

# ENGINEERING SPECIFICATIONS

## PIPE ALIGNMENT GUIDES

Piping in conjunction with expansion joints must be guided as per EJMA (Expansion Joint Manufacturer's Association) guidelines. Guides will restrict lateral pipe movement and buckling caused by pressure thrust loads while allowing for axial movement.

Guides must be of sufficient strength to withstand lateral forces equal to 15% of pipe anchor loads.

The first guide must be located within four (4) pipe diameters on each side of the expansion joint.

The second guide must be located within fourteen (14) pipe diameters on each side of the expansion joint (the first guide may be eliminated when positioning in conjunction with externally pressurized or expansion compensator styles). Additional intermediate guides may be necessary and must be installed along the piping as recommended by the manufacturer and EJMA guidelines.

Pipe alignment guides will be the standard concentric spider type with heavy painted steel, bolted split-housing to be rigidly anchored, and steel sliding spider that is attached to the pipe.

Pipe guides will provide space for specified insulation thickness and are rated for a minimum of 4 inches of axial movement.

Pipe alignment guides will be TCH Series PG.