

Specifications for **INSUL-TEK®** HT Steel Conduit

MATERIAL:

All underground high temperature piping shall be the Dryable, Drainable, Air-Testable INSUL-TEK® HT Steel Conduit System as manufactured by Preinsulated Piping Systems, Inc. All straight lengths, fittings, anchors, and components will be factory preinsulated and prefabricated to suit job requirements.

CARRIER PIPE:

Schedule 40 or Schedule 80 ASTM A53 Grade B beveled for welding or other as specified. All joints will be butt welded for pipe sizes 2-1/2" and above. Sizes 2" and below will be socket welded.

INSULATION:

The insulation shall be mineral wool or calcium silicate held in place with stainless steel bands installed on not less than 18" centers. (The insulation thickness must be determined by specific project conditions and requirements.)

OUTER STEEL CONDUIT:

The outer steel conduit shall be welded smooth-wall steel of not less than 10 gauge in wall thickness.

CONDUIT COATING:

The steel conduit shall have an exterior coating of hybrid urethane not less than 30 mils in thickness. The urethane is to be applied onto abrasive-blasted steel with heated airless spray equipment. All field joints will be covered with a heat shrink sleeve.

PIPE SUPPORTS:

The carrier pipe will be supported by insulated pipe supports placed at not more than 10-foot intervals. The pipe supports will be designed to permit the carrier pipe to expand or contract without restriction as well as permitting for drainage and air flow within the annular air-space of the conduit casing.

INSTALLATION:

Upon completion of the system, the installing contractor shall air test the conduit casing to 15 psig. If there is a loss in pressure, the conduit field joints must be checked with soapy solution and repaired as per manufacturer's recommendations, until the system maintains 15 psig. The contractor shall holiday test the entire conduit system at a voltage of 5000 volts. If there are any holidays present, they must be repaired and retested.

BACKFILLING:

The trenches shall be carefully backfilled and hand tamped in 6" layers until a cover of at least 24" from the top of the pipe has been achieved. The first 12" of backfill shall be sand or fine gravel less than 1/2" in diameter. The remainder of the backfill shall be void of rocks, frozen earth and foreign material over 6" in diameter. The trench shall be compacted to comply with H-20 Highway loading.

