THE UNIVERSITY of York

DIRECTORATE OF FACILITIES MANAGEMENT
ESTATES SERVICES

INSTALLATION OF LIGHTING AND AUDIO EQUIPMENT TO CANOPY ABOVE STAGE AT CENTRAL HALL

Background

Peters Associates Consulting Structural and Civil Engineers were appointed 1 February 2002 to assess the capacity of the lighting and acoustic canopy above the stage and to advise on work method, their Job No T021237. Address: 5 Kirkgate, Tadcaster, North Yorkshire, LS24 9AQ. Contact: Chris Shelton, tel 01937 834812.

Work Method

The steel tubular truss canopy has been used for lighting, audio and acoustic equipment previously with no restrictions on type of equipment, weight, positioning of equipment etc.

An assessment of the structure has been carried out to ascertain if the canopy is able to carry a load of 450kg safely, this load being in addition to the timber acoustic frames already installed.

The canopy is adequate to carry a load of 450kg although the conditions set out below should be strictly followed.

1. The loading should be monitored by the person responsible for the lighting, acoustics and audio equipment.

2. The equipment should be evenly distributed between the various trusses with any particularly heavy items being placed on the truss nearest to the back of the stage. Where possible items should also be positioned adjacent to the intersections of the truss members (ie where vertical members and horizontal members are jointed). Any layouts unevenly distributed or requiring an increase above 450kg loading shall prior to installation be approved by a structural engineer.

3. The lighting units each weigh between 4.5kg and 5kg, details of the weights are detailed on the plate on the back of the light units. Items with unknown weights should be weighed to check compliance with the total weight allowed.

4. Adequate safety chains should be attached to each unit to arrest the item if accidentally dropped during installation or if failure of the attachment to the truss failed.

5. Personnel should not stand on the trusses and all access equipment should be independent.