

ORIGINAL

USER MANUAL OF THE EXTENDING LADDER LIFT

Ladder & Material Lift



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EC Declaration of Conformity

De Lijftfabriek B.V.

Zandven 4, 5508 RN Veldhoven, The Netherlands

We, De Lijftfabriek B.V., hereby declare that the following machinery

Extending Ladder Lift (ELL)

fulfills all of the relevant requirements of EC Machinery Directive 2006/42/EC.

Short description and identification of the machinery

The machinery is (i) a rope operated extending ladder that can be converted into (ii) a lift that is intended for vertical transport of goods and materials with a maximum weight of 125kg.

The guidance for the trolley of the ELL is incorporated into the stiles of the fly-section of the ladder and can be extended to the bottom of the ladder using guidance extensions.

The trolley of this system runs in this guidance and holds a carrier on which the goods and materials are placed and is driven by a winch.

The party authorized to compile the technical file:

De Lijftfabriek B.V.
Zandven 4, 5508 RN Veldhoven, The Netherlands
de Boer, Gerben Berend Johannes, director



Signature


Veldhoven, 16th September 202

Manual and Strict Compliance

This manual applies exclusively to the **Extending Ladder Lift (ELL)** described herein (hereinafter referred to as *the manual*).

Before commencing assembly, the entire manual must be read carefully. The ELL shall only be assembled, operated, and dismantled in strict accordance with the instructions provided. Compliance with these instructions is essential; failure to do so may result in serious accidents. **De Lijftfabriek BV cannot be held liable for any damage or injury resulting from improper assembly or use of the ELL.**

The employer, supervisor, and user are jointly responsible for ensuring the safe and correct use of the ELL in accordance with this manual. Furthermore, it is their responsibility to ensure that the manual is available at the workplace at all times during use of the ELL. Additional copies can be obtained upon request from **De Lijftfabriek BV**.

 **Important:** Local laws and regulations may impose additional requirements beyond those described in this manual. It is the responsibility of the employer and user to ensure compliance with such regulations.

De Lijftfabriek BV

Zandven 4

5508 Veldhoven

The Netherlands

Chapter 1 – Short Intro to the ELL

The ELL is an extending ladder that can be quickly converted into a material lift. The transition between ladder mode and lift mode requires no specialized equipment and can be carried out in less than two minutes.

When used as a ladder, the ELL provides secure access to elevated work areas, functioning as a conventional extension ladder. In lift mode, it enables the safe vertical transport of materials along a guided track, minimizing manual handling risks and improving efficiency on site.

The ELL was conceived, tested and developed by experienced builders for professional users. Its design reflects practical on-site requirements: durability, ease of handling, quick conversion between functions, and uncompromising safety.

Modes of Operation

Ladder Mode

In this configuration, the ELL is used as a standard extending ladder. It is designed to meet professional standards for strength and stability, providing safe access for personnel during construction or maintenance work. The ELL complies with EN-131.

Material Lift Mode

In lift configuration, the ELL functions as a guided lifting system complying with the Machinery Directive 2006/42. The conversion only takes three (3) basic and simple steps:

Step 1 - Adjust the ladder's fly-section to the required working height.

Step 2 - Stack the ELL's lightweight extensions (available in 2-rung or 4-rung modules, each weighing less than 3 kg) onto the base-section, meanwhile placing bumper, trolley and carrier,

Step 3 - Lower the fly-section of the ladder onto the extension stack using the integrated rope mechanism.

Once this procedure is completed, the extensions and fly-section form a continuous structural unit. Each extension contains precision guidance tracks, and when combined, these tracks form a stable path for the trolley to travel from the base to the top of the ladder.

Trolley, Carrier, and Winch

Next to the ladder, the ELL comprises three additional principal components:

- **Trolley and Carrier:** Manufactured for durability and robustness, suitable for the heavy-duty demands of construction sites. The trolley ensures smooth vertical movement, while the carrier secures the load during lifting.
- **Cordless Drill-Powered Winch:** The winch is driven by a standard cordless drill, eliminating the need for electrical connections, cables, or electronic controls. The mechanism is fully mechanical, ensuring dependable operation regardless of site conditions.







These simple yet effective components reduce potential points of failure, resulting in high reliability and minimal maintenance requirements.

Safety Features

The ELL incorporates multiple built-in safety systems, ensuring safe operation under all permitted conditions:

- **Torque Limiter:** The system includes a mechanical torque limiter, factory-set at a maximum of 125 kg. This prevents overloading and protects the mechanism from damage.
- **Mechanical Auto-Lock:** The lifting mechanism is automatically locked whenever the winch is not actively engaged. This ensures that the load remains safely in position without risk of unintended movement.
- **Controlled Lifting Speed:** The system is engineered for a fixed lifting speed of 15 m/min (50 ft/min). This speed has been selected to balance efficiency with safe, controlled handling of materials.

The ELL comes in the following standard versions:

|  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| 5604620400100 | 2x10 | 2,88m | 4,84m | 4,68m | 5,87m | 0,41m | 0,13m | 14,87kg |
| 5604620400124 | 2x12 | 3,44m | 5,96m | 5,76m | 6,85m | 0,41m | 0,13m | 17,41kg |
| 5604620400148 | 2x14 | 4,00m | 6,80m | 6,57m | 7,76m | 0,41m | 0,13m | 20,54kg |
| 5604620400162 | 2x16 | 4,56m | 7,64m | 7,38m | 8,57m | 0,41m | 0,14m | 23,97kg |
| 5604620400186 | 2x18 | 5,12m | 8,76m | 8,46m | 9,65m | 0,41m | 0,16m | 28,10kg |
| 5604620400209 | 2x20 | 5,68m | 9,60m | 9,28m | 10,47m | 0,41m | 0,16m | 30,86kg |

Chapter 2 – Requirements for Use and Safety

2.1 General requirements



Read this manual carefully and follow up on the instructions and warnings given



WARNING: Falling from the ELL can cause serious injury or death. Take notice of all safety precautions



WARNING - Electricity hazard. Identify any electrical risks in the work area, such as overhead lines or other exposed electrical equipment and do not use the ELL where electrical risks occur



Inspect the ELL after delivery. Before every use visually check if the ELL is not damaged and is safe to use. Do not use a damaged ELL.



Do not use the ELL on a unlevel or unfirm base



Do not erect the ELL on contaminated ground.



Do not ascend or descend unless you are facing the ELL



Avoid work that imposes a sideways load on the ELL, such as side-on drilling through solid materials



Do not wear unsuitable foot-wear when climbing the ELL



Do not use the ELL as a bridge



Maximum total load allowed on the ELL is 150kg



Do not overreach



Maximum number of users



Keep a secure grip on the ELL when ascending and descending. Maintain a handhold while working from the ELL or take additional safety precautions if you cannot, e.g. use fall protection gear



Do not use the ELL if you are not fit enough. Certain medical conditions or medication, alcohol or drug abuse could make ladder use unsafe



The ELL is a leaning ladder and shall be used at the correct angle with the underground; this angle is 65-75 degrees



If the ELL is used for access to a higher level it shall be extended at least 1m above the landing point and secured



Do not lean the ELL against unsuitable surfaces



Do not stand on the top 3 rungs of the ELL

The ELL is a fully functional rope-operated extending ladder. For extending this ladder note the following rules:



Locking devices shall be checked and be fully secured before use if not operated automatically and:

- The loose end of the rope must always be securely tied to the ladder to prevent accidental release.
- Whenever possible, the ELL ladder should be extended while leaning against a stable wall until the required working height is reached.
- The correct sequence for extending the ladder must be observed:
 - Unlock the fly-section.
 - Pull the fly-section upward to the required height.
 - Lock the fly-section securely in place.

