



london underground reel

installation & operating
instructions



Forward

Congratulations on buying a Leisuretime London Underground Reel – the clever pool cover reel solution.

Our underground reel system gives you a hidden, easy to use and very reliable pool cover reel solution. You will be the envy of your neighbours.

Leisuretime Spa & Pool Covers has been manufacturing pool covers and reels in New Zealand for over 30 years. We have utilised this depth of local experience to design and manufacture an underground reel well suited to local requirements. The result is a high quality, functional and durable reel solution.

Chris Graham - Owner

Enjoy.

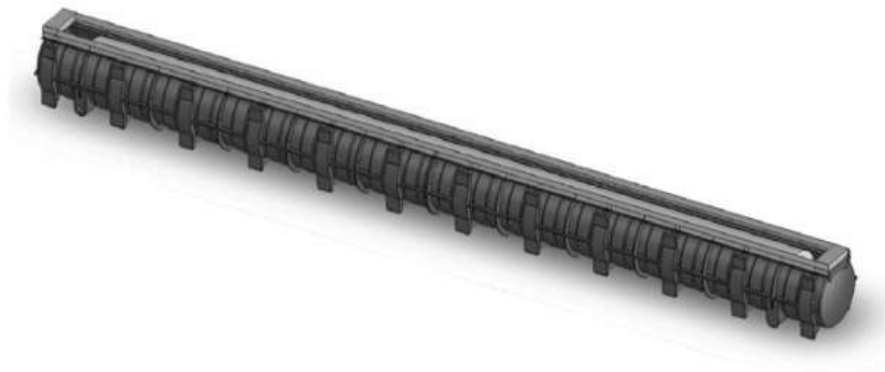
Application



London Underground Reel is for use where the reel needs to be hidden underground at the end of the pool.

Specifications:

Reel Gearbox Reduction Ratio	2 : 1
Reel Models	3.1 / 3.6 / 4.1 / 4.6 / 5.1
Lid	Extruded Aluminium / Anodised
Operation	Manual
Cover Lengths	Suitable for covers up to 12.0m
Cover Types	Suitable for Solar and Thermal Blankets
Enclosure	Rotationally moulded polyethylene
Manufacturing location	New Zealand



Description

London Underground Reel is a drop in enclosure with an integrated trap door style lid and below ground reel mechanism

