

Some instructions on using the Sound Pressure Guide and Symbol

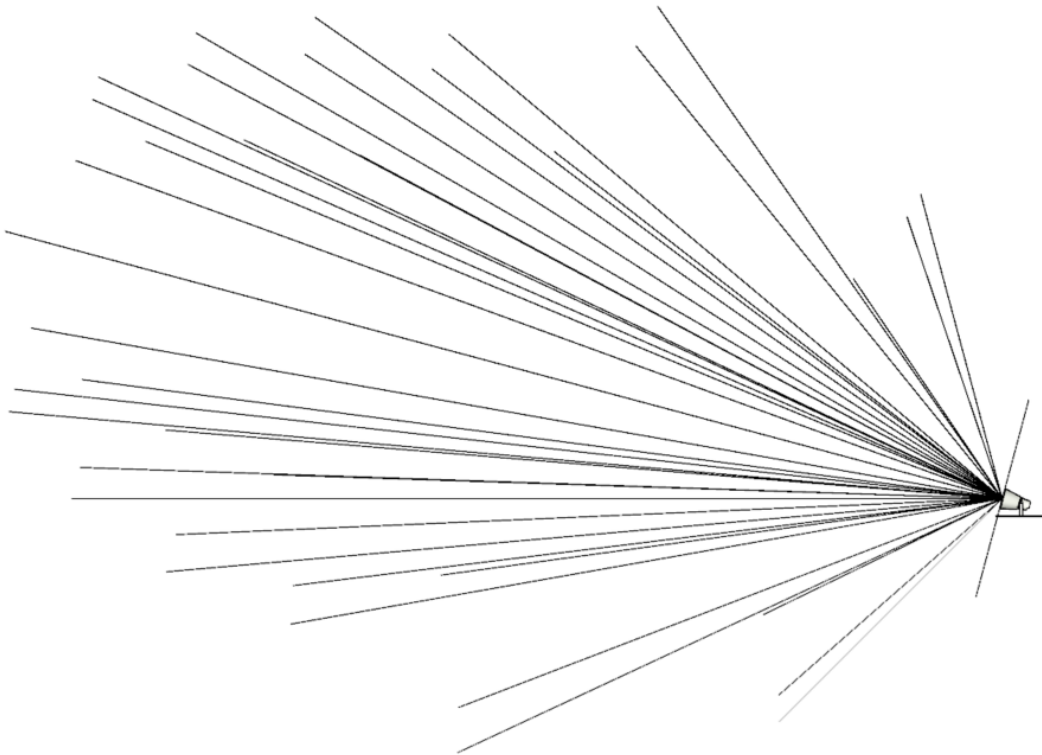
Applicable files

BS-1030 - v.1.2 for 2024.rfa, BS-680FC_U.rfa, CS-154.rfa, CS-304_U.rfa,

SC-615_M_T - v1.3 for 2024.rfa, SC-630_M_T_TU.rfa, TZ-206_WP.rfa, TZ-406_WP.rfa, TZ-606_WP.rfa

Sound Pressure Guide

These files can display the reach of sound pressures.

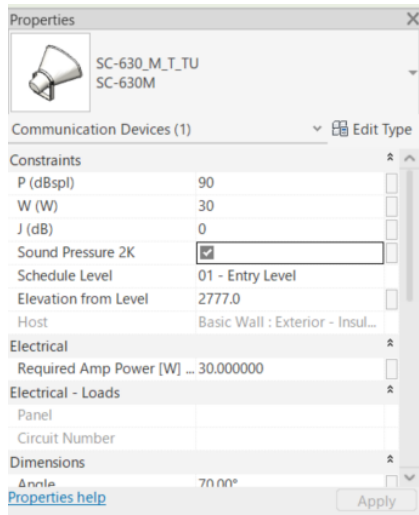


It appears as radial lines extending from the speaker. The user can set the target sound pressure on the family menu in Project, and the tip of this line represents the target sound pressure. Note that the sound pressure on the line (that is, closer to the speaker than the tip) is higher than the target sound pressure.

The conditions

- This reach range display is simplified based on the actual measurement data.
- The conditions that can be displayed (impedance tap, dBspl) differ depending on the file.
- The input signal is 1Hz/2kHz/4kHz. * The selectable frequencies vary depending on the file.
- The input signal is assumed to be -5dB smaller than the rated level.
This assumes of voice and music that are actually used.
- The expected sound pressure level is only at the tip of the line, the sound pressure above the line is higher. Simply put, the closer your listening position is to the speakers, the higher the sound pressure level at that location.
- The sound pressure is also distributed outside the tip of the line and is lower than the sound pressure at the tip.
The sound does not suddenly disappear at the end of the line.

Display method



Select the family data for which you want to display the sound pressure.

In the properties of the family data, the menu shown on the left is displayed in the item "Graphics". Set the following 4 values according to the conditions of the speakers you plan to install.

Input 1kHz/2kHz/4kHz*: Select the frequency of the input signal.

* The selectable frequencies vary depending on the file.

Selected Input (W): Enter the corresponding W value in the impedance tap.

Desired SPL: Enter the sound pressure value (dBspl) on the surface of the balloon.

Attenuation: Enter the volume attenuation value by the amplifier or attenuator.

Then click "Apply".

An example of how to use it is introduced at the URL below.

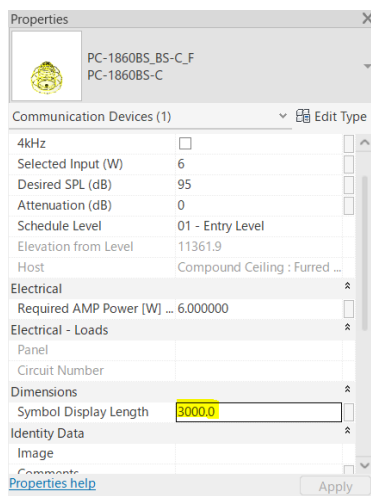
<https://www.sound-toa.com/cspd.html>

Notes

This is simple data created for BIM.

- The actual sound contains various frequencies and is affected by the complex effects that occur on walls and ceilings. This data is not an exact representation of them. Moreover, it is not possible to represent those effects with one data. Use it as a guide to determine the number and position of speakers in the early stages of design.
- The position of the tip of the line has the target sound pressure, but the sound pressure will be higher if it is closer to the speaker than the tip, and it will be lower if it is farther from the speaker than the tip.

Symbol display on floor plan



These family data are mounted on the ceiling, but symbols can be displayed on the floor plan. By default, the symbol is placed 3,000mm below the speaker body, which allows the floor plan to detect the symbol. If ceilings in your project are high and your floor plan does not allow the symbols to be detected, increase the value(mm) of "Symbol Display Length" shown in the image to the left.

* Some files do not have this feature.

About the View Range

Please refer to the Autodesk website to find out which range of symbols the floor plan detects.

<https://help.autodesk.com/view/RVT/2024/ENU/?guid=GUID-58711292-AB78-4C8F-BAA1-0855DDB518BF>

Your opinion/request

This data is made by simple consideration so far. We aim to create data that is more convenient for actual operations.

If you have any opinions or requests for our data, please let us know. Please submit your opinion using the form of the page : <https://www.sound-toa.com/your-opinionrequest.html>