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Lighting - festoon & flood -110/230v

AHCTOOLS
HIRE/SALES/SERVICE

CHANGING BULBS

1. Make sure that you have the correct replacement bulb ready. Check with the hire company if in any doubt.
2. Ensure no-one will be put in any danger when switching off the lighting. Then, switch off and unplug the light.
3. High power lights may need to cool before handling.
4. Open any covers taking care not to lose any fixing screws or clips.
5. Do not touch halogen bulbs with bare fingers – this will shorten the life of the bulb.
6. When the light bulb has been changed, replace all covers and guards properly and secure any screws or clips.
7. Look away before plugging in and switching on as powerful lights can dazzle.

FESTOON LIGHTS

1. Some festoon lights have sockets so that strings of lights can be chained together. Do not try to use the socket to provide power to other equipment – it is only for connecting another string of lights.
2. Do not connect more than four (4) festoon strings together unless the hire company has given special instructions.

Using the Lighting Equipment

1. Ensure that nobody is staring at a powerful light when it is switched on – the dazzle can cause temporary blindness.
2. Check that cable runs are being kept safe, and are not causing a hazard.
3. If a cable appears to be cut or damaged in any way, switch off and unplug at the mains before inspecting it. If the cable attached to a light is damaged, stop using the light. Contact the hire company. If an extension cable has been damaged, do not use it again.
4. Check that no combustible material, such as paper or rubbish, is too close to powerful and hot lights.
5. Switch off lights before adjusting their position.
6. Switch off and unplug lights before moving them to a new location.
7. Switch off and unplug before leaving portable lights unattended.
8. Before switching off general or festoon lighting, make sure no one is going to be put in danger by the drop in lighting levels.
9. If the lights are left in place for more than a week, then a competent person should inspect them every week to ensure they are safe.
10. If the equipment does not work properly do not attempt to repair it, contact the hire company.

Please keep this leaflet safely as it may be required for future reference

Festoon & Flood Lighting

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

It is important to read all of this leaflet BEFORE using Festoon & Flood Lighting



1. Plan each task and try to foresee any problems that may occur so they can be dealt with safely.
2. Electricity is dangerous and must always be used with great care.
3. Water and electricity make an extremely dangerous combination. Keep electrical equipment away from rain and water.
4. The following items of personal protective equipment are a minimum: rcd if using a 230 volt (mains) supply.
5. Particular items of equipment or environments may require a higher level of personal protective equipment.
6. Lighting equipment must not be installed by minors, or by anyone under the influence of drugs or alcohol.
7. Lighting equipment is designed for installation by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.



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WORK AREA

1. Do not use electrical equipment where there is a danger of explosion. It may ignite fumes from petrol or gas cylinders.
2. Keep electrical equipment away from rain and water.
3. Ensure there are no combustible materials near floodlights. A floodlight can produce as much heat as a 1kw electric radiant heater and can cause paper and cloth to ignite, check that no loose paper or rubbish can be blown into the area heated by the light.
4. For stand lights, choose an area where they are going to be safe from vehicles, people, water, rain, strong gusts of wind and other hazards which may damage them or knock them over. The ground should be firm and level.
5. For lights fixed to buildings or fixtures, make sure that their support is strong enough and secure. Take care to position lights up and away from where they may get struck by passing vehicles, people or materials being carried.
6. In all cases, plan cable runs to avoid damage to the cables, and so that the cables themselves do not form a tripping hazard in doorways or walkways.
7. In areas where members of the public are allowed, it may be necessary to put barriers around lighting stands to keep people away from the heat and to prevent them tampering with the light.

EQUIPMENT

1. Check the equipment cables, plugs, sockets and stands. If anything is found damaged, do not use it – contact the hire company.
2. Check that the plugs on the cables match the supply. Do not try to force connections or improvise them.
3. Equipment with a cylindrical yellow industrial plug fitted is designed to run off a special 110v supply. The hire company will have provided a portable transformer if the equipment requires powering from a normal mains 230v supply. If a portable transformer has been supplied, take care not to injure yourself when moving it about – it may be heavier than you think.

