

## Geology/Geomaterials

# Schedule of Stone Tests

### Petrographic Tests

BS EN 12407	Petrographic Description
BS EN 12326-2	Petrographic Examination (slate)
BS 5930	Petrographic Description
ISRM	Petrographic Description
In-house Methods	Scanning Electron Microscopy & x-ray microanalysis

### Physical Tests

BS EN 1936	Real Density & Total Porosity Apparent Density & Open Porosity
BS EN 13755	Water Absorption at Atmospheric Pressure
BS EN 1925	Water Absorption Coefficient by Capillarity
ASTM C97	Water Absorption & Density
BR 141	Porosity & Saturation Coefficient
ISRM	Water Content, Porosity & Absorption
In-House Method	Microporosity (water)
BS EN 14581	Thermal Expansion Coefficient
In-House Method	Thermal Expansion
BS 6073	Moisture Expansion

### Mechanical Tests

BS EN 1926	Compressive Strength
BS EN 12372	Flexural Strength Under Concentrated Load (3pt)
BS EN 13161	Flexural Strength Under Constant Moment (4pt)
ASTM C99	Modulus of Rupture (3pt)
ASTM C170	Compressive Strength
ASTM C880	Flexural Strength (4 pt)
ISRM	Uniaxial Compressive Strength
BS EN 14580	Static Elastic Modulus
BS EN 14146	Dynamic Modulus of Elasticity
In-House method	Young's Modulus
In-House method	Poisson's Ratio
ISRM	Indirect Tensile Strength (Brazil Test)
ISRM	Fracture Toughness
ISRM	Point Load Strength
In-House method	Tile Impact Strength

### Durability Tests

BS EN 12371	Frost Resistance
DIN 52104	Frost Resistance
CWCT	Accelerated Aged Strength Test
BS EN 12370	Salt Crystallisation
BR 141	Salt Crystallisation
BR 141	Acid Immersion
BS EN 13919	SO <sub>2</sub> Ageing Resistance
ISRM	Slake Durability
BS EN 14066	Thermal Shock
In-House Method	Fatigue (cyclical)
BS EN 14579	Sound Speed Propagation

### Miscellaneous Tests

BS EN 14231	Slip Resistance
BS EN 1341	Slip and Abrasion Resistance
BS EN 1342	Slip and Abrasion Resistance
BS 7976	Slip Resistance
BS EN 14157	Abrasion Resistance
ASTM C241	Abrasion Resistance
BS 7932	Polished Paver Value
ENV 12633	Polished Paver Value
In-House Method	Staining Potential
ASTM D2203	Staining from Sealants
In-House Method	Crack Inspection
In-House Method	Dye Testing of Panels

### Slate Tests

BS EN 12326-2	Water Absorption
BS EN 12326-2	Failure Load in Bending
BS EN 12326-2	Freeze Thaw Resistance
BS 680	Water Absorption
BS 680	Acid Immersion
BS 680	Wetting & Drying
ASTM C120	Modulus of Rupture
ASTM C121	Water Absorption
ASTM C217	Weathering Resistance

### Fixing Tests

BS EN 13664	Breaking Load at Dowel Hole
BS 5080	Pull-Out Strength
In-House Method	Undercut Anchors
In-House Method	Kerf Supports
In-House Method	Precast dowels
BS 8200	Soft & Hard Body Impact

To discuss your needs please contact

**David J Ellis**, Partner

**Panos Sotiropoulos**, Associate

g110r07.wpd

