Sturdy, Elegant & Reliable

EIE INSTRUMENTS PVT. LTD.

(An ISO 9001 : 2008 Certified Company)

Lab Equipments for Tiles Adhesive as per IS-15477, ISO:13007-1,13007-2

With NABL Calibration Services

Lab Equipments for Tiles Adhesive as per IS-15477, ISO:13007-1,13007-2

Established since 1977, We are one of the major Manufacturers and Suppliers of Lab Equipments for Tiles Adhesives as per BIS/ASTM/ISO/DIN and other international standards.

Approved Vendors to:

STP Limited, Mcon Rasayan India Ltd., Forsoc chemicals India Ltd., Sika India Pvt. Ltd., Fuji Silvertech Pvt. Ltd., Drychem Solutions Pvt. Ltd., Magicrete Building Solutions Pvt. Ltd., Basf India Limited., Myk Arment Private Limited, Myk Laticrete India Private Limited, etc.

Our Strength:

- Experience of Over 45 Years.
- Original Equipments Manufacturer (OEM)
- Large Scale Manufacturing Facility built on enormous 150,000 square feet factory area.
- NABL accredited Calibration Lab.
- Strong team of 300+ experienced and dedicated professionals.
- Committed to provide after sales services to customers.

Product List and few catalogs enclosed.

Please Contact Us for:

- Laboratory Testing Instruments Requirement.
- Laboratory Instruments Service and AMC.
- Annual Calibration and Validation Services.

UNIVERSAL TESTING MACHINE - DUAL LOAD CELLS – 5KN, 100 KN

The Universal Testing Machine (UTM) equipped with dual load cells rated at 5 KN and 100 KN is designed for precise mechanical testing, in compliance with the BIS 15477:2019 standard. This machine performs tensile and shear adhesion tests, providing essential data for material evaluation.

Versatile Testing Capabilities:

- **Tensile Testing:** To determine the Tensile Adhesion Strength for cementitious adhesive
- **Shear Adhesion Testing:** To determine Shear Adhesion Strength of Dispersion & Reaction resin adhesive

Compliance Standards:

BIS 15477, EN 1348, EN 12003, EN 12004, BS 5980 (1980), ANSI 118.1, ISO 13007, BIS 15477:2019. This machine is suitable to test tile adhesion **upto type 5.**

UNIVERSAL TESTING MACHINE - DUAL LOAD CELLS - 5KN, 30KN / 5KN, 60 KN

The Universal Testing Machine (UTM) equipped with dual load cells rated at 5 KN, 30 KN and 5 KN, 60 KN is designed for comprehensive mechanical testing, adhering to the IS 15477:2019 standard. This machine is capable of performing tensile, shear, and deformation adhesion tests on a variety of materials, ensuring precise and reliable measurements.

Versatile Testing Capabilities:

- **Tensile Testing:** Evaluates tensile strength, yield strength, elongation, and reduction in area.
- **Shear Testing:** Determines shear strength and modulus.
- **Deformation Adhesion Testing:** Assesses the adhesion strength and deformation characteristics of bonded materials.

Compliance Standards:

BIS 15477, EN 1348, EN 12003, EN 12004, BS 5980 (1980), ANSI 118.1, ISO 13007, BIS 15477:2019. This machine is suitable to test tile adhesion **upto type 4.**

UNIVERSAL TESTING MACHINE - DUAL LOAD CELLS - 5KN & 30KN - SERVO CONTROLLED

The Universal Testing Machine (UTM) with dual load cells rated at 5 KN and 30 KN is a servo-controlled system designed to perform precise mechanical tests, conforming to the IS 15477:2019 standard. It is equipped for tensile, shear, and deformation adhesion tests, providing accurate and reliable measurements.

Versatile Testing Capabilities:

- **Tensile Testing:** To determine the Tensile Adhesion Strength for cementitious adhesive
- **Shear Testing:** To determine Shear Adhesion Strength of Dispersion & Reaction resin adhesive
- **Deformation Adhesion Testing:** To determine Flexural strength (Degree of deformability) of Cementitious Adhesive and Grouts Material.

