

*Concrete  
prefabricated modules  
for dry construction  
temporary or permanent*



## *Advantages*

- Stable
- Modular
- Repositionable
- Reusable
- Resellable
- Safe
- Economic
- Modern
- Simple design
- Very high fire resistance
- Ecological (does not require mortar)
- High resistance to aggressive agents
- Can also be modified during construction
- Simple replacement of damaged modules

## *Sectors of use*

- Civil and industrial construction
- Environmental and hydraulic engineering
- Mining industry
- Recycling
- Road traffic
- Street furniture
- Agriculture
- Zootechnics
- Agri-food industry
- Bioenergy
- Ecological islands

## *Application*

- Walls against the shore
- Infill walls
- Security walls
- Fences
- Fire barrier
- Anti-noise barrier
- Horizontal silos
- Trenches
- Unloading bays
- Containment basins
- Ballast for tensile structures
- Disposable formwork
- Support for tensile structures
- External plinths for poles
- Organization of outdoor spaces
- Flowerbeds
- Stairways
- Anti-erosion banks for canals
- Flood barriers
- Tool storage

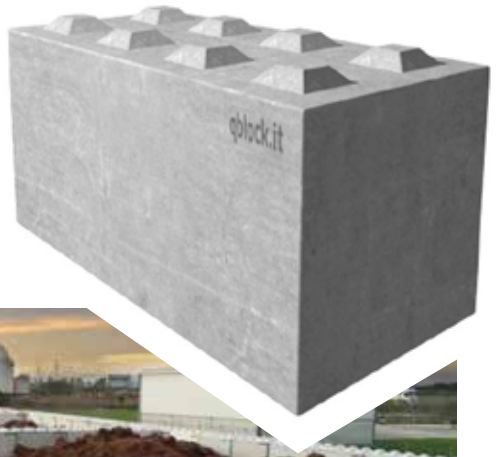


## ***Simple, strong, economical, fast***

Prefabricated concrete blocks with very high resistance and durability.

The shape, the weight, the particular contact surfaces allow them to be stacked, interlocking and giving them a very high resistance to cutting, becoming, in fact, a real monolithic structure.

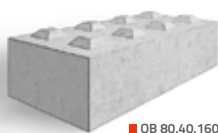
Solidity, simplicity and speed of installation, flexibility of the project even during construction, guarantee certainty of costs, making this intelligent and innovative system unique and absolutely the most economical.



