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Mechanical Properties of Portland Cement Concrete with Reclaimed Asphalt Pavement Aggregate

This analysis of the mechanical properties of Portland cement concrete with reclaimed asphalt pavement as aggregate was completed to determine if a mix design could be achieved that would be suitable for use as a rigid pavement. It was found that it is possible to design a mix that meets the necessary compressive strength and handling characteristics needed for rigid pavement. This analysis contains the results of ASTM C39/C39M-11a Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens, ASTM C78/C78-10 Standard Test Method for Flexural Strength in Concrete, ASTM C496/C496M-11 Standard Test Method for Splitting Tensile Strength of Cylindrical Concrete Specimens, and ASTM C469/C469M-10 Standard Test Method for Static Modulus of Elasticity and Poisson’s Ratio of Concrete in Compression.