# SECTION 15254 - REPAIR OF INSULATION AND LAGGING

### PART 1 - GENERAL

#### RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-l Specification sections apply to work of this Section.

## DESCRIPTION OF WORK:

Repair of insulation on all piping upon which asbestos-containing insulation is to remain.

Repair of laggings on boilers, breechings and equipment upon which asbestos containing lagging and/or insulation is to remain.

Extent of pipe insulation and lagging to be repaired is shown on the drawings.

Labeling of repaired asbestos-containing materials.

## PART 2 - PRODUCTS

Mineral Wool Insulating Cement: Provide job mixed insulating plaster manufactured for use on plumbing equipment.

<u>Waterproof Cement</u>: Provide premixed or job mixed cement manufactured for coating of thermal insulation laggings.

Nonwoven Fiberous Glass Mat: Provide felt approximately 3/32" thick fabricated from glass fibers.

Open Weave Glass Fiber Mat: Provide cloth with approximately 1/4" openings in weave, fabricated from glass fibers twisted or braided into strands approximately 1/128" in diameter.

REVISE BELOW IF SECTION 09805 IS NOT GOING TO BE INCLUDED IN THE SPECIFICATION.

Bridging Type Encapsulant: is specified in section 09805.

## PART 3 - EXECUTION

#### GENERAL:

Piping: Remove any loose material with HEPA vacuum. No existing jacket material is to be removed.

Fill holes with mineral wool insulating cement and cover damaged areas with nonwoven fiberous glass mat completely saturated with bridging type encapsulant.

Wrap open joints with nonwoven fiberous glass mat embedded in bridging type encapsulant.

Smooth mat to a wrinkle free condition. Allow to dry and coat entire surface of mat with an additional coat of bridging type encapsulant and brush to a smooth uniform appearance.

BRIDGING TYPE ENCAPSULANT INSTALLED AS ABOVE PROVIDES A DURABLE FLEXIBLE COVERING THAT BONDS WELL TO BOTH METAL SURFACES AND INSULATING MATERIALS. NORMAL PIPE WRAPPING MATERIALS SUCH AS CANVAS AND WATERPROOF CEMENT DO NOT BOND WELL TO METAL SURFACES AND FREQUENTLY CRACK DUE TO EXPANSION AND CONTRACTION OF PIPING.

<u>Fittings</u>: Patch damaged fittings as required, using mineral wool insulating cement. Smooth insulation to a uniform appearance, continuous with and not overlapping adjacent straight insulation runs. Cover entire surface of fitting with nonwoven fiberous glass mat embedded in bridging type encapsulant. Stretch to conform to shape of fitting and smooth to a uniform appearance without wrinkles. Overlap jackets of adjacent straight insulation sections by 3". Allow to dry and coat entire surface of mat with bridging type encapsulant and brush to a smooth finished appearance.

Equipment Laggings: (Hot Water Tanks, Converters, Etc.) Fill damaged portion of lagging as required with mineral wool insulating cement and cover with nonwoven fiberous glass mat completely embedded in bridging type encapsulant. Coat area of repair and six inches on all sides with bridging type encapsulant, brush out to a uniform appearance. Completely coat laggings which do not possess a canvas jacket with two coats of bridging type encapsulant.

Boiler and Smoke Hoods Breeching Laggings: Fill damaged portions of laggings, as required, with mineral wool insulating cement. Coat entire surface of lagging with 1/4" minimum thickness of mineral wool insulating cement reinforced with openweave glass fiber mat. Trowel surface smooth finish.

REFER TO 29 CFR 1926 OR SUBSEQUENT REVISIONS OR PROGRAM DIRECTIVES FOR INFORMATION ON OSHA REQUIRE-MENTS FOR LABELING.

Labeling: Label all asbestos containing piping insulation, fitting insulation laggings, etc. in unoccupied areas with a 3" x 5" yellow sticker containing the words "CAUTION - CONTAINS ASBESTOS FIBERS - AVOID BREATHING DUST - BREATHING ASBESTOS MAY CAUSE SERIOUS BODILY HARM." Apply labels minimum 2 per side or maximum of five feet (5') apart on boilers, breeching and equipment and a mimimum of one per section and a maximum of eight feet (8') apart on pipe runs. Apply labels to both sides of pipe runs which are accessible from both sides.

In occupied areas provide labels shaped like stop signs approximately 3" across with text reading: "STOP - Before Doing Work In This Area See Custodian".

END OF SECTION - 15254