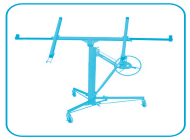
Panel Lifter (Hand Operated)

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 Panel Lifter



1. Plan your work and think ahead to make sure you will always be working safely.
2. Take care; a loaded panel lifter becomes top heavy and may be difficult to control.
3. This panel lifter is designed to lift SINGLE wall panels (plasterboards) into position on ceilings and walls ready for fixing. Do not use it for anything else.
4. The safe Working Load (SWL) will be marked on the equipment, do not exceed it.
5. The action of this panel lifter can cause injury or damage if not used in a careful and controlled way. Keep fingers clear of moving parts.
6. If you have not used the panel lifter before, familiarise yourself with the equipment before you start work. Practice raising and lowering a small section of wallboard.
7. You should wear the following items of personal protective equipment:
   safety boots (EN345 or BS1870/4972);
   safety helmet (EN397 or BS5240);
   gloves.
8. This panel lifter must not be used by minors, or by anyone under the influence of drugs or alcohol.
9. This panel lifter is designed for operation by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.

Every effort has been made by HAE/EHA to ensure that the information given in this document and supporting material is accurate and not misleading. HAE/EHA cannot accept responsibility for any loss or liability perceived to have arisen from the use of any such document/material. Only Acts of Parliament and Statutory Instruments have the force of law and only the courts can authoritatively interpret the law.

Hire Association Europe
2450 Regents Court
The Crescent
Birmingham Business Park
Solihull B37 7YE

Telephone: 44 (0) 121 380 4600
Fax: 44 (0) 121 333 4109
Email: mail@hae.org.uk
website: www.hae.org.uk

WORK AREA

1. If you are using the panel lifter continuously in the same area, put up barriers, or warning signs to prevent other people entering your work area.
2. Make sure that your work area is clear and safe and that no-one is near to you or could distract you.
3. Protect other people from the danger. Warn others to keep away.
4. Do not use a panel lifter on rough or soft ground. The floor must be level and hard like smooth concrete, asphalt, level paving slabs or similar.

OPERATORS

1. The following items of personal protective equipment (ppe) are the minimum that should be worn whenever you use the Hilti DX450. Particular jobs or environments may require a higher level of protection.
2. You must wear safety boots (EN 345 or BS1870/4972) a falling panel can cause serious injury.
3. You should wear a safety helmet (EN397 or BS5240) whenever you are working above head height or when someone is working above you. On a construction site you must wear a helmet at all times.
4. Depending on the job you are doing you may need goggles: EN166 or BS2092; and a dust mask with a minimum of EN149:2001ffp2 protection.
5. Anybody who is working near to you will also need to wear appropriate personal protective equipment.

PANEL LIFTER

1. Check your panel lifter and all its equipment. If anything is found damaged, do not use it – contact the hire company.
2. Carefully check the cable before fire use and regularly (at least daily) thereafter. If the cable is worn or damaged, do not use the equipment – contact the hire company. Do not attempt to replace or alter the cable – contact the hire company.
3. Do not exceed the safe working load (SWL) marked on the equipment.
4. This panel lifter is for lifting wallboards and plasterboards, do not use it for any other purpose.
5. Ensure you understand how to operate your panel lifter before you start using it.
6. Do not use a panel lifter on top of the telescoping section. This will allow the cradle to tilt for loading and for hanging boards on walls and sloped ceilings.

Redistributed under licence from HAE by Alliance Tool Hire Ltd. Licence expires on 31/01/2024

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

Using the Panel Lifter

1. Wear your safety boots and gloves.
2. Inspect the equipment before each use especially the cables.
3. Keep hands, hair and loose clothing away from cable and moving telescopic sections.
4. Do not pass your hand through the spokes of the winch handwheel when in operation, if it slipped round with a panel on load, serious injury could result.
5. Inspect the equipment, especially the cable, for damage regularly at least daily.
6. When lifting a panel, do not allow it to overhang by such an amount as to create the danger of it falling off.
7. Manoeuver the lifter with a loaded panel into position before raising. Only minute adjustments should be made with the panel raised.
8. Keep the panel lifter away from overhead electric fittings and cables. It is made of steel which will conduct electricity down to the user.
9. Stop lifting and make the equipment safe if someone approaches you.
10. Do not leave a panel or wallboard unattended while in the raised position. Either fix it or lower it to the floor.
11. If your equipment does not work properly, do not attempt to repair it. Contact the hire company

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

v:032017

Hire Association Europe
2450 Regents Court
The Crescent
Birmingham Business Park
Solihull B37 7YE

Telephone: 44 (0) 121 380 4600
Fax: 44 (0) 121 333 4109
Email: mail@hae.org.uk
website: www.hae.org.uk

Before Starting Work...

FRAME ASSEMBLY

3. Note that the bottom tip of the frame assembly (3) (D) slides over the small lip (C) on the bottom of the tripod base and the upper part of the tripod base (B) slides inside the appropriate part of the frame assembly (A).
4. When the frame assembly is located correctly, release the backstop.

