

**RECOMMENDATIONS FOR JACKETING ROOF-TOP PIPING
FOR AMMONIA COOLING SYSTEMS**

Our recommendations for jacketing the roof-top insulated piping for ammonia cooling system and other related insulated pipe lines are as follows:

- 1) Jacketing shall be either .016" or .020" smooth (not stucco embossed) white painted aluminum with Polysurlyn* moisture barrier and shall be applied over dry substrate (vapor retarder jacket) and/or insulation with a minimum 2" overlap on both circumferential and longitudinal joints.
- 2) A vapor retarder jacket that has no paper to absorb and retain moisture shall be used, such as Dow's Saran®, or other suitable product.
- 3) Longitudinal joints shall be positioned at the 3 o'clock position and jacketing secured with 1/2" x .020" 300 series stainless steel banding and seals. Banding will be installed on 12" centers.
- 4) Jacketing shall be installed in a manner to shed water and in accordance with the Midwest Insulation Contractor Association's (M.I.C.A.) National Commercial and Industrial Standards which has been endorsed by the National Insulation Association (N.I.A.).
- 5) White painted aluminum has been recommended not only because of its superior emittance value (.80) versus bright new aluminum (.04), but also its improved corrosion resistance compared to the unpainted aluminum.
- 6) Smooth finish is less susceptible to poulitice/crevice corrosion than stucco embossed.
- 7) Polysurlyn* moisture barrier is recommended since excessive moisture is likely to be present underneath the jacketing, and it provides superior protection from corrosion when compared to polykraft moisture barrier.

*surlyn is a registered trademark of DuPont