See TDS G3.00 & Design and Installation Manual for additional requirements

TERMS AND EXPLANATIONS

ENVELOPE

The insulation surrounding the pipeline or tank. This seamless envelope insulates and protects the system.

FORMS

Accurate material coverage is provided by using a simple form system constructed of sheet rock. Forming also eliminates material waste caused by uneven trenching.

SPACERS AND SUPPORTS

Temporary spacers are used to hold forms in place during placement of GILSULATE® 500XR. Temporary supports are used to support the pipe system at elevation during placement of GILSULATE® 500XR. Temporary spacers and supports must be removed as installation of GILSULATE® 500XR progresses. The consolidated GILSULATE® 500XR will fully support the pipeline or tank.

CONSOLIDATION

GILSULATE® 500XR is designed with a specific gradation of particle sizes which allows consolidation of the material by simple vibration and provides a load bearing system. Shrinkage and reduction of insulation coverage caused by backfill loads is avoided as occurs with loose bulk material installation. Consolidation is best accomplished by use of a concrete vibrator with a 1-3/8" diameter vibrator head. Vibrators are available from Wacker Corp. or Wyco Tool Co. and equipment rental firms. See note #5 below.

CARBOLINE BITUMASTIC 50

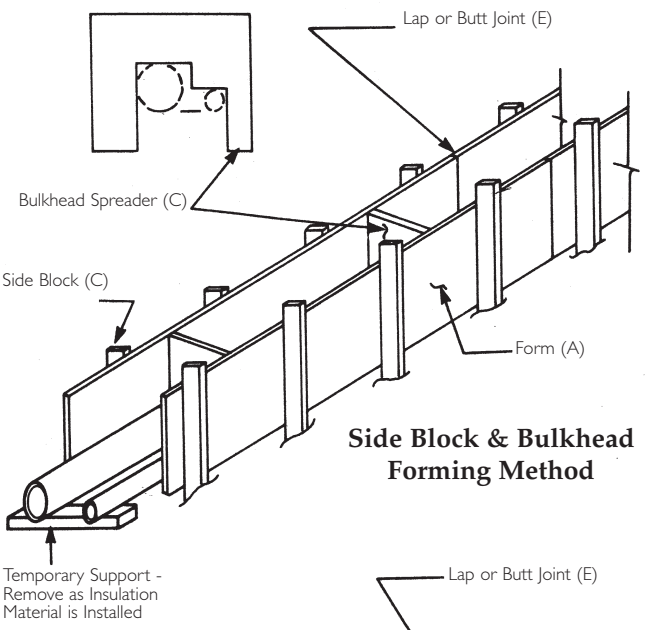
A self-priming, waterproof coating made from pitch used to coat metal and concrete structures that penetrate the GILSULATE® 500XR envelope from the outside. Application of Carboline bitumastic 50 is to occur just prior to placement of the GILSULATE® 500XR. The "tacky" Carboline Bitumastic 50 receives the GILSULATE® 500XR and provides a seal along envelope penetrations. Koppers Super Service Black meets these requirements.

MINERAL FIBER CUSHION

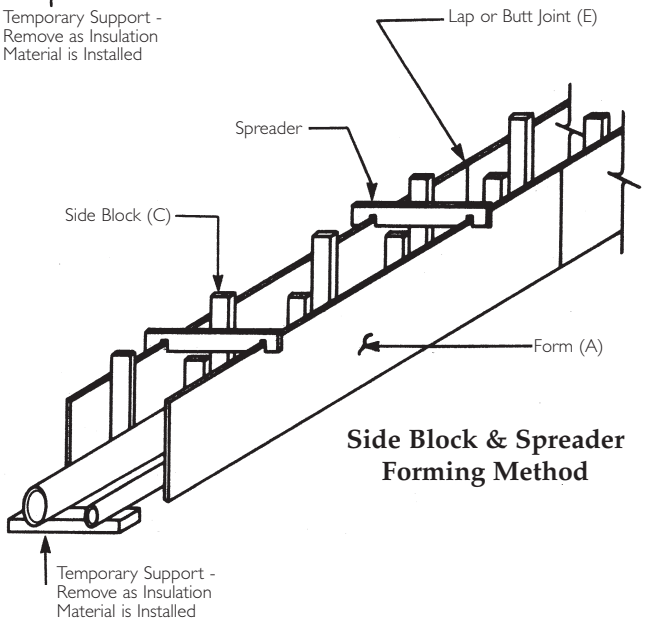
An expansion absorbing cushion required at expansion loops and EL's. May be manufactured from inorganic glass fibers at 3 - 5lb. density with an upper temperature range of 750°F or spun ceramic fibers. Other preformed, snap-on pipe insulation composed of fiberglass, bonded with phenolic resin and capable of withstanding the system design temperature are also suitable.

PACKING

High temperature rope, prefabricated Link Seals or other suitable materials are used to seal the annulus at pipe entries through walls or floors. The packing is used to prevent migration of granules through the entry and yet will allow longitudinal pipe movement.



Side Block & Bulkhead Forming Method



Side Block & Spreader Forming Method

NOTES:

1. Pack wall entries as specified (See Design Manual).
2. Remove standing water prior to installation of insulation. Check soil permeability. Section 4.0
3. Clear all "foreign" objects from insulation envelope to provide a "seamless" covering and eliminate "short circuits".
4. Clean pipes of all dirt, scale and other foreign materials.
5. Just prior to placement of GILSULATE® 500XR coat anchors, guides, wall entries, etc. with Carboline bitumastic 50 to provide a seal. Carboline Bitumastic 50 is to be "tacky".
6. Consolidate GILSULATE® 500XR with rod-type concrete vibrator to 40 - 42 lb./cf. density. Walk on top of envelope. Density has been achieved if footprints are less than 1" deep.
7. Bulkhead uncompleted end and backfill top with 4" to 6" of soil backfill at the end of each day to protect insulation envelope until work resumes.
8. If conditions cause excessive dusting, use NIOSH/MSHA approved face mask dust respirator. A material safety data sheet is available by calling (800) 833-3881.

GILSULATE® 500XR is manufactured for use by experienced and knowledgeable contractors or maintenance personnel. For complete design and installation details please consult Gilsulate International at (800) 833-3881.

A. Forms may be removed or left in place. Forms left in place should be of gypsum board and a minimum thickness of 1/2".
B. Use side block spacing as required to limit maximum bowing of forms to 1/2".
C. Side blocks are not attached to forms. Blocks are removed as insulation is installed and compacted to mid-pipe height. After removal of block, fill void with insulation. Bulkheads are removed as insulation is installed and compacted. After removal of bulkheads, fill void with insulation.
D. Backfill behind forms must be thoroughly compacted by mechanical or hand tamping. It should be installed at least to mid-pipe height before installation of insulation commences.
E. If lap joints are used, interior end must be spaced full Dim. "A" from pipe.

Gilsulate International Incorporated
P.O. Box 802650
Santa Clarita, CA 91380
Phone: (800) 833-3881
Web: www.gilsulate.com