Simulate fields penetrating two slabs with normal incidence

Preliminary step: define a z coordinate before the slabs, inside the slabs and after the slabs. You may define local (zero at interface) and global coordinates (consecutive).

Two possibilities:

1. Find the reflection coefficient recursively from the right to the left. Then obtain reflected field on the left side. Then use propagation matrices (5.1.13) to get fields in consecutive media.
2. Imagine a unitary transmitted wave and use matching matrices (5.2.3) to obtain forward and backward waves from right to left of each interface, and then propagation matrix (5.1.11) to go from one interface to the previous one. Then normalize everything to ensure unit incident wave.

Post-processing: to see the fields as a function of time, multiply by exp(jωt) and take real part.