

HIGHER TECHNICAL INSTITUTE

CIVIL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

THE BITUMEN PENETRATION TEST

By

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June 1998

HIGHER TECHNICAL INSTITUTE	PROJECT NO. 2811
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1.1 BITUMEN:

Bitumen is a viscous liquid or solid material, black or dark brown colour having adhesive properties, consisting essentially of hydrocarbons, derived from petroleum or occurring in natural asphalt, and soluble in carbon disulphide (CS_2). It is substantially non-volatile, non-toxic and softens gradually when heated.

Bitumen is divided into two main categories firstly the one, which occur naturally and secondly to those, which are byproducts of the fractional distillation of petroleum at a refinery. Hundreds of types of bitumens types are falling into these categories.

Bitumen has many uses but its main use is in road and building construction (see table 1.1)

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