Design Number 3MU/BI 10-01
PLENUM PROTECTION SYSTEM
3M Company - Canada
3M Fire Barrier™ Plenum Wrap 5A+
CAN/ULC S102
Flame Spread Index = 25
Smoke Developed Index = 50

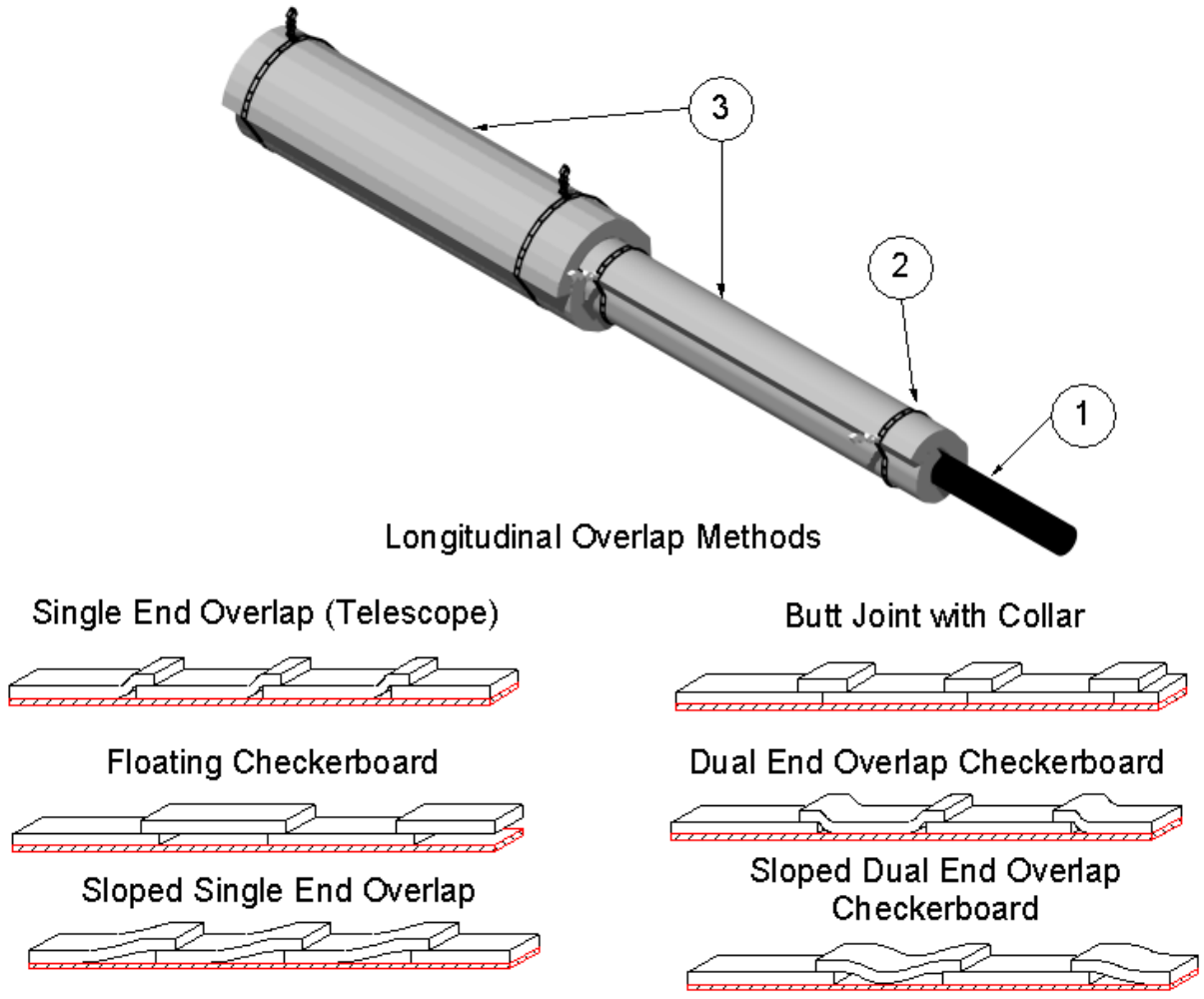

Figure 1

1. PIPE ASSEMBLY: Pipe or conduit with a mass equal to, or less than, of two 4-inch diameter schedule 40 polyethylene pipes. The acceptable pipe materials are one of the following compounds: polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), polybutylene

(PB), polyethylene (PE), polypropylene (PP) or polyvinylidene floride (PVDF).

2. FASTENER: Use either wire ties or steel banding to secure each piece of insulation (Item 3) applied around the pipe assembly (Item 1). When banding is selected, use minimum1/2-inch wide stainless steel bands, which are nominally 0.015-inches thick or 1/2-inch wide carbon steel banding equivalent, which are nominally 0.020-inches thick. When desired, use of filament tape as a temporary hold for the insulation prior to fastening to ease installation is permitted. Place the bands a maximum 1 inch from each blanket edge. Tension the banding material to hold the insulation in place without causing any cutting or damage to the insulation (Item 3). When wire ties are selected, use minimum 24 GA steel wire ties. Place the wire ties a maximum 1 inch from each insulation (Item 3) edge. Tension the wire ties by twisting them together to hold the insulation (Item 3) in place without causing any cutting or damage to the insulation (Item 3).

3. CERTIFIED MANUFACTURER: 3M Company
CERTIFIED PRODUCT: 3M Fire Barrier™ Duct Wrap
MODEL: 5A+

INSULATION: Cover the pipe assembly (Item 1) with a single layer of min. 1/2-in. thick by minimum 24-inch wide refractory ceramic fiber blanket or calcium magnesium silicate blanket with a nominal density of 6-pcf. Use insulation fully encapsulated with foil scrim facing. Place one end of the insulation on the pipe assembly (Item 1) and wrap the insulation completely around the pipe assembly (Item 1). Overlap the other end of the insulation a minimum of 1 inch around the perimeter. Overlap the next piece of insulation onto the first piece of insulation a minimum of 1 inch. Overlap adjacent insulation using one of the following methods: (1) telescoping method where each adjacent insulation has one edge exposed and one edge covered by the next piece of insulation, (2) various checkerboard patterns detailed where both edges of each alternating insulation are covered by each adjacent insulation whose edges are exposed, or (3) a butt splice with collar method where the insulation are butted together and a 2-inch wide collar of insulation is centered over the butt splice overlapping each adjacent insulation 1 inch.

4. TAPE: (Not Shown) Apply pressure sensitive tape with aluminum foil facing to all exposed edges of the insulation (Item 3). Overlap tape onto insulation a minimum of 1-inch.