

Assessing Thermal Behavior of Surface Bituminous Concrete Facings Used in Tightening Dams Under Syrian Circumstances¹

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Abstract

Various ways of tightening Earth-fill and Rock-fill Dams were practically used through the last decades. One of such ways is the usage of Bituminous Concrete (BC) as a core inside dam's body or as a surface facing to its front profile.

BC, as an impervious material, is known over the world and used in many countries for more than 60 years. In Syria, only in Sourani Dam, being currently under construction, BC has used.

A number of BC mixes designed using the same constituent components in Sourani Dam were experimentally tested and analyzed. To determine the expected maximum temperature, we developed a program depending on Energy balance for Sourani dam project.

¹ For the paper in Arabic see pages (27-50).

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