ELEVATORS & SERVICE LIFTS

FREIGHT HOIST MAST LIFTS

FREIGHT HOIST SCISSOR LIFTS

ELEVATING DOCK SCISSOR LIFTS

DOCK LEVELLERS
McGrath Industries has been supplying and maintaining commercial Elevators and Service Lifts in the New Zealand market for well over 35 years. We specialise in the supply of passenger elevators and goods lifts for low to medium rise developments.

The hoist propulsion mechanism can be either direct acting hydraulic or hydro-traction. Our direct acting hydraulic elevators are suitable for buildings up to 3 levels high, and do not require a caisson below ground level to accommodate the vertical ram. Hydro-traction lifts are suitable for installations up to 35 metres high, around 11 levels. All elevators are designed, built and installed compliant with New Zealand regulations.

Automatic doors and digital control systems are standard. Optional enhancements include a range of display units and button panels plus synthesized voice announcements.

There are many standard lift car finishes available to compliment your building's interior design. Wall panels can include any combination of woodgrain, colour laminates, mirrors and stainless steel. Glass car walls can be provided for glass enclosed lift shafts. There is a range of light fittings and ceiling panels too. Or the car interior can be left unfinished for others to complete.

McGrath Industries Limited
ABN 47 109 719 310

Auckland
5 - 9 Cartwright Road, Glen Eden, Auckland, New Zealand
Phone: +64 (0)9 818-6036 Fax: +64 (0)9 818 - 3965
Visit us at: mcgrath-industries.com

Sydney
PO Box 578, Mascot, NSW 2020, Australia
Phone: +61 (0)2 8339-0123 Fax: +61 (0)2 8339 - 0124
Email: enquiries@mcgrath-industries.com
McGrath Industries’ Freight Hoist Mast Hoists are a lift mechanism that can be applied in both low rise and multi-level (between floor) cargo transfer applications. It is ideal for moving freight between levels in any type of facility including warehouses, factories, retail complexes and restaurants.

Compared to a passenger-goods elevator a freight only Mast Hoist is a very economical alternative. The mast is a self supporting structure that carries all load directly back to the floor. For the cargo deck to be level with the floor when fully lowered, the base of the mast is mounted in a swallow pit. However, in many installations a pit is unnecessary. If the Mast Hoist sits directly on the floor slab the lowered deck is nominally only 150mm high. Fork-lifts can place pallets directly on the deck or a low incline ramp can be installed for access using hand devices like pallet trolleys.

In low rise installations handrails, gates, interlocked controls, foot shear safety bar and roller blinds are included as applicable to support a safe working environment.

In multi-level (between floor) installations, a lift shaft enclosure is required. The shaft can be constructed separately and integral with the building if appropriate to the site. Alternatively, in many simple installations such as ground floor to mezzanine, the lift shaft can be provided as a fence enclosure attached to the mast structure, forming a complete unit that requires no site work preparation.

Lift shaft doors may be manual or power operated and are interlocked with the controls. Controls on each landing can include Call and Send buttons plus level indicators. The hydraulic power plant is usually located adjacent to the lift shaft and may be enclosed in it’s own ventilated machine room to minimise noise during operation if appropriate to the building environment.
GENERAL SPECIFICATION

Maximum Range of Travel:
Up to 11 metres overall.

Lifting Speed Range:
2.0 - 6.0 metres per minute to suit travel distance.

Lowering Speed:
Generally matched to Lifting Speed. Adjustable.

Standard Cargo Deck Size and Type:
1.2m square. Smooth reinforced flat steel surface with anti skid grit finish.

Standard Features:
• Maintenance Props are fitted to allow service staff to work safely under the raised hoist.

Optional Features:
• Guard Walls attached to non-interfacing edges of the Cargo Deck help contain the freight within the deck area and protect lift shaft walls from impact damage.
• Access Ramp at ground level for floor mounted installations, 150mm high.
• Lift Shaft Enclosure for multi-level (between floor) installations. Modular fence enclosure with separate door frames and vertical opening roller doors.
• Ride-on Capability allows a trained operator to ride on the platform with the load between floors. Includes onboard controls plus additional safety features.

