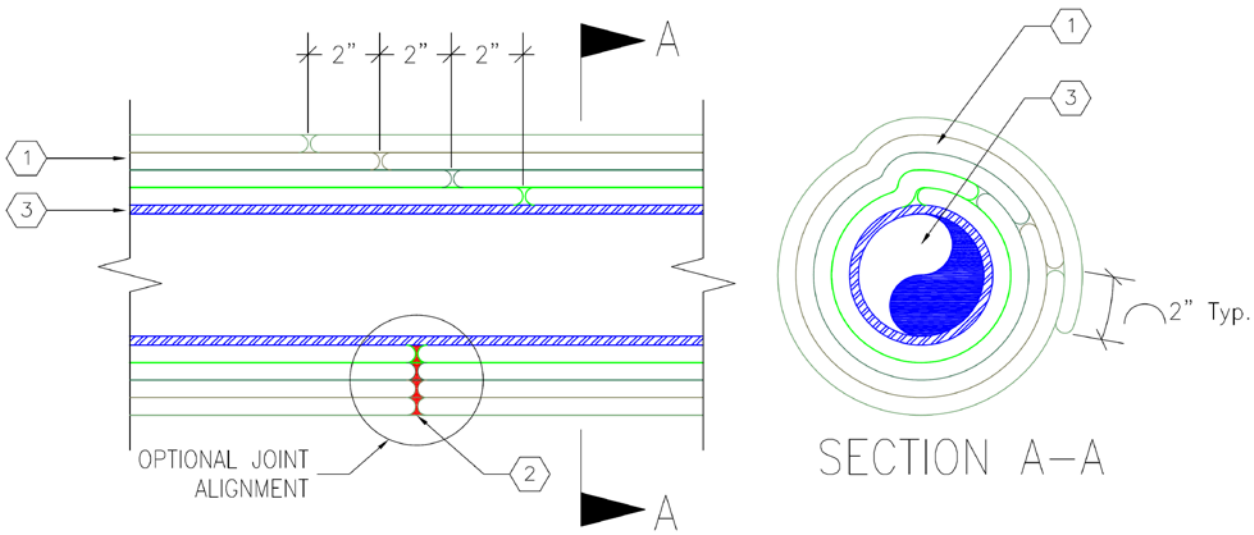
Specified Technologies, Inc.
Design No. STI/AF 120-01
Applied Fireproofing
STI E-Wrap
ASTM E1725
Ratings:
Min. 1 in. Tubing, 3 Layers of STI E-Wrap: 1 Hour
Min. 1 in. Tubing, 4 Layers of STI E-Wrap: 1-3/4 Hour
Min. 1 in. Tubing, 5 Layers of STI E-Wrap: 2 Hour
Min. 4 in. Tubing, 4 Layers of STI E-Wrap: 2 Hour



1. **CERTIFIED MANUFACTURER:** Specified Technologies, Inc.

   CERTIFIED PRODUCT: Applied Fireproofing

   CERTIFIED MODEL: STI E-Wrap Endothermic Wrap

   Install STI E-Wrap layers to achieve the desired fire resistance rating.

   LAYER 1 – Wrap STI E-Wrap onto the tubing (Item 3) by attaching the edge to the tubing using 1/2 in. wide filament tape or 2 in. wide aluminum foil tape, and wrapping tightly around the tubing and overlapping 2 in. at the longitudinal seam. 3 in. wide aluminum foil tape is applied centered on, and parallel with the longitudinal seam for the full length of the seam. Additional wrap sections are added to insulate all straight runs of tubing. The radial seams are butted end-to-end without overlap. 3 in. wide aluminum foil tape is applied over the seam and overlaps 2 in. back onto itself.

   The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the STI E-Wrap is wrapped radially around the elbow. The gore segment is wrapped onto the tubing (Item 3) by attaching the edge to the tubing using 1/2 in. wide filament tape or 2 in. wide aluminum foil tape, and wrapping tightly around the tubing and overlapping 2 in. at the longitudinal seam. The longitudinal seam is located at the long radius of the elbow. 2 in. wide aluminum foil tape is applied centered on,

and parallel with the longitudinal seam for the full length of the seam. The radial seam butted between the gore end segment and adjoining straight section is filled with STI LCI Intumescent Firestop Sealant (Item 2). 3 in. wide aluminum foil tape is applied over the seams and overlaps 2 in. back onto itself.

LAYER 2 – Wrap a second layer of STI E-Wrap in the same manner as Layer 1. The start of Layer 2 begins at the longitudinal seam of Layer 1, secured with 2 in. wide aluminum foil tape covering the full length of the seam. Offset the Layer 2 radial seam 2 in. from the radial seam of Layer 1. Tightly wrap Layer 2 over Layer 1 and overlap the longitudinal seam by 2 in. Cover the full length of the longitudinal and radial seam with 3 in. wide aluminum foil tape. Alternatively, Layer 2 and subsequent layers can be aligned such that the radial seams are not offset or have an offset less than 2 in. When this is done, apply a 1/8 in. thickness of STI LCI Intumescent Sealant (Item 2) over the entire edge of the of STI E-Wrap prior to installing the adjacent section.

The elbows are each fitted with a gore segment cut to accommodate the elbow radius that occurs as the STI E-Wrap is wrapped radially around the elbow in the same manner as Layer 1. The gore segment is attached to Layer 1 with 2 in. wide aluminum foil tape and wrapped tightly around Layer 1, overlapping 2 in. at the longitudinal seam. The longitudinal seam of Layer 2 is located at the short radius of the elbow. 2 in. wide aluminum foil tape is applied centered on, and parallel with the longitudinal seam for the full length of the seam. The radial seam butted between the gore end segment and adjoining straight Layer 2 section is filled with STI LCI Intumescent Sealant. The elbow and straight section butt joints of Layer 1 and Layer 2 are in alignment and not offset. 3 in. wide aluminum foil tape is applied over the seams and overlaps 2 in. back onto itself.

LAYER 3 AND LAYER 4 – Wrap a third and fourth layer of STI E-Wrap in the same manner as Layer 2.

The elbow longitudinal seam for Layer 3 is located at the middle radius of the elbow, rotated 90 degrees from the longitudinal seam of Layer 2. The elbow longitudinal seam for Layer 4 is located at the middle radius of the elbow, rotated 180 degrees from the longitudinal seam of Layer 3.

GENERAL – For each layer, all aluminum foil tape is pressed with a squeegee.

The outer layer is further secured with steel tie wire or 1/2 in. wide stainless steel banding located 1 in. from each radial seam. Space the steel tie wire 6 in. on center (oc) between the seams or the 1/2 in. wide stainless steel banding 12 in. oc. At the elbows, space the steel wire 2 in. oc or the stainless steel banding 12 in. oc, both at the short interior radius.

2. **CERTIFIED MANUFACTURER:** Specified Technologies, Inc.

   CERTIFIED PRODUCT: Caulk or Sealant

   CERTIFIED MODEL: STI LCI Intumescent Firestop Sealant

   Install STI LCI Intumescent Firestop Sealant at seams of elbow gore segments and for any gap greater than 1/8 in. at a butted seam. Use only STI LCI Intumescent Firestop Sealant bearing an Intertek Certified Label.

3. **TUBING:** Use min. 1 in. diameter electrical metal tubing (EMT), intermediate metal conduit (IMC), or rigid metal conduit (RMC).