Installing the Acoustical Library for Simscape

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Before using the Acoustical Library, it must be installed in a way that the Simscape system will recognize it. The instructions below do that, and also allow the Acoustical Library to be listed in the Simscape Library Browser with all of the standard Simscape components.

1. The source code for the Acoustical Library is contained in the directory tree "+acoustical" included in this download. That directory tree must be moved to a location that is included in the MATLAB path. My personal preference is to move it to be a subdirectory in the MATLAB startup directory.

2. The source code must be processed by Simscape to convert it to a form that is useable in your models. To do this

   (a) Open MATLAB. Set the current directory to the parent directory of the +acoustical tree.

   (b) Execute the command `ssc_build acoustical`. This may take a minute or two depending on your system. This command creates the file acoustical_lib.slx that is the Simscape library.

3. For this library to be included in the Simscape Library Browser, add the file `slblocks.m` to your MATLAB startup directory. If your installation already has an `slblocks.m` file, do not overwrite that file. Instead, you must merge the data in the two files into a single file. The MATLAB documentation has a good explanation of this process. You must then refresh the Library Browser. There are several ways to do this. Do one of the following:

   (a) Close and re-open all MATLAB sessions.

   (b) Open the Simscape Library Browser. Right-click in the left column of the Browser. Select `Refresh Library Browser`.

   (c) With Simscape open, execute the command `refresh(slLibraryBrowser)`.