Standard Electrical Supply:
3 phase + Earth 50 Hz. Electrical supply should be to a point adjacent to the hoist hydraulic power plant position, (by others). Supply cable to be unterminated.

Standard Paint Finish:
Industrial Grey with Safety Yellow Load Flips if included.
FREIGHT HOIST
SCISSOR LIFTS
McGrath Industries’ multistage scissor lifts are ideal for transferring freight between floors in low rise two or three level buildings such as warehouses, retail complexes and factories. Compared to a goods-passenger elevator, a “freight only” multistage scissor lift is a very economical alternative. And cost savings extend into the building construction itself. As a multistage scissor lift is a self supporting structure, its carries all the load directly back to the ground. There is no need to design and construct the building to support the hoist and payload.

A Freight Hoist Scissor Lift is enclosed within a hoist shaft similar to an elevator. In some Ground Level to Mezzanine installations and loading dock applications, the hoist shaft maybe a simple fenced enclosure.

Doors may be manually or power operated and can be located on any side of the hoist shaft at each level. Electrically activated door interlocks will only allow access into the hoist shaft when the scissor lift’s Cargo Deck is at that level.

Controls on each landing typically include Call and Send buttons and level indicators. An intercom can be added to assist staff at each level coordinate their activities.
A Freight Hoist Scissor Lift installation can also be dual purpose, acting as an Elevating Dock for delivery truck loading operations. The hoist may operate between Ground Level, truck deck height and the First or Second Level of the building. This allows freight to be transferred directly between a delivery vehicle and any level of the building using a single hoist movement that occupies minimal building area.

Freight Hoist Scissor Lifts can be configured with up to four scissor leg sets stacked vertically. The legs sets open and close simultaneously to move the freight smoothly between levels. The hoist mechanism is powered by electro-hydraulic action. The hydraulic power plant is usually located adjacent to the lift shaft and may be enclosed in its own ventilated machine room to minimise noise during operation.

Popular models are listed on the table below. McGrath Industries can also design and manufacture a Freight Hoist Scissor Lift to meet your specific load capacity, deck size and travel distance requirements.
## POPULAR MODELS

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Maximum Load Capacity</th>
<th>Deck Area Length x Width</th>
<th>Maximum Range of Travel</th>
<th>Minimum Pit Depth</th>
<th>Height Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5-1.1/0.7-1.3</td>
<td>500kg</td>
<td>1.1m x 0.7m</td>
<td>1.3m</td>
<td>550mm</td>
<td>1850mm</td>
</tr>
<tr>
<td>0.5-1.6/1.6-3.0</td>
<td>500kg</td>
<td>1.6m x 1.6m</td>
<td>3.0m</td>
<td>750mm</td>
<td>3750mm</td>
</tr>
<tr>
<td>1.0-2.0/1.6-2.5</td>
<td>1.0 tonne</td>
<td>2.0m x 1.6m</td>
<td>2.5m</td>
<td>620mm</td>
<td>3120mm</td>
</tr>
<tr>
<td>1.5-2.3/1.4-2.6</td>
<td>1.5 tonnes</td>
<td>2.3m x 1.4m</td>
<td>2.6m</td>
<td>600mm</td>
<td>3200mm</td>
</tr>
<tr>
<td>1.5-2.2/1.5-3.0</td>
<td>1.5 tonnes</td>
<td>2.2m x 1.5m</td>
<td>3.0m</td>
<td>1050mm</td>
<td>4050mm</td>
</tr>
<tr>
<td>1.5-3.3/1.6-4.0</td>
<td>1.5 tonnes</td>
<td>3.3m x 1.6m</td>
<td>4.0m</td>
<td>1000mm</td>
<td>5000mm</td>
</tr>
<tr>
<td>1.5-2.0/1.5-5.5</td>
<td>1.5 tonnes</td>
<td>2.0m x 1.5m</td>
<td>5.5m</td>
<td>1250mm</td>
<td>6750mm</td>
</tr>
</tbody>
</table>

## GENERAL SPECIFICATION

**Lifting Speed Range:**
2.0 - 6.0 metres per minute to suit travel distance.

**Lowering Speed:**
Generally matched to Lifting Speed. Adjustable.

**Cargo Deck Type:**
Smooth reinforced flat steel surface with anti skid grit finish.

**Standard Features:**
- *Maintenance Props* are fitted to allow service staff to work safely under the raised hoist.
- *Inspection Hatch* provides service staff access through the Cargo Deck.

