

LMHD Suggested Specification & Configuration

LMHD UNIT

Furnish and install Krueger model LMHD dual duct (variable air volume) terminal units of the sizes shown in the plans.

Terminals shall be certified by use of the AHRI Standard 880 Certification Program and carry the AHRI seal.

Unit casing shall be constructed of not less than 22 gage galvanized steel. All inlet collars from 4" to 16" diameter shall accommodate standard spiral and flex duct sizes. Inlet sizes larger than 16" diameter shall be rectangular. Unit discharge shall be slip and drive construction for field attachment to downstream ductwork.

- **(Optional) 20 Gage Galvanized Steel Unit Construction:** Unit casing shall be constructed of not less than 20 gage galvanized steel. All inlet collars from 4" to 16" diameter shall accommodate standard spiral and flex duct sizes. Inlet sizes larger than 16" diameter shall be rectangular. Unit discharge shall be slip and drive construction for field attachment to downstream duct work.

Unit labels shall be adhered to each unit including model, size, airflow (CFM), balancing chart, and tagging data.

Control air damper assemblies shall be constructed of heavy gage steel with solid shafts rotating in self lubricating Delrin® bearings. Damper shafts shall be marked on the end to indicate damper position. Damper blades shall incorporate a flexible gasket for tight airflow shutoff and operate over a full 90° rotation.

LMHD unit shall be equipped with a factory installed airflow sensing device. Provide a K4 LineaCross, four quadrant, multi-point center averaging sensor with an amplified signal.

- **(Optional)** Provide a linear multi-point, velocity averaging sensor with an amplified signal.

Provide balancing taps to allow for easy airflow verification.

The radiated and discharge attenuation factors for the specified NC levels shall be based on either room absorption and environmental adjustment factor or the attenuation factors from AHRI Standard 885-08 Appendix E, which includes room absorption, environmental adjustment factor, duct insertion, end reflection, and duct branching.

- **(Optional)** Access panel(s) shall be in the unit casing for viewing of damper components.

CASING LINERS

Unit casing shall be lined with 1/2" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A. Insulation shall be attached to the unit casing by adhesive and weld pins.

- **(Optional) 1" Thick Insulation:** Unit casing shall be lined with 1" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A. Insulation shall be attached to the unit casing by adhesive and weld pins.
- **(Optional) Cellular Insulation:** Unit casing shall be lined with 1/2" or 1" thick, 1 1/2 lb. density, smooth surface, polyolefin, closed-cell foam insulation for fiber free application. Cellular insulation meets UL 181 and NFPA 90A and does not support mold or bacteria growth. Insulation shall be attached to the unit casing by adhesive and weld pins.
- **(Optional) Steriliner Insulation:** Unit casing shall be lined with 13/16" thick, 4 lb. density, rigid board insulation with nylon reinforced foil covering insulation fibers that meets UL 181 and NFPA 90A. Liner shall be attached to unit casing by adhesive and weld pins with full-seam-length Z-strips to enclose and seal the insulation cut edges.
- **(Optional) Sterilwall Insulation:** Unit casing shall be lined with 1/2" or 1" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A, enclosed between the unit casing and a non-perforated internal sheet metal cover extending over the fiberglass insulation, as well as covering the liner cut edges.
- **(Optional) Perforated Doublewall Insulation:** Unit casing shall be lined with 1/2" or 1" thick, 1 1/2 lb. dual density fiberglass insulation, (additional options: 1/2" or 1" thick, 1 1/2 lb. density foil reinforced fiberglass insulation or 13/16" thick, 4 lb. density, rigid board insulation with fiber reinforced foil covering) that meets UL 181 and NFPA 90A, enclosed between the unit casing and a perforated internal sheet metal cover extending over the fiberglass insulation, as well as covering the liner cut edges.
- **(Optional) No Liner:** Unit casing shall be equipped with no internal insulation liner.

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DUAL DUCT TERMINAL UNITS

1. SERIES: (XXXX)

LMHD - Dual Duct Terminal Unit

2. SENSOR TYPE: (X)

- 1 - Linear Averaging
- 3 - K4 LineaCross (Four Quadrant)

3. LINER TYPE: (X)

- 0 - Standard
- 1 - 1" Liner
- 2 - Steriliner
- 3 - No Liner
- 4 - Sterilwall with 1/2" Dual Density
- 8 - Sterilwall with 1" Dual Density
- A - Perforated Doublewall with 1/2" Dual Density
- B - Perforated Doublewall with 1" Dual Density
- C - Perforated Doublewall with 1/2" Foil Encapsulated
- D - Perforated Doublewall with 1" Foil Encapsulated
- E - Perforated Doublewall with Steriliner
- F - 1/2" Cellular
- H - 1" Cellular

4. UNIT CASING CONTROLS: (XX)

- Cold Inlet On:
- 0L - Left-hand Side, 22 Gage
 - 1L - Left-hand Side, 22 Gage & Access Panel
 - 2L - Left-hand Side, 20 Gage
 - 3L - Left-hand Side, 20 Gage & Access Panel
 - 0R - Right-hand Side, 22 Gage
 - 1R - Right-hand Side, 22 Gage & Access Panel
 - 2R - Right-hand Side, 20 Gage
 - 3R - Right-hand Side, 20 Gage & Access Panel

5. INLET CODE: (XX)

- 04 - 4"
- 05 - 5"
- 06 - 6"
- 07 - 7"
- 08 - 8"
- 09 - 9"
- 10 - 10"
- 12 - 12"
- 14 - 14"
- 16 - 16"
- 22 - 24"x16"

6. CONTROL TYPE: (X)

- D - Digital Controls *
- A - Analog Controls
- P - Pneumatic Controls

7. UNIT ACCESSORIES: (X) (X) (X)

- 0 - None
- S - Hanger Brackets
- D - Disconnect for Controls
- G - 24-24 VAC Transformer
- H - 120-24 VAC Transformer
- J - 208-24 VAC Transformer
- K - 240-24 VAC Transformer
- L - 277-24 VAC Transformer

* Digital controls are supplied by others; mounted by Krueger.

SAMPLE CONFIGURATION: LMHD - 3 - 2 - 0L - 08 - P - S - 0 - 0