

Before Starting Work...



to it by each prop.

- Each prop should stand on a timber soleplate unless the baseplate is on suitable structural concrete.
- The timber soleplate should be at least 225mm (9 inches) wide by 38mm (1.5 inches) thick. It should be long enough to project at least 300mm (12 inches) either side of the support prop's baseplate.
- Ensure the brickwork above the prop is with cantilever blade attachment is capable of carrying the load and is stable.
- Props are available in six different lengths (size 0 to 5). Do not use props that are too short by making up the gap with timber. Use the correct length prop.
- The propping design may require lacing and bracing using horizontal and diagonal scaffold tubes. This will require sufficient swivel scaffold clips - standard size clips onto the prop inner tube but larger ones are needed for the outer tube. Order these in good time from your hire company.
- Before you start work, make sure you understand how to use the prop with cantilever blade attachment safely and how much support your overhead structure needs.
- The prop with cantilever blade attachment

13. If in doubt seek advice from a temporary works structural engineer.

INSTALLING THE PROPS

- Mark out the exact position of the lintel and the brickwork that will be removed. Calculate and plan the positioning of each prop with cantilever blade attachment - mark the position for each one.
- Each 900mm or part of 900mm span will require a prop with cantilever blade attachment.
- Two persons are usually required to put a prop with cantilever blade attachment in position safely.
- All operators must wear their safety equipment.
- At each blade position chain, drill or use a cylindrical mortar rake to remove mortar at the course the prop will cantilever blade attachment blades will be inserted. Then hammer the prop with cantilever blade attachment into the mortar courses with the handle on the top, at the upper level of the proposed opening in the wall. Ensure the safety of anyone on the opposite side of the wall is protected from any brickwork or debris that may be dislodged. Ensure barriers and warning signs are in place.
- The prop with cantilever blade attachment should be hammered into the mortar joint until the triangular support web of the prop with cantilever blade attachment meets the brickwork.
- Feed the prop onto the headplate of the prop with cantilever blade attachment at a slight angle, rotate into the correct engagement then insert blade into wall. It should be resting on it.
- Carefully slide the inner tube up to the prop with cantilever blade attachment locating the top plate into the square recess of the prop with cantilever blade attachment.
- Locate the pin, above the screw collar, and through the slot in the outer tube, ensuring the nut is pushed into the inner tube and secured to secure the collar down to accommodate this.
- Secure the collar up against the pin to prevent the prop with cantilever blade attachment from falling. The prop will be bearing its share of the load. If it becomes loose, while installing other props, it will fall over causing injury or damage.
- Use a spirit level to make sure each prop is plumbbed vertically and adjust if necessary.
- You must make sure that the load is equal on each prop with cantilever blade attachment you use.
- Do not use the prop with cantilever blade attachment as a jack to lift a beam or other load into place.
- Once the wall above is fully supported by the props with cantilever blade attachment, sufficient masonry can be removed to allow the new lintel to be fitted. Particular care is needed to maintain the condition of the bearing either side of the prop ends on masonry at either side of the prop ends. If they have become damaged, full rebuild will be needed - sometimes from the foundation upwards. Chain drill (holes side by side) to full depth and pry. Try to avoid using a sledgehammer - rapid progress will soon turn into hours of making good. In some cases the new lintel will need to rest on padstones. These may need to be built in and allowed to cure prior to the main lintel opening being created. If the full height opening is to be made prior to fitting the new lintel this should be done using chain drilling along the marked out lines, followed by prising the masonry loose at the top and working down to clear level. Careful work should allow the reveals to be kept in suitable condition. In many cases this can be achieved without significant overbreak and with only minor need for rebuilding. Always ensure you have sufficient bearing surface between the lintel and its support on each side. 150mm minimum at each end is normal. The lintel may sit on a mortar bed or, if the bearing surface has sufficient strength, slate or similar dry material can be driven/packed in to allow almost immediate load carrying. Brickwork above the lintel should be supported until the prop is reinstated, working around the prop with cantilever blade attachment plates if rapid curing (high alumina) cement is used to make the mortar, the manufacturer's instructions should be followed regarding mixing and curing times. Do not use too few distributed load. Do not use too many slate edge packers between the lintel and the masonry above.

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Important to read this entire leaflet BEFORE using the prop with cantilever blade attachment

The above guide assumes that the props are within 1.5 degrees of vertical (This is about 25mm in 1 metre or 1 inch in 1 yard); and that they are not braced.

| Prop Size | Length (metres) | Extended Length (metres) | SWL in kilograms |
|-----------|-----------------|--------------------------|------------------|
| 0 | 4.01 | 6.81 | 34 |
| 1 | 4.71 | 7.51 | 40 |
| 2 | 5.41 | 8.21 | 46 |
| 3 | 6.11 | 8.91 | 52 |
| 4 | 6.81 | 9.61 | 58 |
| 5 | 7.51 | 10.31 | 64 |

1. Support props are usually available in six different lengths (size 0 to 5).
2. A prop with cantilever blade attachment is an attachment fitted to the top of screw adjustable telescopic prop (arrow). Props with cantilever blade attachments are suitable for providing propping from one side only. Most props with cantilever blade attachments can be used on a 225mm thick solid wall, a 112mm half brick thickness wall, or a 250mm twin leaf cavity wall. Some longer products are available that will prop up to 300mm solid wall leaf cavity wall. In all cases the SWL is 340kg. The following is the safe working load of props when used with prop with cantilever blade attachments. The maximum span supported by each prop with cantilever blade attachment must not exceed 900mm. Consult an architect and a structural engineer as needed on planning and permanent work design issues, and on the design of temporary works.

