liftroller. wall

User manual



EN User manual Version 1 - 2022

SAFETY INSTRUCTIONS

Please read the user manual carefully before use!

- Maximum capacity is 1,200 kg. This limit must not be exceeded.
- This product is designed for professionals who are familiar with the building's construction.
- Check that the upper and lower wall clamps, ceiling supports and wires are tightened before use.
- Please note that there is a risk of crushing when pulling the locking pins out of the ceiling supports. Hold the upper part of the support firmly while pulling out the locking pin to prevent the support from descending uncontrollably.
- Ensure that no one enters the space underneath the load.
- Ensure that the wall clamps, legs and ceiling supports are aligned with load-bearing elements in the building structure that are capable of withstanding the load.
- If the building has timber joists, establish their direction and place a perpendicular reinforcement on them that can withstand the load if necessary.
- The Liftroller Wall must only be used by persons familiar with its functions.
- Do not modify the Liftroller Wall.
- The cross bars on the Liftroller Wall must overlap by at least 150 mm.
- Do not step on the roller tables and reach out of the window opening in order to grab hold of the load.
- Place the load in the centre of the Liftroller Wall.
- Ensure that the load's centre of balance is as close to the external wall as possible before releasing the slings and bringing the load to a rest on the Liftroller Wall . No more than 1/3 of the load should protrude beyond the roller tables.
- Take care not to crush body parts between the Liftroller and the load.
- Ensure that the roller tables slope gently towards the middle of the room. You can achieve this by tightening the wire. Tighten the wire too much and it may result in an excessive incline. Check before use.
- Place the Liftroller Wagon on the inside and engage the wheel brake before rolling the load onto the wagon.
- Ensure that the height of the Liftroller Wagon's roller tables corresponds with that of the Liftroller Wall before moving a load from one to the other. Check that the roller brakes have been disengaged.
- The Liftroller Wall is not an approved scaffolding device.
- Never leave a load unsecured on the Liftroller Wall, as the rollers offer little resistance and could put the load in motion as the roller tables have an incline.
- Ensure that you have read, understood and can adhere to all the safety instructions and warnings before using the Liftroller Wall. Failing to comply with the above can result in damage to the product and/or personal injury.

TECHNICAL DATA

| Minimum window width | 1200 mm* |
|------------------------------------|----------|
| Maximum window width | 1700 mm* |
| Maximum wall thickness | 495 mm* |
| Minimum floor hight/ceiling height | 2390 mm* |
| Maximum floor hight/ceiling height | 3425 mm* |
| Minimum height roller table | 940 mm |
| Maximum height roller table | 1225 mm |
| Max. parapet height | 1050 mm |
| Tare weight total | 170 kg |
| Max. load capacity (WLL) | 1200 kg |
| | |

* Other sizes available upon request.

NB! This user manual is for both standard Liftroller Wall model and for custom Liftroller Wall models. The values stated above may therefore deviate on some models.

DESCRIPTION



| NO. | EXPLANATION | QUANTITY |
|-----|-----------------------|----------|
| 1 | Left frame outer | 1 |
| 2 | Right frame outer | 1 |
| 3 | Left frame inner | 1 |
| 4 | Right frame inner | 1 |
| 5 | Left ceiling support | 1 |
| 6 | Right ceiling support | 1 |
| 7 | Roller table | 2 |
| 8 | Cross profile inner | 1 |
| 9 | Cross profile outer | 1 |

| NO. | EXPLANATION | QUANTITY |
|-----|-------------------------|----------|
| 10 | Cross profile middle | 2 |
| 11 | Bolted coupling profile | 2 |
| 12 | Washer M12 | 16 |
| 13 | Nut M12 | 8 |
| 14 | Hex bolt M12 x 90 | 8 |
| 15 | Quick release bolt | 18 |
| 16 | Steel wire | 2 |
| 17 | D shackle | 2 |
| | | |

ASSEMBLY











ASSEMBLY



The left frame (1 and 3) and right frame (2 and 4) of the Liftroller Wall can be separated at the jointing piece (11). This allows all the parts to be carried by one person alone. Remember to tighten the bolts properly when reattaching the frames.