Compliance Standards:

BIS 15477, EN 1348, EN 12003, EN 12004, BS 5980 (1980), ANSI 118.1, ISO 13007, BIS 15477:2019.

DETERMINATION OF THE WATER ABSORPTION AT THE SURFACE OF CONCRETE BLOCKS OR SLABS (CARSTEN — ROHRCHEN FLASK)

The determination of water absorption at the surface of concrete blocks or slabs using the Carsten-Rohrchen flask method, as per BIS 13630 Part 14 and BIS 15477 standards, involves placing a sealed flask on the concrete surface. Distilled water is then introduced into the flask, and the amount absorbed by the concrete over a specified time period is measured. This test provides crucial information about the porosity and durability of concrete surfaces, aiding in assessing their performance and suitability for various applications.

Usage:

- Attach a graduated glass cylinder to the concrete surface by means of a suitable sealant around the perimeter of the base. Allow the sealant to cure.
- Fill the graduated cylinder to the zero mark with de ionized or distilled water.
- Record the water level after 1, 2, 3 and 4 h and obtain a curve of surface water absorption *versus* time.
- Test the surface in 3 specimens and obtain an average surface water absorption after 4 h.

WEIGHT-100 N-10 KGS- FOR DEFORMATION TEST- MILD STEEL, HARD CHROME PLATED / STAINLESS STEEL MATERIAL

Designed for deformation tests according to EN 12002, EN 12004, and IS 15477 standards, featuring a hard chrome plated surface / stainless steel material.

Details:

- Dimensions : 290 x 40 mm
- Capacity : 100 Newton (10 Kgs)
- Fabricated from Mild Steel Material, which is hard Chrome plated for corrosion resistance performance. / Fabricated from stainless steel material

Compliance Standards:

EN 12002, EN 12004, IS 15477:2019

TEMPLATE A - DEFORMATION TEST OF CEMENTITIOUS ADHESIVE AND GROUTS - MILD STEEL, HARD CHROME PLATED

This template describes the procedure for conducting deformation tests on cementitious adhesives and grouts in compliance with standards EN 12002, EN 12004, and IS 15477. The template is made of mild steel with a hard chrome plating to ensure durability and precision during testing..

Details Of Template A:

- A rigid rectangular frame, with non-absorbent surface,
- Fabricated from Mild Steel Material, which is hard chrome plated for corrosion resistance performance
- Dimension : 280 x 45 x 5 mm (L x W x H)

Compliance Standards:

EN 12002, EN 12004, IS 15477:2019

TEMPLATE B - DEFORMATION TEST OF CEMENTITIOUS ADHESIVE AND GROUTS MILD STEEL, HARD CHROME PLATED

This template outlines the procedures for performing deformation tests on cementitious adhesives and grouts in accordance with standards EN 12002, EN 12004, and IS 15477. It provides the necessary guidelines and specifications to ensure accurate and consistent testing results.

Details Of Template B:

- A rigid mould, with smooth and non-absorbent surface
- Fabricated from Mild Steel Material, which is hard chrome plated for corrosion resistance performance
- Dimension : 300 x 45 x 3.05 mm (L x W x H)

Compliance Standards:

EN 12002, EN 12004, IS 15477:2019

PULL PLATE SET WITH PULL CONNECTON-DOLLY FOR PULL ADHESION TEST

This pull plate set, equipped with a pull connection dolly, is designed for conducting pull adhesion tests in accordance with IS 15477. It ensures accurate and reliable assessment of the adhesive strength of cementitious materials, providing essential data for quality control and performance evaluation.

