Specification items for Isotex wood cement formwork blocks

SISTEMA COSTRUTTIVO ISOTEX® Blocchi e Solai in Legno Cemento

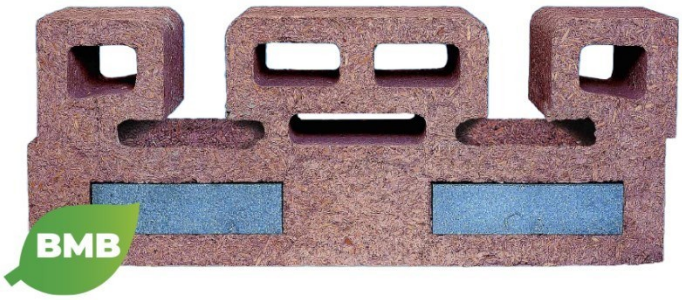
Exterior and interior load-bearing walls from H-form **Isotex® cement-bonded** wood fiber blocks of density 534 ± 10% kg/m^3 to be laid dry and staggered by half a block, cast with concrete every 5-6 courses layers and with a single continuous cavity for concrete casting. **The walling is reinforced with horizontal and vertical steel rods at 25 cm intervals and concrete casting of a consistency of no less than S4.** The range of blocks is complete with a number of special units such as half-blocks, corner blocks, flooring curb blocks, architrave blocks and pillar blocks.

The blocks contain EPS inserts made of **Neopor® BMBcert by BASF**, certified by Bureau Veritas Italia under the **ReMade in Italy®** scheme**, in Class C with 15% recycled content (ISOTEX GREEN insulating insert) or Class A+ with 100% recycled content (ISOTEX TOTAL GREEN insulating insert).** It should **have CE marking** in accordance with European Technical Approval and European harmonized standard UNI EN 15498, certifications on thermal transmittance values "U" according to European standards UNI EN ISO 6946, UNI 10355 and EN 10211, dynamic and hydrometric thermal characteristics as provided for by D.M 26/06/2015, **air impermeability test (Blower-Door-Test)** according to EN 12114, frost test (freeze-thaw) and dimensional stability according to UNI EN 14474, acoustic tests according to UNI EN ISO 140 and UNI EN ISO 717 for acoustic insulation, UNI EN ISO 354 and UNI EN ISO 11654 for acoustic absorption, **fire resistance tests (REI 120)** carried out with load-bearing walls according to EN 1365-1 and EN 13501-2, **façade fire performance test LEPIR 2 according to the Decree of the French Ministry of the Interior of 10/09/1990 and its application protocol, approved by CECMI on 11/06/2013**, materials certification according to **the requirements of green construction and Type III-EPD** environmental label according to **ISO 14025:2006** and **UNI EN 15804:2012+A2:2019/AC:2021** issued by the relevant structures and **Eurofins product certifications "Indoor Air Comfort" and "Indoor Air Comfort GOLD"** according to UNI EN 16516 or UNI EN ISO 16000-9, demonstrating the compliance of the product with the criteria of **low VOC emissions** (Volatile Organic Components) with respect to the mandatory regulations of individual European countries and voluntary labels **(LEED, BREEAM INTERNATIONAL, etc.).**

Formwork block system with ETA **(ETA 08/0023),** European Technical Assessment. The ETA is issued in accordance with Regulations: EAD 340309-00-0305 (non-structural) and EAD 340309-00-0305-v01 (structural). Experimental tests on the structural characterization of the formwork block system carried out in full compliance with European standard: EAD 340309-00-0305-v01.

Specifications of beam and structural flooring panel

SISTEMA COSTRUTTIVO ISOTEX®
Blocchi e Solai in Legno Cemento



The Isotex® cement-bonded wood fiber panel system for highly thermo-acoustic insulated horizontal or inclined structures consists of pre-assembled 100 cm x(20/25/30/39/49) panels of lengths up to 6.5-7 m, with horizontal and vertical cavities to eliminate thermal and acoustic bridges, reinforcing rods and concrete filling. The flooring system is completed on site with reinforcing rods, partitioning wire mesh and concrete casting.

Isotex® floor panels are CE marking in accordance with the **harmonized European standard UNI EN 15037-1**, certifications of fire resistance (**REI 240),** thermal transmittance (D.M. 26/06/2015), in-situ acoustic tests in accordance with UNI EN ISO 140 and UNI EN ISO 717 standards, structural tests, material certifications in accordance with the requirements for green building and the **Type III-EPD** environmental label in accordance with **ISO 14025:2006** and **UNI EN 15804:2012+A2:2019/AC:2021** standards issued by the relevant structures, and **Eurofins "Indoor Air Comfort GOLD**" product certifications in accordance with UNI EN 16516 or UNI EN ISO 16000-9 standards, demonstrating the product's compliance with the criteria of **low VOC emissions** (Volatile Organic Components) with respect to the mandatory regulations of individual European countries and voluntary labels (**LEED, INTERNATIONAL BREEAM,etc.).**