Here's the crossover design process:
Crossover optimization for DI-matched two-way speakersFor box tuning, use any of the box modeling programs to select a box size and Helmholtz frequency appropriate for the midwoofer you'll be using. You'll also need to analyze and test the cabinet for internal standing waves, which may cause ripples in response in the lower midrange. That can be done with some modeling programs, but there are few that will do this part.

The position of the midwoofer and port in relation to the internal boundaries of the cabinet are largely what determine the standing waves and how they line up. I also have found that the insulation matters a lot, and a sheet spanning the cross-section is very helpful to damp the midrange standing waves, in addition to the insulation that lines the cabinet walls.