

SECTION 423 - LEAN MIX ASPHALT

423.01 GENERAL

This section is a supplement to Standard Section 407 - Asphalt and covers special requirements for lean mix asphalt that are in addition to, or override the requirements of Section 407.

423.02 DESCRIPTION

Lean mix asphalt is a Size 20 asphalt for use in locations where a lower quality asphalt is acceptable or for use as an alternative to unbound granular pavement material to provide a temporary all weather surface during construction.

423.03 AGGREGATES

Source rock shall comply with the requirements of Section 801 - Source Rock for the Production of Crushed Rock and Aggregates.

Crushed aggregate products shall comply with the requirements specified in Table 423.031.

Table 423.031

Test	Requirement
Flakiness Index	40% (max)
Total Marginal and Unsound Rock Content	15% by Mass (max)
Unsound Rock Content	7% by Mass (max)
Plasticity Index	6% (max)

423.04 MIX DESIGN REQUIREMENTS

(a) General

All asphalt mixes shall be registered in accordance with Clause 407.06.

The following information is not required to be submitted:

- (i) Air Voids at Design Binder Content
- (ii) Voids in Mineral Aggregate
- (iii) Voids Free Bulk Density
- (iv) Binder Film Thickness
- (v) Indirect Tensile Modulus

The Contractor shall forward to the Superintendent details of the computations of the bulk density for approval and subsequent assignation of a bulk density for the mix to enable compaction to be assessed.

(b) Grading Limits and Production Tolerances for Aggregates

The grading of mineral matter and target grading tolerances of the job mix shall lie within the limits specified in Table 423.041. Unless otherwise specified or directed, the grading aim shall be as specified in Table 423.041.

Table 423.041 Grading Limits and Production Tolerances for Aggregates

Sieve Size (mm)	Grading Limits % Passing (by mass)	Grading Aim % Passing (by mass)	Production Tolerance from Grading Aim % Passing (by mass)
26.5	100	100	Nil
19.0	95 - 100	100	±6
13.2	78 - 92	85	± 6
9.5	63 - 83	73	± 6
4.75	45 - 55	50	± 6
2.36	30 - 43	36	± 6
1.18	20 - 35	27	± 6
0.600	14 - 27	20	± 6
0.300	9 - 21	15	± 4
0.150	7 - 15	11	± 4
0.075	3 - 6	4	± 1.5

(c) Added Filler

There is no requirement for added filler in lean mix asphalt. However, the Contractor may add up to 1% of added filler to satisfy the grading requirement.

(d) Bitumen Content

The proportion of binder in the job mix shall be 3.5% by mass unless otherwise specified or directed by the Superintendent and the production tolerance on binder content in the mix shall be ±0.3% of the total mix by mass.

423.05 RECYCLED ASPHALT FROM RECLAIMED ASPHALT PAVEMENT

Reclaimed asphalt pavement may be used in the production of lean mix asphalt provided that the requirements of Clause 423.04 are met that the minimum quantity of virgin binder added to the mix shall not be less than 2.0% by mass unless otherwise directed.