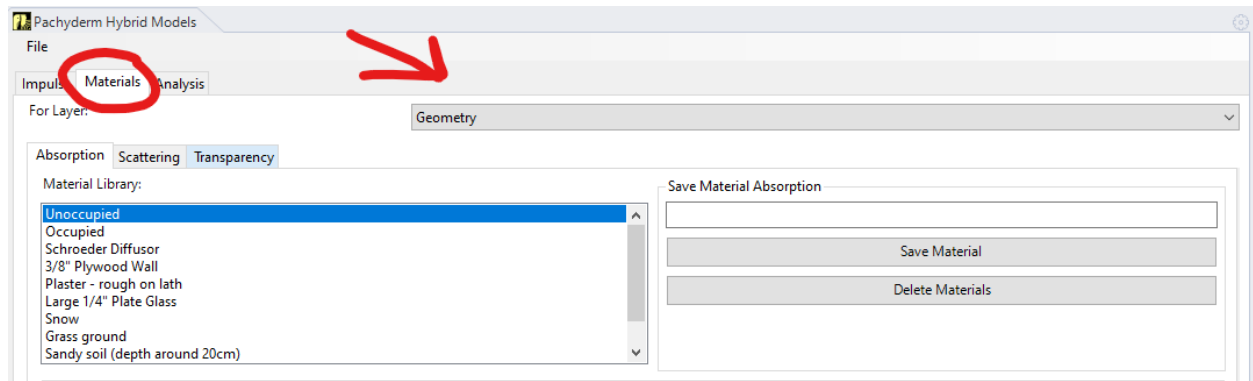


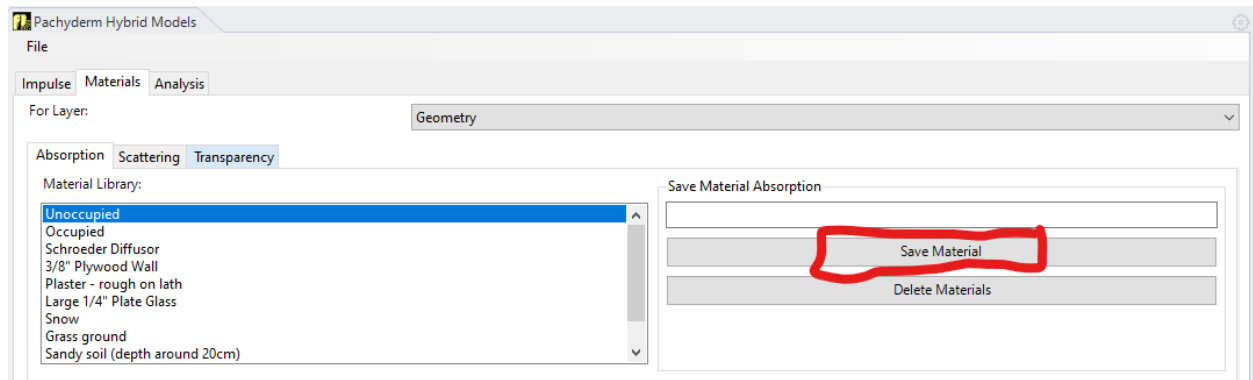
Go to the materials tab and choose the layer you want to assign a new material to:



The screenshot shows the Pachyderm Hybrid Models software interface. The 'File' menu is circled in red. The 'Materials' tab is selected. The 'Material Library' lists various materials. The 'Save Material Absorption' section has a red arrow pointing to the 'New material' button. The 'Call Absorption Designer' section shows a table of absorption coefficients for various frequencies, with a red arrow pointing to the '3' value in the first row.

Frequency	Absorption Coefficient
62.5 Hz	3
125 Hz	8
250 Hz	17
500 Hz	47
1 kHz	66
2 kHz	100
4 kHz	44
8 kHz	55
Flatten All	

After naming the new material and adding the parameters click “Save material”



You would have to do it for 3 different materials – “Snow”, “Grass ground” and “Sandy soil” add assign them to the layers that you have with a geometry.

After that you can go to the second instruction file and start to run a simulation!

Parameters for the “Sandy soil”

Impulse

Materials

Analysis

For Layer:

Absorption

Scattering

Transparency

Material Library:

Unoccupied

Occupied

Schroeder Diffusor

3/8" Plywood Wall

Plaster - rough on lath

Large 1/4" Plate Glass

Grass ground

Snow

Sandy soil (depth around 20cm)

Save Material Absorption

Sandy soil (depth around 20cm)

Save Material

Delete Materials

Call Absorption Designer

Absorption Coefficients (% energy absorbed)

62.5 Hz	<div></div>	<div>3</div>
125 Hz	<div></div>	<div>32</div>
250 Hz	<div></div>	<div>66</div>
500 Hz	<div></div>	<div>82</div>
1 kHz	<div></div>	<div>88</div>
2 kHz	<div></div>	<div>86</div>
4 kHz	<div></div>	<div>82</div>
8 kHz	<div></div>	<div>77</div>
Flatten All	<div></div>	

Parameters for the “Snow”

Impulse Materials Analysis

For Layer:

Absorption Scattering Transparency

Material Library:

- Unoccupied
- Occupied
- Schroeder Diffusor
- 3/8" Plywood Wall
- Plaster - rough on lath
- Large 1/4" Plate Glass
- Grass ground

Save Material Absorption
Snow

Save Material

Delete Materials

Call Absorption Designer

Absorption Coefficients (% energy absorbed)

Frequency	Unoccupied	Occupied	Schroeder Diffusor	3/8" Plywood Wall	Plaster - rough on lath	Large 1/4" Plate Glass	Grass ground
62.5 Hz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
125 Hz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
250 Hz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
500 Hz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 kHz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2 kHz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
4 kHz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
8 kHz	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Flatten All	0.05	0.05	0.05	0.05	0.05	0.05	0.05

3
9
20
45
92
86
82
77

Parameters for the “Grass ground”

For Layer:

Test 20221216

AbsorptionScatteringTransparency

Material Library:

UnoccupiedOccupiedSchroeder Diffusor3/8" Plywood WallPlaster - rough on lathLarge 1/4" Plate GlassGrass ground

Save Material Absorption

Grass ground

Save Material

Delete Materials

Call Absorption Designer

Absorption Coefficients (% energy absorbed)

62.5 Hz		<div>1</div>
125 Hz		<div>3</div>
250 Hz		<div>15</div>
500 Hz		<div>20</div>
1 kHz		<div>30</div>
2 kHz		<div>45</div>
4 kHz		<div>70</div>
8 kHz		<div>82</div>
Flatten All		