Installation



1 - Reel Location / Orientation

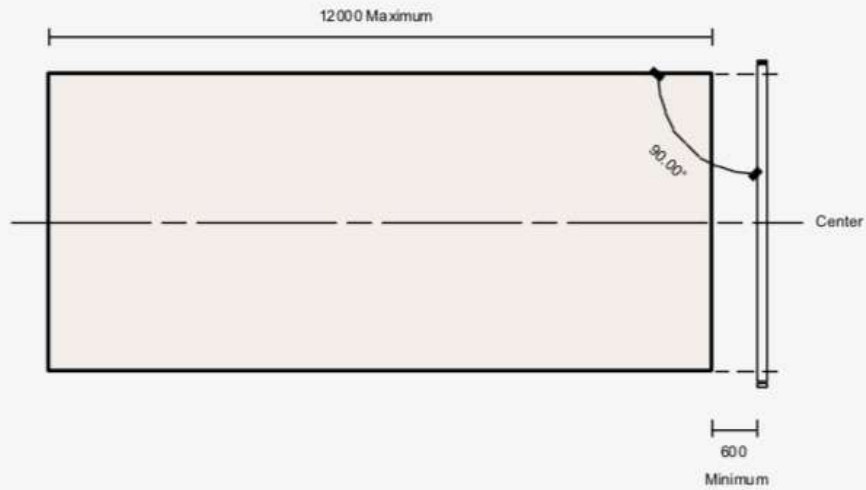


Diagram A

2 - Bond Beam

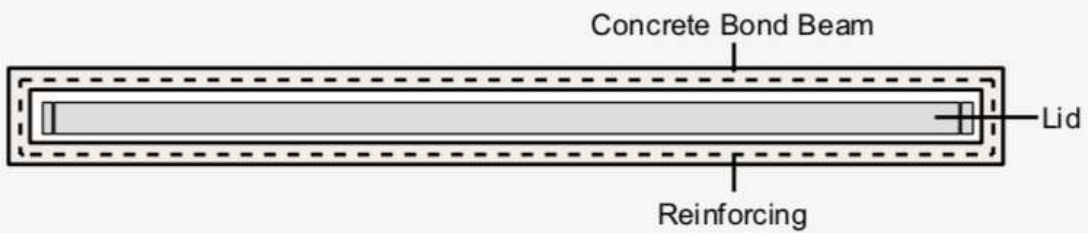
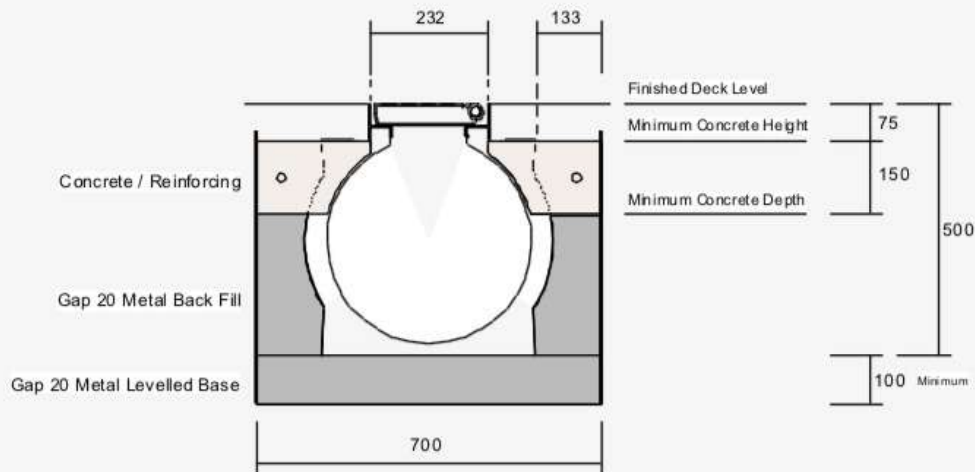


Diagram B

3 – Deck Cross Section

Model	Max Cover Width	Trench Width	Trench Length	Trench Depth (Minimum)
LUG 3.1	3100 mm	700 mm	4000 mm	600 mm
LUG 3.6	3600 mm	700 mm	4500 mm	600 mm
LUG 4.1	4100 mm	700 mm	5000 mm	600 mm
LUG 4.6	4600 mm	700 mm	5500 mm	600 mm
LUG 5.1	5100 mm	700 mm	6000 mm	600 mm



4 – Pit Drainage

- Drainage is critical
- The London Underground reel cannot be flooded
- Flooding is likely to destroy the gearbox
- How the London Underground reel is drained is the responsibility of the installer
- Drainage methods will be determined by site requirements
- The owner is required to check regularly to ensure the drainage system is not blocked

5 – Procedure

- Prepare dig zone
- Dig trench to the required dimension
- Determine drainage method and prepare reel enclosure and pit

- Pour aggregate (Gap 20) into bottom of trench
- Level aggregate at 500 mm below the top of the tile/deck height
- Carefully lower in the reel enclosure
- Check levels
- Check the orientation of the reel
- Spacers are supplied to ensure the opening at the top of the enclosure is a constant 232mm. Check the top opening is a uniform 232mm down the length of the enclosure
- Lay a string line to check there is no bow (up or down) along the length of the lid
- Calculate your levels working down from your required tile height
- Pour aggregate around the sides and ends of the reel enclosure
- The aggregate must stop at no higher than the minimum concrete depth as shown in Diagram B
- Ensure the aggregate goes down around the bottom of the enclosure
- Recheck the top opening is a uniform 232mm down the length of the enclosure. If it has closed up under the weight of the aggregate backfill then correct before proceeding
- Box up for a concrete bond beam if required
- Lay reinforcing
- Pour the concrete bond beam around the top of the enclosure
- The concrete should be poured to at least the level of the top of the T's moulded into the side of the enclosure
- The concrete depth should be at least 150mm
- The concrete needs to go between and around the T profile on the side of the enclosure
- - When encased in concrete these T's hold the moulding in position preventing the lid gap closing
- This bond beam must go all the way around the enclosure (Diagram B)
- **Do not** remove the Spacers until the concrete surround is fully set

