

Installation instructions for ECLAMUR retaining walls

Layout

For each wall height, a sketch is proposed. The necessary materials are determined by these diagrams, and generally available from stock, or within 2 weeks.

The sole

Made of reinforced concrete, it must rest on a resistant and frost-free ground. If the height of the wall exceeds 150 cm, the sole must be equipped with a stop, blocking the first row.

The fruit of the wall gives it a luxurious appearance. It is easily obtained by tilting the upper surface of the sole (generally 10%).

A drainage jacket will be placed on the back of the wall.

Laying

Each row is laid "with string" to ensure horizontality.

Geotextile: From a wall height of 150 cm, the weight of the wall is no longer sufficient for its stability. We then use one or two "anchors", using a geotextile. Whose necessary tensile strength ≥ 30 kN/m. It will be pinched between two rows, over the entire surface of the elements.

Backfilling

A clean, draining, sandy material is recommended for this operation. Backfilling is carried out in layers not exceeding 50 cm. Compacting will be carried out carefully, using light machinery. The vibrating rollers will not approach less than 1.5 m from the wall.

Dimensioning - Basic data

The installation diagrams take into account the following technical data:

Angle of the upstream ground: $\beta = 0$ i.e. a flat upstream ground

Overload on the upstream ground: $P = 0$

Permissible stress of the geotextile: 8.5 kN/m

Ground:

Volume weight: $\gamma = 18$ kN/m³

Friction angle $\varphi = 30$

Cohesion $c = 0$

Geotextile: Tensile strength ≥ 30 kN/m

The proposed diagrams are indicative. They relate to the aforementioned basic data. In the event of different geological conditions, for loads on the crown of the wall, for slopes of the upstream ground, the intervention of an engineer is necessary.

Furthermore, the diagrams do not take into account the risks of "circular sliding" (rare) which will also have to be assessed by an engineer.

Important: The stability of the wall is the responsibility of an engineer. The diagram mentioned is indicative. It cannot engage the responsibility of Procim SA.