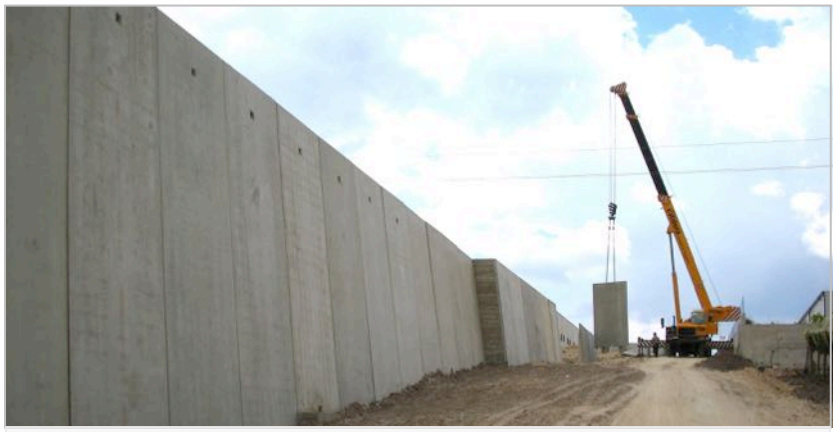
Monachino Technology

PRECAST COUNTERFORT RETAINING WALL WITH FAIR-FACED CONCRETE, COVERED IN STONE, STONE-GRASS OR CONCRETE-GRASS



FAIR-FACED CONCRETE WALL

WALL COVERED WITH LOCAL STONE

STONE-GRASS WALL

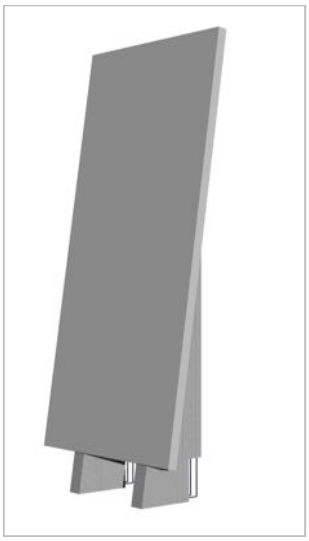
WE SUPPLY FREE OF CHARGE: ESTIMATES, TECHNICAL ASSISTANCE, DESIGN, CALCULATION REPORTS AND WORKING DRAWINGS.

Precast retaining walls are concrete structures for retaining soil. They are made up of a sequence of full-height modular panels (width 1.25 m or 2.50 m). The side facing the soil is endowed with one or more vertical stiffening counterforts which extend from the base to the top of the wall. They are placed on a underpinning slab which has been cast-in-place beforehand and whose depth is between 15-20 cm. It is then anchored through the casting of the foundation (shallow or deep, with the construction of piles or micropiles, if the terrain requires them).

The precast retaining walls are produced in four different types: with fair-faced concrete, covered with local stone, stone-grass or concrete-grass. The precast elements can be used for the construction of retaining walls for embankments, counterscarp walls, bridge abutments, abutments for artificial tunnels and noise barriers.

Both the precast elements and their highly automatized production techniques are protected by industrial patents and are perfectly suitable for any kind of soil pressure, be it low, medium or high. The wall facing can be made perpendicular to the laid substructure or inclined between 0%-15%. Placement is very quick and produces a structure which is ready to be filled.

Monachino Technology



FAIR-FACED CONCRETE WALL

The facing of the precast retaining wall is made up of a vertical or sloping wall of varying height with two stiffening counterforts under which can be seen the jutting out rebars which are to be incorporated in the foundation.

