## **Engineering Bulletin** # 2005-002

## Terminal Units



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## **FPTU w/SM Liners and Inlet Attenuators**

Occasionally, fan terminals are specified to have solid metal liners (SM) to eliminate the possibility of exposed fiberglass and to add rigidity to the units casing. However, it should be noted that the SM liner negates any sound absorption of the encased insulation, significantly increasing radiated noise levels.

Typically, an inlet attenuator is selected to reduce radiated noise. The addition of a SM lined inlet attenuator will not provide any noise reduction or acoustical benefit while adding to the overall weight, size, and cost of the terminal. As a result, when any Fan Powered terminal unit is ordered with SM liner and an inlet attenuator section, the inlet attenuator will be supplied with a perforated metal (PM) liner.

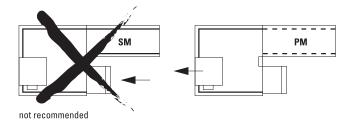
The inlet attenuator will be constructed with two inch fiberglass insulation covered with perforated metal that has a low free area (12%) which effectively contains and protects the fiberglass insulation. The small perforations of 3/32"dia staggered at 1/4" inch allow sound waves to pass through, providing acoustic absorption which reduces radiated sound levels.

One primary feature of the Price Fan Powered terminal is very low sound levels. By offering a perforated metal liner on the inlet attenuator when the SM option is selected, the customer benefits from effective protection of the insulation and the lowest sound levels in the industry.

## RADIATED ATTENUATION dB For PM lined inlet attenuator sections

	Octave Band					
Sizes	2	3	4	5	6	7
20, 30, 40	3	5	8	9	10	12
50	3	5	7	7	7	8

Note: for SM lined attenuator all values are 0.



Best Regards,

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**Terminals**