

DAMP PROOFING CASE STUDY St George's Hall, Liverpool

NEWTON DAMP PROOFING PROJECT

Treating damp in a Grade I Listed historic building

History

St George's Hall is in the centre of Liverpool and is a landmark building steeped in history. Construction of the building started in 1841 and it eventually opened in 1854. The Grade I Listed neoclassical building has Roman and Greek design influences and contains concert halls, law courts, tea rooms, heritage centre and educational tour areas.

As part of the major refurbishment works that have continued through recent years, areas of the building that have been opened to the public have been required to be upgraded.

Problem

One area requiring upgrading was the reception and entrance/lobby area on the east side of the building. Visitors wishing to undertake a historical tour enter through this part of the building so it needed to be dry but aesthetically in keeping with the historical tone. Visible dampness and mineral deposits leeching from the surface of the brickwork were creating an unsightly look and damp feeling to the area. This, coupled with the convoluted shape of the walls, required a solution that would retain the character of the structure whilst providing protection from the dampness and associated salting. The solution would also need to conform to the heritage requirement that it should be sympathetic to the underlying structure.

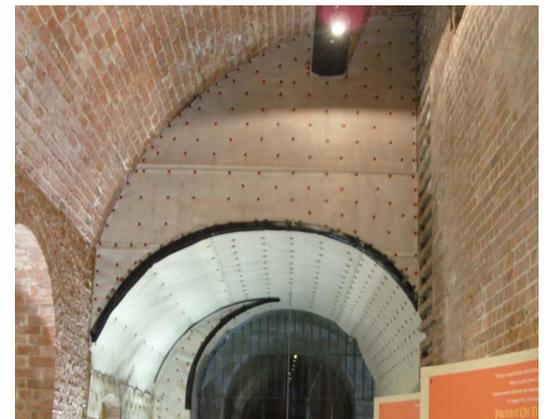
Solution

After considering the options available the main contractor Bullen Conservation decided that the John Newton 503 Mesh membrane would be the product most suited to the project.

The membrane was skillfully applied by Bullen Conservation and followed the general contours of the structure perfectly to retain the features and shapes of the walls and arched ceilings. In accordance with its historical status the membrane was plastered with a natural hydraulic lime (NHL). The NHL was then given a 'rubbed up' finish completing the historical look and in the safe knowledge that the membrane is acting as an impervious barrier protecting against the dampness and migrating salts. In addition it is considered to be reversible in that at all times in the future it can be removed to expose the existing structure beneath in a relatively untouched state.



St George's Hall, Liverpool, is a Grade I Listed building



Newton 503 Mesh being installed to the walls to fit the contours of the structure



Newton 503 Mesh acts as a permanent barrier, protecting the area from damp