**Optional Features:**
- *Guard Walls* attached to non-interfacing edges of the Cargo Deck help protect the walls of the hoist shaft enclosure from impact damage, while containing the freight within the Cargo Deck area.
- *Load Lips* can be added to the interfacing edges of the Cargo Deck for truck loading operations or where the gap at the door sill varies due to lift shaft discrepancies. Load Lips may be manually operated or powered.
- *Ride-on Capability* allows a trained operator to ride on the platform with the load between floors. Includes onboard controls plus additional safety features such as light certs.

**Standard Electrical Supply:**
3 phase + Earth 50 Hz. Electrical supply should be to a point adjacent to the hoist hydraulic power plant position, (by others). Supply cable to be unterminated.

**Standard Paint Finish:**
Industrial Grey with Safety Yellow Load Flips if included.

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ELEVATING DOCK
SCISSOR LIFTS

McGrath Industries’ Elevating Docks are hydraulically actuated scissor lift mechanisms that facilitate the efficient passage of freight between warehouse floor level and truck deck. Elevating Docks can operate over a very large height range compared to dock bank mounted Dock Levellers. And because the deck remains level, they are well suited to manual pallet trolley operations where negotiating an incline could be difficult. A level deck is also beneficial if accessing enclosed trucks with low overhead clearance and if the freight is typically delicate or should be kept level.

Elevating Docks can provide a truck interface where a building has no dock bank at all. The scissor lift may be mounted into a recessed pit in the floor slab or dock bank. When parked, the scissor lift’s deck sits flat, flush with the floor, allowing for unobstructed cross traffic.

The Elevating Dock is raised and lowered by electro-hydraulic action. A standard feature is the “Load Lip” attached to the front of the hoist that bridges the gap to the truck deck. The lip may be manual engaged or power operated. Other optional accessories include truck buffers, handrails, gates and control features.
### POPULAR MODELS