2.2 Additional Safety Rules for Using the ELL

2.2.1 Assembly, Risk Assessment and Positioning

- **The ELL must always be secured near its top** to prevent turning or sliding and to provide safe access to higher levels (e.g. roofs).
- Do not remain on the ELL for extended periods without taking regular breaks, as fatigue increases the risk of accidents.
- When transporting the ELL, it must be properly fastened and positioned to prevent damage.
- **Always ensure that the ELL is suitable for the intended task.**
- The ELL must not be used if it is contaminated (e.g. with wet paint, mud, oil, or snow).
- Do not use the ELL outdoors in adverse weather conditions, such as strong winds.
- **A risk assessment must be carried out in accordance with the applicable legislation in the country of use.**
- When positioning the ELL, consider the risk of collision from pedestrians, vehicles, or doors. Secure nearby doors (except fire exits) and windows wherever possible and cordon off the area around the ELL
- Modifications to the ELL design are strictly prohibited.
- **Never move the ELL while standing on it.**
- The ELL must always be positioned on its stabilizer.
- When working from the ELL, always face the ladder and ensure that both feet are placed firmly on the rungs/steps.
- The ELL must never be moved from its fly-section.

⚠ Important: If any of the above conditions cannot be fully satisfied, the ELL must not be used.

2.2.2 Load and Usage Restrictions

- The maximum permissible load is 125 kg.
- It is strictly forbidden to lift persons or animals with the ELL.
- Objects must not protrude beyond the ELL carrier.
- Always make sure that there are no objects obstructing passage of the trolley, the carrier and the load

2.2.3 Operation of the Winch

- Operate the winch only with a drill/driver with a minimum continuous power of 600 watts.
- To lift a load, rotate the drill counterclockwise; to lower, rotate clockwise.
- The lifting strap must run smoothly between the winch and the console, without twists.
- Do not allow the winch to slip or “run free.” Always control lowering speed to prolong winch life.
- Always engage the winch latch to secure the load.

2.2.4 Weather and Environmental Conditions

Never use the ELL in wind speeds exceeding 10.7 m/s (max. 5 Beaufort).

2.2.5 Preventing Crushing and Falling Hazards

- The load travels vertically along the scaffolding. Maintain a safe distance from both the ELL and the load at all times.
- Do not remain inside the scaffolding while a load is being lifted or lowered.
- Ensure the lifted load cannot slip or fall from the carrier.

2.2.6 Final instructions when using the ELL:

- never wear baggy clothing or jewelry; these could become caught when ascending or descending the ELL which could lead to a fall;
- frequently check that the feet of the ELL are not worn; worn feet may damage the support surface, or can result in the ELL slipping;
- do not leave any tools or other equipment at the bottom of the ELL which you might trip over;
- the ELL should be lifted by two (2) persons;

Chapter 3 – Set-Up of the ELL

3.1 Pre-Use Checks

Before each use, the following checks must be carried out to ensure the safe condition of the ELL:

- Verify that the **stiles/legs (uprights)** are free from bending, bowing, twisting, dents, cracks, corrosion, or rot.
- Check that the **stiles/legs at fixing points** for other components are in good condition.
- Ensure that all **fixings** (rivets, screws, bolts) are present, tight, and free from corrosion.
- Inspect all **rungs/steps** to ensure none are missing, loose, excessively worn, corroded, or damaged.
- Confirm that the **hinges** between fly- and base-sections are not damaged, loose, or corroded.
- Verify that the **locking stays, horizontal braces, back rails, and corner braces** are present, secure, and free from bending, looseness, corrosion, or damage.
- Ensure that the **rung hooks** are present, undamaged, secure, free from corrosion, and correctly engaging the rungs.
- Check that the **guide brackets** are present, undamaged, secure, free from corrosion, and correctly engaging with the mating stile.

Note: The 2x14-rung version of the ELL is used in this manual to illustrate modes of operation. These modes apply to all standard ELL versions.

Note: For clarity, the lifting rope is omitted from the drawings in this manual. In some drawings, the lifting belt is also omitted.

3.2 Modes of Operation – Ladder Mode

In this configuration, the ELL is used as a standard extending ladder. It is designed to meet professional standards for strength and stability, providing safe access for personnel during construction or maintenance work.

Use the rope to extend the fly-section of the ladder to the desired height and place the ladder at a 65-degree to 75-degree angle with the horizontal surface on which it rests.

3.3 Use of the ELL as a Material Lift

The **ELL** is not only a rope-operated extending ladder; it can also be converted into a **material lift** with a maximum load capacity of **125 kg**.

When operating the ELL in material lift mode, it is strongly recommended that work is carried out with **two persons**: one positioned at ground level to load and unload materials, and one positioned at height to receive or place them. This ensures both safety and efficiency.

As in its mode of operation as a ladder, use the rope to extend the fly-section of the ladder and place the ladder at a 65-degree to 75-degree angle with the horizontal surface on which it rests.

3.3.1 Conversion Procedure: Ladder to Material Lift

The conversion from ladder mode to material lift mode must be carried out in the following sequence:

⚠ Set up the ELL as a ladder, strictly observing all warnings and instructions described in the preceding sections of this manual.

1. Extend the ladder to **one (1) rung higher** than the intended position at height of unloading/loading. See *drawing 1*.
2. Position the first guidance extension on the base-section of the ladder. See *drawing 2*.
3. Next, place the bumper on this first guidance extension. This sets the lowest stop position for the trolley. See *drawing 3*.
4. Place the trolley on the first guidance extension. It will rest on the bumper. See *drawing 4*.

Now stack the **guidance extensions** onto the base-section of the ELL. See *drawings 5 and 6*.

- a. Ensure that each guidance section **snaps securely into place**, with all four hooks resting firmly on the rungs of the ladder.
- b. The guidance extensions must fit seamlessly into one another without gaps or misalignment.

Note: NOT shown in the drawings is that after placing the first or second guidance extension that you can place the trolley on that stack. This is easiest.

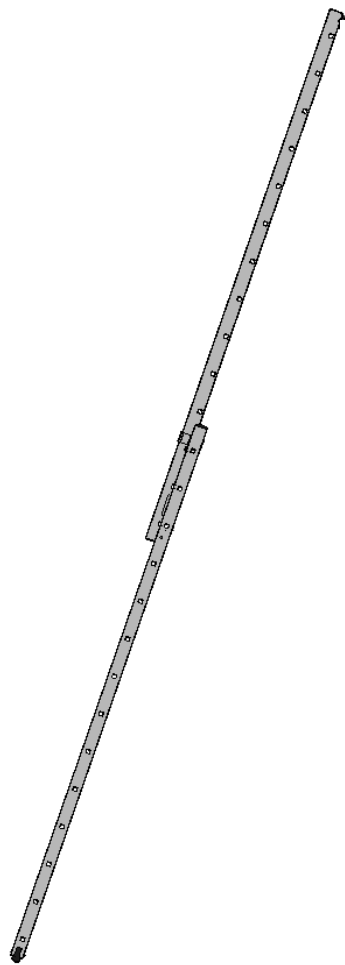
5. Continue installing the guidance extensions until a distance of **one (1) rung** remains between the top of the extensions and the lowest rung of the fly-section of the ladder. See *drawing 7*.
6. Lower the **fly-section by one (1) rung** so that it rests firmly on the installed guidance extensions. See *drawing 8*.
7. Place the winch on top of the ladder. See *drawing 9*.

Note: Before you place the winch secure the top of the ladder so that it can't slide and/or turn.

