

# VAV TERMINAL UNITS LINER OPTIONS TYPE: SOLID METAL LINER (DOUBLE WALL CONSTRUCTION)

A Solid metal liner completely isolates the standard insulation and its raw edges from the airstream within the terminal. The solid metal liner option, also referred to as double wall construction, offers excellent protection against exposure of fiberglass particles to the airstream. This option is ideal for applications where Indoor Air Quality (IAQ) is a concern and where terminals will be wiped down and cleaned on a regular basis. This option is also resistant to moisture.

### ISOLATED INSULATION

Material: Dual Density flame attenuated glass fiber.

Thickness: 3/4" (19). (37N, 37S, 37SST and 33SZ Size 30 Low Profile Fan Powered Terminal Units use

1/2" (13) material).

Density: 4.0 lb/cu. ft. (64 kg/m³) skin.

1.5 lb/cu. ft. (24 kg/m3) core.

Thermal Conductance: 0.36 BTU / hr-ft<sup>2</sup>-°F @ 75°F (2.04 W / m<sup>2</sup>-°C @ 24°C).

(C) For 1/2" (13) material: 0.52 BTU / hr-ft²-°F @ 75°F (2.95 W / m²-°C @ 24°C).

## STANDARD AND CODE COMPLIANCE

- UL 181 Class I
- ASTM E84 and UL 723 Flame/Smoke (25/50)
- NFPA 90A and 90B
- · ASTM C 1071 Air Velocity (2000 fpm max.)
- ASTM C 665

# **ACOUSTICAL PERFORMANCE**

Correction factors to cataloged sound power level data (standard dual density insulation) are shown below.

# Single Duct Terminal Units • 3000 Series Basic Unit • All sizes.

Octave Band	2	3	4	5	6	7	NC Impact
Center Frequency (Hz)	125	250	500	1000	2000	4000	(Average)
Discharge Sound	0	0	0	0	0	0	0
Radiated Sound	-1	-2	-2	-3	-3	-3	-2

# Fan Powered Terminal Units • 33SZ, 35N, 35S, 37N and 37S Series • All sizes.

Octave Band	2	3	4	5	6	7	NC Impact
Center Frequency (Hz)	125	250	500	1000	2000	4000	(Average)
Discharge Sound	0	0	0	0	0	0	0
Radiated Sound	+2	+1	+2	+6	+13	+14	+3

# Fan Powered Terminal Units • 35SST and 37SST "Stealth" Series • All sizes.

Octave Band	2	3	4	5	6	7	NC Impact
Center Frequency (Hz)	125	250	500	1000	2000	4000	(Average)
Discharge Sound	0	0	0	0	0	0	0
Radiated Sound	-5	-4	-4	0	+3	+5	-4

## Dual Duct Terminal Units • 3230 and 3240 "Blendmaster" Series • All sizes.

Nailor has independently tested and cataloged their dual duct sound data based upon the use of Steri-Liner (high density foil back insulation) rather than standard dual density fiberglass insulation as used in the above terminal units. This is because it is the most popular specification for dual duct terminals, where IAQ is frequently a concern. Solid metal liner is acoustically reflective in a manner similar to Steri-Liner. The cataloged data may therefore be used without correction when a solid metal liner is required.

SCHEDULE TYPE				
PROJECT				
ENGINEER	DATE	B SERIES	SUPERSEDES	DRAWING NO.
CONTRACTOR	8 - 19 - 16	VAV.ACC.	11 - 19 - 12	VAV - SML