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Maximum Load Capacity</th>
<th>Deck Area Length x Width</th>
<th>Maximum Range of Travel</th>
<th>Minimum Pit Depth</th>
<th>Height Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0-2.0/0.9-1.1</td>
<td>1.0 tonne</td>
<td>2.0m x 0.9m</td>
<td>1.1m</td>
<td>400mm</td>
<td>1500mm</td>
</tr>
<tr>
<td>1.0-3.0/2.2-1.5</td>
<td>1.0 tonnes</td>
<td>2.3m x 0.9m</td>
<td>1.5m</td>
<td>500mm</td>
<td>1500mm</td>
</tr>
<tr>
<td>1.5-2.0/1.5-1.0</td>
<td>1.5 tonnes</td>
<td>2.0m x 1.5m</td>
<td>1.0m</td>
<td>350mm</td>
<td>1350mm</td>
</tr>
<tr>
<td>1.5-2.4/2.0-1.5</td>
<td>1.5 tonnes</td>
<td>2.4m x 2.0m</td>
<td>1.5m</td>
<td>350mm</td>
<td>1850mm</td>
</tr>
<tr>
<td>2.0-1.6/1.2-1.0</td>
<td>2.0 tonnes</td>
<td>1.6m x 1.2m</td>
<td>1.0m</td>
<td>350mm</td>
<td>1350mm</td>
</tr>
<tr>
<td>2.0-2.2/1.2-1.2</td>
<td>2.0 tonnes</td>
<td>2.2m x 1.2m</td>
<td>1.2m</td>
<td>350mm</td>
<td>1550mm</td>
</tr>
<tr>
<td>2.0-2.4/1.8-1.5</td>
<td>2.0 tonnes</td>
<td>2.4m x 1.8m</td>
<td>1.5m</td>
<td>350mm</td>
<td>1850mm</td>
</tr>
<tr>
<td>2.0-2.5/2.1-1.5</td>
<td>2.0 tonnes</td>
<td>2.5m x 2.1m</td>
<td>1.5m</td>
<td>400mm</td>
<td>1900mm</td>
</tr>
<tr>
<td>2.0-2.6/2.1-1.5</td>
<td>2.0 tonnes</td>
<td>2.6m x 2.1m</td>
<td>1.5m</td>
<td>400mm</td>
<td>1900mm</td>
</tr>
<tr>
<td>2.0-3.0/2.1-1.7</td>
<td>2.0 tonnes</td>
<td>3.0m x 2.1m</td>
<td>1.7m</td>
<td>350mm</td>
<td>2250mm</td>
</tr>
<tr>
<td>2.5-2.4/2.4-1.5</td>
<td>2.5 tonnes</td>
<td>2.4m x 2.4m</td>
<td>1.5m</td>
<td>350mm</td>
<td>1850mm</td>
</tr>
<tr>
<td>2.5-2.5/2.5-1.2</td>
<td>2.5 tonnes</td>
<td>2.5m x 2.5m</td>
<td>1.2m</td>
<td>350mm</td>
<td>1550mm</td>
</tr>
<tr>
<td>3.0-2.5/2.5-1.5</td>
<td>3.0 tonnes</td>
<td>2.5m x 2.5m</td>
<td>1.5m</td>
<td>400mm</td>
<td>1900mm</td>
</tr>
<tr>
<td>4.0-3.5/1.5-1.8</td>
<td>4.0 tonnes</td>
<td>3.0m x 2.4m</td>
<td>1.8m</td>
<td>530mm</td>
<td>2330mm</td>
</tr>
<tr>
<td>5.0-3.0/2.4-1.5</td>
<td>5.0 tonnes</td>
<td>3.0m x 2.4m</td>
<td>1.5m</td>
<td>520mm</td>
<td>2020mm</td>
</tr>
<tr>
<td>7.0-3.9/3.0-1.5</td>
<td>7.0 tonnes</td>
<td>3.9m x 3.0m</td>
<td>1.5m</td>
<td>520mm</td>
<td>2020mm</td>
</tr>
<tr>
<td>7.0-4.2/3.0-1.5</td>
<td>7.0 tonnes</td>
<td>4.2m x 3.0m</td>
<td>1.5m</td>
<td>575mm</td>
<td>2075mm</td>
</tr>
</tbody>
</table>

In addition to the models above, McGrath Industries can design and manufacture an Elevating Dock Scissor Lift to meet your specific load capacity, deck size and travel distance requirements. Pit specification drawings are available on request. The drawings include site electrical requirements. When requesting a pit drawing, please advise:

- The Product Code above or the required capacity, deck dimensions and range of travel.
- How the scissor lift will be mounted:
  - Will it be installed into the floor slab? Include:
    - The truck position relative to the deck.
    - The sides at floor level the deck is accessible from for freight transfer
  - Or will it be installed into a raised dock bank above road level? Include:
    - The height of the internal floor above road level.
- The required Optional Features from the list below.
GENERAL SPECIFICATION

Lifting Speed:
2.4 metres per minute or as specified.

Lowering Speed:
Generally 2.4 metres per minute. Adjustable.

Cargo Deck Type:
Smooth reinforced flat steel surface with anti skid grit finish.

Standard Features:
• Manually operated Load Lip is attached to the front edge of the Elevating Dock, and is folded down to engage on the truck deck. Facilitates stable passage of freight handling equipment across the gap.
• Integral Hydraulic Power Plant and Console, typically mounted adjacent to the scissor lift on the facility floor or dock bank. (See optional control positions below).
• Maintenance Props are fitted to allow service staff to work safely under the raised hoist.