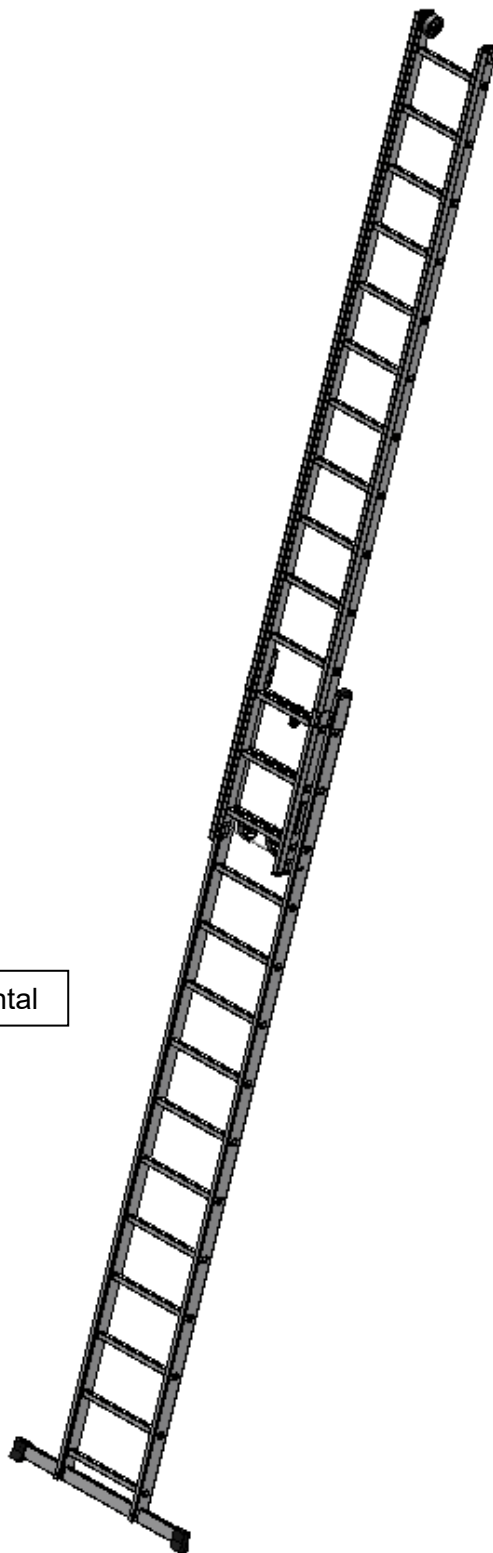
8. Place the carrier on the trolley and secure it with its pin. See *drawing 10*.
9. Your ELL is ready for loading and lifting now. See *drawing 11*.

⚠ Remember this while building the guidance stack:

- Don't forget to place the trolley on the guidance stack when it is easiest to do so. After you have placed the first or second guidance extension drop the trolley in from the top of the stack.
- Ensure that the extension guidance connects seamlessly with the fly-section of the ladder, forming a continuous track.



65 – 75 degrees to the horizontal



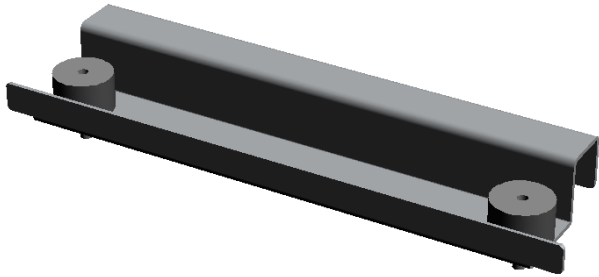
Drawing 1

Extend the ladder – place it at an angle of 65-75 degrees to the horizontal and one rung above the position at height where you wish to unload/load because you will need to lower the fly-section by one rung at the end of build-up



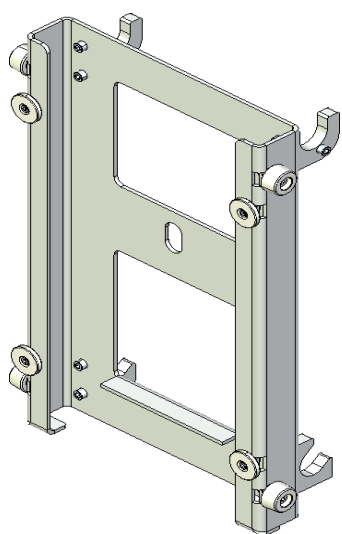
Drawing 2

Place the first guidance extension (in this case 4 rungs) and make sure that all the four hooks of this extension rest on the rungs of the ladder



