ABSTRAK

Penelitian ini menganalisis perbandingan kinerja aspal porus normal dengan aspal porus variasi gradasi agregat tanpa saringan #3/8 untuk menentukan formulasi terbaik sebagai bahan konstruksi jalan. Kinerja dievaluasi melalui pengujian Marshall, Catambro Loss, dan permeabilitas, dengan mengacu pada spesifikasi *Road Engineering Association of Malaysia (REAM)* Granding A. Penelitian ini menggunakan metode kuantitatif eksperimental dengan pengujian laboratorium di UPTD Bahan Konstruksi Jalan Jawa Barat. Hasil menunjukkan campuran aspal porus normal lebih unggul dari campuran tanpa saringan #3/8 karena performa teknisnya yang lebih stabil. Aspal normal memiliki stabilitas Marshall lebih tinggi (1145,0 kg vs 1130,1 kg) dan Catambro Loss lebih rendah (9,1% vs 10,2%), yang mengindikasikan daya tahan lebih baik. Namun**,** keduanya tidak memenuhi spesifikasi permeabilitas**,** dengan aspal normal 3,2% dan tanpa saringan 1,5%, menunjukkan perlunya perbaikan lebih lanjut. Disarankan mempertahankan penggunaan fraksi agregat saringan No. 3/8 untuk meningkatkan ketahanan dan menjaga permeabilitas. Pengendalian kadar aspal dan distribusi agregat juga krusial untuk mencegah penurunan stabilitas atau porositas berlebihan, terutama pada campuran gradasi terbuka.

Kata kunci : Aspal Porus, Gradasi Aggregat, Pengujian Marshall, Spesifikasi *Road Engineering Association of Malaysia* (REAM)

ABSTRACT

This research analyzes the comparative performance of normal porous asphalt with porous asphalt using aggregate gradation without a #3/8 sieve to determine the best formulation for road construction materials. Performance was evaluated through Marshall stability, Catambro Loss, and permeability tests, referencing the Road Engineering Association of Malaysia (REAM) Granding A *specifications.*
The study employed a quantitative experimental method with laboratory testing conducted at the West Java Road Construction Material Technical Implementation Unit (UPTD). Results indicate that normal porous asphalt mixtures are superior to mixtures without the #3/8 sieve due to their more stable technical performance. Normal asphalt showed higher Marshall stability (1145.0 kg vs 1130.1 kg) and lower Catambro Loss (9.1% vs 10.2%), indicating better durability. However, neither mixture met the permeability specifications, with normal asphalt at 3.2% and the non-sieved mixture at 1.5%, suggesting further improvement is needed. It's recommended to retain the use of the #3/8 sieve aggregate fraction to enhance wear resistance and maintain permeability within safe limits. Strict control over asphalt content and aggregate distribution is also crucial to prevent decreases in stability or excessive porosity, especially in open-graded mixtures.

Keywords : Porous Asphalt,Aggregate Gradation,Marshall Stability, Road Engineering Association of Malaysia (REAM) specifications.