ASSEMBLY TRIPOD BASE

1. To set up the tripod base (1), press down on the slide yoke ring, on the centre leg, and swing the other two legs out until they lock in the working position. There are holes at each end, on the underside of the slide tube, to accommodate the locking pin.

BACKSTOP

2. Carefully check the cable before fire use and regularly (at least daily) thereafter. If the cable is worn or damaged, do not use the equipment – contact the hire company. Do not attempt to replace or alter the cable – contact the hire company.
3. Protect other people from the danger. Warn others to keep away.
4. Do not use a panel lifter on rough or soft ground. The floor must be level and hard like smooth concrete, asphalt, level paving slabs or similar.
5. Check your panel lifter and all its equipment. If anything is found damaged, do not use it – contact the hire company.
6. Keep hands, hair and loose clothing away from cable and moving telescopic sections.
7. Do not pass your hand through the spokes of the winch handwheel when in operation, if it slipped round with a panel on load, serious injury could result.
8. Inspect the equipment, especially the cable, for damage regularly at least daily.
9. When lifting a panel, do not allow it to overhang by such an amount as to create the danger of it falling off.
10. Manoeuver the lifter with a loaded panel into position before raising. Only minute adjustments should be made with the panel raised.
11. Keep the panel lifter away from overhead electric fittings and cables. It is made of steel which will conduct electricity down to the user.
12. Stop lifting and make the equipment safe if someone approaches you.
13. Do not leave a panel or wallboard unattended while in the raised position. Either fix it or lower it to the floor.
14. If your equipment does not work properly, do not attempt to repair it. Contact the hire company

WINCH

5. To position the winch into its working position (5); use your righthand to rotate the winch forward (clockwise) slightly while raising the brake arm by pushing in the same direction with your left hand.
6. Keep raising the brake arm until you can wrap the finger of your left hand round the winch post (6) with your thumb still holding the brake arm and squeeze sufficiently to prevent back-lash of the cable on the winch.
7. Now place your right hand on top of the frame (7) and push it backwards while pulling the winch towards you with your left hand. Maintain your grip on the winch post and brake arm.

WINCH POST

8. When the winch is fully extended, release the brake arm and swing the retaining hook (8), near the top of the frame, away from the telescoping sections.
9. Push the winch assembly back towards the frame to automatically engage the slide bar lock (9). Check it is locked correctly - do NOT tighten the slide bar lock nut.
10. Mount the cradle on top of the telescoping section. Flip out the tilt-latch (11), located in the centre of the cradle where it locates into the telescoping section. This will allow the cradle to tilt for loading and for hanging boards on walls and sloped ceilings.
11. Place the tapered plates of the crossarms into the tapered sockets on the cradle (11). The spring tab on the back of the crossarm will click into place.
12. To extend the outriggers, pull out on the outrigger lock pin with your right hand (12), and slide the outrigger out. The lock pin will engage at three different positions on the outrigger.
13. Repeat this action for the other outrigger. Lock pins MUST be engaged in their equivalent locking points before use.

CRADLE

OPERATION

1. Move the panel lifter to its approximate work position each time before loading a panel. Set the backstop to prevent movement. Extend the outriggers and tilt the cradle as needed. Open out the support hooks at the bottom of each crossarm. Load the panel, noting which face you should present to the wall or ceiling.
2. Make any minor positional adjustment if needed before raising the panel. Ensure you reset the backstop.
3. Raise the panel into position by turning the winch wheel in a clockwise direction. The brake will hold the panel at any height automatically. Fix the panel in place.
4. Take great care if you have to move the panel into its final position after lifting it. Make slow and small adjustments, and use the backstop prudently.
5. To lower the now empty cradle, grasp the winch wheel with your right hand BEFORE you release the brake with your left hand. The weight of the cradle will cause it to slide down to its lower position; your right hand on the winch wheel will control the speed of descent.
6. Take care, if lowering with a panel still loaded, it will descend with greater force requiring greater control of the winch wheel.

DISASSEMBLY

1. Fold in the cross arm support hooks. Slide each outrigger all the way in after pulling out each outrigger lock pin. Ensure the lock pin locks in the closed position.
2. Remove the cross arms by pressing the spring tab on the bottom, and slide the cross arm out of its tapered socket.
3. Lock the cradle tilt latch and lift the cradle out of the frame.
4. Rotate the winch wheel clockwise one full turn. Lift up on the slide bar with your left hand while rotating the slide bar lock counter-clockwise with your left hand.
5. While holding the slide bar lock in this disengaged position with your right hand, push down on the top of the telescoping section with your left hand. This will cause the winch assembly to move toward the frame.
6. With the telescoping section all the way down, position the retaining hook over the top.
7. Hold the retaining hook in this position (13) and rotate the winch wheel clockwise, this will wind in the cable causing the winch assembly to fold up against the frame. When the slide bar contacts the frame, tighten the cable just enough to hold the winch in this position.
8. Lift the frame off the tripod base. Collapse the base by pressing down on the slide yoke ring and wing the other two legs into the close position.

Any unauthorised reproduction – manually or electronically – is STRICTLY prohibited
©Copyright Hire Association Europe April 2011

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