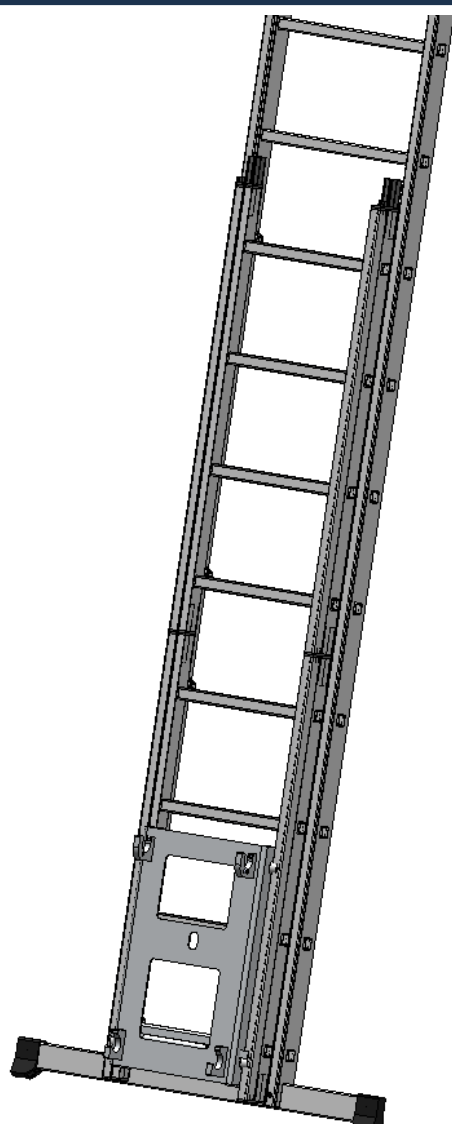
Drawing 3

Place the bumper on the lowest rung of the first guidance extension

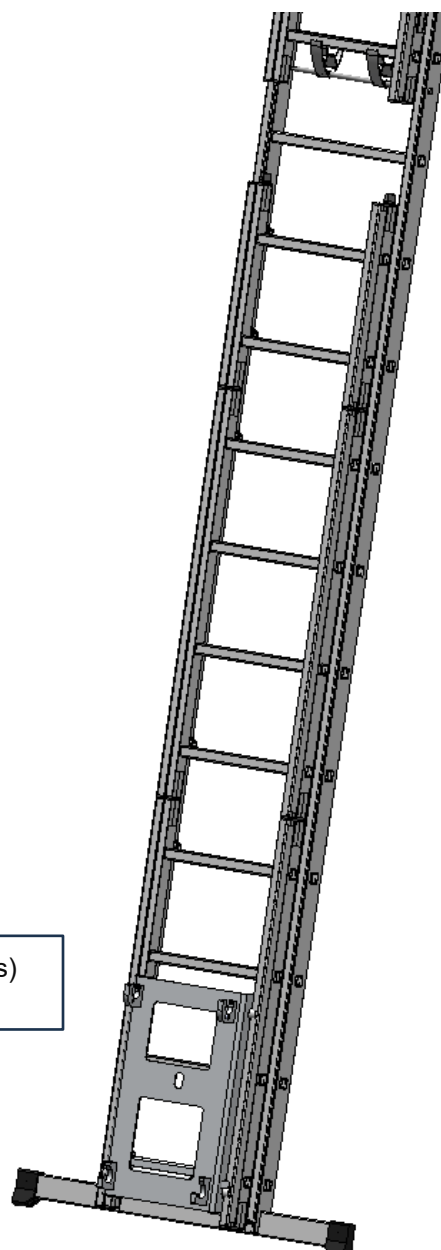


Drawing 4

Place the trolley on the first guidance extension – roll it in from top



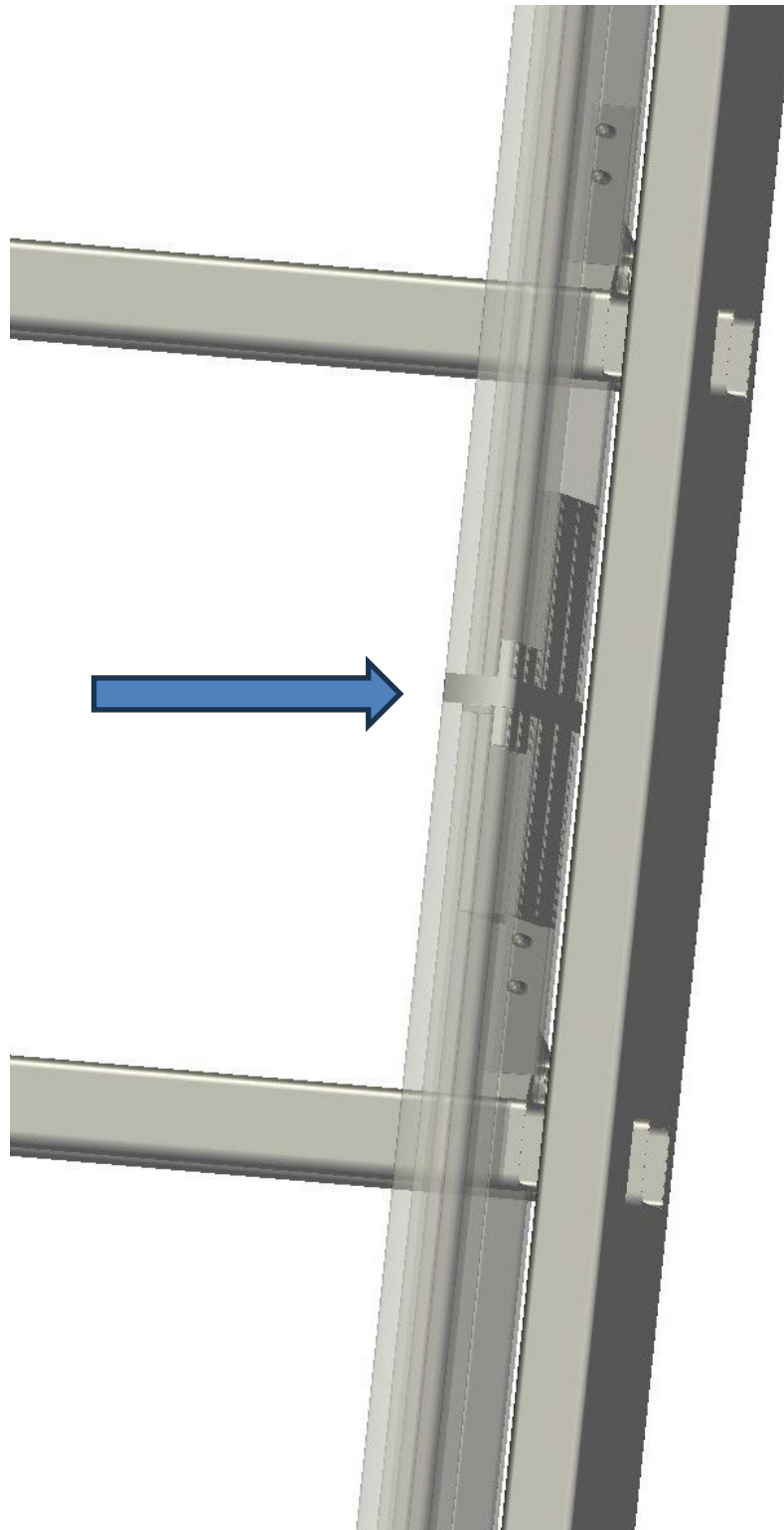
Left: second guidance extension (4 rungs)
stacked on top of first extension



Right: third guidance extension (2 rungs)
stacked on top of second extension

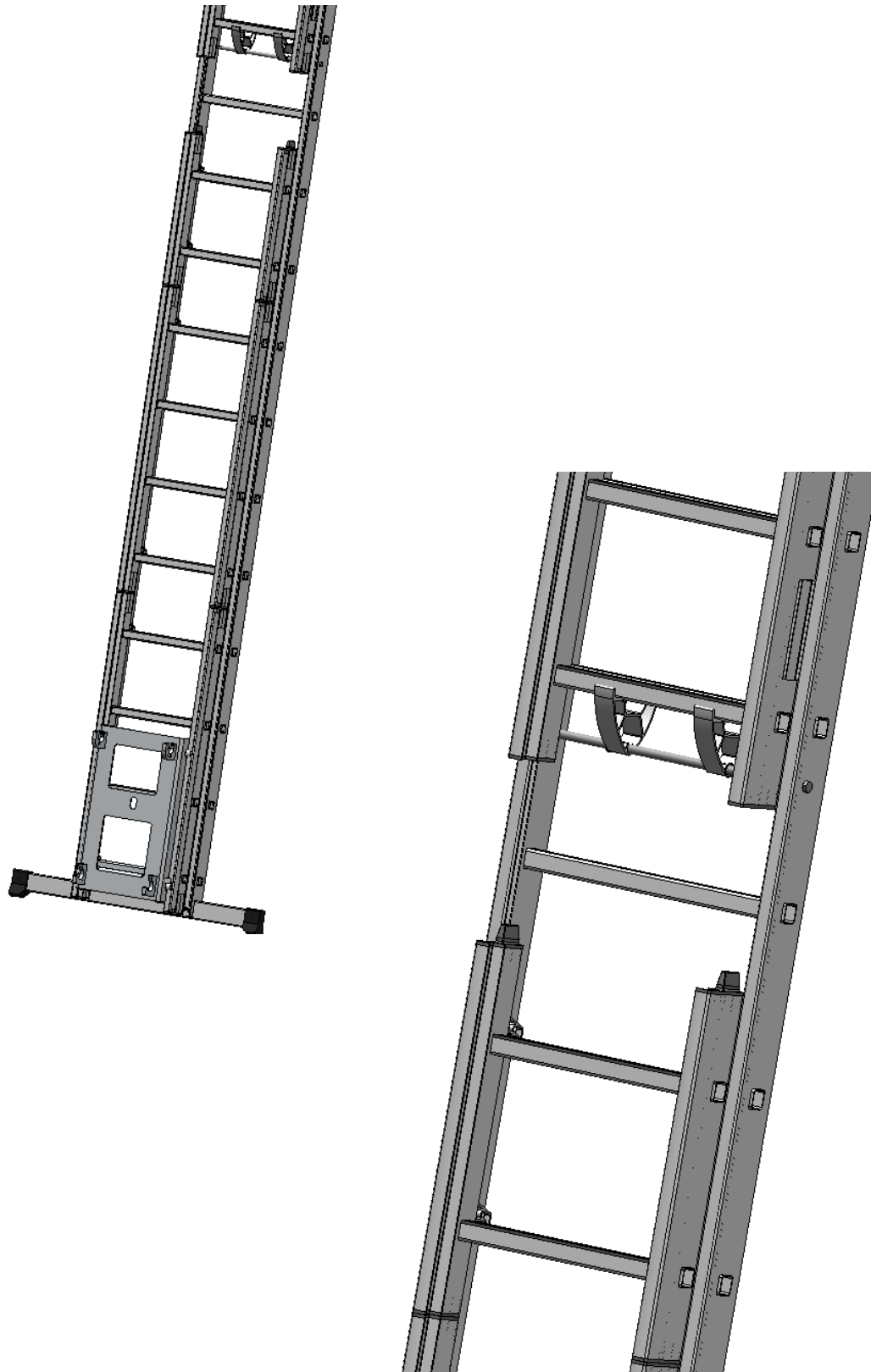
Drawing 5

Stack the guidance extensions on the ladder – work from bottom up upwards and make sure that the extensions rest on all of four (4) hooks on the rungs of the base-section of the ladder; the guidance stack above holds 3 extensions now and is 10 rungs high.



