

ASK THE TAC



What kind of grout should I use for sewer rehabilitation, hydrophilic or hydrophobic?



Grouts represent a broad category of products for repairs. They are a good choice for leak sealing, void filling, and soil stabilization challenges. For gravity sanitary sewers, chemical grouts have been utilized for control of extraneous flows (infiltration) into mainlines, maintenance accesses, and laterals. For mainline sewers and laterals, the leakage pathway is typically through joints that are not water-tight, so injection grouting using a chemical grout is preferred. For brick sewers and maintenance accesses, void filling or curtain grouting may be the preferred rehabilitation method. The type of grouting method depends on the rehabilitation goal, application type, and subsurface conditions. This can influence whether to use a hydrophilic or hydrophobic grout.

Hydrophilic grouts have an affinity for water, moving towards soil moisture. They are ideal for sealing leaking fractures and joints where there is consistent moisture (i.e. groundwater influence or soil that has a consistently high moisture content). Considering that hydrophilic grouts need moisture for activation, dry soil conditions can inhibit effectiveness as an infiltration barrier once the grout shrinks because of desiccation.

Hydrophobic grouts repel water and move away from soil moisture. They are a good choice for dry moisture conditions, high volume or gusher type leaks, and filling large soil voids around sewer assets. These are typically expandable foams that can expand many times to achieve void filling.

To learn more about suitable grout types and applications, please contact grouting manufacturers and access performance specification guidelines at www.NASSCO.org.

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Have a technical question? Email NASSCO's Technical Advisory Council
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