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Building and Construction Engineering
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Study of Structural Design Methods of Buried Pipes

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Abstract

The buried pipe (underground conduits) is each pipe under ground Surface which is made from many type of materials ranging from rigid Concrete to flexible thermal plastic. this pipe must have enough strength And /or stiffness to perform its intended function it must also be durable Enough to last for its design life.

There are four types of pipe's installation: trench type of installation Which is normally used in the construction of sewers ,drain and water Main . positive projecting embankment type of installation which used When the culvert is installed in a relatively flat stream bed or drainages Path. Negative projecting embankment type of installation which is used When the culvert is installed in a relatively narrow and deep stream bed Or drainage path. Jacked or tunneled type of installation which is used when surface condition make it difficult to install the pipe by conventional and backfill method or where its necessary to install the pipe Under an extends embankment. These type of installation effect on transmitted of the earth load to a buried pipe

There are two type of buried pipe :Rigid pipes which are stiffer than the surrounding soil. Rigid pipe undergo little deflection in some circumstance ,polyethylene pipes may behave as a rigid pipe . flexible Pipes which are less stiff than the surrounding soil with weak soil support ;relatively small earth loads may cause flexible pipe deflection