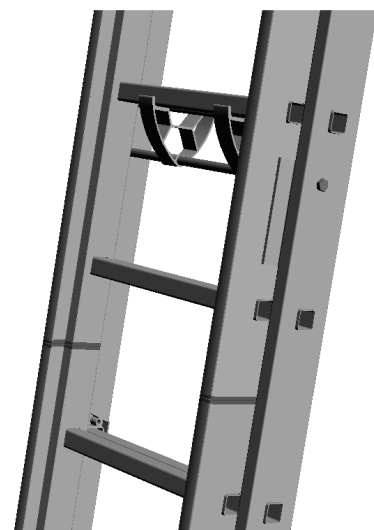
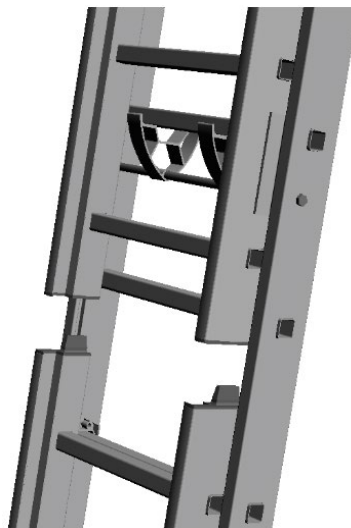
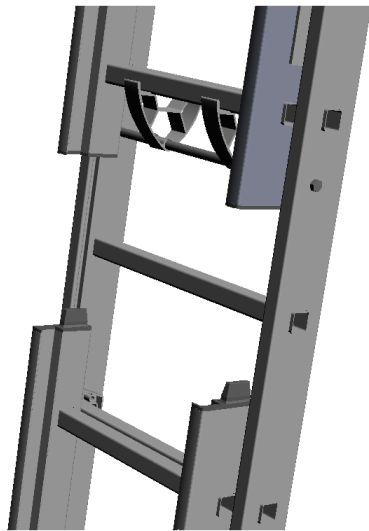
Drawing 6

Make sure that you stack these extensions seamlessly. See arrow. For this, each extension has a male connector on its top and a female insert on its bottom.



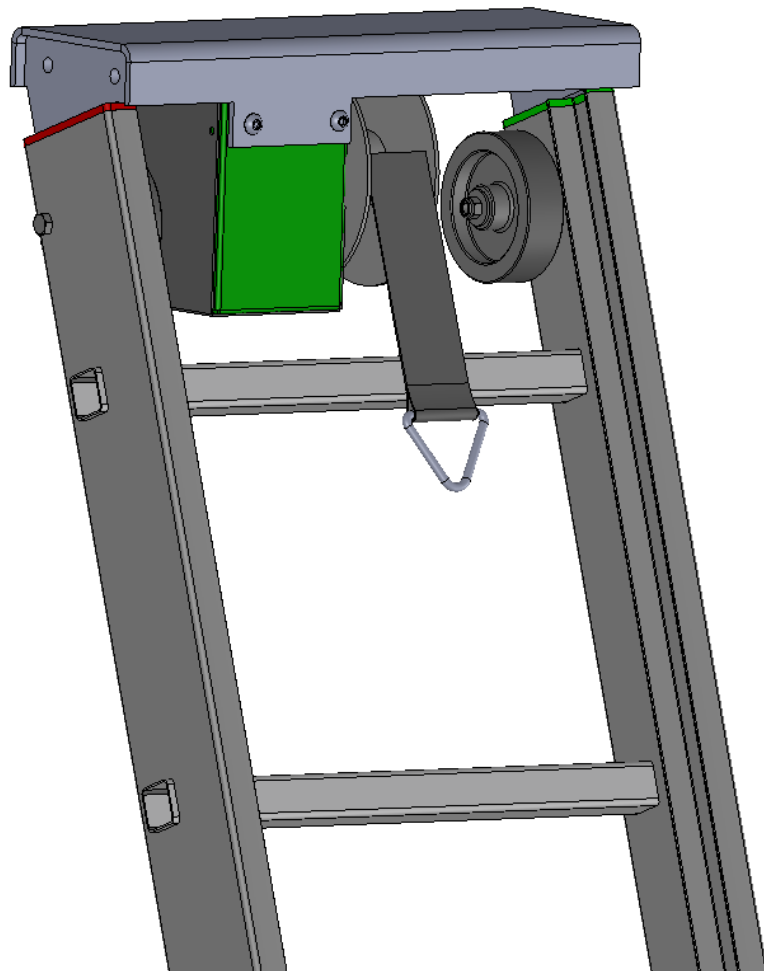
Drawing 7

You build the stack of extensions until that stack is one rung below the fly-section of the ladder



Drawing 8

Now you lower the fly-section of the ladder onto the guidance stack. The guidance for the trolley runs now from bottom of the ladder to the top.



Drawing 9

After you secure the ladder at its fly-section so that it can't slide and/or turn, you place the winch on top



Drawing 10

Finally you place the carrier on the trolley and secure it with its pin



Drawing 11

This is what the ELL looks like now – fully extended in material lift mode

Chapter 4 - Lowering and Lifting with the Drill

The ELL winch is designed to be operated with a **cordless drill**. Operation is straightforward but must always be performed in strict compliance with the instructions and safety rules below.

See drawing 7 for the drill placed on the winch drive.

Unlocking the Auto-Lock

- To engage the winch, gently **push the hex input shaft inwards**.
- This action unlocks the mechanical auto-lock on the winch. Only light pressure is required.

Once unlocked, the lifting and lowering functions can be controlled directly with the drill.

Drill Rotation

- **Clockwise rotation** lowers the lifting belt.
- **Anti-clockwise rotation** raises the lifting belt.

The operator remains in full control of the lifting and lowering process and can position the trolley and load at any desired point along the ELL.

Additional Operating Considerations

1. **Timely Stop to Protect the Torque Limiter**
 - When the trolley reaches the winch plate, the winch's torque limiter engages, producing a distinct rattling sound. This indicates internal friction and wear.
 - To extend the service life of the torque limiter, **always stop lifting before the trolley contacts the winch plate**.
 - Replacement torque limiters are available from De Liffabriek BV, but avoiding unnecessary engagement will minimize wear and reduce cost.
 2. **Use of Drill Clutch for Added Safety**
 - The winch torque limiter is factory set at **125 kg**, preventing the lifting of heavier loads.
 - For lighter loads, it is strongly recommended to use the **clutch function of the drill**.
 - Example: If lifting 50 kg, set the drill clutch so it can just raise 50 kg. In this case, if a hand or foot is accidentally caught, the maximum crushing force is limited to approximately 60 kg rather than the full 125 kg.
 - This provides an **additional safety layer** for personnel.
-

Preparation for Material Hoisting

Before beginning work:

1. Lower the lifting belt using the drill.
2. The ground operator attaches the **hook of the lifting belt** to the trolley.

