

Method Statement for Insulation & Cladding of Chilled Water Pipes

INSULATION OF CHILLED WATER PIPING METHOD OF STATEMENT

- Check all required approved chilled water pipe insulation materials are readily available on site.
- Install the pipe insulation according to this method statement, taking into consideration the manufacturer instructions as per material submittal.
- Ensure all insulation materials are in dry condition at all times, especially during the application.
- Ensure all chilled water pipes are painted with two coats of red oxide primer prior to application of insulation.
- Make sure the thickness of insulated pipe sections will be as per specification and approved schedule for chilled water pipes inside and outside areas of the building.
- The insulators will wear the nose mask at the time of working with the insulation material.
- Cut the insulation material into profiles (outline of pipe face area to be insulated) using cutter knife.
- Apply approved adhesive in longitudinal seam and end faces of the insulation and entire pipe surfaces.
- Ensure pipe surface are clean prior to application of adhesive.
- Apply insulation with longitudinal seams at top of horizontal pipe runs.
- Apply pipe insulation with least number of joints.
- Properly fix the approved insulation on the entire circumference of the pipe to be insulated and pull sheet tight and smooth.
- Install same insulation material for flanges, elbows, fittings and valves, and mitered section of pipe.
- Properly apply aluminium tape on the joints of insulation segments.
- Use manufacturer recommended tape to seal the joints in a way no air can penetrate through the joints.
- Provide removable type insulation sections to valves, including check valves, strainer basket and other valves.
- Maintain permissible access to the valves to operate without disturbing the insulation.
- In case of rising steam valves used in chilled water system, extend the insulation and properly seal insulation joints and valve specialties in order to prevent passage of air to pipe surface.
- Close pipe penetrations through roof, exterior wall, interior wall, fire rated wall, floor etc., through sleeves by ram packing with loose

insulation and seal with approved mastic. For fire rated walls, approved fire proof sealant will be used.

- Raise inspection request of Insulation of Chilled Water Piping, for approval by Client.

CLADDING OF CHILLED WATER PIPING



- Apply flat (embossed) or profiled aluminium cladding. Use sheeting 0.6mm thick on pipe work systems up to 150 mm diameter and 0.8 mm on above 150 mm diameter and above.
- Informing use of pop up rivets is not acceptable due to high risk of damaging the insulation vapour barrier an option is given using aluminium straps as per the specification requirements and according to manufacturer's recommendation and sample site mock-up.
- Valves, strainers and flanges will be provided with a split casing fabricated from 0.9 mm aluminium sheet fitted with spring clips fasteners.
- Valve boxes will be designed to facilitate easy access and replacement for maintenance whilst ensuring the integrity of the vapour barrier.
- Where located externally joints between the box and the adjacent pipe insulating material and also around the valve stem will be sealed by non-setting mastic.