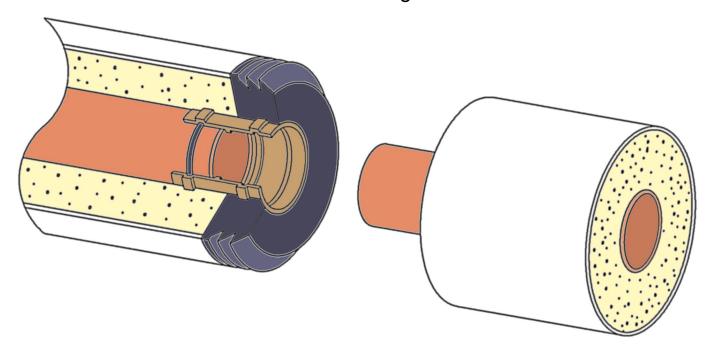


COPPER-CORE®

Specially Designed Copper Piping System with Integral Gasketed Joint For

Domestic and Heating Hot Water



Copper-Core is a lightweight, easy to install, energy efficient piping system for use in low temperature and domestic hot water service. This system may be used for water only in temperatures to 250°F at pressures to 150psi.

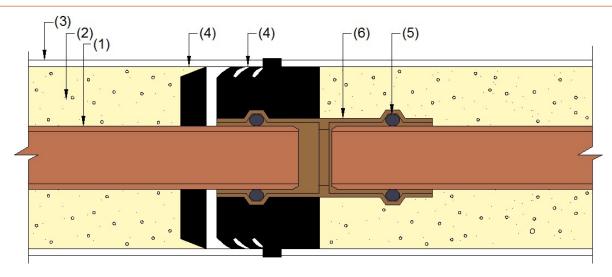
The standard carrier pipe is type 'K' copper. The system is produced with an integral grooved bronze coupling containing two high temperature heat resistant rubber 'O' rings.

Insulation is thermally efficient polyurethane foam with a 'K' factor of 0.16 at

70°F. The heavy wall PVC or HDPE casing and heat resistant end seals keep the insulation dry. Fittings are standard copper solder joint fittings.

Assembly of Copper-Core is a simple one step procedure. Lubricate the joint and push the piping home. No additional steps are required to insulate the joint. This specially engineered joint compensates for thermal expansion, contraction, and earth movement without additional stress on the pipe. The pipe system is corrosion resistant and maintains high flow characteristics.

COPPER-CORE®



(1) CARRIER: Type 'K' Copper.

(2) INSULATION: Polyurethane Foam

(3) CASING: PVC or HDPE

(4) END SEAL: EPDM

(5) SEALING RINGS: EPDM

(6) COUPLING: Grooved Bronze

NOMINAL PIPE	NOMINAL CASING	CARRIER	CASING	THICKNESS		WEIGHT
SIZE (IN.)	SIZE (IN.)	O.D. (IN.)	O.D. (IN.)	FOAM (IN.)	PVC CASING (IN.)	(LBS./20 FT.)
1	4	1.125	3.50	1.13	0.060	35
1 1/4	4	1.375	3.50	1.00	0.060	40
1 1/2	4	1.625	4.21	1.17	0.120	54
2	4	2.125	4.21	0.92	0.120	68
2 1/2	6	2.625	6.14	1.64	0.120	97
3	6	3.125	6.14	1.39	0.120	98
4	6	4.125	6.14	0.89	0.120	158
6	10	6.125	10.20	1.84	0.200	360

NOTE: 6" Copper-Core will have a separate bronze coupling. The joint will be sealed with 30 mil high temperature tape. Standard lengths are 20'-0". Weights are approximate. Consult manufacturer for HDPE dimensional data.

SHORT FORM SPECIFICATIONS

- 1.1 All underground pre-insulated pipe 1"-6" shall be Thermal Pipe Systems, Inc. Copper-Core® piping with Ring-Tite joints.
- 1.2 Copper carrier pipe shall be type 'K' copper. The pipe shall be suitable for use at maximum hydrostatic working pressure of 150 psi at 250°F.
- 1.3 Each joint shall automatically provide for expansion and contraction through the Ethylene Propylene Diene Monomer
- (EPDM) sealing rings in the grooves of the integral bronze coupling. Pipe must be assembled with lubricant supplied by Thermal Pipe systems.
- 1.4 Casing pipe shall be [Polyvinyl Chloride (PVC) meeting the minimum classification requirements of ASTM D-1784] or [High Density Polyethylene (HDPE)]. The thickness shall be in accordance with the Thermal Pipe Systems published data.
- 1.5 The insulation shall be polyurethane foam completely encapsulated on each end by a compression rubber end seal. Pipe joints shall be insulated using polyurethane foam half shells and protected with a Casing-Tite Sleeve.
- 1.6 The rubber end seals shall be an Ethylene Propylene Diene Monomer (EPDM) heat resistant compound.
- 1.7 Fittings shall be uninsulated using type 'K' copper brazed fittings.

WARRANTY

We warrant that our products are manufactured with the applicable material specifications and are free from defects in the workmanship and material using our specifications as a standard. Every claim under this warranty shall be deemed waved unless in writing received by Thermal Pipe systems, Inc. within (30) days of the date the defect was discovered and within (1) year of the date of shipment of the product. Thermal Pipe Systems, Inc. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, IN FACT OR IN LAW, INCLUDING WITHOUT LIMITATION THE WARRANTY OF MERCHANTABILITY OR THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, OTHER THAN THE LIMITED WARRANTY SET FORTH ABOVE.

LIMITATIONS AND LIABILTY

It is expressly understood and agreed that the limit of Thermal Pipe Systems, Inc. liability shall be the resupply of a like quantity of non-defective product and that Thermal Pipe Systems, Inc. shall have no such liability except where the damage or claim results solely from the breach of the Thermal Pipe Systems, Inc. warranty. IT IS ALSO AGREED THAT THERMAL PIPE SYSTEMS, INC. SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES FOR ANY ALLEGED NEGLIGENCE, BREACH OF WARRANTY, STRICT LIABILTY OR ANY OTHER THAN THE LIMITED LIABILTY SET FORTH.



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