

CONCRETE Material Properties



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Technical Information

Concrete

High quality concrete HA 30 B20 IIA, acid etched and waterproofed.

Cement: PORTLAND (BLIIB-LL52.5-R) cement and GRIFFI (BLI-IB-LL52.5-R) cement.

Aggregates: Aggregates of marble, granite, with selected granulometry. With warranties and EEC certificates and ISO9001: 2000 SIMO.

Water: Potable water, containing no impurities silt or suspended organic components that may affect the quality of concrete as Structural Concrete.

Armed: welded wire mesh steel corrugated B500 S (UNE3092)

Surface finish: Acid etched, leaving the aggregates on the surface, and waterproofed. Optional finishing anti-graffiti coating.

Self-compacting concrete with 350 and 400 kg / m3 of cement, with aggregates of granite and / or limestone between 1 and 12 mm.

CHARACTERISTIC RESISTORS IN 28 DAYS Compressive strength 35-45 MPA Bending force 4-5 MPa OTHER PROPERTIES Water absorption 1.5 kg / m2

Concrete UHPC

Concrete UHPC (reinforced fiber) with various resistances depending on the needs of the piece, acid etched and waterproofed.

Cement: PORTLAND (BLIIB-LL52.5-R) cement and GRIFFI (BLIIB-LL52.5-R) cement.

Fiberglass: AR glass fiber in various formats depending of the piece. Type Cem-fl 70 or similar. Aggregates: Aggregates of silicates, granite and marble, with selected granulometry. With warranties and EEC certificates and ISO9001: 2000 SIMO.

Water: Potable water, containing no impurities silt or suspended organic components that may affect the quality of concrete as Structural Concrete.

Armed: welded wire mesh steel corrugated B500 S (UNE3092)

Surface finish: Acid etched, leaving the aggregates on the surface, and waterproofed. Optional finishing anti-graffiti coating.

UHPC

Self-compacting UHPC concrete with 700 kg / m3 of cement, with silicaous aggregates between 0.4 and 1 mm.

CHARACTERISTIC RESISTORS IN 28 DAYS Compressive strength 90-150 MPA Bending force 15-35 MPA OTHER PROPERTIES Water absorption 1 kg / m2



Minimal waste

Concrete can be produced in whatever quantity needed for each project, reducing waste and resources. After a concrete structure has served its primary purpose, the concrete can be crushed and recycled into aggregate for use in new concrete pavements or as backfill or road base.

Resource efficiency

The predominant raw material for the cement in concrete is limestone, the most abundant mineral on earth. Concrete can also be made with fly ash, slag cement, and silica fume, all waste by products from power plants, steel mills, and other manufacturing facilities.

Durability

Concrete builds durable, long-lasting structures that will not rust, rot, or burn. Life spans for concrete building products can be double or triple those of other common building materials.

Reflectivity

Concrete minimizes the effects that produce urban heat islands. Light-colored concrete pavements and roofs absorb less heat and reflect more solar radiation than dark-colored materials, such as asphalt.



