

Soundspec.exe Acoustical Specification maker.

This program assists the design engineer by providing a text specification for a VAV unit. Sound Power is based on an industry standard. (AHRI Standard 885-2008). The program is a copy (unpack the self extracting zip file, located here on the Krueger website) and execute program (It doesn't have to be installed).

When all the variables below have been set up, a text file will be generated with a guide specification for maximum allowed sound power based on 885-2008 parameters. Note that the program asks for design duct static pressure. This value is not used in the specification, but is required if sound power is to be calculated.

SoundSpec Parameters

SounSpec for Windows V 1.1 4/6/2010

Title: Acme Building

Room Sound Pressure Requirement Type: High Speech Privacy

Design Duct Pressure, in. Ps.: 1.0

Discharge Assumptions:

Avg Discharge Duct Size: 12 ☒ Use End Reflection?

Length of Lining, Ft.: 5 Number of Zones: 2

☒ Use Flex Duct? Flex Diameter, in.: 8

Length of Flex Duct: 5

Room Absorption (Discharge Sound Only)

Room Volume: 2400

Distance from Source, Ft.: 5

Radiated Sound Assumption

ARI 885-08 Ceiling Values (note - Room effect is included)

Ceiling Attenuation Type: Type 2: Mineral Tile, Typical

High Speech Privacy

Octave Band						
2	3	4	5	6	7	
57	53	48	43	37	31	

ARI 885-08 Ceiling Values

Octave Band						
2	3	4	5	6	7	
15	17	19	25	30	33	

Process Exit

Clicking on the process button will generate a text file, listing the assumptions and providing specification text:

Based on these assumptions, Neither Radiated or Discharge Unit sound power shall exceed the following levels at an inlet pressure listed above.:

Octave Band : 2 3 4 5 6 7
Radiated Pwl ,dB : 17 18 19 25 30 33

Discharge Pwl ,dB : 14 21 33 47 50 34

Both Radiated and Discharge sound power shall be based on the most current ARI Certified data, as reflected in the most current Certified Product Directory.

The program includes a full help module.

SounSpec Help
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SounSpec V 1.0 for Windows 95, 98 and IIT.

SounSpec is a program designed to assist the design engineer in developing a performance- based specification for the sound levels allowed from ceiling located VAV air terminal devices. The specification is generated by taking a desired room sound level and adding all the known attenuation elements to determine a maximum allowed sound power level for a ceiling mounted source.

The following topics are covered in this help document:

[ARI 885 Standard](#)
[Desired room sound level](#)
[Discharge assumptions](#)
[Radiated assumptions](#)
[Processing Data](#)

The attenuation levels are based on ARI Industry Standard 885-1998. This standard includes tables for a number of commonly found attenuation elements and paths.

The program will prompt for a project name, and a design duct static pressure. The pressure is not used in any calculations but is provided as a basis for determining the unit sound power. Note that the value is for the design duct pressure, not the pressure across the damper in the VAV terminal, which will be less, depending on the downstream pressure due to balancing dampers, ducts, fittings and diffusers.