3. The **carrier** is placed onto the trolley and secured with the **locking pin** - the ELL is now ready to function as a material lift.
-

Rules for Safe Hoisting with the ELL

The following rules must always be observed when using the ELL in lifting mode:

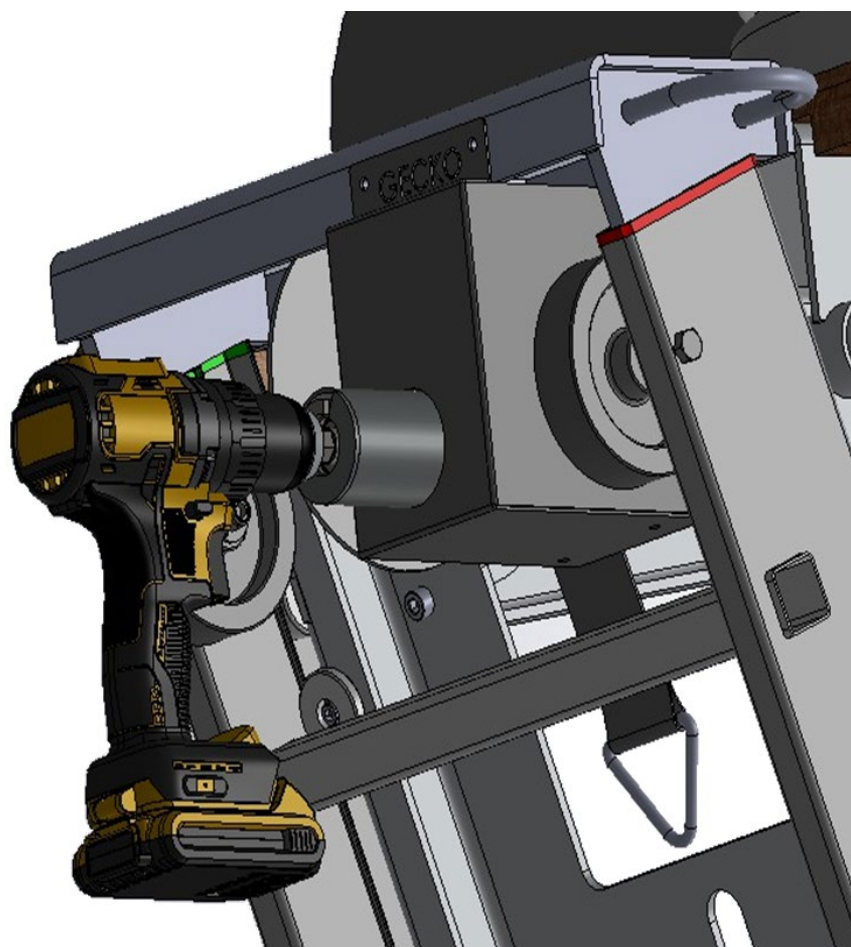
- Confirm that all rules for setting up the rope-operated ladder (as described earlier in this manual) have been followed.
 - Ensure the ELL is properly secured and **cannot turn or slide**.
 - The **maximum permissible load** on the carrier is **125 kg**.
 - All materials placed on the carrier must be **securely fastened** so they cannot fall during lifting or lowering.
 - The lifting path must be **free of obstacles**, both for the trolley and the load itself.
-

Additional Safety Rules

- Maintain a **minimum safety distance of 3 m** from the ELL during lifting and lowering operations.
 - If there are frequent passers-by, the area around the ELL must be **cordoned off**.
 - The winch operator is fully responsible for controlling the lifting and lowering process and must remain **alert to potential hazards** at all times.
 - When working at height, the operator must comply with all **regulations for working at height**, including the use of **appropriate fall protection equipment**.
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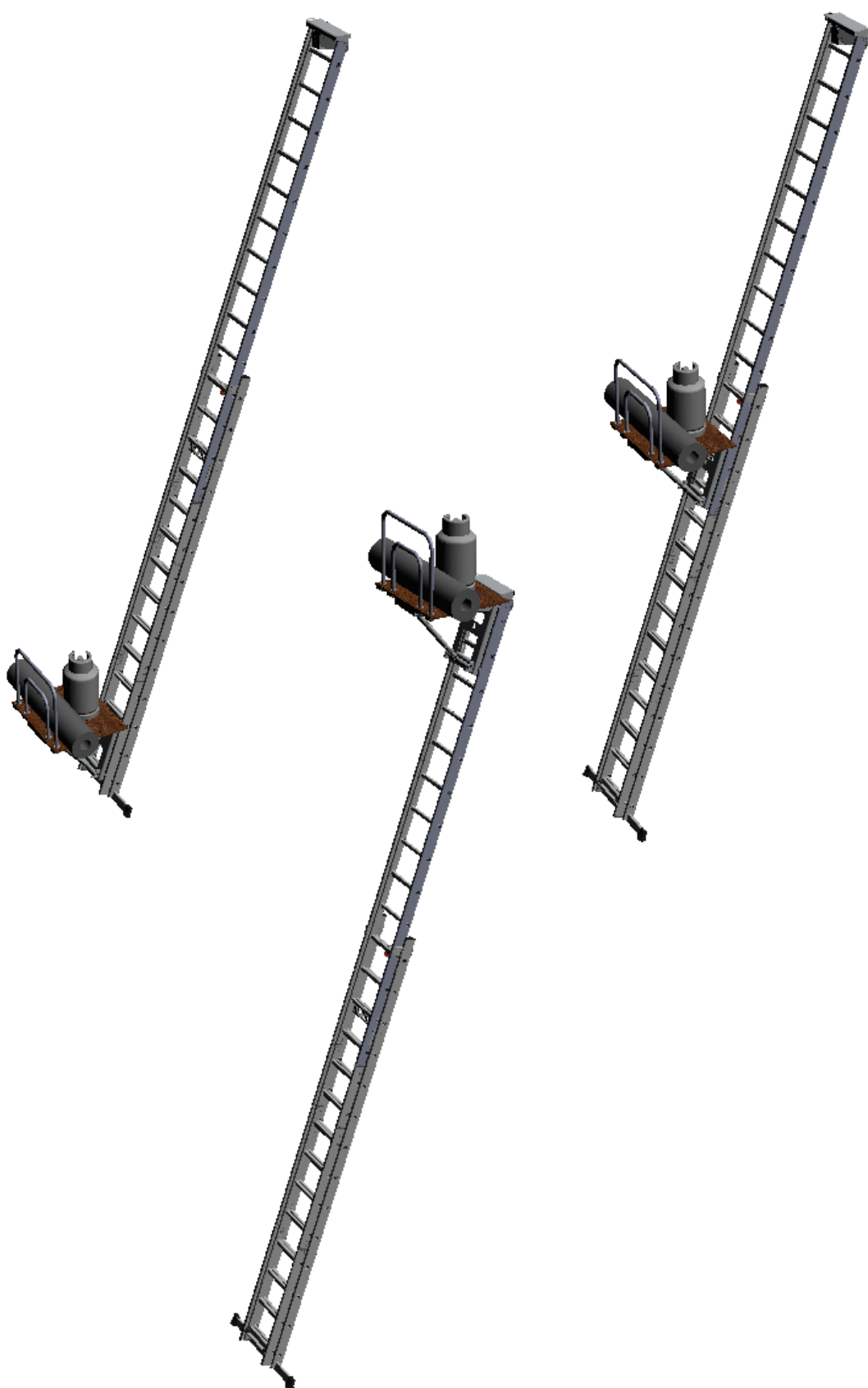
⚠ Critical Safety Reminder

Failure to follow the above rules may result in severe injury or damage. The ELL must only be used in lifting mode by trained personnel who have read and understood this manual.



Drawing 7

You drive the winch with your own cordless drill. For this you need an M8 hexbit to connect to the hexagonal drive shaft of the winch.



Drawing 8
ELL fully set-up and functional

Chapter 5– Dismantling the ELL as a Material Lift

Once the lifting work is completed, the ELL must be dismantled safely and in the correct sequence. Always make sure the ladder is standing firmly on level ground and that no one is positioned under or in front of the ELL during the process.

