



**DUAL DUCT TERMINAL UNITS  
LINER OPTIONS  
TYPE: DUAL DENSITY INSULATION**

**DESCRIPTION**

Nailor tests and catalogs its sound power levels for dual duct terminal units using Steri-liner insulation as this is the most popular liner on dual duct projects. Correction factors for standard 3/4" (19) dual density insulation are shown below.

Tuf-Skin dual-density fiber glass blankets are the most widely-used insulation for HVAC equipment applications. The combination of high-density skin and low-density core provides high acoustical values in the high and low frequency ranges normally encountered in HVAC equipment.

**Application.** Tuf-Skin provides effective thermal and acoustical control in air conditioning and heating equipment.

**Advantage.** The porosity and inherent structure of the flame-attenuated glass fiber blankets are highly effective in reducing thermal transfer.

Tuf-Skin readily withstand damage from mechanical abrasion during assembly and from air erosion in service.

**INSULATION CHARACTERISTICS**

- Material: Dual density fiberglass, surface treated to prevent erosion.
- Thickness: 3/4" (19).
- Density: 4.0 lb/cu.ft. (64 kg/m<sup>3</sup>) skin, 1.5 lb/cu.ft. (24 kg/m<sup>3</sup>) core.
- Thermal Conductance: 0.36 BTU / hr-ft<sup>2</sup>-°F@75°F (2.0 W / m<sup>2</sup>@24°C).
- Thermal Resistance: 2.8 hr-ft<sup>2</sup>-°F / BTU (0.74m<sup>2</sup>-°C / W).  
(Effective R-Value)
- Flame Spread: 25
- Smoke Density: 50

**MAXIMUM AIR VELOCITY**

3,600 FPM (1,097 mpm). Tested at two and one-half times (9,000 fpm) (2,743 mpm) the maximum recommended service velocity. Meets the erosion requirements of UL 181.

**STANDARD AND CODE COMPLIANCE**

25/50 (per ASTM E 84 AND UL 723 CAN.ULC S102 - M88).  
NFPA 90A and 90B

**ACOUSTICAL PERFORMANCE**

Correction factors to cataloged sound power level data (steri-liner) are shown below.

**Model 3230 • All sizes.**

Octave Band	2	3	4	5	6	7	NC Impact
Center Frequency (Hz)	125	250	500	1000	2000	4000	(Average)
Discharge Sound	-4	-4	-6	-10	-12	-13	-5
Radiated Sound	+1	+2	+2	+3	+3	+3	+1

**Model 3240 "Blendmaster" • All sizes.**

Octave Band	2	3	4	5	6	7	NC Impact
Center Frequency (Hz)	125	250	500	1000	2000	4000	(Average)
Discharge Sound	-4	-4	-6	-10	-12	-13	-5
Radiated Sound	+1	+2	+2	+3	+3	+3	+1

<b>SCHEDULE TYPE</b>				
<b>PROJECT</b>				
<b>ENGINEER</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR</b>	<b>1 - 18 - 07</b>	<b>VAV.ACC.</b>	<b>7 - 21 - 04</b>	<b>VAV - DDDD</b>