

Materials Laboratory

The year 2007 saw the amalgamation of Grenada Bureau of Standards with the Materials Laboratory of the Ministry of Works. Since then the Bureau's Laboratory has continued its monitoring programmes in accordance to the following national standards:

- ◆ **GDS 63: Pt. 2: 2002 Specification for Ready-Mix Concrete**
- ◆ **GDS 50:1999 Specification for Portland Cement**
- ◆ **GDS 6: 1992 - Specification for Hollow Concrete Blocks**

In addition, the Materials Laboratory uses testing standards from institutions of international and regional recognition:

- ◆ **American Association of State Highway and Transportation Officials (AASHTO)**
- ◆ **American Society for Testing and Materials (ASTM International)**
- ◆ **British Standards Institute (BSI)**



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Grenada Bureau of Standards

**MATERIALS
LABORATORY**

Standards Mean Quality



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GRENADA BUREAU OF STANDARDS

Materials Testing Programme

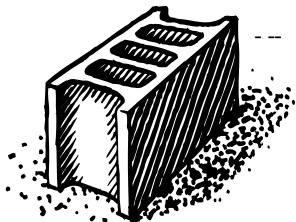
If you are constructing a multi storey building, a commercial building, a home, a road or a pavement, the Grenada Bureau of Standards can assist you in conducting tests on the following materials:

◆ Soil

- Moisture Content
- Atterberg Limit
- Linear Shrinkage
- Specific Gravity
- Unit Weight (Wet Density)
- Grain Size Distribution (Wet and Dry Sieve)
- California Bearing Ratio (Soil Strength)
- Compaction Test (Standard and Modified Proctor)

◆ Concrete Blocks

- Compressive Strength
- Dimension
- Density
- Shrinkage



◆ Asphalt

- Bitumen Content (on Hot Mix Samples)
- Core Density (to check thickness of pavement)
- Maximum Theoretical Specific Gravity (to check air void on hot mix)
- Penetration Test (on Raw Bitumen used for Making Mix)
- Marshall Stability and Flow Test (to determine the strength of the asphalt)

◆ Aggregates

- Specific Gravity
- Sand Equivalent
- Bulk Density
- Density
- Aggregate Impact Value
- Flakiness Index
- Elongation Index
- Aggregate Crushing Value
- Soundness
- Los Angeles Abrasion (to check the hardness of the aggregates)

◆ Ready-Mix Concrete

- Compressive Strength
- Volume
- Meter Gauge Calibration



◆ Cement

- Setting Time
- Compressive Strength
- Fineness



◆ Geotechnical Investigation

- Insitu Density
- Permeability
- Compressive Strength
- Soil Resistance
- Shear Vane
- Percolation
- Load Bearing Capacity
- Consolidation
- Unconfirmed Compressive Strength