



Insulation Materials

Reference Bulletins CBI Bulletin No. 2 Negative Radius Insulation Jackets

Thick walled 90° ells to be covered with metal jackets are an industry wide problem. This happens when the wall thickness approaches or exceeds the pipe size.

The problem occurs because the inside radius (or throat) of the insulation disappears with a thick wall. Even though the outer radius contours perfectly with the iron elbow, there is no inside throat radius.

Thick walled ells lose their sweeping appearance when the wall thickness approaches or exceeds the pipe size. They become “humped” ells even though they are perfectly contoured long radius covers.

As a consequence, the OD and circumference is greater in the throat area than the regular OD at either end of the elbow. This holds true for all thick walled ells whether the ells are fabricated from miters or from solid blocks. Refer to examples below.

Contractors and/or owners should take these problems into account when bidding jobs with thick walled elbows. Cook Brothers Insulation cannot assume responsibility for extra labor charges associated with field fabricating metal to fit thick walled ells.