Equipment designed to run directly from 230v mains will have either a normal square pin plug fitted or a blue industrial plug.

ELECTRICAL SAFETY - GENERAL


1. The equipment will only operate on one voltage: it will be 110v or 230v. 110v lighting will have a yellow industrial plug fitted. 230v lighting will have either a normal square pin plug fitted or a blue industrial plug. Read the instructions below for the equipment.

110 VOLT LIGHTING (YELLOW PLUG)


1. If using a portable transformer, plug the transformer directly into the 230 volt socket. Do not use any 230v extension cables.


Before Starting Work...



2. If an extension cable is required, follow any special instructions given by the hire company. If the hire company have not given any special instructions, a suitably rated heavy duty 110v extension cable only should be used, no longer than 50 metres (160 feet). The extension cable must only be used between the transformer and the lighting.
 
3. Lay the extension cable out carefully avoiding liquids, sharp edges, doorways or windows where it might become trapped, and places where vehicles might run over it. Unroll it fully or it will overheat and could catch fire.
4. Make sure that any extension cable connections are dry and safe.

230 VOLT LIGHTING (SQUARE PIN OR BLUE PLUG)

1. Use a residual current device (rcd) plugged directly in to the 230 volt socket. Plug the lighting into the rcd. This will help to protect against electric shock if the cable or lights are damaged.
 

2. Use the "TEST" button to check that the rcd is working each time it is used. Reset the rcd according to the instructions supplied with it.
3. If an extension cable is required, follow any special instructions given by the hire company. If the hire company have not given any special instructions, a suitably rated heavy duty one only should be used, no longer than 50 metres (160 feet). Plug it directly into the rcd.
 
4. Lay it out carefully avoiding liquids, sharp edges, doorways or windows where it may become trapped, and places where vehicles might run over it. Unroll it fully or it will overheat and could catch fire.
5. Make sure that any extension cable connections are dry and safe.

230V EQUIPMENT ON CONSTRUCTION SITES

1. If 230v is selected for equipment on construction sites or similar environments, the risk of injury or death arising from the use of damaged or faulty equipment leads or plugs is unacceptably high unless special precautions are taken. The precautions

must reduce the risk to an acceptable level.

2. Health and safety authorities consistently recommend 110v systems as the best solution for reducing risk from portable, hand-held, and transportable equipment. A risk assessment carried out by the planning supervisor (or other person responsible for health and safety on site) is likely to indicate that risk of electric shock is most effectively controlled by the use of 110v equipment.
3. Some suitable precautions are shown below. Some of these precautions can only be taken by the person responsible for providing the electricity supply on site. Other precautions, however, fall to you, the user.
4. Protect people who may receive an electric shock by fitting non-adjustable residual current devices (rcds) with a rated tripping current of 30mA. Rcds should be installed either at the distribution board which feeds to mains supply sockets or at the fixed main supply socket. In either of these positions they will provide protection from faults in both the cable and light. Rcds fitted close to the light only protect faults in the light.
5. Rcds should be:
 - installed in a dustproof and weatherproof enclosure (see the manufacturer's instructions) or designed for use in dusty and outdoor environments;
 - protected against mechanical damage and vibration;

- checked daily by operating the test button;
 - inspected weekly together with the equipment it is supplying during the formal visual inspection;
 - tested every three months by an electrician using appropriate electrical test equipment. Note: the tests should not be carried out on rcds at a time when loss of power may adversely affect other work activities.
6. Reduce the risk of flexible supply leads being damaged by:
 - positioning them where they are less likely to be damaged. (e.g. run them at ceiling height inside a building); and/or
 - protecting them inside impact resistant conduit where appropriate; or
 - using special abrasion resistant or armoured flexible supply leads where appropriate; or
 7. Select equipment that is designed for trade and work use. Double insulated equipment is strongly recommended where it is necessary to use a mains voltage supply, because the equipment itself is less likely to give rise to danger. (Danger can still arise, however, if the cables, plugs or equipment casing are damaged). Any restrictions on use set out in the manufacturer's or supplier's instructions should be observed.

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