A new geomembrane system in construction of fill dams: concepts and 2 case histories

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SYNOPSIS. A new geomembrane system, totally deformable and capable of following large settlements and differential movements, has been developed to waterproof new fill dams. The geomembrane liner is anchored by PVC elements embedded in the fill as it is being raised. This unconventional design, presented at the 2006 ICOLD congress in Barcelona, has found recent field application in two projects, both in Iran: Kohrang dam and reservoir in 2004, and phases BII and CII of Sar Cheshmeh tailings dam in 2007-2008. The paper discusses the general concepts of the system, and reports on Kouhrang and Sar Cheshmeh projects.