Optional Features:
• Powered Load Lip, hydraulically actuated by pushbutton control. Recommended for busy operations or larger capacity hoists that have a wide heavy lip.
• Roller Blinds for floor installations help prevent ingress and rubbish accumulation under the hoist.
• Rigid Side Panels for dock bank installations prevent foot ingress shear hazard.
• Additional Load Lips can be added to the non-truck interface edges to allow smooth cargo movement across the pit edges at floor level. May be applicable if utilising handling devices with small wheels, such as pallet trolleys.
• Handrails can be provided on non-interface edges of the Cargo Deck.
• Boom, Swing or Chain Gates can be included on the operational deck edges that interface with the truck and warehouse floor. Gates are usually interlocked with the controls to ensure they are closed before the hoist is raised or lowered.
• Access Ladder, mounted independently on the floor, allows staff to safely climb up or down from the raised platform.
• Handrail mounted Controls allows staff to ride on the hoist for added convenience, if practical.
• Wall mounted controls allow the controls to be located in a more convenient position separate to the hydraulic power plant, if required.
• Chequer Plate surface on the Cargo Deck is preferred for some commercial or industrial environments.
• Safety Bar provides protection against foot shear trap under the lowering deck edge. The hoist automatically rises if an obstruction is encountered at the pit edge.
• Raised Side Guides on the Cargo Deck provide a tyre bump bar to help prevent fork-lifts from accidentally driving over the side of the hoist if the fork-lift is misaligned when reversing out of the truck.
• Integral Cargo Weighing allows the Elevating Dock to serve a dual purpose as a Weigh Bridge when parked at floor level.

Standard Electrical Supply:
3 phase + Earth 50 Hz. Electrical supply should be to a point adjacent to the hoist hydraulic power plant position, (by others). Supply cable to be unterminated.

Standard Paint Finish:
Industrial Grey with Safety Yellow Load Flips, Roller Blinds, Side Panels, Handrails and Gates if included.

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McGrath Industries' Dock Levellers are hydraulically activated ramp mechanisms which allow efficient passage of general freight handling equipment, such as fork-lifts or pallet trolleys, between warehouse loading dock and truck deck.

Our dock levellers utilise proven technology. Their robust design and reliability is second to none. Built to the highest standards, our hydraulically powered dock levellers have superior structural integrity, ensuring long service life even in the most demanding conditions.

Generally a dock leveller is mounted in a recessed pit in the dock bank. When parked, the dock leveller's platform sits flat, flush with the floor surface, allowing for unobstructed cross traffic. Alternatively the dock leveller can be mounted in front of the dock bank on its own self supporting frame anchored directly to footings at road level.

The dock leveller ramp is raised and lowered by electro-hydraulic action. A "Load Lip" on the front of the ramp extends out to engage on the truck deck ensuring stable smooth passage of freight handling equipment.
STANDARD FEATURES

- Rugged remote control station with shielded pushbuttons.
- Hydraulically actuated lip easily docks onto truck decks, increasing operating speed and efficiency.
- Built-in mechanical stops and night locks ensure safety for the operator and the loading dock.
- Built-in hydraulic velocity fuse prevents sudden deck decent, ensuring fail-safe operation.
- Fully enclosed hydraulic power pack. Overload protection ensures trouble free operation and long service life.

1 Toe guards - full range telescopic guards, made of heavy gauge steel plate, complies with ANSI standards. Finished in safety yellow.
2 Main deck cylinder - incorporates a special velocity fuse which prevents free fall.
3 Lip Hinge - Full width piano hinge provides maximum strength to withstand dynamic loads.
4 Deck support - up to eight Universal Beams welded at dynamic impact joints ensure structural integrity.
5 Tilt Pockets - two rear corner tilt pockets compensate for canted truck deck by allowing the dock leveller to twist to keep the lip flat on tilted trucks.
6 6’ – 7’ deck plates - wide deck plates allow quick smooth fork-lift and pallet truck movement.
7 Safety Prop - facilitates safe maintenance by locking the raised deck, preventing it from collapsing.

McGrath Industries Limited
ABN 47 109 719 310
Auckland
5 – 9 Cartwright Road, Glen Eden, Auckland, New Zealand
Phone: +64 (0)9 818-6036  Fax: +64 (0)9 818-3965
Visit us at: mcgrath-industries.com

Sydney
PO Box 578, Mascot, NSW 2020, Australia
Phone: +61 (0)2 8339-0123  Fax: +61 (0)2 8339-0124
Email: enquiries@mcgrath-industries.com