Follow these steps to dismantle the ELL after use as a material lift:

1. Loosen the lifting belt
Release the hook of the lifting belt from the trolley. Ensure that the belt is not under tension before detaching it.
2. Retract the belt
Wind the lifting belt fully back into the winch. This prevents tangling or damage during storage.
3. Remove the winch
Detach the winch unit from the ELL. Place it on a clean, stable surface to avoid dirt entering the mechanism.
4. Raise the fly-section
Use the rope to carefully lift the fly-section of the ELL by one rung. This creates the clearance needed to remove the extension parts. Keep a steady pull on the rope at all times.
5. Remove extension parts
Take off the extension guidance, the trolley, and the bumper. Store these components together so they remain complete and ready for the next use.
6. Detach the ladder top components
Remove the ladder lock or the top stabilizer, depending on your setup.
7. Lower the fly-section
Using the rope, gently lower the fly-section of the ELL back into position. Do this slowly and in a controlled manner to protect both the ladder and surrounding area.

Safety Notes

- Keep hands clear of moving parts during dismantling.
- Never attempt to remove components while the belt is still under load.
- Always dismantle in the order listed above to prevent instability.
- Store all components in their designated transport case or storage area to avoid loss or damage.

Chapter 6 – Repair, Maintenance and Storage

Repairs and maintenance shall be carried out **periodically** by a competent person and always in accordance with the instructions of De Liftfabriek.

NOTE: A *competent person* is someone who possesses the skills and knowledge to perform repair or maintenance tasks safely and correctly, for example through training provided by De Liftfabriek.

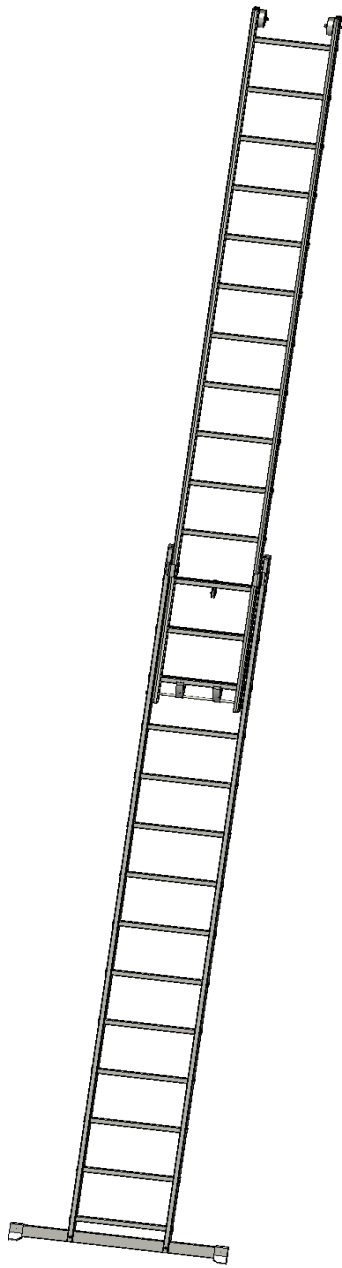
- For repair and replacement of parts (e.g., ladder feet), contact De Liftfabriek or an authorized distributor if necessary.
 - Only replacement parts supplied by De Liftfabriek may be used. These must be assembled on the ELL in exactly the same way as the part they replace.
 - Assembly (attachment) and/or repair is carried out at the **client's own risk and expense**. De Liftfabriek cannot be held liable for any damage caused by incorrect assembly and/or repair.
 - Upon request and against payment, De Liftfabriek can perform the repair or assemble replacement parts for you.
-

Storage

When the ELL is not in use, proper storage is essential to maintain its condition and safety. Consider the following:

- Is the ELL stored **away from areas** where its condition could deteriorate rapidly (e.g., damp environments, excessive heat, or prolonged exposure to weather)?
- Is the ELL stored in a **position that helps it remain straight** (e.g., hung by the stiles on suitable ELL brackets, or laid flat on a clutter-free, even surface)?
- Is the ELL stored in a place where it **cannot be damaged** by vehicles, falling objects, or contaminants?
- Is the ELL stored where it does not **cause a trip hazard or obstruction**?
- Is the ELL stored **securely**, so it cannot be easily misused for unauthorized or criminal purposes?
- If the ELL is **permanently positioned** (e.g., on scaffolding), is it secured against unauthorized climbing (e.g., by children)?

Appendix 1 ELL Components



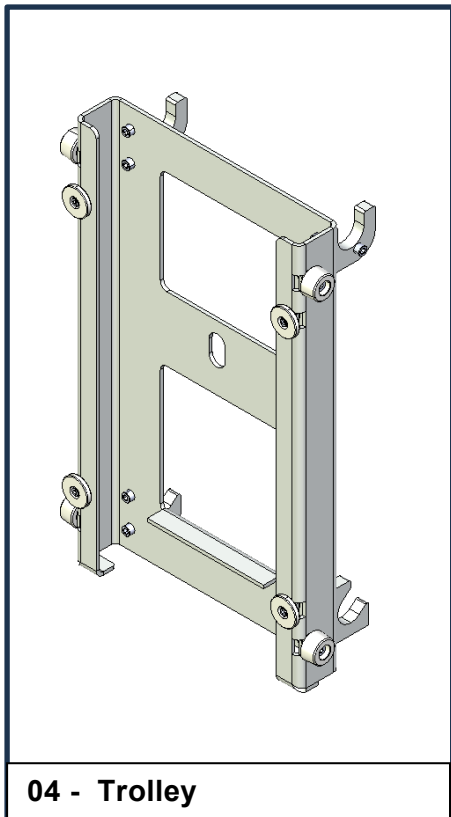
01 - Rope-operated extending ladder with 2x14 rungs



02 - Guidance extensions – two types: 2-rungs and 4-rungs



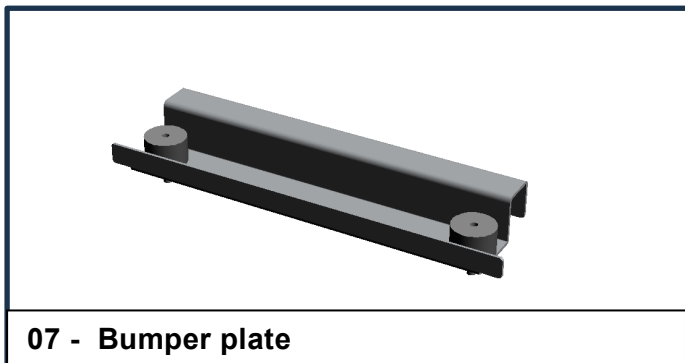
03 - Winch with auto lock and torque limiter



04 - Trolley



05 - Carrier



07 - Bumper plate

For driving the winch a standard M8 hex-bit is needed. One such bit comes with the winch.



M8 hex-bit to drive winch

Appendix 2 – Maintenance Log and Periodic Test

To ensure safe and reliable operation, the ELL must undergo regular checks and periodic tests. These inspections help prevent accidents, extend the service life of the equipment, and maintain compliance with safety standards.

Daily Checks

- Winch belt inspection: Before each use, carefully check the winch belt for fraying, tears, or other damage. **If such damage is found, the winch must not be used.** The winch belt must be replaced immediately.
- General cleanliness: Daily maintenance focuses on keeping all parts of the ELL clean.
- Moving parts: The wheels of the trolley and the winch are the only moving parts. Keeping the trolley wheels clean in particular ensures a long service life.

Periodic Winch Inspection


Even when the belt is in good condition, the winch itself must be tested at regular intervals. This inspection consists of three aspects:

1. Dynamic test – verifying smooth lifting and lowering under load.
2. Static test – verifying load-holding capacity without movement.
3. Self-braking test – verifying automatic stop function when the drive is disengaged.