ASSEMBLY:

1. Using a 19 mm ratchet and a 19 mm spanner, attach the outer and inner frames on both the left-hand and right-hand sides. Ensure that all eight bolts and nuts are securely tightened. Use washers on both the bolt head and nut side. (This part does not have to be removed when moving the device if there are two people lifting.)

ASSEMBLY



2. Fix the centre pieces (8, 9 and 10) by inserting the quick release bolts (14) into the holes on the left frame. Set the position according to the width of the opening the Liftroller Wall will be fitted to. Measure the opening and find the correct position for the centre pieces. Remember to insert the locking split pins.

ASSEMBLY

The width table below can be used as a guide to determine which hole to use with different window widths. NB! The optimal hole is found by measuring the window opening.

| WIDTH OPENING (mm) | HOLE NR. |
|--------------------|----------|
| 1210-1240 | 1 |
| 1240-1260 | 2 |
| 1270-1290 | 3 |
| 1290-1310 | 4 |
| 1310-1340 | 5 |
| 1340-1370 | 6 |
| 1370-1400 | 7 |
| 1400-1430 | 8 |
| 1430-1460 | 9 |
| 1460-1490 | 10 |
| 1490-1520 | 11 |
| 1520-1550 | 12 |
| 1550-1610 | 13 |
| 1610-1700 | 14 |

ASSEMBLY



At least 2 persons are required for further assembly:

3. Place the left frame on the floor and insert the right frame into the centre pieces. (It is important that all four profiles are inserted simultaneously to prevent them from becoming skewed and getting stuck.) Use a lubricant such as teflon spray.

Once fully inserted, the greatest width of the Liftroller Wall should be narrower than the opening it is being fitted to. If it is not, adjust the centre pieces further by moving the quick release bolts to different holes. Measure the window opening to ascertain that it is wider than the Liftroller Wall before lifting the Liftroller Wall through the opening.

ASSEMBLY



- 4. Lift the Liftroller Wall through the opening and place all four legs on the floor. Adjust it sideways so that the clamp meets a load-bearing part of the external wall just to the left of the opening, then pull the Liftroller Wall inwards so that the external wall support rests against the external wall. See the small picture on the next page. Tighten the wall clamp on the left-hand side.
- 5. The left side of the device is now locked against the external wall. Next, expand the right frame so that it meets a load-bearing wall on the right-hand side of the opening. Tighten the wall clamp. (It is important to extend all 4 jointing pieces evenly to prevent excessive friction between the aluminium parts. They may get stuck if pulled unevenly. Applying lubrication to the profiles will make them glide more smoothly.)

One tip is to stand inside the frame when making the sideways adjustment as shown in the picture. This will make it easier to get a good grip in the middle and make the adjustment.

ASSEMBLY



- 6. Assemble both the ceiling supports, adjust their height against the ceiling, but do not clamp them against the ceiling just yet.
- 7. Slightly loosen the lower wall clamps. Pull/lift the penultimate cross bar (10) so that the external wall support is perpendicular to the external wall. (see inset in the bottom right-hand corner of the picture above) Tighten the wall clamps again.
- 8. Extend the upper wall clamp and adjust its length so that it sits tight up against the wall. Then clamp the ceiling supports to the ceiling.
- 9. Attach the wires to the ceiling supports and tighten them so that the frame slopes gently towards the middle of the room. NB! The wires should be tensioned, but do not overtighten them. This will make the slope too steep, which in turn will make it difficult to roll the load onto the Liftroller Wagon.

ASSEMBLY



NOTE: Quick bolt is mounted on the underside of the wire tightening nut. Screw the nut downwards to tighten the wire. (As opposed to quick bolt for roof support which is mounted over the nut and tightened by screwing upwards.)

ASSEMBLY



- 10. Ensure that the ceiling supports are perpendicular, that the cross bars are reasonably level, and that the wires have been tensioned so that the frame slopes gently towards the middle of the room. Repeat the checklist above and readjust if necessary.
- 11. Assemble the roller tables. Adjust the tables to the desired width using the outer holes shown in the illustration to the right of the picture.
- 12. Attach the roller tables to the inner frame in the track on the inner cross profile (8) using the accompanying quick release clamps.

The Liftroller Wall is now ready for use.