WALL COVERED WITH LOCAL STONE

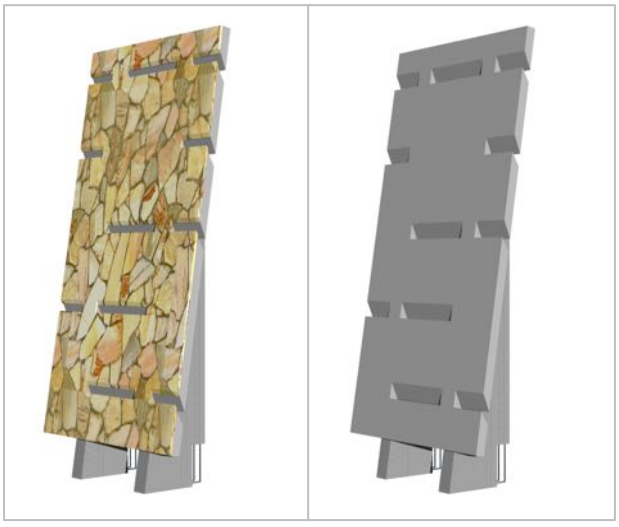
This option stems from the need to safeguard the environment, actually the precast retaining wall can also be supplied in ecological version with precast panel covered with local stone or in any other ecological material which can be in harmony with the surrounding environment.

STONE-GRASS / CONCRETE-GRASS WALL

The patent is the result of the need to protect the environment and maintain its balance. As well as having stone facing if required, this version of the precast wall has horizontal flowerbeds so that vegetation may easily grow to allow the wall to blend in better with the surrounding environment. The color of the facing, together with the green of the vegetation, is perfectly suitable for any natural environment.

ITEM SPECIFICATIONS

Precast concrete retaining wall, factory produced certified or controlled series products supplied with a suitable foundation to be paid separately, made up of vertical or sloping panels in vibrated concrete with stiffening counterforts on the side facing the soil which go from bottom to top, from which jut out the rebars incorporated in the foundation; the visible part can be covered with a natural or artificial stone facing which blends in with the surrounding ecosystem to safeguard the environmental impact. The wall can be endowed with horizontal self-draining flowerbeds so that vegetation may easily grow to allow the wall to blend in better with the surrounding environment. The wall is sized according to the current regulations regarding the verification of sliding, toppling and the maximum load of the foundation-wall-soil structure and according to current regulations regarding works carried out in reinforced concrete and, where necessary, according to current anti-seismic regulations.



ASSEMBLY PHASES FOR RETAINING WALLS ON SHALLOW FOUNDATION

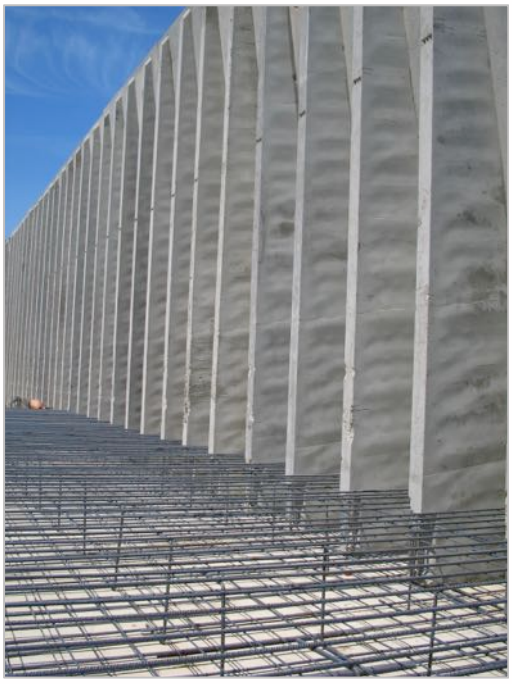
1) The first working phase, concerns the ground excavation, with the possible construction of piles or micropiles, in presence of very low friction angles; Then, the lean concrete is poured for underpinning slab.

2) The precast walls are carried on the assembly location.

3) The precast wall is hooked from its upper part and lifted through an adequate means.

4) The precast elements are placed side by side. Shoring the walls before the pouring of concrete is unnecessary. In fact, the wall is self-stabilizing.

5) When the assembly phase is finished, the rebars of the foundation are placed. Their size is in accordance with the structural calculation. Subsequently, the casting of the foundation will be carried out.



6) When the concrete in the foundation has cured, the wall is filled in with earth.

7) The work is finished.

Monachino Technology

www.monachinotechnology.com

General Informations:
info@monachinotechnology.com

Monachino Technology