

C++ code 3.8.6: Function `solveImpedanceBVP`: Assembly of boundary contribution to Galerkin matrix, cf. boundary term in (3.8.3). → [GITHUB](#)

```
2 // I.ii : Computing mass edge matrix resulting from Robin B.C.
3 // Obtain an array of boolean flags for the edges of the mesh, 'true'
4 // indicates that the edge lies on the boundary
5 auto bd_flags{ lf::mesh::utils::flagEntitiesOnBoundary(mesh_p, 1)};
6 // Creating a predicate that will guarantee that the computations are carried
7 // only on the interior boundary edges of the mesh using the boundary flags
8 auto edges_predicate_RobinBC =
9     [&bd_flags](const lf::mesh::Entity &edge) -> bool {
10     if (bd_flags(edge)) {
11         auto endpoints = lf::geometry::Corners(*(edge.Geometry()));
12         return endpoints(0, 0) > 0.05 && 0.95 > endpoints(0, 0) &&
13             endpoints(1, 0) > 0.05 && 0.95 > endpoints(1, 0);
14     }
15     return false;
16 };
17 // Coefficients used in the class template
18 // MassEdgeMatrixProvider< SCALAR, COEFF, EDGESELECTOR >
19 auto eta = lf::mesh::utils::MeshFunctionGlobal(
20     []((Eigen::Vector2d x) -> double { return 1.0; }));
21 lf::uscalfe::MassEdgeMatrixProvider<double, decltype(eta),
22                                     decltype(edges_predicate_RobinBC)>
23     edgemat_builder(fe_space_p, eta, edges_predicate_RobinBC);
24 // Invoke assembly on edges by specifying co-dimension = 1
25 lf::assemble::AssembleMatrixLocally(1, dofh, dofh, edgemat_builder, A);
```