# Products



■ QB 80.80.160



■ QB 80.40.160



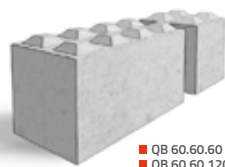
■ QB 60.60.180



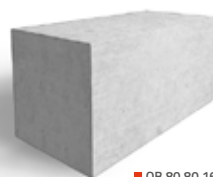
■ QB 80.80.80



■ QB 80.40.80



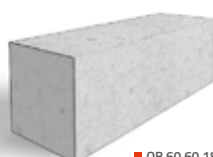
■ QB 60.60.60  
■ QB 60.60.120



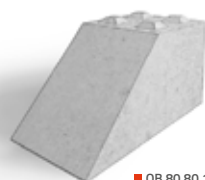
■ QB 80.80.160-00



■ QB 80.40.160-00



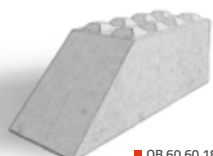
■ QB 60.60.180-00



■ QB 80.80.160-45



■ QB 80.40.160-45



■ QB 60.60.180-45



■ QB 80.80.160-T



■ QB 80.40.160-T



■ QB 60.60.180-T



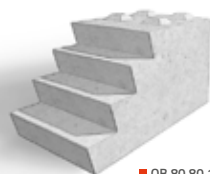
■ QB 80.80.160-R



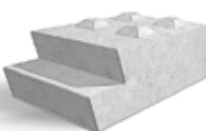
■ QB 80.40.160-R



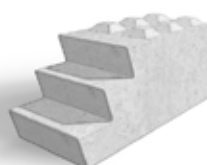
■ QB 60.60.180-R



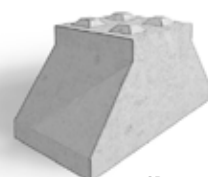
■ QB 80.80.160-S



■ QB 80.40.160-S



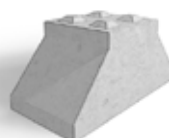
■ QB 60.60.180-S



■ QB 80.80.160-W



■ QB 200.16.200

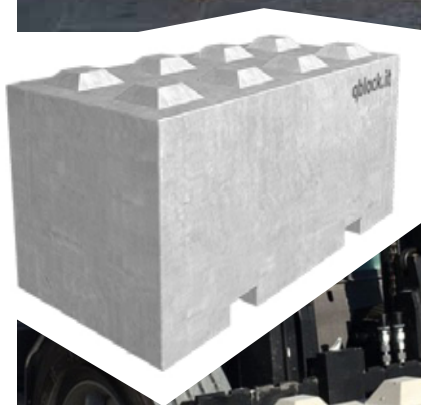


■ QB 60.60.180-W

# Movement

Simplicity, speed and safety in handling.

Each block is equipped with a certified system that allows lifting by any means and on request special pockets can be created for handling with a forklift.



# 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.

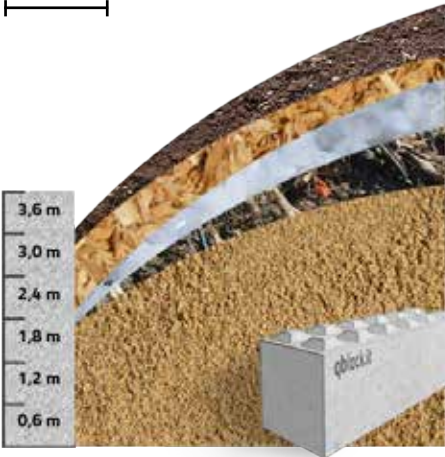
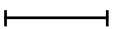
The supervision of a specialized technician is always recommended.

## Products and services

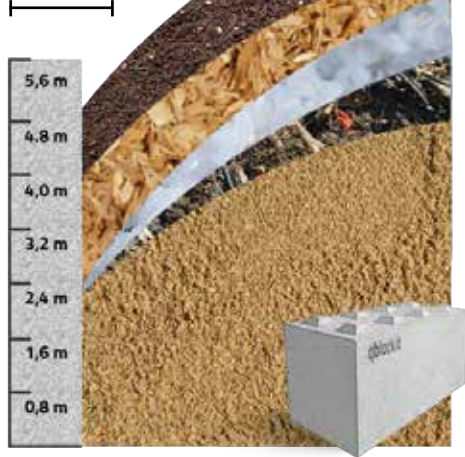
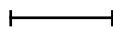
QBLOCK®, in addition to the supply of individual blocks, can provide actual assembly kits, integrated design services, static calculations, technical assistance on site, transport and construction of turnkey structures.

## SAMPLE SIZE (ONE-SIDED COMPRESSIVE LOAD)

Base 60 cm



Base 80 cm



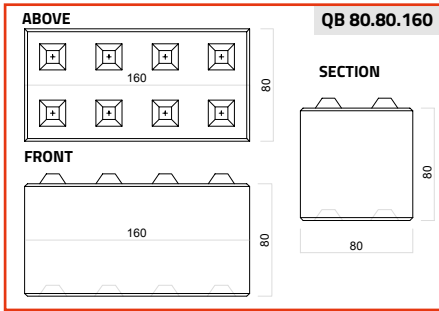
Densità (kg/m³)  
Angolo di  
compressione  
interna

SABBIA	RIFIUTI	SALE	LEGNO	TERRENO
1500 - 30°	1500 - 35°	1200 - 40°	645 - 35°	500 - 45°

For technical information send an email to [tecnico@qblock.it](mailto:tecnico@qblock.it)

# Data sheet

## For structural use



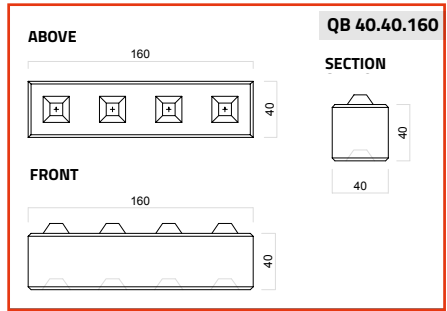
### Standard Element

Size in cm: 80x80x160  
Volume: 1,010 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 2,419 ton