Details:

- Precision CNC Work
- Fabricated from Mild Steel Material EN 31
- Hard Chrome Plated
- With Pull connection

Compliance Standards:

BIS 15477

PULL PLATE SET WITH PULL CONNECTION & X-Y MOVEMENT VISE SUPPORT- FOR TENSILE ADHESION BOND TEST-10 PIECES- ACCESSORIES

This pull plate set includes 10 pieces with pull connections and X-Y movement vise support, designed for conducting tensile adhesion bond tests in accordance with EN 1348 and IS 15477. The set comes with all necessary accessories to ensure precise and efficient testing of the adhesive strength of cementitious materials.

Details:

- 50 X 50 MM in dimension
- 08/10 mm in thickness
- Fabricated from stainless steel material
- Fitted with Pull connection at the top, which will fit with the Grip/Fixture of tensile machine
- 10 nos of Pull Plates with lifting arrangement will be the part of standard supply
- Also, supplied complete with X-Y Movement vise & Holder for concrete base plate and specimen along

Compliance Standards:

EN 1348, 1015-12, BIS 15477

CASTING FRAME TO APPLY ADHESIVE ON CONCRETE SLAB

This casting frame is designed for applying adhesive onto concrete slabs in accordance with IS 15477: 2019. It ensures even and consistent application, providing a reliable method for preparing test specimens and conducting adhesive performance evaluations.

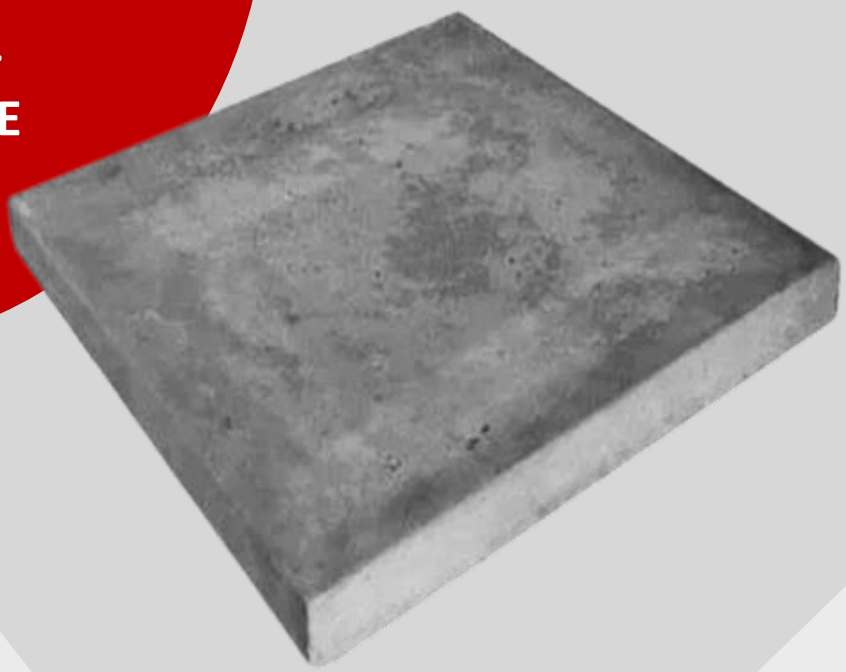
Applications:

To apply adhesive layer on concrete slab for tile adhesion test as per IS 15477

Compliance Standards:

IS 15477

CONCRETE SLAB-SUPPORT FOR TILE ADHESIVE TEST



Applications:

- Concrete slabs are suitable for use as cement adhesive testing support according to standard number EN 1323:2007: Adhesives for tiles.
- Features as cement adhesive testing support in order to determine the mechanical properties of the adhesive for tiles, according to the standard number.

Details:

- Slab Thickness : 40 ± 5 mm thick
- Slab Dimensions : 200 x 200 mm (L x W)
- Having a moisture content of less than 3 percent by mass, and water absorption at the surface after four hours of testing in range of 0.5 cm^3 - 1.5 cm^3.
- Price for 01 Piece

Compliance Standards:

EN 1348, EN 1323, IS 15477, EN 12004

SHEAR BOND JIG- COMPRESSION METHOD

This shear bond jig is designed for performing shear bond tests using the compression method in accordance with standards EN 1324, IS 15477, and EN 12003. It ensures accurate measurement of the shear strength of cementitious adhesives and grouts, providing reliable data for quality control and performance assessment.

