

Data sheet

QBLOCK® is a prefabricated concrete element in the shape of a parallelepiped with variable length and square or rectangular cross section.

On the base and top surfaces there are negative and positive pyramid trunks (diamonds) which allow a precise and fast coupling of the blocks as well as counteracting their mutual sliding.

The concrete has a resistance class of Rck37 and an exposure class of certificates for "LEED" credits.

QBLOCK® is not reinforced as it is not subjected to tensile or bending forces, thus acquiring very high durability and fire resistance EI240.

The 2.5 ton lifting nails are made of hot-dip galvanized tempered steel, 170 mm long.

Factory Production Control Compliance Certificates:

- **UNI EN 15258**: concrete elements for retaining walls 0925 CPR P q n.20/2017 dated 04/03/2017

- **UNI EN 771-3**: concrete elements for masonry 0925 CPR M d n.19/2017 dated 04/03/2017

- **UNI EN 10204**: metal products B084207 c n.3100008 dated 19/02/2015

- **NTC - D.M. 14/01/2008**: pre-mix concrete 0925 NTC C a n.03/2009

Criteria and principles underlying the use

The main characteristic of this construction system lies in the simplicity and modularity of the elements along the lines of the famous Lego toy.

By simple juxtaposition and superposition the blocks fit together without limits in shape and size and then subsequently adapt their arrangement if needs different from the initial ones arise.

The weight, the perfect parallelism of the contact surfaces and the diamonds guarantee stability to the structure without the use of cement binders.

Technical construction measures

The support surface of the elements must be regular and flat so as to guarantee the perfect positioning of the blocks and loads.

Foundations are not necessary, however we recommend a leveling cleaning jet, preferably reinforced, so as to absorb any subsidence of the ground if the bearing capacity is not uniform or sufficient.

QBLOCK® must be laid in staggered rows so that it can keep each single block linked, avoiding creating independent columns, but rather a monolithic structure.

Please note that the creation of structures using blocks is the result of a study carried out by qualified technicians appointed by the client, therefore the indications contained herein are to be understood exclusively as application examples.

QBLOCK® considers itself relieved of any responsibility related to improper use.

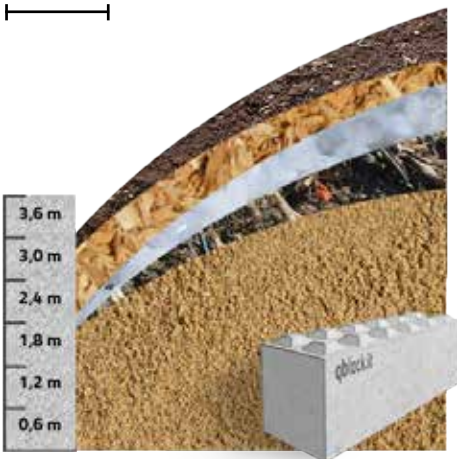
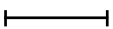
The supervision of a specialized technician is always recommended.

Products and services

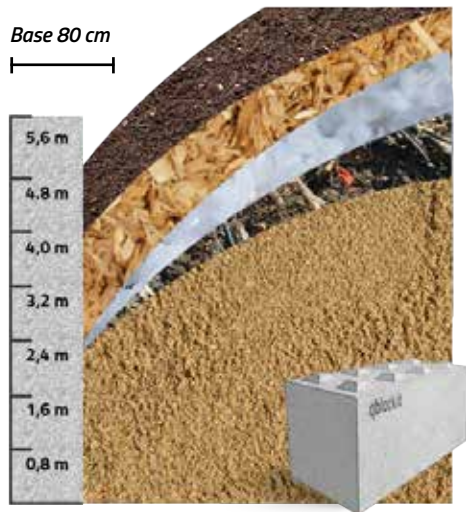
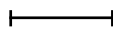
QBLOCK®, in addition to the supply of individual blocks, can provide actual assembly kits, integrated design services, static calculations, technical assistance on site, transport and construction of turnkey structures.

SAMPLE SIZE (ONE-SIDED COMPRESSIVE LOAD)

Base 60 cm



Base 80 cm



Densità (kg/m³)
Angolo di
compressione
interna

SABBIA
1500 - 30°

RIFIUTI
1500 - 35°

SALE
1200 - 40°

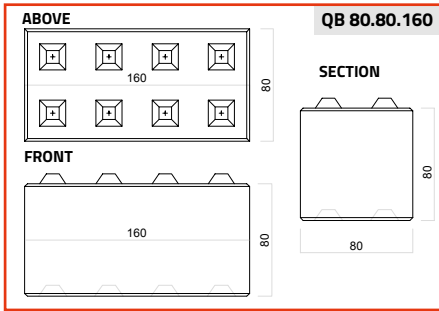
LEGNO
645 - 35°

TERRENO
500 - 45°

For technical information send an email to tecnico@qblock.it

Data sheet

For structural use



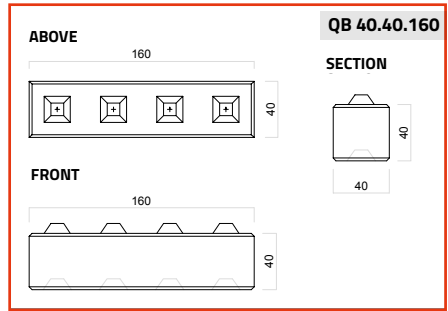
Standard Element

Size in cm: 80x80x160
Volume: 1,010 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 2,419 ton