Test Procedure

The following tests must be performed with appropriate test weights and equipment:

1. Dynamic Test
 - Use a crate loaded with 137.5 kg.
 - The load must be raised and lowered smoothly, without slipping or jamming.
 - If this is not possible, the slip clutch and/or worm gear transmission must be replaced.
2. Static Test
 - Use a crate loaded with 187.5 kg.
 - The load must remain completely stationary when held.
 - If movement occurs, the worm gear transmission must be replaced.
3. Self-Braking Test
 - Use a crate loaded with 100 kg.
 - Begin lowering the load, then remove the drill from the winch during movement.
 - The trolley must stop immediately.
 - If not, the spring under the slip clutch must be replaced.
4. Lifting Strap Check
 - Inspect the lifting strap for fraying, tears, or other damage.
 - If damaged, the strap must be replaced immediately.
5. General ELL Check
 - Inspect all other ELL components for cracks, deformation, or other damage.
 - Cosmetic wear (e.g., scratches, dents) may not affect performance.
 - However, if the effectiveness or safety of the ELL is compromised, the damaged part must be replaced.

 Important: All inspections and tests must be carried out by a competent person. If in doubt, contact De Lijftfabriek or an authorized distributor for support.

Appendix 3 – Factory Test and Release Procedure

Prior to release, every ELL is individually tested by De Lijftfabriek. These tests ensure that the product complies with all safety and performance requirements.

Tests Performed

| Test Item | Specification | Date | Inspector | Passed / Rejected) | Remarks |
|----------------------|------------------------------|------|-----------|--------------------|---------|
| Dynamic Test | 137.5 kg (safety factor 1.1) | | | | |
| Static Test | 187.5 kg (safety factor 1.5) | | | | |
| Auto-lock Test | 125 kg (maximum load) | | | | |
| Torque Limiter Test | 12–13 Nm | | | | |
| Winch Belt Condition | Visual check | | | | |

Documentation

- Upon delivery to the end-user, the ELL must carry a seal of approval.
- A completed test report accompanies each unit, recording the results of the above inspections.
- The seal and report together confirm that the ELL has passed factory testing and is safe for use.

| |
|---|
|  DE LIJFTFABRIEK ERGONOMIC LIFTING SOLUTIONS |
| All tests passed |
| Tests operator name and signature |

Upon approval, the ELL receives a machinery plate as required by the Machine Directive with the date, series and product number

| | | |
|------------------|---|---|
| PRODUCER: | DE LIJFTFABRIEK B.V. ZANDVEN 4 5508RN VELDHoven |  |
| PRODUCT: | ELL ELL VERSION 1 | |
| PROD. YEAR: | 2025 | MACHINERY DIRECTIVE 2006/42/EG |
| MAX LOAD: | 125 KG | |
| MAX INPUT TORQUE | 12-13Nm | |
| SERIES: | 202X-XX Product number XXX | |
| WEB: | WWW.DELIJFTFABRIEK.COM | |


This machinery plate is placed on the winch of the ELL.

Appendix 4 – Residual Risks

Even when the ELL is used correctly and all safety instructions are followed, certain residual risks remain. These risks cannot be fully eliminated by design and must be managed by the operator through safe working practices.

The following points must always be observed:

1. Risk of falling
 - The use of a certified fall arrest harness with fall protection is required when working at height with the ELL.
2. Risk of tipping or slipping
 - Always ensure that the ELL is securely fastened at the top to prevent turning or slipping.
3. Risk of instability
 - The stabilizer must always be used. The ELL must never be operated without its stabilizer attached.
4. Risk of collision
 - Ensure that the trolley's path is clear of any obstacles that it could collide with, both during lifting and lowering of loads.
5. Risk of slack in lifting strap
 - The operator must continuously and closely monitor the trolley while lifting or lowering.
 - Avoid slack in the lifting strap, particularly when lowering the load. If the trolley is prevented from moving downwards (e.g. by an obstacle), slack can cause the trolley to jam or malfunction.
6. Risk of entrapment
 - Keep a safe distance from the ELL whenever the trolley is moving.
 - Entrapment hazards are marked with warning stickers on the stiles of the ELL and the extension guides.

 Important: Residual risks are the responsibility of the operator. Safe use of the ELL requires continuous attention, proper training, and strict adherence to all operating instructions.

Appendix 5 - Markings

Marking for risk of entrapment / crushing
Placed on trolley and on ladder stiles



Warning for risk of falling object
Place on trolley on carrier and on ladder stiles



Warning for load not to exceed 125kg



Caution for damage



⚠ If these markings are no longer present, they must be requested from **De Liftfabriek B.V.** and reapplied in the exact same locations as the original markings.

Appendix 6 - Warranty provisions

This product of the De Liftfabriek has been designed, manufactured and tested with the utmost care. If this product is used in accordance with the instructions and for its intended purpose, it is covered by a warranty under the following conditions:

1. De Liftfabriek guarantees the soundness of the product and the quality of the materials used.

- For the aluminum parts the period of guarantee is 5 years
- For the plastic parts the period of guarantee is 2 years
- For the winch the period of guarantee is 2 years

2. Defects covered by the warranty will be resolved by us by replacing the defective part, the product or by sending a replacement part.

3. The warranty does not cover defects that occur as a result of:

- a) Use of the product contrary to its intended purpose or contrary to the instructions for use.
- b) Normal wear and tear.
- c) Assembly or repair by the customer or third parties (with the exception of the installation of parts sent as referred to in 2).
- d) Changes in government regulations regarding the nature or quality of materials used.
- e) Defects resulting from overdue maintenance or incorrect storage.

4. Defects discovered upon delivery must be reported to De Liftfabriek immediately.

Failure to do so will void the warranty. In order to invoke the warranty, the proof of purchase must be provided to De Liftfabriek or your De Liftfabriek dealer.

5. Defects in the product must be reported to De Liftfabriek or your De Liftfabriek dealer as soon as possible, but in any case within 14 days of their discovery.






6. a) When a claim is made under the warranty provisions, De Liftfabriek must be able to examine the product in its quality centre. The customer must make the product available for this purpose. If the examination establishes that the product has been used incorrectly, examination costs will be charged.

b) If the customer wishes to have the product examined by an independent institute, the costs of this examination shall be borne by the customer if the examination establishes that the product has been used incorrectly. The costs of the examination shall also be borne by the customer if De Liftfabriek has offered to repair or replace the product at its own expense prior to such an examination.

Appendix 7 – ELL Models

The ELL features a robust, extra-wide 2-section extending ladder for maximum stability and safety. Setup is quick and effortless, thanks to the front-facing rope-operated extension system.

Choose from these standard ELL models — built to suit your professional needs:

|  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|
| 5604620400100 | 2x10 | 2,88m | 4,84m | 4,68m | 5,87m | 0,41m | 0,13m | 14,87kg |
| 5604620400124 | 2x12 | 3,44m | 5,96m | 5,76m | 6,85m | 0,41m | 0,13m | 17,41kg |
| 5604620400148 | 2x14 | 4,00m | 6,80m | 6,57m | 7,76m | 0,41m | 0,13m | 20,54kg |
| 5604620400162 | 2x16 | 4,56m | 7,64m | 7,38m | 8,57m | 0,41m | 0,14m | 23,97kg |
| 5604620400186 | 2x18 | 5,12m | 8,76m | 8,46m | 9,65m | 0,41m | 0,16m | 28,10kg |
| 5604620400209 | 2x20 | 5,68m | 9,60m | 9,28m | 10,47m | 0,41m | 0,16m | 30,86kg |

- Extra-wide, 2-section extending ladder for maximum stability
- Front rope-operated extension for quick, easy setup

The ELL – A Ladder. A Lift. One Tool.

- ***Switch from pro-grade ladder to pro-grade material lift in under 2 minutes.***
- ***A cordless-drill-powered winch let you lift up to 125 kg safely and easily.***
- ***Strong, simple, and built for the job site***

The ELL - because climbing with a load is history.



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The Netherlands



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Machinery Directive
2006/42/EG