Applications:

Shear Bond Jig tests for the shear strength test of **dry-set cement mortar (Cementitious Mortar)**

Principle:

For this test, the dry-set mortar samples are stressed in shear compression to failure using a compression test machine paired with a shear bond jig. The sample is clamped in the vice jig and tested according to the standard procedure.

Details:

- Jaws are adjustable
- Fabricated from Steel Material
- Supplied complete with upper compression plate

Compliance Standards:

IS 15477, EN 1324, EN 12003, EN 12004

SHEAR BOND JIG-TENSILE METHOD

This shear bond jig is designed for conducting shear bond tests using the tensile method in compliance with standards EN 1324, IS 15477, and EN 12003. It provides precise measurement of the shear strength of cementitious adhesives and grouts, ensuring reliable data for quality control and performance evaluation.

Applications:

Shear Bond Jig tests for the shear strength test of **dispersion adhesives**

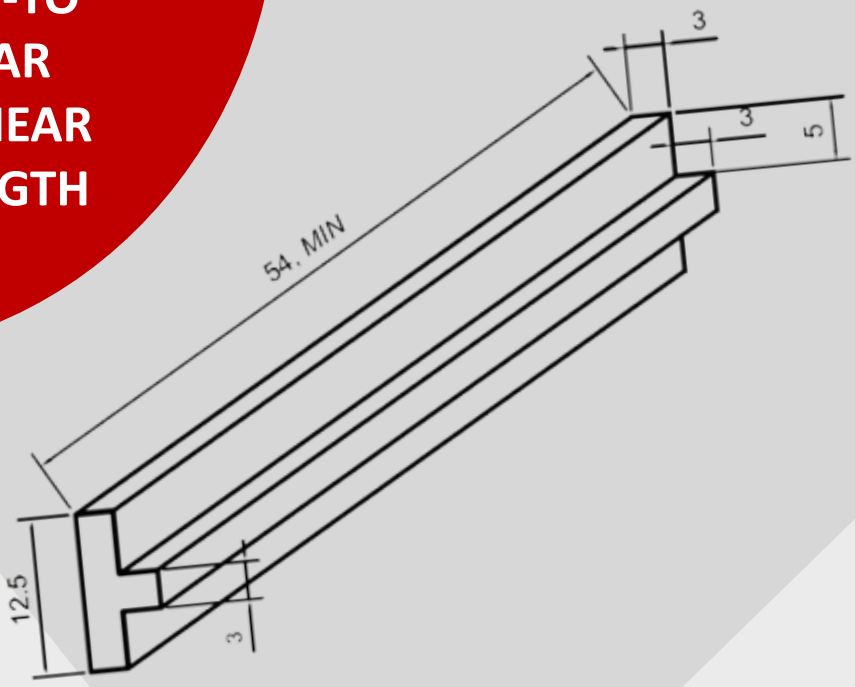
Details:

The jig is constructed from 6 X 6 mm M.S frame as per fig.5 of BIS 15477
Sample size : 108 X 108 X 6.5 mm sample

Compliance Standards:

IS 15477, ANNEX B. FIG 5, EN 1324, EN 12003, EN 12004

T SPACE BAR- 54 MM X 12.5 MM X 3 MM-TO PREPARE MORTAR SPECIMEN FOR SHEAR ADHESION STRENGTH TEST



Applications:

To prepare 3 mm thick mortar layer to prepare specimen for shear bond test for tile adhesive

Compliance Standards:

IS 15477

THREE POINT BENDING FIXTURE-FLEXURAL JIG-DEFORMATION TEST

In the test, a piece of cured adhesive (known as a “lintel”) of a prescribed length, width and thickness is supported at each end and then pushed downward using a curved anvil that is positioned midway between two end supports. The downward movement of the adhesive is measured in order to determine whether it can be classified as a deformable (“S1”) or highly deformable (“S2”) adhesive.

