KEENE
CORPORATION

CEILING and INSULATION DIVISION
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Princeton, New Jersey 08540

481665

PLAINTIFF'S
EXHIBIT
KN-422

BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

SPECIFICATIONS FOR INSULATION OF DUCT SYSTEM

1. All air ducts noted on drawings shall be insulated with Spun Mineral Wool Duct Insulation, as manufactured by Baldwin-Hill Company, or approved equal, in thickness specified on drawings.

2. Preparation of Surface - Remove all loose rust, scale or dirt from surface of Duct so that nothing will interfere with the application of the pins, clips, screws or adhesive.

3. Type of Duct Insulation to be used - (Cross off all but desired one)

   (a) - Plain
   (b) - Vapor Barrier
   (c) - Coated

4. Methods of Attachment - (Cross out all but desired method)

   (a) Graham Welding Pins or Mechanical Clips applied with recommended adhesive - applied to under surfaces of horizontal runs and all four sides of vertical ducts - with a minimum of one fastener per 2 square feet of surface. Benjamin-Foster 81-81, 81-71, or equal adhesive, to be applied to other three sides of horizontal runs. Adhesive to be applied in 4" wide strips at one foot intervals, and then ridged slightly by using a serrated trowel.

   Duct insulation to be cut in widths and lengths to suit the cross-sectional dimensions of each duct - with the top and bottom pieces overlapping the side pieces. (Cut over-size to insure tight fit). Apply the bottom piece first by impaling it on the pins or clips, and secure with washers, speed nuts or bend the fasteners to hold the insulation in place. Apply the sides and then the top, pressing the material firmly in place to insure good bond.

   If Vapor Barrier Duct Insulation is used - seal all joints with a 3" wide vapor barrier tape adhered with Benjamin-Foster 60-26, or equal. Cover fastener heads with, at least, a 3" patch of Benjamin-Foster 60-26, or equal, to prevent vapor entry at these points.

   (b) No. 10 or 12 gauge galvanized or stainless steel screws 1/2" longer than the thickness of insulation to be applied. Caps to be fiber washers or metal disks of 1-1/2" diameter; screws to be applied, at least, one per 2 square feet, and should be as near the duct edges as possible for maximum support.

   Duct insulation to be cut in widths and lengths to suit the cross sectional dimensions of the duct, with the top and bottom pieces overlapping the side pieces. (Cut over-size to insure tight fit). Apply all four sides with the screws and caps, making sure each has taken a firm hold.

   If Vapor Barrier Duct Insulation is used, seal all joints with a 3" wide vapor barrier tape adhered with Benjamin-Foster 60-26 or equal. Cover fastener heads with, at least, a 3" patch of Benjamin-Foster 60-26, or equal, to prevent vapor entry at these points.

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BALDWIN-HILL COMPANY, TRENTON 2, NEW JERSEY

SPECIFICATIONS FOR INSULATION OF DUCT SYSTEM

4. Methods of Attachment - (Continued)

(c) Coated insulation to be applied inside the Duct with metal screws or mechanical fasteners (cross out one) applied on upper surface of horizontal runs. Benjamin-Foster 81-71, 81-81, or equal adhesive, used on vertical sides and bottom surface of horizontal runs. Adhesive to be applied in 4" wide strips at one foot intervals, and then ridged slightly by using a serrated trowel.

When applying coated insulation inside the duct, cut to fit cross sectional dimensions with the side pieces overlapping the top and bottom. Attach sides and bottom with coated side exposed, pressing firmly into the adhesive to form a good bond, and then apply top piece and fasten firmly in place, with prescribed fasteners on the pins or the screws and washers. Point all joints of Duct Insulation with BFC 81-33 or equal adhesive to insure tight joints.

5. Special Finish - (Cross out all or all but those desired)

(a) Canvas or Asbestos Paper - Place metal edges of 26 or 28 gauge Galvanized Metal or thin aluminum bent at right angles on all corners of insulated duct (if desired) and _____ oz. canvas or _____ # Asbestos paper applied with Benjamin-Foster 81-42 W "Lagfas", or equal.

(b) White Insulating & Finishing Cement - Welding pins or mechanical fasteners must be used on all four sides of duct - using pins approximately 1/2" longer than the thickness of the insulation.

Impale the insulation over the pins and secure it with clips pressed tight. Then apply poultry netting or metal lath on all four sides and corner beading on all edges - and secure with second fastener on same pin. Then apply a minimum of 3/8" Baldwin-Hill Super Powerhouse Cement, or equal, and trowel to a smooth finish.

(c) Painted Surface - Paint Duct Insulation with Rubber Base Paint.

(d) Out-Door Weatherproofing - When ducts are outdoors, apply metal lath over the insulation - attaching it by tie wires to the metal fasteners holding the insulation in place.

Apply a minimum of 3/8" thickness of Baldwin-Hill Super Powerhouse Cement, or equal, on the metal lath, and trowel to a smooth finish. Allow to dry. Apply a first coat of Baldwin-Hill Vapor Seal Mastic (4 gal./100 sq.ft.), or equal, then press into the still "wet" Vapor Seal Mastic, a layer of woven glass cloth. Then apply a second coat of Vapor Seal Mastic (8 gal./100 sq. ft.) and allow to dry.

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