



ENGINEERING PRACTICE



THERMAL
INSULATION

CHEMICALS & PLASTICS
TECHNOLOGY METHODS AND STANDARDS PROGRAM

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EXPANDED PERLITE

SERVICE:

This specification covers the insulation material for use on process, steam and steam traced lines and equipment. (Do not use in ethylene oxide service.) This insulation material may also be used over self-limiting type electric tracing systems.

SPECIFICATION IDENTIFICATION:

5M - Expanded Perlite with Mastic Weather Barrier
5A - Expanded Perlite with Aluminum Weather Barrier
5P - Expanded Perlite with Plastic Weather Barrier
5SS - Expanded Perlite with Stainless Steel Weather Barrier

TEMPERATURE RANGE:

10°C (50°F) to 650°C (1200°F)

MANDATORY ADDITIONAL SPECIFICATIONS:

General Specification GS-501
Weather Barrier Application: Spec AP-1
Material Application: Spec AP-2

INSULATION THICKNESS:

As per Thickness Standard TIM-102-XXX

LIMITATIONS:

These materials are not approved for use in ethylene oxide service.

PRECAUTIONS:

Inhalation of perlite dust may cause minor nose and throat irritations.

FIRE PROTECTION:

When used in either single or double layers, this insulation satisfies the credit allowed when sizing safety relief devices.

ASTM DESIGNATION:

Expanded Perlite shall conform to ASTM Standard Specification C610 (latest revision).

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TABLE 1
ACCEPTABLE MAJOR MATERIAL COMPONENTS

COMPONENT	TRADE NAME	MANUFACTURER
Expanded Perlite (Pipe covering and Block)	Goodtemp 1500 Temperlite 1200 WR-1200	Howred Corporation Knauf Corporation Sproule/Calsilite
Mastic Weather Barrier (Spec. 5M)	WC-5 Jaxsan 600 SF L&L 300 Sealfas GPM #35-00 Vi-Cryl Cadalon 500	Vimasco Corporation Plastic Coatings Corporation L&L Coatings Corporation Foster Div. of H. B. Fuller Company Childers Products Company Epolux Manufacturing Corporation
Aluminum Jacketing (Smooth or 3/16" Corrugated) (Spec. 5A)	Type 3003 or 5005, H14 Aluminum roll jacketing with polyethylene coating kraft paper vapor barrier 0.010" Min. up to 24" diameter 0.016" Min. 24" diameter and above 0.020" when crimping and goring	Childers Product Company Premetco International, Inc. Pabco Metals Company RPR Products, Inc.
Stainless Steel Jacketing (Spec. 5SS)	0.010" Thick Type 301, 302, or 304SS roll jacketing	Childers Products Company Premetco International, Inc.
Plastic (PVC) Jacketing (Spec. 5P)	Ceel-Tite 300 Series UVR Perma-Jac "SX"	Ceel-Co Topline Products Inc.



TABLE 2
ACCEPTABLE ACCESSORY MATERIAL COMPONENTS

<u>COMPONENT</u>	<u>TRADE NAME</u>	<u>MANUFACTURER</u>
Insulating Cement (Hydraulic Setting)	Quik Cote Finishing Cement FBX Superkote Cement Thermokote 1-MWP	P. K. Insulation Fibrex, Inc. Pro-Tec-T-Kotes
Reinforcing Fabric	Elastafab #984 PC Fabric 79 Q Quality Cloth	Vimasco Corporation Pittsburgh-Corning Corporation Quality Service Metals Company
Fabricating Cement	Fibrous Adhesive #81-93 Brush Grade 7B High Temp. Adhesive	Foster Div. of H.B. Fuller Company Michael Walter Industries
Heat Resistant Sealer	Silastic 732RTV	Dow Corning Corporation
Wire Netting	One inch, hexagonal mesh, 20 gauge, Type 304 or 430 SS or Monel	(Any Building Materials Supplier)
Insulation Strap Pipe Equipment	3/8" x 0.015" Type 304 SS 1/2" x 0.020" Type 304 SS	Childers Products Company A. J. Gerrard Techalloy Band-It Company
Strap Clip Pipe Equipment	3/8" x 1/2" double pronged SS 1/2" x 7/8" double pronged SS	Childers Products Company A. J. Gerrard Techalloy Band It Company
Stainless Steel Wire	.18 gauge dead soft annealed Type 304 or 430 SS	(Any building materials supplier)
Insulating Cement (Air Setting)	FBX 1900 Cement Thermokote - MW Super-Stik Insulating Cement	Fibrex, Inc. Pro-Tec-T-Kotes P. K. Insulation

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