

Project: \_\_\_\_\_

Tag: \_\_\_\_\_

Engineer: \_\_\_\_\_

Contractor: \_\_\_\_\_

Date: \_\_\_\_\_

## LAD LINEAR ANTISTRAT DIFFUSER MODELS: LAD

## SUBMITTAL: LAD

The L.A.D. (Linear Antistrat-Diffuser) is a thermally powered bi-directional outlet that automatically changes from a two slot "Horizontal Cooling" position to an adjustable single slot "Vertical Heat" position. This is achieved by an adjustable "Bi-Metallic Coil" attached to a uniquely designed center diffusion blade, utilizing a single moving part configuration.

### CONSTRUCTION NOTES:

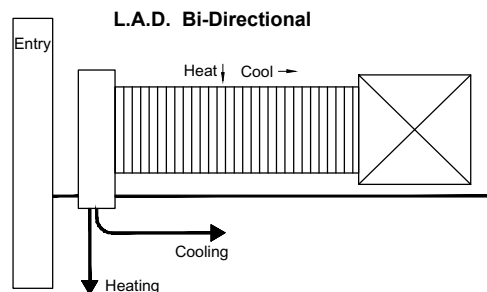
1. Construction: 24 ga. Electro-galvanized steel.
2. Controls: Self-Contained, thermally actuated control.
3. Models available:
  - 24" with 8" Oval Inlet
  - 48" with 10" Oval Inlet
4. Options:
  - 1/2" Black matte insulation
  - Surface mount frames
5. Finish: Baked White enamel or Satin Black

Series LAD - Thermally Powered Linear Diffuser							
UNIT SIZE	HORIZONTAL DISCHARGE				VERTICAL DISCHARGE		
	cfm	Ps	Throw	NC	cfm	Throw	NC
2 ft	50	0.030	1 - 3 - 5	<15	40	1 - 4 - 6	<15
	100	0.050	3 - 7 - 10	<15	80	2 - 4 - 8	17
	175	0.130	7 - 12 - 14	27	120	7 - 12 - 15	27
	200	0.190	10 - 15 - 20	31	160	10 - 15 - 20	32
4 ft	150	0.030	5 - 6 - 11	<15	120	1 - 4 - 5	<15
	200	0.050	5 - 7 - 14	16	160	3 - 5 - 11	17
	250	0.070	6 - 8 - 17	21	200	4 - 6 - 12	23
	300	0.120	7 - 9 - 17	27	240	5 - 9 - 17	28
	350	0.130	8 - 11 - 20	30	280	6 - 12 - 19	30
	400	0.190	9 - 18 - 23	34	320	8 - 15 - 22	35

- Definition of Units:
- cfm - Cubic feet per minute (air)
- Ps - Static pressure =  $P_t - P_v$  (in.wg.)
- Throw - Cataloged throw is the distance in feet to the terminal velocities of 150-100-50 fpm with isothermal air.
- NC - Noise criterion. NC ratings are based on sound power level (Lw) RE:10E-12 watts minus a 10 dB room attenuation in all octave band

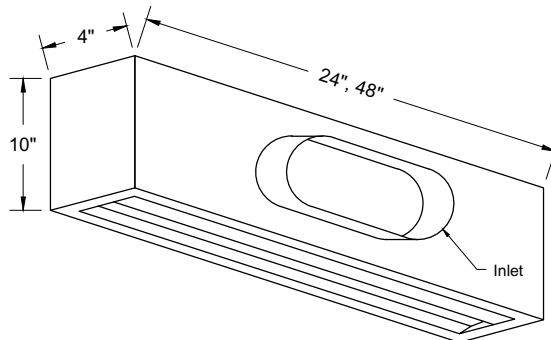
### L.A.D. 2 & 4 ft. Linear Diffuser

- Horizontal Cool Air / Vertical Warm Air Throw
- Bi-Metallic Thermostatic Blade Control



### NOTES:

1. The heating S.P. shall be slightly greater than the S.P. for the corresponding cooling C.F.M. balanced condition.
2. The throw values are for terminal velocities of 150 - 100 - 50 F.P.M. The throw values are based upon a cooling temperature differential of 20°F and a heating temperature differential of 30°F.
3. The N.C. values were determined from octave band 2 - 7 sound power levels with a 10dB room absorption.



Revision: A

Date: 02/16/15

Dimensions are in Inches

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