

Highway & Traffic Engineering

MARSHALL MIX DESIGN METHOD - ASSESSMENT

by

Dr. Intan Suhana bt Mohd Razelan

Puan Azlina Ismail

Faculty of Civil Engineering & Earth Resources

intan@ump.edu.my

Activity 1

- Draw and explain the relationship of below variables
 - Stability vs Asphalt Content
 - Density vs Asphalt Content
 - Voids Filled with Asphalt vs Asphalt Content
 - Voids in Mineral Aggregate vs Asphalt Content
 - Air Voids vs Asphalt Content

Activity 2

Plot the Marshall Trial Mix test results. Find the optimum asphalt content based on Asphalt Institute and US Department of Transportation to meet the suggested requirement for a surface course of a medium-traffic area.

Asphalt Content (%)	Density (kg/m ³)	Stability (N)	Air Voids (%)	VMA (%)
5	2365	6030	6.8	18.8
6	2388	7860	5.0	16.6
7	2398	6750	3.9	15.6
8	2386	4500	3.2	16.2

Author Information

Dr. Intan Suhana bt Mohd Razelan
Puan Azlina Ismail