Applications:

For determination of Flexural strength of Cementitious Adhesive and Grouts Material. This test method is for cementitious (“C”) adhesives and is used to quantify the degree of deformability that an adhesive can withstand before it breaks or loses bond

Details:

Comprises of Test head (Anvil) and test supports

Compliance Standards:

EN 12002, IS 15477:2019

ANVIL FOR THREE POINT BENDING FIXTURE- DEFORMATION TEST

This anvil is designed for use with a three-point bending fixture to perform deformation tests in accordance with EN 12002, EN 12004, and IS 15477. It ensures precise and accurate measurement of the deformation characteristics of cementitious adhesives and grouts.

Applications:

For determination of Flexural strength of Cementitious Adhesive and Grouts Material. This test method is for cementitious (“C”) adhesives and is used to quantify the degree of deformability that an adhesive can withstand before it breaks or loses bond

Anvil

Radius : 50 ± 1 mm
Length : 97 ± 1 mm
Width : 60 ± 1 mm

Compliance Standards:

EN 12002, IS 15477:2019

STEEL STRAIGHT EDGE - STAINLESS STEEL - 180 L X 20 W X 5 T MM - FOR SLIP RESISTANCE TEST OF TILE ADHESIEVE - IS 15477 ANNEX E

Designed for the slip resistance test of tile adhesive in accordance with IS 15477 Annex E.

Details:

- Fabricated from Stainless Steel Material
- Dimensions : 180 mm long x 20 mm wide x 5 mm thick
- To carry out the slip test of tile adhesive as per IS 15477:2019 Standard.

Compliance Standards:

IS 15477 : 2019

3" C-CLAMPS TO HOLD STRAIGHT EDGE-75MM-FOR SLIP TEST

These 3" C-Clamps are designed to securely hold a 75mm straight edge in place during slip tests in compliance with IS 15477. They ensure stability and precision in measuring the slip resistance of cementitious adhesives and grouts.

Applications:

To hold the straight edge in place

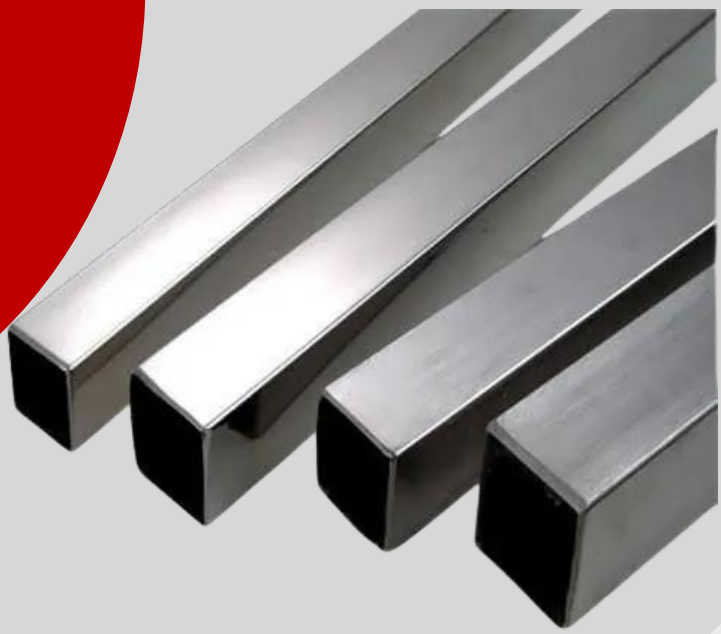
Dimensions:

- Material : M.S.
- Length : 4 Inches (100 mm)
- Width : 4 Inches (100 mm)
- Holding depth : 75 mm

Compliance Standards:

BIS 15477:2019

STAINLESS STEEL SPACE BARS-25MM X 25MM X 10MM / 25MM X 25MM X 100MM-FOR SLIP TEST



Applications:

To determine the slip resistance of Tile Adhesive.

