**C++ code 13.2.50: Declaration of ENTITY_MATRIX_PROVIDER class for the computation of the element matrix for the monolithic Whitney FEM discretization of the Hodge-Laplacian variational problem ↪ GitLab**

```
class HodgeLaplacian2DElementMatrixProvider {
 public:
  // The size of the element matrix is 6 × 6.
  using ElemMat = Eigen::Matrix<double, 6, 6>;
  HodgeLaplacian2DElementMatrixProvider(
      const HodgeLaplacian2DElementMatrixProvider &) = delete;
  HodgeLaplacian2DElementMatrixProvider(
      HodgeLaplacian2DElementMatrixProvider &&) noexcept = default;
  HodgeLaplacian2DElementMatrixProvider &operator=(
      const HodgeLaplacian2DElementMatrixProvider &) = delete;
  HodgeLaplacian2DElementMatrixProvider &operator=(
      HodgeLaplacian2DElementMatrixProvider &&) = delete;
  HodgeLaplacian2DElementMatrixProvider() = default;
  virtual ~HodgeLaplacian2DElementMatrixProvider() = default;
  [[nodiscard]] bool isActive(const lf::mesh::Entity & /*cell*/) {
    return true;
  }
  // Computation of element matrix M_K:  two versions
  [[nodiscard]] ElemMat Eval(const lf::mesh::Entity &cell);
  // Alternative implementation created for debugging purposes
  [[nodiscard]] ElemMat Eval_ref(const lf::mesh::Entity &cell);

 private:
  ElemMat MK_;
};
```