For guidance on managing construction health risks go to
www.hse.gov.uk/construction

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Orbital Sander

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 you use the Orbital Sander

1. Plan the use of the Orbital Sander so that it can always be used safely.
2. Electricity is dangerous and must always be used with great care.
3. This orbital sander is designed to sand wood, but not round timber. It can also be used on metal, rust or painted surfaces. You must use the appropriate sanding paper.
4. The action of this orbital sander can cause injury or damage if the machine is not used in a careful and controlled way.
5. If you have not used an orbital sander before, familiarise yourself with the machine on some straightforward work before you start on the main task.
6. You must have at least the following items of personal protective equipment: goggles: EN166 or BS2092; dust mask – a minimum of EN149 FFP3(s) protection; ear muffs or plugs giving protection for levels up to 101dB (A); gloves; rcd if using a 230 volt (mains) supply.
7. This orbital sander must not be used by minors, or by anyone under the influence of drugs or alcohol.
8. This orbital sander is designed for operation by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.

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Using the Orbital Sander

1. Wear your protective equipment including ear defenders, dust mask and goggles.
2. Always hold the orbital sander firmly with two hands while working.
3. Let the orbital sander run up to full speed before lowering it carefully onto the surface. Be prepared for the reactive force when the sanding sheet contacts the surface.
4. Keep the cable clear, do not let the machine run over it.
5. Apply only moderate pressure to the machine. Any extra pressure will overload the machine and may cause an uneven surface in your work.
6. Lift the machine off the work surface before switching off.
7. After switching off, wait for the machine to stop completely before you put it down.
8. If you think the cable may be cut or damaged in any way, switch off and unplug at the socket before inspecting it. If the cable attached to the orbital sander is damaged, stop using the machine. Contact the hire company. If an extension cable has been damaged, do not use it again.
9. Take care not to accidentally pull the plug from the socket.
10. Watch out for signs that vibration may be affecting your hands. If your fingers start to tingle or feel numb, take a short break from using the machine. Exercise your fingers to encourage blood circulation.
11. To help prevent vibration affecting your hands, operate the machine for shorter periods. Keep your hands warm – wearing gloves may help do this.
12. Make sure that any ventilation slots in the orbital sander do not get blocked with dust.
13. Remember to empty the dustbag when it is half full or when you stop work. Wood or paint dust is highly flammable. Do not empty the dust bag onto a fire.
14. Switch off and unplug before making adjustments or changing the sanding paper.
15. Switch off and remove the plug from the socket before leaving the orbital sander unattended.
16. If your equipment does not work properly do not attempt to repair it. Contact the hire company.
17. You may want to read this leaflet again. Please keep it until you finish work.

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

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Before Starting Work...

WORK AREA

1. Do not use this orbital sander where there is a danger of explosion. It will ignite fumes from petrol, or gas cylinders.
2. Make sure that the area is clear and safe and that no-one is near to you or could distract you.
3. Protect other people from the noise and dust. Warn others to keep away.

OPERATORS

1. The following items of personal protective equipment (ppe) are the minimum that should be worn whenever you use this machine. Particular jobs or environments may require a higher level of protection.
2. You must wear goggles (EN166 – B or BS2092 grade 1) when you are working with this orbital sander.
3. This orbital sander is likely to cause noise levels up to 101 dB(A) – wear appropriate ear muffs or plugs giving hearing protection for this level as a minimum.
4. You will need to wear an appropriate dust mask (with a minimum of EN149 FFP3(s) protection) when you are sanding material that causes dust.
5. Anybody who is working near to you will also need to wear appropriate personal protective equipment.

ORBITAL SANDER

1. Check your machine, cables, plugs and cutting blades. If anything is found damaged, do not use the orbital sander – contact the hire company.
2. Check that the plug on your orbital sander matches your supply. Do not try to force connections or improvise them.
3. Machines with a cylindrical yellow industrial plug fitted are designed to run off a special 110v supply. The hire company will have provided a portable transformer if you need to power the machine 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. Machines designed to run directly from 230v mains will have either a normal square pin plug fitted, or a blue industrial plug.
4. Any work that is not part of a fixture should be securely clamped or held in a vice.
5. Check and remove any nails or screws in the wood to be sanded.
6. Always hold the orbital sander correctly with two hands while working.
7. Vibration from using this orbital sander can be hazardous. Warm your hands up before you start work, and wear gloves to keep your hands warm while you are working.
8. Check on how the on/off switch operates – before you switch the orbital sander on, you must know how to stop it.

SANDING PAPERS AND DUSTBAG

1. Switch off and remove the plug from the socket before making adjustments or changing the sanding paper.
2. Make sure you use the correct type of sanding paper recommended by the hire company for the material being sanded.
3. Sanding paper used for sanding by hand is not suitable for use with this machine.
4. Empty the dust bag when it is half full or when you stop work. Remember the dust from wood, paint and even metal is highly flammable.
5. Do not empty the dust bag onto a fire it may explode.

ELECTRICAL SAFETY

Your machine will only operate on one voltage: it will be 100v or 230v. 110v machines will have a yellow industrial plug fitted. 230v machines will have either a normal square pin plug fitted, or a blue industrial plug. Read the instructions below for your machine.

110 VOLT HEATERS (YELLOW PLUG)

1. If you are using a portable transformer, plug the transformer directly into the 230volt socket. Do not use any 230v extension cables.
2. If you need to use an extension cable, follow any special instructions given by the hire company. If the hire company have not given any special instructions, you should only use a suitably rated heavy duty 100v extension cable, not longer than 50 metres (160 feet). You must only use an extension cable between the transformer and the machine.
3. Lay the extension cable out carefully avoiding liquids, sharp edges, doorways or windows where it might be 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 MACHINES (SQUARE PIN OR BLUE PLUG)

1. Use a residual current device ("rcd") plugged directly in to the 230 volt socket. Plug your machine into the rcd. This will help to protect you against electric shock if the cable or machine get damaged.
2. Use the "TEST" button to check that the rcd is working each time you use it. Reset the rcd according to the instructions supplied with it.
3. If you need an extension cable, follow any special instructions given by the hire company. If the hire company have not given any special instructions, you should only use a suitable rated heavy duty one, not 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 might be 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.

Useful Reference Points • www.hae.org.uk/businessguard