Details:

- Fabricated from Stainless Steel Material
- Dimensions : 25mm x 25mm x 10mm (W X D X T)
- Also available in dimensions: 25mm x 25mm x 100mm (W X D X T)

Compliance Standards:

BIS 15477:2019

PULL OFF ADHESION TESTER - FOR TILE ADHESIVE WITH 50MM SQUARE DOLLY

Details:

Pull-off adhesion, measures the amount of tensile stress to pull the coating off the substrate. A dolly is glued to the coating surface, after the glue is cured, a testing apparatus is attached to the loading fixture and aligned to apply tension perpendicular to the test surface. The force applied is gradually increased and monitored until either a plug of coating material is detached, or a specified value is reached.

Digital pull-off adhesion tester is a portable, **hand-operated instrument** which is used to measure the force required to pull a specified test diameter of coating away from its substrate using hydraulic pressure. The pressure is displayed on a digital LCD and represents the coating's strength of adhesion to the substrate.

Compliance Standards:

ASTM D 4541, ASTM D 7234, EN 13144, ISO 4624, ISO 16276

PULL OFF ADHESION TESTER - WITH 50X50 SQUARE DOLLY

Details:

- Digital Pull-Off Adhesion Tester is a portable, Automatic hydraulic instrument which is used to measure the force required to verify adhesive of ceramic tiles coating away from its substrate using hydraulic pressure. This has dolly of 50 mm x 50 mm cross-sectional area. The pressure is displayed on a digital LCD and represents the coating's strength of adhesion to the substrate. Pull-Off Adhesion Tester is a easy to operate and fully portable, provides a test results values for adhesion. Using Square Dolly is also called as Tile Conversion Kit. Pull off Adhesion Tester has direct pull tensile force test and with suitable capacity and sensitivity for the test. This is capable of applying the load to the pull-head plate through a suitable fitting that does not exert any bending force.

Compliance Standards:

BS EN 12004-2, ASTM D4541/D7234, ISO 4624/16276-1, AS/NZS 1580.408.5

FLOW TABLE (CEMENT)- MOTORISED - 25CM DIA - GUNMETAL TOP

Details:

- The Motorized Flow Table for cement testing, with a 25 cm diameter gunmetal top, conforms to IS 5512 standards. It is used to determine the consistency of cement mortar. The apparatus consists of a rigid table with a smooth, gunmetal surface, mounted on a motorized mechanism that provides consistent and repeatable shaking action to the table. This ensures uniformity in testing, providing accurate results for assessing the flow and workability of cement mixtures. The motorized function enhances efficiency and precision in laboratory settings.

FLOW TABLE (CEMENT) -HAND OPERATED - 25CM DIA - GUNMETAL TOP

Details:

The Hand Operated Flow Table for cement testing, with a 25 cm diameter gunmetal top, adheres to IS 5512 standards. It is utilized to measure the consistency and workability of cement mortar. This apparatus features a durable table with a smooth gunmetal surface, operated manually to achieve a controlled and uniform shaking motion. The hand-operated mechanism allows for precise control, ensuring accurate and reliable test results. Ideal for laboratory use, it is a vital tool for assessing the flow characteristics of cement mixtures.

Mktd. By:

Sturdy, Elegant & Reliable

INSTRUMENTS

EIE INSTRUMENTS PVT. LTD.

(An ISO 9001 : 2008 Certified Company)

Factory Address

Survey No. 1098, Nr. Mahakali Temple, Opp. Primary School
Village Kubadthal, Tal: Daskroi, Ahmedabad-382433, India

Corporate Office

A-1301, BVR Ek, Opp. Hotel Inder Residency,
Nr. Gujarat College, Ellisbridge, Ahmedabad-380006, India

Please give us a call on 079-66211234, drop us an email at info@eieinstruments.com, or send your product request on our WhatsApp No: 9227230010, if in case, you want to have third party references for our testing products. We will be glad to assist you with all possible details.