Submeasures

80x80x40
80x80x80
80x80x120

For non-structural use

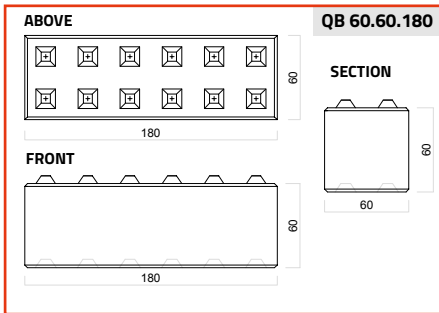


Standard Element

Size in cm: 40x40x160
Volume: 0,249 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 0,596 ton

Submeasures

40x40x40
40x40x80
40x40x120

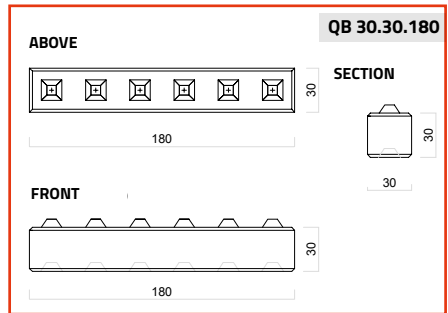


Standard Element

Size in cm: 60x60x180
Volume: 0,639 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 1,530 ton

Submeasures

60x60x30
60x60x60
60x60x90
60x60x120
60x60x150



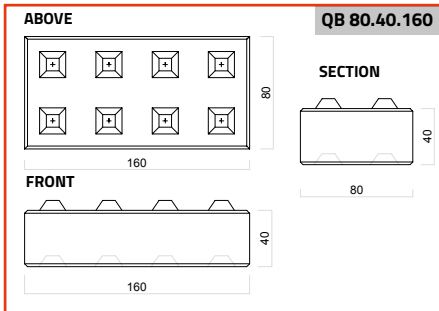
Standard Element

Size in cm: 30x30x180
Volume: 0,161 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 0,386 ton

Submeasures

30x30x30
30x30x60
30x30x90
30x30x120
30x30x150

For structural use



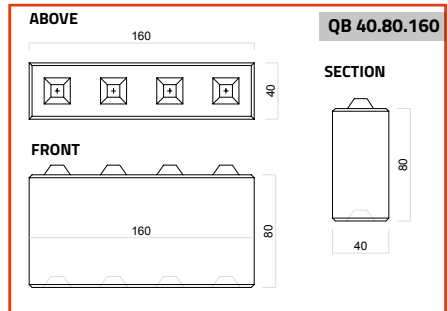
Standard Element

Size in cm: 80x40x160
Volume: 0,489 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 1,193 ton

Submeasures

80x40x40
80x40x80
80x40x120

For non-structural use

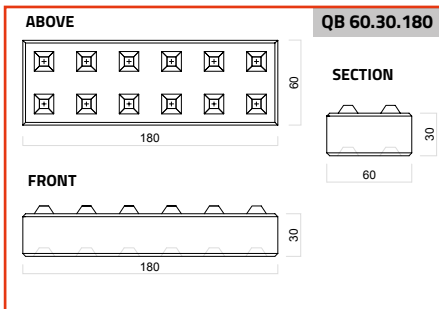


Standard Element

Size in cm: 40x80x160
Volume: 0,511 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 1,223 ton

Submeasures

40x80x40
40x80x80
40x80x120

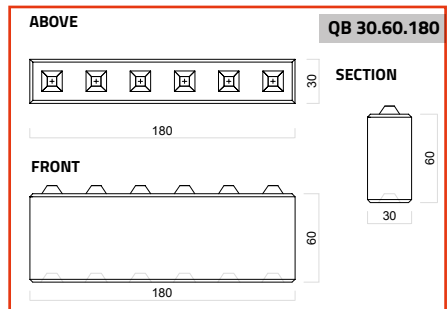


Standard Element

Size in cm: 60x30x180
Volume: 0,315 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 0,754 ton

Submeasures

60x30x30
60x30x60
60x30x90
60x30x120
60x30x150



Standard Element

Size in cm: 30x60x180
Volume: 0,319 m³
Specific weight cls Ys: 2,395 ton/m³
Block weight: 0,765 ton

Submeasures

30x60x30
30x60x60
30x60x90
30x60x120
30x60x150

SQUARE section

RECTANGULAR section

This technical data sheet may undergo changes and be superseded by new editions.
The version published on the site is considered valid as the latest version www.qblock.it