

HVAC Systems Pipe Insulation Thickness in Inches for Various Pipe Sizes							
Heating System Temperature (F)	Equivalent Steam Pressure (psig)	Runouts ½"-2"	1" & Less	1-1/4" thru 2"	2-1/2" thru 4"	5" & 6"	8" & Up
2. For piping exposed to outdoor air: a. Scheduled ½" through 1" thicknesses shall all increase to 1-1/2" thickness. b. Scheduled 1-1/2" thickness and greater shall increase by ½" thickness.							

HVAC Systems Pipe Insulation Thickness in Inches for Various Pipe Sized							
Cooling System Temperature (F) & Type	Runouts ½"-2"	1" & Less	1-1/4" thru 2"	2-1/2" thru 4"	5" & 6"	8" & Up	
Condensate Drain	½	½	½	½	½	½	
Notes: 1. Runouts are defined as piping branches not exceeding 12 feet in developed pipe length which serve individual terminal units. 2. For piping exposed to outdoor air: a. Scheduled ½" through 1" thicknesses shall all increase to 1-1/2" thickness. b. Scheduled 1-1/2" thickness and greater shall increase by ½" thickness.							

B. Provide the following minimum insulation thickness on all Plumbing Piping Systems:

Plumbing Systems Pipe Insulation Thickness in Inches for Various Pipe Sizes				
Plumbing System Temperature (F) & Type	Runouts thru 1"	1-1/4" & Less	1-1/2" thru 2"	2-1/2" & Up
170-180 HW & HWC	1	1	1-1/2	2
140-160 HW & HWC	1	1	1	1-1/2
100-130 HW & HWC	1	1	1	1
45-55 Chilled Drinking Water	1	1	1	1
Notes: 1. Runouts are defined as piping branches not exceeding 12 feet in developed pipe length which serve individual terminal units. 2. For piping exposed to outdoor air: a. Scheduled ½" through 1" thicknesses shall all increase to 1-1/2" thickness. b. Scheduled 1-1/2" thickness and greater shall increase by ½" thickness.				

3.3 SPECIFIC INSTALLATION REQUIREMENTS

A. Fittings

1. Insulation depth shall match that of adjacent pipe insulation. Standard PVC fitting covers are permitted throughout piping system except in air plenums. PVC fitting covers are permitted in air plenums only when accepted by the local building code officials and the covers comply with a flame/smoke rating less than or equal to 25/50 per NFPA 90A. Apply minimum 1-1/2" wide tape to seal edge of fitting covers to pipe insulation jacket.
2. All other fittings locations shall be provided with either mitered pipe insulation, glass fiber molded inserts or insulating cement built-up to same thickness as adjacent insulation. Finish with glass cloth and a heavy coating of lagging adhesive.

B. Valves

1. Insulation depth shall match that of adjacent pipe insulation. Standard PVC fitting covers are permitted throughout piping system except in air plenums. PVC fitting