

### 1.3 SCOPE OF SUPPLY

The Marioff HI-FOG system for 30 Gresham Street embraces the sprinkler protection of 2 MER's:

Zone 1 – Ground Floor

Zone 2 – Lower Ground Floor

The system is supplied with a Gas Pump Unit (GPU), water storage tank and control panel which are located in the basement area.

From the GPU, a 30mm feed pipe takes the water supply to two section valves (one for each MER). A 30mm feed pipe from each section valve is used to take the water to the appropriate room. The piping from the section valves to the sprinkler heads is dry.

Small bore 12mm tubing is used to connect the sprinklers from distribution blocks on the feed pipes

All feed pipe and distribution pipe is manufactured from stainless steel.

A control panel is provided to provide interface facilities with the building management and fire detection systems. Fault and warning conditions associated with the Gas Pump Unit are also monitored.

### 1.4 DESIGN CRITERIA

The HI-FOG system supplied and installed by Marioff at the Maritime Integration Support Centre is:

Design, manufactured and installed in accordance with NFPA 750, which is the standard for water mist fire suppression systems, and on basis of various full scale fire performance tests.

Tested, through special full scale fire performance tests conducted at VTT under the supervision of FMRC and described in:-

Test report No. RTE10322/98, August 1998 and test report No. RTE11165/99, October 1999 (Fire performance testing of the HI-FOG fire protection system for the protection of light hazard occupancies).

Dimensioned, to follow nozzle type, nozzle spacing/distances (App 02), nozzle location/orientation, and nozzle pressure as determined based on results of the above mentioned FMRC full scale fire test procedure.

Is Dimensioned to operate through a maximum number of 9 pieces of thermally operated HI-FOG water mist sprinkler heads for a duration of 30 minutes using a Gas Pump Unit (App 01).

Fulfills American Light Hazard Classification requirements, which are equal to Ordinary Hazard 2 classification requirements in Europe.