### Submeasures

80x80x40  
80x80x80  
80x80x120

## For non-structural use

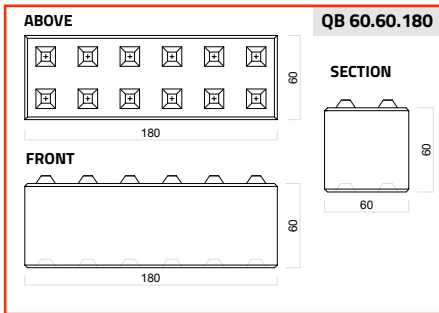


### Standard Element

Size in cm: 40x40x160  
Volume: 0,249 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 0,596 ton

### Submeasures

40x40x40  
40x40x80  
40x40x120

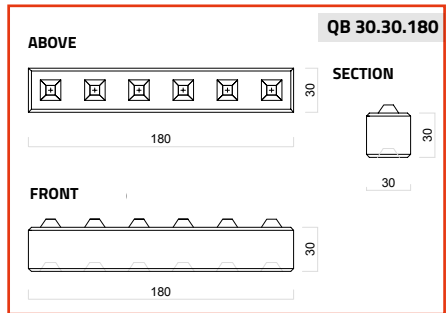


### Standard Element

Size in cm: 60x60x180  
Volume: 0,639 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 1,530 ton

### Submeasures

60x60x30  
60x60x60  
60x60x90  
60x60x120  
60x60x150



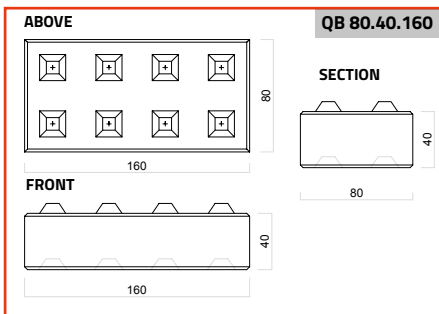
### Standard Element

Size in cm: 30x30x180  
Volume: 0,161 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 0,386 ton

### Submeasures

30x30x30  
30x30x60  
30x30x90  
30x30x120  
30x30x150

## For structural use



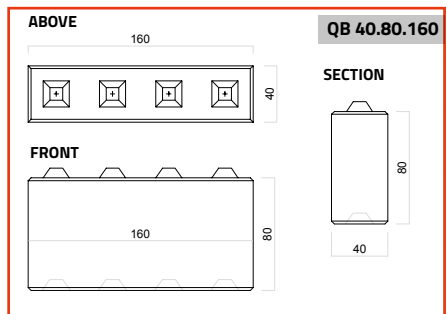
### Standard Element

Size in cm: 80x40x160  
Volume: 0,489 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 1,193 ton

### Submeasures

80x40x40  
80x40x80  
80x40x120

## For non-structural use

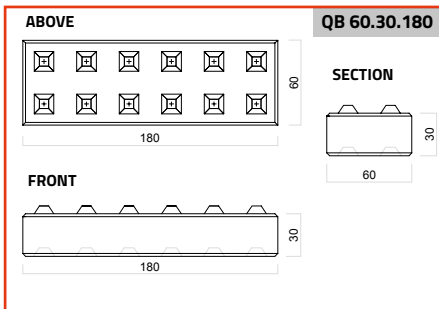


### Standard Element

Size in cm: 40x80x160  
Volume: 0,511 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 1,223 ton

### Submeasures

40x80x40  
40x80x80  
40x80x120

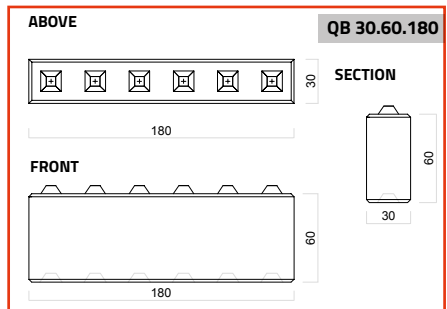


### Standard Element

Size in cm: 60x30x180  
Volume: 0,315 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 0,754 ton

### Submeasures

60x30x30  
60x30x60  
60x30x90  
60x30x120  
60x30x150



### Standard Element

Size in cm: 30x60x180  
Volume: 0,319 m<sup>3</sup>  
Specific weight cls Ys: 2,395 ton/m<sup>3</sup>  
Block weight: 0,765 ton

### Submeasures

30x60x30  
30x60x60  
30x60x90  
30x60x120  
30x60x150

SQUARE section

RECTANGULAR section



*Free to change shape  
in an infinite possibility  
of constructions.*



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