SAFE WORKING LOAD

Most lintels are only designed to carry a masonry pointed up to make good.

Support props are usually available in six different lengths (size 0 to 5).

16. Be careful when removing props with cantilever blade attachment. Ensure the brickwork is supported by another means (such as a prop with cantilever blade attachment) before removing the prop with cantilever blade attachment. Do not pull the inner tube wall slide down into the outer tube. Keep your hands well away from the top of the outer tube.
17. If in doubt seek advice from a temporary works structural engineer.

1. Wear your protective equipment including safety boots and helmet.
- Check the props with cantilever blade attachment each time before you start work.
- Do not remove or adjust any prop with cantilever blade attachment until you are certain that it is safe to do so.
- Do not stir or fit any electrical or lighting equipment to prop with cantilever blade attachment.
- If prop with cantilever blade attachment are left in position unattended, make the area safe against children and other unauthorised persons.
- Props with cantilever blade attachment should be checked regularly, le - continuously during structural work.

Using the prop with cantilever blade attachment

That could dislodge them - including work on the opening being supported and any other nearby work involving propping. Do not touch, and do not lean against, the prop with cantilever blade attachment, or any other nearby work involving propping, load but without work underway in the vicinity.



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

WORK ENVIRONMENT

- Only essential people should work in the area when the props with cantilever blade attachment are in use.
- Make sure that your work area is clear and safe and that no-one is near to you or could distract you.
- Protect other people from the danger. Warn others to keep away. Put barriers around your work area. Ensure warnings are positioned on both sides of the structure to be supported.
- Make sure the floor area where you put the baseplate of your prop is sturdy enough to support the weight that will be placed upon it.
- Check the work area for services (gas, water and heating pipes, electric and telephone wiring etc.). Services will not be damaged, or present any danger whilst any of the work is being carried out.

OPERATORS

- The following items of personal protective equipment (ppe) are the minimum that should be worn whenever you use props with cantilever blade attachment. Particular jobs or environments may require a higher level of protection.
- You must wear safety boots (EN345 or BS1870/4972) with good grip and ankle support.
- Safety helmet to EN397 or BS5240.
- Wear impact resistant goggles (EN166 - B or BS2092 grade 1).
- Strong gloves will help protect your hands.
- You will need a dust mask -

- (EN149-2:2001 tips) if grinding or chipping a slot in the mortar for the prop with cantilever blade attachment.
 - Anybody who is working near to you will also need to wear appropriate personal protective equipment.
- ### PROPS WITH CANTILEVER BLADE ATTACHMENT
- Check your prop with cantilever blade attachment; check that the inner and outer tubes are straight and that the telescope easily. Check that the locking pin is still secure on its chain. Check that the prop with cantilever blade attachment is clean and all slides are fitted. Do not use anything found damaged - contact the hire company.
 - Take professional advice to determine the safe working load (SWL) of 3rdkg for each prop with cantilever blade attachment. Loads in excess of this will require two or more props with cantilever blade attachment. The maximum spacing between each prop with cantilever blade attachment must not exceed 900mm.
 - The maximum working height of the prop with cantilever blade attachment must not exceed 3m.
 - Your prop must be vertical in order to bear its load safely.
 - Props must never be used more than 1.5 degrees of vertical. This is about 25mm in 1 metre (1 inch in 1 yard).
 - Ensure that the floor, where the baseplate will locate, is strong enough to support the load that will be transferred

Every hire company should ensure that the information given in this document and supporting material to occur in any document cannot be misread. Only AEA of Parliament and Statutory Instruments have the force of law and only the courts can authoritatively interpret the law.



It is important to read this entire leaflet BEFORE using the prop with cantilever blade attachment

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2. The prop with cantilever blade attachment and support props must not be used by minors, or anyone under the influence of drugs or alcohol.
3. Anybody with either a temporary or permanent disability must seek expert advice before using them.
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The rules and procedures in force where people are at work require the person responsible for this equipment to carry out a specific risk assessment. This leaflet is not a substitute for such an assessment. This prop with cantilever blade attachment will not fit, and should not be used with BS EN1165 (1999) 'new type' support props. BS 4074:2000 is the current standard for french props, not support props. If in doubt seek advice from a temporary works structural engineer.



Prop with Cantilever Blade Attachment



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Please store this leaflet safely. It may be required for further information



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