

**WVU DESIGN GUIDELINES & CONSTRUCTION STANDARDS**  
**DIVISION 23 – HEATING, VENTILATION, AND AIR CONDITIONING**

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**SECTION 232243 – STEAM PIPING INSULATION**

**PART 1 - GENERAL**

1.1 Any deviance from the following instructions must be approved during design by WVU Facilities Management project manager.

**PART 2 - PRODUCTS**

2.1 N/A

**PART 3 - EXECUTION**

3.1 Piping

A. Steam Supply and Condensate Lines:

1. Aboveground or in Tunnels:

a. Material: Calcium silicate with a thermal conductivity, k, of 0.5 btu-in/hr-ft<sup>2</sup>-F @ 400 degrees F mean temperature. Jacket: A layer of ¾” deadening felt shall be wrapped around the insulation. The felt on the elbows shall be pasted in place with a water based sealant/coating, equal to Foster Sealfas coating 30-36, as manufactured by the H.B. Fuller Co. The felt may be wired in place on straight runs of pipe.

b. Thickness:

1. Supply:

<u>Pipe Size</u>	<u>Insulation Thickness</u>
0 – 2” nominal OD	1.5”
2” – 4”	2”
Over 6”	2.5”

2. Condensate: Use 1.5” thick on all pipe sizes.

2. Direct Buried:

a. Premanufactured: Multi-Therm 500 by Perma Pipe. MT-500 consists of the following: steel service pipe, mineral wool insulation, support assembly, 10 gage steel conduit, polyurethane insulation, and a fiberglass reinforced polyester outer jacket.

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B. Other:

1. All valves 2” and larger shall have removable insulation blankets. These are machine sewn with velcro fasteners.
2. All fittings, flanges, and unions shall be insulated the same as its corresponding piping.
3. Insulation shall continue unbroken through any hangers. The insulation shall rest on shields so as not to overly compress the insulation.

END OF SECTION 232243