



# Noise Control Design-Assist Services

Complimentary noise control analysis for mechanical systems.

Here's what we need from you: (see back page for more thorough list)



## 1. Equipment Sound Data

Mechanical equipment selections with octave band sound power levels.



## 2. Mechanical Drawings

HVAC duct layout drawings for project spaces.



## 3. Room Criteria

Desired room noise criteria for individual project spaces.

**Call 817-509-2300 or email [noisecontrol@pottorff.com](mailto:noisecontrol@pottorff.com) to get started.**

Pottorff is dedicated to providing the commercial and industrial acoustic markets with excellence in both products and service.

Our acoustic analysis is completed using our Acoustic Information Model (AIM) software package. AIM is a leading HVAC noise prediction tool that is trusted by hundreds of acoustical consultants and mechanical engineers around the world.



# POTTORFF®

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Here is what we need from you for your noise control analysis.



## 1. Equipment Sound Data

**Air Handling Equipment.** The main source of noise in HVAC systems is the primary air handling equipment. For our calculation, we'll need published information for project selected equipment that includes Discharge, Inlet, and Casing/Radiated sound power levels for each octave band.

**Terminal Units.** Ancillary noise sources downstream of primary air handling equipment include terminal units (VAV boxes, fan powered boxes, etc.). For the most accurate results, provide us with project specific terminal unit selections, at project specific operating points (make, model, CFM, differential pressure, etc.). We'll look at the Discharge and Casing Radiated sound power levels to ensure that contribution from these devices is kept to a minimum.

**GRD.** The final elements in ducted system are typically GRD's, which can yield elevated noise levels if not properly selected. Provide us with scheduled GRD's and we'll include them with our analysis to ensure that your noise criteria goals are achieved for the space.



## 2. Mechanical Drawings

**Duct Layout.** Mechanical drawings highlighting duct layouts from air handling equipment to noise sensitive spaces are used to develop calculation results. Drawings showing clear routing in the system along with duct sizes, presence of internal duct lining, etc. will help expedite our calculation summary report and ensure accurate noise predictions.

**Details/Notes.** Often times detail sheets and/or drawing notes describe installation conditions of items affecting the noise prediction that aren't immediately apparent on mechanical drawings. This might include an installation detail highlighting when and where to use internal duct liner, or, a note that suggests whether elbows will utilize turning vanes. For best results, include the full drawing package and we'll utilize all available information relevant to the noise prediction.

**Return Air System.** Complete drawings of the return air system can help clarify the type of system on which we're conducting an analysis. Plenum return type systems require different calculation elements be used than completely ducted return systems. For plenum returns, we'll need to understand location of duct termination and specific types of ceiling systems used on the project for best results.



## 3. Room Criteria

**Room Criterion.** We'll calculate the noise level at individual spaces that you highlight to us as being noise sensitive. If you're not sure, no problem. Just let us know and we'll utilize background noise criteria standards outlined in the ASHRAE handbook in our analysis.

Pottorff has a highly skilled staff of acoustical engineers available to provide a complimentary noise control analysis specific to your project. From start to finish, our engineers will work with you to gather all necessary information, conduct a noise control analysis, and develop a comprehensive report of our findings. Afterward, we are available to answer any questions related to product selections or design changes throughout the duration of your project.

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