

INTRODUCTION

The ATNS single duct attenuators are a versatile addition to a standard LMHS terminal unit. The ATNS is a separate attenuator section, designed to perfectly fit the LMHS discharge opening. Whether a five foot attenuator section is needed, a downstream water coil access door is required, or an access door needs to be added to an existing LMHS unit, the ATNS is the perfect solution.

MODEL

ATNS - Single Duct Attenuator

FEATURES

- Designed to fit all standard LMHS sizes.
- 20 gauge galvanized steel casing construction that provides strength and product durability.
- Available top or bottom 6"x9" access opening for easy accessibility during routine inspections and maintenance.
- Several casing liner options provide quiet and clean operation.
- Rectangular connections with slip and drive connections providing quick and easy connection to hot water heat coils and down stream duct work.

PRODUCT DESCRIPTION

CASING

- All ATNS unit casing panels are constructed of 20 gauge galvanized steel.

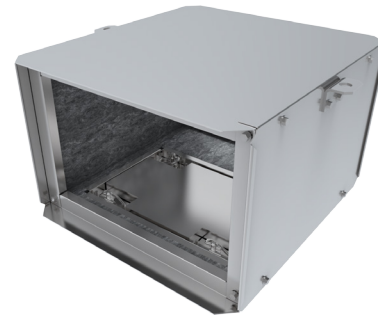
INLET / OUTLET CONNECTION

- All standard outlet connections are rectangular and require a slip and drive duct connection.

CASING LINERS

All liners are attached to the unit casing with both adhesive and weld pins to ensure long term durability (excludes Sterilwall and Perforated Doublewall). The standard liner option is 1/2" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A.

- **(Optional)** 1" Thick Insulation: 1" thick, 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A.
- **(Optional)** Cellular Insulation: 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.
- **(Optional)** Steriliner Insulation: 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.



ATNS
(Size 06, Length 12")



ATNS
(Size 12, Length 60")

- **(Optional)** Sterilwall Insulation: 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: 1/2" or 1", 1 1/2 lb. dual density fiberglass insulation that meets UL 181 and NFPA 90A, enclosed between the unit casing and a perforated internal sheet metal cover extending over the fiberglass insulation and covering the liner cut edges.

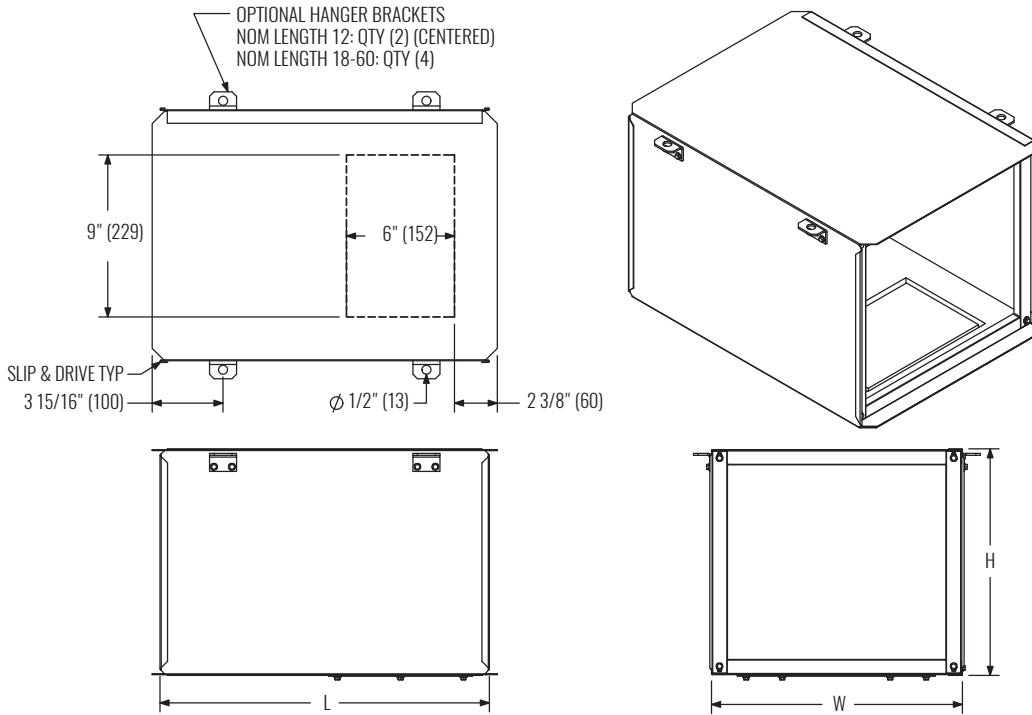
ACCESS PANEL

- **(Optional)** Gasketed access panel in the attenuator casing is available for viewing and accessing inside of duct work. Access panel is available for bottom access or top and bottom access.