<u>Tip:</u>

You can dismantle the roller tables when not in use. This will make it easier to close the window opening by placing a plywood sheet with a groove at the bottom over the Liftroller Wall profiles. The wires can also be removed and the holes underneath the profiles closed if the opening needs to be completely sealed in order to retain heat.

ASSEMBLY



The illustration above shows all 18 quick release bolts. Check to ensure that they have all been fitted.

ASSEMBLY



If the external wall is uneven, fashion a lath from a piece of wood to give the wall an even surface to rest against. <u>Screw the lath to the Liftroller Wall through the perforated holes to keep it in place during assembly and disassembly.</u>

- 1. Ensure that all parts have been securely fastened. Consult the assembly instructions.
- 2. Place the Liftroller Wagon back-to-back with the Liftroller Wall and ensure that the height of the Liftroller Wagon's roller table corresponds with those of the Liftroller Wall. Check that the Liftroller Wagon's roller brakes have been disengaged. Fully lower the handle on the Liftroller Wall so that the wheel brake engages.
- 3. Grab the slings holding the load with the accompanying telescopic boat-hook and help guide the load correctly onto the Liftroller Wall. (see items 4 and 5 below)
- 4. The load's centre of balance should be as close to the external wall as possible, and the load should be centred on the roller tables so that it stays clear of the wires on both sides when being rolled in.
- 5. Once the load is in the correct position, lower the load until the slings slacken. Ensure that at least 2/3 of the load is inside the orange cross bar at the far end of the Liftroller Wall.
- 6. Pull the slings with the boathook until you reach the crane hook and can unhitch the slings.
- 7. Next, roll the load onto the Liftroller Wagon. Before the last part of the load leaves the Liftroller Wall, pump up the wagon slightly so that the load no longer rests on the Liftroller Wall. Lock the brakes on the rollers and lower the load before you start moving. (See separate manual on how to use the Liftroller Wagon.)



TIP:

When not in use, disassemble the roller table, and close the opening with a suitable plywood board or similar. The small remaining opening can be closed with isolation or plastic.



<u>TIP</u>:

Use pallets with longitudinal stringers and thread the slings through the pallet. If the slings is underneath the pallet they may block the rollers from turning.

If you use pallets with transverse stringers/bearers, place a couple of planks on top of the Liftroller Wall and lower the load onto the planks. This will prevent the slings from blocking the movement of the rollers. The planks also offer a good grip for you to pull in the load.

If you are not using a couple of planks like advised above, always ensure that the slings land <u>between the rollers</u>. If they end up on top of the rollers, it may be difficult to pull the load inside as the slings prevent the rollers from turning.



 $\underline{\text{TIP}}$: Lifting straps is better and safer to use than pallet fork.



MAINTENANCE

- Regularly check that all moving parts are operating freely. Wipe off visible dust and dirt from a profile before inserting it into another profile.
- Inspect all parts before use. If you identify damage to any part of the Liftroller Wall, do not use the product until the damage has been repaired. Remember to check welding joints for cracks and deformation. Check the wires for weaknesses.
- Regular inspection and maintenance along with dry storage will extend the product's life span.
- Exposing the product to impact can cause deformation and make it difficult to adjust its width and height.

Industry





EC - Declaration of conformity CE - Déclaration de conformité EG - Konformitätserklärung

Holder of Certificate:

Liftroller AS

VAT registration number 911687321 Leirvikåsen 45 5179 Godvik Norway CE

This declares that the following designated product

Model: Descripion:

Liftroller Wall max load 1200 kg

The Liftroller Wall model is an aluminum construction with rollers. Designed for moving goods through façade openings.

Complies with the essential protection requirements of the European Parliament and of the COUNCIL Directive 2004/108/EC on the approximation of the laws of the Member States relating to safety requirements and verification.

This declaration applies to all specimens manufactured in accordance with attached manufacturing drawings which from part of this declaration.

Assessment of compliance of the product is produced in accordance with harmonized standard and Conformity is assured according to the following standards:

- NS-EN ISO 10042:2018 Welding Arc-welded joints in aluminium and its alloys
- 2006/42/EF EU Machinery Directive of the European Parliament and the Council

Identifications of regulations/ standards

Godvik 06.03.2020

Place and date of issue



This declaration of conformity is issued under the sole responsibility of the manufacturer or representative. It certifies compliance with the indicated Directive, but implies no warranty of properties.