangent to the walls of a room and are designed and adjusted to the sizes of the foot and the arm.



BARREL-VAULT



Generally, it is a semi cylinder, but it can also be made with any other type of curve. In case of a semi-circular curve, the inside of the formwork permits reinforcement removal and recycling.



concreting of a sail-vault



DESCRIPTION OF THE FORMWORK

The formworks are done according to a design, of blown-out polystyrene lined with plastic resin. Arbloc has studied the reinforcement removal, recycling and delivery of the formworks.



INSTALLATION

Regarding the sizes, the form and the constructive requirements, the formworks can be placed on one or more levels of the platform.

To prevent the cement from penetrating between two elements, a masking tape is applied to the joints.



SEALING OF PERIMETRIC JOINTS

Elements in polystyrene are applied round the perimeter to seal the margin between the formwork and the wall.

concreting of a sail-vault



REMOVAL OF ARCHES

Lateral vault arches are removed by compressing the center of the formwork. The central space in the form of an arch and the tables of wood glued to the base allow executing this operation also in case of arches of big sizes. The tables are drawn to the central space winding the metal cord. The force needed to set it off can vary from 100 to 300 kg.



VAULT REMOVAL

The elements of the vault are removed using a lifting jack. A constant pressure should be exercised on the panel of the front caisson. The required pressure for the removal can vary from 100 to 500 kg a part.



WORK DONE