LABELS

- Label information is adhered to each unit and includes model name, unit size, configuration code, and duct size.

ATTENUATOR | DIMENSIONAL DATA



Dimensions in parentheses are millimeters. Bottom access panel is shown; top access panel is available.

NOMINAL LENGTH	L	LMHS INLET SIZE	W	H	LMHS INLET SIZE	AVAILABLE LENGTHS					
						12"	18"	24"	36"	48"	60"
12	12 1/4"	4-6	12"	8"	4-6	•	•	•	•	•	•
18	18 1/4"	7-8	12"	10"	7-8	•	•	•	•	•	•
24	24 1/4"	9-10	14"	12 1/2"	9-10	•	•	•	•	•	•
36	36 1/4"	12	16"	15"	12	•	•	•	•		
48	48 1/4"	14	20"	17 1/2"	14	•	•	•	•		
60	60 1/4"	16	24"	18"	16	•	•	•	•		
		22	38"	18"	22			•			

STANDARD FEATURES

- 20 gauge galvanized steel casing construction
- 1/2" thick dual density fiberglass insulation that meets NFPA 90A and UL 181 safety requirements
- Slip and drive connections (hardware not provided)

OPTIONAL FEATURES

- Liners: 1" dual density fiberglass, 1/2" or 1" cellular, Steriliner, 1/2" or 1" Sterilwall, 1/2" or 1" perforated doublewall
- Access Door: Single, bottom access door
- Access Door: Dual, top and bottom, access door*
- Access Door Fastening: Screws or cam locks*
- Hanger brackets*

* Not available with size 22.

SUGGESTED SPECIFICATION & CONFIGURATION

Furnish and install Krueger model ATNS single duct attenuator of the sizes shown in the plans.

Unit casing shall be constructed of not less than 20 gauge galvanized steel.

Unit connections shall be slip and drive construction for field attachment to LMHS single duct terminal units or existing duct work.

Unit labels shall be adhered to each unit including model size, length, duct size, and tagged data.

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. Units with electric reheat 1/2" cellular insulation is enclosed between the unit casing and a non-perforated internal sheet metal cover extending over the cellular insulation, as well as covering the liner cut edges.
- **(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", 1 1/2 lb. dual density fiberglass insulation 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.

ACCESS PANEL

- **(Optional) Gasketed access panel** shall be located in the bottom panel (optional - top and bottom panels) of the attenuator casing to provide viewing and access to the inside of the duct work.

1. SERIES: (XXXX)

ATNS - Single Duct Attenuator

2. INLET: (XX)

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

3. LENGTH: (XX)

12 - 12"	18 - 18"
24 - 24"	36 - 36"
48 - 10"	60 - 60"

4. LINER TYPE: (X)

- 0 - 1/2" Liner (Standard)
- 1 - 1" Liner
- 2 - Steriliner
- 4 - Sterilwall with 1/2" Dual Density
- 8 - Sterilwall with 1" Dual Density
- 6 - 1/2" Foil Encapsulated
- 9 - 1/2" Foil Encapsulated
- A - Perforated Doublewall with 1/2" Dual Density
- B - Perforated Doublewall with 1" Dual Density
- C - Perforated Doublewall with 1/2" Foil Encapsulated
- F - 1/2" Cellular
- H - 1" Cellular

5. UNIT ACCESSORIES: (X) (X) (X) *

- 0 - None
- 1 - Single Access Panel
- 2 - Double Access Panel
- P - Cam Locks (for Liner Codes 0,1,2,3,F, H)
- Y - Cam Locks (for Liner Codes 4,8,A,B,C)
- S - Hanger Brackets

* Unit accessory code '1' is not available with unit accessory code '2'.
Unit unit accessory code 'P' is not available with unit accessory code 'Y'.

SAMPLE CONFIGURATION: ATNS - 08 - 24 - 0 - 1PS