# GRADING OF GRADED CRUSHED STONE

| | | G1 | G2 | G3 | | G4 | | | G5 |
|---|---|---|---|---|---|---|---|---|---|
| | NOMINAL APERTURE SIZE OF SIEVE (mm) | PERCENTAGE PASSING SIEVE BY MASS | PERCENTAGE PASSING SIEVE BY MASS | PERCENTAGE PASSING SIEVE BY MASS | | PERCENTAGE PASSING SIEVE BY MASS | | | |
| | | | | | | CRUSHED | | UNCRUSHED | |
| | | 37.5mm | 37.5mm | 37.5mm | 26.5mm | 37.5mm | 26.5mm | | |
| GRADING | 53.0 | | | | | | | 100 | |
| | 37.5 | 100 | 100 | 100 | | 100 | | 85 - 100 | |
| | 26.5 | 84 - 94 | 84 - 94 | 84 - 94 | 100 | 84 - 94 | 100 | - | |
| | 19.0 | 71 - 84 | 71 - 84 | 71 - 84 | 85 -95 | 71 - 84 | 85 -95 | 60 - 90 | |
| | 13.2 | 59 - 75 | 59 - 75 | 59 - 75 | 71 - 84 | 59 - 75 | 71 - 84 | - | |
| | 4.75 | 36 - 53 | 36 - 53 | 36 - 53 | 42 - 60 | 36 - 53 | 42 - 60 | 30 - 65 | |
| | 2.00 | 23 - 40 | 23 - 40 | 23 - 40 | 27 - 45 | 23 - 40 | 27 - 45 | 20 - 50 | |
| | 0.425 | 11 - 24 | 11 - 24 | 11 - 24 | 13 - 27 | 11 - 24 | 13 - 27 | 10 - 30 | |
| | 0.075 | 4 - 12 | 4 - 12 | 4 - 12 | 5 - 12 | 4 - 12 | 5 - 12 | 5 - 15 | |

The percentage by mass passing the 2.00mm sieve shall not be less than 20% nor more than 70%

## 10% FINES AGGREGATE CRUSHING VALUES (Table 3602/2)

| Rock Type | Matrix | Dry (min.) | Wet (min.) | Wet / Dry (min.) |
|---|---|---|---|---|
| Arenaceous rocks | Non-siliceous cementing material | 140kN | | 75% |
| | Siliceous cementing material | 110kN | | 75% |
| Diamictites (tillites) | | 200kN | | 70% |
| Argillaceous rocks | | 180kN | 125kN | - |
| Other rock types | | 110kN | | 75% |

## AGGREGATE CRUSHING VALUE (Table 3602/3)

| Rock Type | ACV, max. |
|---|---|
| Arenaceous: without siliceous cementing matrix | 27% |
| Arenaceous: with siliceous cementing matrix | 29% |
| Diamictites (tillites) | 21% |
| Argillaceous rocks | 24% |
| Other rock types | 29% |

*for more detailed information and interpretations see latest COLTO*

MATROLAB

## DURABILITY REQUIREMENTS FOR G4 MATERIAL (Table 3402/3)

| GROUP | MEMBERS OF GROUP | DURABILITY MILL INDEX (MAX.) | % PASSING 0.425mm SIEVE AFTER DURABILITY MILL TEST (MAX.) |
|---|---|---|---|
| Basic crystaline rock | Basalt<br>Dolerite<br>Gabbro | 125 | 35 |
| Acid crustaline rock | Gneiss<br>Granite | 420 | 35 |
| High silica rock | Chert<br>Hornfels<br>Quartzite | 420<br>(clay mineral kaolin) | 35 |
| Sandstone | Arkose<br>Conglomerate<br>Sandstone<br>Siltstone | 125 | 35<br>(increase from original not more than 15%) |
| Mudrock | Mudrock<br>Phylitte<br>Shale etc | 125 | 35 |
| Carbonate rock | Dolemite<br>Limestone<br>Marble | not applicable | not applicable |
| Diamictities | Greywacke<br>Tillite | 125 | 35 |
| Pedogenic material | Calcrete<br>Ferricrete<br>Silcrete | 480 | 40 |