1. Rectangular room with an incomplete partition.

2. UT BEM+SVD.

3. LM BEM+SVD.

4. Multi-domain BEM.

5. Dual BEM.

Fig.1

6. Using $\begin{bmatrix} T \\ M \end{bmatrix}$ to find the true eigensolutions.

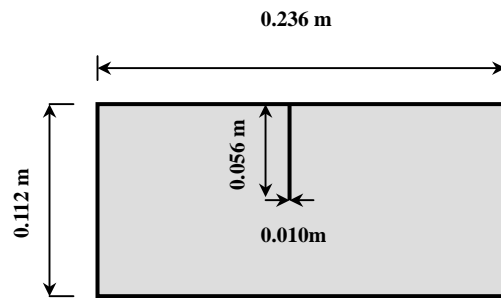7. Using $\begin{bmatrix} U^T \\ T^T \end{bmatrix}$ to find the spurious eigensolutions.

References

[1] J.T. Chen, S.R. Lin, K.H. Chen, I.L. Chen, S.W. Chyuan, Eigenanalysis for membranes with stringers using conventional BEM in conjunction with SVD technique, Comput. Methods Appl. Mech. Engrg. 192 (2003) 1299-1322.

[2]J.T. Chen, K.H. Chen, Dual integral formulation for determining the acoustic modes of a two-dimentional cavity with a degenerate boundary, Engineering Analysis with Boundary Elements 21(1998) 105-116.