Shivaay Technocrat Service, H. No. 48, Shri Ji Nagar, Durgapura, Tonk Road, Jaipur, Rajasthan Laboratory

Accreditation Standard ISO/IEC 17025: 2005

Page 1 of 2 **Certificate Number** TC-7206

Validity 26.04.2018 to 25.04.2020 Last Amended on --

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are | Range of Testing / Limits of Detection |
|-----|----------------------------|----------------------------|---------------------------------------------------|----------------------------------------|
| | | | performed | |

MECHANICAL TESTING

| l. | BUILDING MATERIALS | | | |
|----|--------------------|-----------------------------|------------------|---------------------------------------------|
| 1. | Coarse Aggregate | Sieve Analysis | IS 2386 (Part 1) | 475 mm to 80 mm (Upto 100 %) |
| | | Specific Gravity | IS 2386 (Part 3) | 2 to 4 |
| | | Water Absorption | IS 2386 (Part 3) | 0.1 % to 5 % |
| | | Bulk Density | IS 2386 (Part 3) | 0.82 kg/L to 2.2 kg/L |
| | | Flakiness Index | IS 2386 (Part 1) | 2 % to 50 % |
| | | Elongation Index | IS 2386 (Part 1) | 2 % to 50 % |
| | | Aggregate Impact Value | IS 2386 (Part 4) | 5 % to 50 % |
| | | Aggregate Crushing Value | IS 2386 (Part 4) | 2 % to 60 % |
| | | 10% Fine Value | IS 2386 (Part 4) | 10 Ton to 40Ton |
| | | Soundness | IS 2386 (Part 5) | 0.1 % to 20 % |
| | | Finer Than 75 µm | IS 2386 (Part 1) | 0.1 % to 10 % |
| | | Stripping Value | IS 6241 | 150 µm to 10 mm (Upto 20 %) |
| 2. | Fine Aggregate | Sieve Analysis | IS 2386 (Part 1) | Upto 100 % |
| | | Specific Gravity | IS 2386 (Part 3) | 2 to 4 |
| | | Water Absorption | IS 2386 (Part 3) | 0.1 % to 5 % |
| | | Bulk Density | IS 2386 (Part 3) | 0.8 kg/L to 2.2 kg/L |
| | | Bulking | IS 2386 (Part 3) | 1 % to 20 % |
| | | Soundness | IS 2386 (Part 5) | 0.1 % to 20 % |
| | | Finer Than 75 µm | IS 2386 (Part 2) | 0.2 % to 10 % |
| | | Silt Content | IS 2386 (Part 3) | 0.2 % to 10 % |
| 3. | Bricks | Water Absorption | IS 3495 | 1 % to 30 % |
| | | Compressive Strength | IS 3495 | 1 N/mm ² to 40 N/mm ² |
| | | Efflorescence | IS 3495 | Qualitative |

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|-----|----------------------------|----------------------------|-------------------------------------------------------------------|-----------------------------------------------|
| |] | Dimensions | IS 1077 | |
| | | Length | | 4500 mm to 4700 mm |
| | | Weight | | 2100 mm to 2300 mm |
| | | Height | | 1300 mm to 1500 mm |
| 4. | Concrete Cube | Compressive Strength | IS 516 | 5 N/mm ² to 80 N/mm ² |
| 5. | Bituminous MixE4 | Binder Content | ASTM D-2172 | 2 % to 12 % |
| 6. | Paver Block | Compressive Strength | IS 15658 | 5.0 N/mm ² to 80 N/mm ² |
| [| | Water Absorption | IS 15658 | 1 % to 30 % |
| II. | SOIL & ROCK | | | |
| 1. | Soil | Liquid Limit | IS 2720 (Part 5) | 10 % to 80 % |
| | | Plastic Limit | IS 2720 (Part 5) | Upto 50 % |
| | | Grain Size Analysis | IS 2720 (Part 4) | 75 μm to 20 mm (Upto 100 %) |
| | | Free Swell Index | IS 2720 (Part 40) | 1 % to 100 % |
| | | Light Compaction Test | IS 2720 (Part 7) | MDD- 1.5 g/cc to 2.5 g/cc OMC- 4% to 20 % |
| | | Heavy Compaction | IS 2720 (Part 8) | M.D.D 1.6 g/cc to 2.8g/cc O.M.C 4% to 20% |
| | | Moisture Content | IS 2720 (Part 2) | 1 %to 50 % |

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