

Wet Mix-Macadam

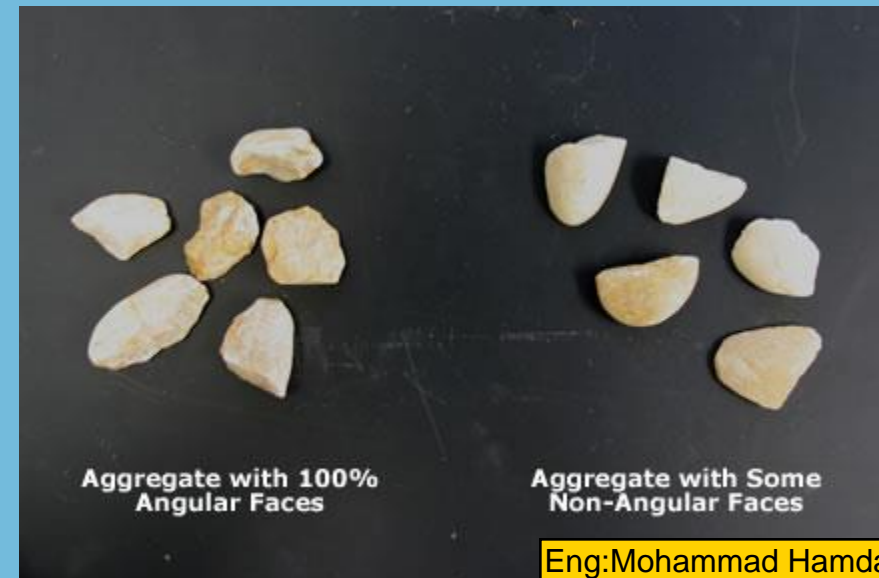
Wet Mix-Macadam

Wet Mix Macadam consist of crushed gravel, crushed rock or stone fragments obtained by crushing gravel that has first been screened in such a manner that no less than 90 % of the material to be crushed is retained on a 4.75 mm sieve. Wet mix macadam will be made from a high quality crushed aggregates, the water content of the mix shall be carefully controlled to ensure a dense mixture



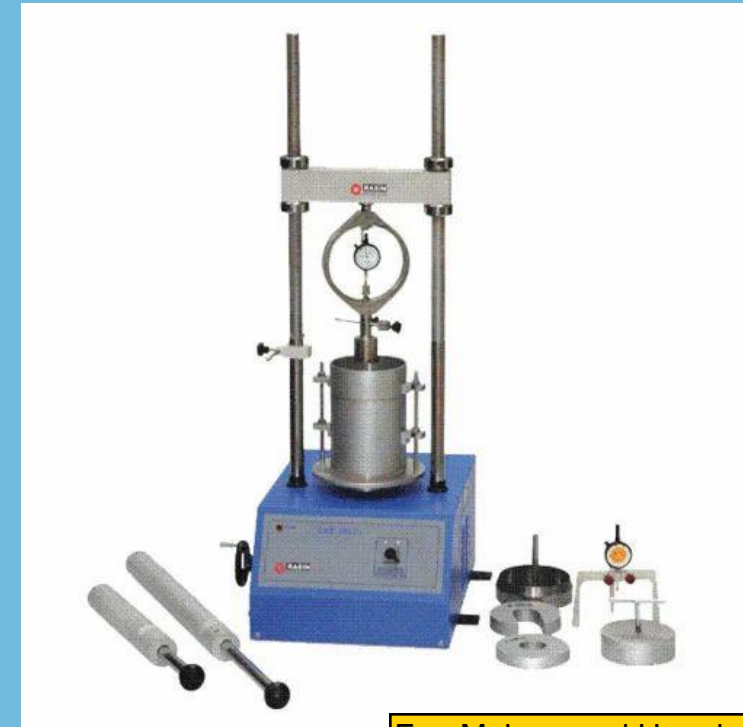
Wet Mix-Macadam

- **Wet Mix Macadam coarse aggregates shall be made of crushed rock. Amount of crushing should be controlled so that at least 100 %, by weight, of the pieces retained on the 4.75 mm sieve have at least 1 fractured face.**
- **Fine aggregates for wet mix macadam will be made of crushed rock or naturally occurring material passing 4.75 mm sieve**



Wet Mix-Macadam

- CBR for Wet Mix Macadam should achieve at least 80% at 98% of the maximum dry density.
- Other important characteristics to be checked for wet mix macadam are:
 1. Liquid limit $\leq 25\%$
 2. Plasticity index ≤ 6
 3. Flakiness and elongation index $\leq 30\%$
 4. Los Angeles abrasion $\leq 30\%$
 5. Sand equivalent $\geq 45\%$



Wet Mix-Macadam

- **Wet Mix macadam moisture content should be controlled carefully and it should be always with 1% of the optimum moisture content. the correct moisture content is very important to achieve the required degree of compaction and failure to maintain the moisture content during mixing, laying and compaction of material can result in layer with lesser degree of compaction.**
- **The degree of compaction for the wet mix macadam shall be 100% of the maximum dry density**

Wet Mix-Macadam

During the construction of wet mix macadam layer we should consider this points:

- The delivered mixture should be a uniform mixture and not segregated.
- Wet mix macadam will be laid in layers ≤ 150 mm.
- The material should be laid by paver or a spreader box to prevent the segregation of material



Wet Mix-Macadam

During the construction of wet mix macadam layer we should consider this points:

- The compaction of the WMM should start immediately after the laying of material. Compaction should be done by suitable equipment such as pneumatic roller or steel drum roller and it should continue until the achieving of required degree of compaction.
- Conducting a trial for road can be useful for determining the loss thickness to compacted thickness ratio and also, it is important to determine the type of rollers and number of passes to achieve the compaction
- Prior to placing the succeeding layers of materials, the top of the under-layer shall be made sufficiently moist to insure bond between the layers.

