ZEAL INTERNATIONAL (An ISO 9001 Certified Company)
Head Office: 1, Netaji Subhash Marg Daryaganj, New Delhi - 110002 INDIA
Phone: +91-11-23276114, 23244474, 23250281, 23278846 Fax: +91-11-43580558
Branch Office: 4/20 Kirti Nagar Industrial Area New Delhi - 110015 Phone: +91 11 45380800
Warehouse: 4/26 Kirti Nagar Industrial Area New Delhi – 110015
info@zealinternational.com
sales@zealinternational.com
support@zealinternational.com
quotation@zealinternational.com
Visit us at: www.zealinternational.com

Cube Mould

ZI 2024

Standards:

Specification:

Zeal International is manufacturing Cube Moulds as per international standards (BS and IS). These cube moulds are available in different sizes. For the metric size cube mould, the faces are machined flat to +/-0.2mm accuracy and finished to within 0.2mm. For the inch size moulds, the faces are machined flat to +/-0.01 inched to within 0.01in. All cube moulds are supplied complete with the base plate.

ZI 2024A Cube Mould (Cast Iron - for Mortar) 50mm, Single Gang
ZI 2024B Cube Mould (Cast Iron - for Mortar) 50mm, Three Gang
ZI 2024C Cube Mould (Mild Steel - for Cement) 70.6mm, with Loose Base Plate
ZI 2024D Cube Mould (Cast Iron - for Concrete) 75mm Single Gang
ZI 2024E Cube Mould (Cast Iron - for Concrete) 100mm Light Weight
ZI 2024F Cube Mould (Cast Iron - for Concrete) 100mm Clamp Type (8.5 KG) Four-Part
ZI 2024H Cube Mould (Cast Iron - for Concrete) 150mm ISI Marked
ZI 2024I Cube Mould (Cast Iron -for Concrete) 150mm Clamp Type (16 KG) Four-Part
ZI 2024J Cube Mould (Cast Iron - for Concrete) 150mm Clamp Type (16 KG) Two-Part

Apart from Cast Iron and Mild Steel Cube Moulds, Zeal International also manufactures Plastic & Polyurethane Cube Mould. Zeal International is the first company in India to manufacture Plastic and Polyurethane Cube Moulds.
More information on Plastic & Polyurethane cube moulds is available at: Plastic Cube Mould.

How to determine the compressive strength of concrete using Cube Mould.

To determine the compressive strength of concrete, 6 concrete samples are prepared using cube mould. Freshly prepared concrete is poured into 6 cube moulds and is kept for curing for 7 & 28 days. The preferred size of concrete cube used in concrete testing is 150mm x 150mm x 150mm. On 7th day, 3 concrete samples are extracted from their respective cube moulds and compression test is performed using compression machine. A similar process is repeated on 28th day with remaing 3 concrete cubes.

When the force is applied on the concrete cube specimens, concrete starts to chip off and finally the specimen cracks. The force at which the specimen fails is noted and compressive strength of concrete cube is calculated. I.e, if the specimen cracks at 500kN force and size of specimen is 150 X 150 x 150 mm, the strength of cube will be (500 x 1000) / (150 x 150) N/sq. mm

Finally, the mean of all 6 concrete cube specimens, is used as the compressive strength of concrete.

Note:

1. Only IS, BS or ASTM cube mould should be used to prepare concrete samples, so as to maintain accuracy of test results.
2. To shorten the curing time, cube moulds can

be kept in curing tank. Zeal International also supplies curing tanks to it's customers. Visit: http://www.zealinternational.com/materialtesting/concrete/curing/curing-tank to know more about Curing Tank