

# Conservation Material Testing Laboratory

Scientific understanding of historic building materials and techniques is a prerequisite for successful and sympathetic interventions on built heritage. Relevant tests on important historic building materials - bricks, stone and lime mortars are conducted in the conservation laboratory. Further efforts are underway to augment the lab's capacity to handle other historic building materials like wood, metal, ceramics, etc.

## List of Experiments

| Sr. No. | List of Experiment                                                                                                                                                           |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.      | Visual examination, Ball Test, Reaction with concentrated HCL Acid, Classification and Slaking of Lime.                                                                      |
| 2.      | Physical Examination, Carbonation, compressive strength, Microscopic Study, Acid Digestion, Porosity, Vacuum Filtration and Granulometry Test of Historic Mortars / Plasters |
| 3.      | Proportioning and Hot Lime Mix of Lime Mortar                                                                                                                                |
| 4.      | Workability Test of Lime Mortar                                                                                                                                              |
| 5.      | Compressive Strength Test of Lime Mortar                                                                                                                                     |
| 6.      | Physical Examination of Historic Bricks and New Bricks                                                                                                                       |
| 7.      | Water Absorption and Efflorescence Test of Historic Bricks and New Bricks                                                                                                    |
| 8.      | Compressive Strength Test of Historic Bricks and New Bricks                                                                                                                  |
| 9.      | Microscopic Study and Porosity Test of Historic Bricks and New Bricks                                                                                                        |

## Following are the equipment in Conservation Laboratory

### Sieve shakers-hand operated



20cm diameter sieves



30cm diameter sieves

### Sieve shakers-electrical operated



**Digital Laboratory oven**



**Industrial Hot Plate**



**Laser Distance Meter  
leica disto x310**



**Moisture Meter**



**Cmos 5MP camera**



**Infra-Red Moisture Meter**



**M50215B Munsell soil color  
Chart (Sudarshan distributors)**



**Multi-magnetic Stirrer**



**Electronic balance up to 300gm**



## Students carrying out conservation material tests

