

WATERTIGHT TANK MADE OF PRECAST ELEMENTS – HEIGHT 5.00 M

Supply and installation of a watertight tank for the containment of liquid materials (water, slurry, etc.), installed above ground, partially buried or fully buried, with a square, rectangular, triangular, elliptical or circular shape, consisting of modular precast reinforced-concrete elements (Rck 45 N/mm²), structurally independent, with CE marking in accordance with European Standard EN 15258 under Assessment System 2+, classified as **“Declared Series” production** pursuant to the Italian Ministerial Decree of 17/01/2018, with filing with the Presidency of the Superior Council of Public Works, **manufactured by a company with a quality management system certified in accordance with UNI EN ISO 9001**, and joined together by means of male/female interlocking connections and a watertight elastic sealing joint.

The precast elements shall be supplied with Product Certification (ICMQ) certifying the content of recycled/recovered/by-product material, with reference to the Regulation for product certification relating to construction products – CP DOC 262, and to UNI EN ISO 14021:2016 “Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)”. Certification System 3 – ISO/IEC 17067 with TOTAL PERCENTAGE OF RECYCLED MATERIAL: ≥5%.

Characteristics of the precast elements:

Height	: 500 cm
Width	: 160 cm
Length	: 200 cm
Average element weight	: 9100 kg

To ensure long-term durability, the precast elements shall have the following physical and mechanical characteristics:

Concrete exposure class	: XA2 (in accordance with EN 206-1)
CAM certification	: System 3 – ISO/IEC 17067
Recycled material in concrete – CAM	: ≥19%
Fire resistance	: EI – REI 30
Environmental exposure condition	: E=High (in accordance with EN 13369)
Consistency class	: S4
Recycled material in concrete	: ≥5%
Compressive strength	: 45 N/mm ²
Concrete density	: 2550 kg/m ³
Water/cement ratio	: <0.45
Minimum cement content	: 360 kg/m ³
Minimum concrete cover	: 40 mm

The precast elements are structurally connected to the internal reinforced-concrete base slab of the tank, made with concrete of strength class C28/35, consistency class S4 and exposure class XA1, with B450C high-bond reinforcing steel subject to factory production control.