6 – After installation

- - Seal off lid if acid washing any surrounding concrete
- - Seal off the lid if surrounding decking is still "bleeding"
- - If acid wash or deck bleeding comes in contact with the lid or reel rinse thoroughly
- - Protect the lid from concrete slurry
- - Protect the lid from accidental damage during ongoing construction activity



Daily cover operation

Retracting the cover

- Lift the lid
- Engage the handle
- Lift the end of the cover up and over the end of the pool
- Rotate the handle in the direction that winds the cover over the tube and down the back
- When the flotation boom gets to the reel end of the pool, stop winding and lift the boom up and over the end of the pool
- Continue rotating the handle until the cover is fully below deck
- When the boom gets to the end of the pool, stop winding and lift the boom up and over the coping before continuing to wind the cover in
- Shut the lid carefully
- If the cover snags then stop and clear the problem before continuing

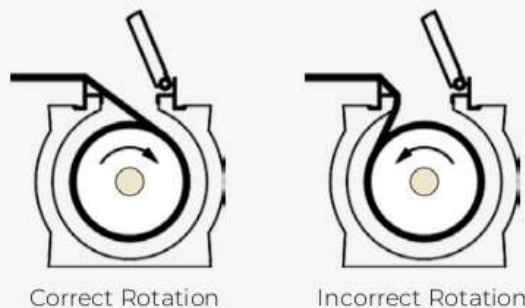


Diagram D

Covering the pool

- Ensure that there is nothing in the pool (balls, toys, etc.) that could hinder correct movement of the cover
- Open the reel lid
- Reach down and pull the boom on the leading edge of the cover up and out of the reel enclosure
- Connect the pull out rope
- Walk with the end of the pull out rope to the far end of the pool.
- Standing at the centre of the far end of the pool pull the cover down the pool
- Again if the cover snags then stop and clear before continuing
- Remove and store the reel handle
- Close the reel lid

Precautions

It is very important to check that there is no-one in the pool before closing the cover.

Always watch the pool carefully while operating the cover.

Never allow children to operate the reel.

Swimming under the cover is strictly prohibited.

Restrict users to those who have read the operating instructions



1. Water Quality

Water quality must be checked regularly.

Extremes of water chemistry can result in damage to the cover and reel.

We advise that water chemistry is monitored by a professional pool service.

2. Reel Maintenance

The gearbox is a sealed unit and requires no maintenance.

The lid requires no maintenance.

All that is required is that you keep both the lid and the enclosure clean and the drainage in working order.

3. Winterising/Cleaning

Regularly clean the lid, the lid hinges and the lid rails. Ensure they are free off rubbish and stones.

The reel mechanism is designed to be easily lifted out for cleaning or storage.

Lift the reel mechanism out to allow easy access to the enclosure for a thorough cleaning.

If there is a lot of debris in the reel enclosure cover the drain and remove the debris through the top rather than risk it going down the drain and causing blockages.

The reel mechanism must never be submerged so if there is any risk of flooding then detach the cover and lift the reel mechanism out to store safely when not required.

Periodically check through the year to ensure the drainage is not blocked.

4. Scope of Use

London Underground Reels are designed for installation on private pools. Any other use (public or semi-public pools) must be authorised.

5. Things to Avoid

- Do not leave water toys on the lid (or cover) in extreme heat. Translucent water toys can magnify the sun's rays causing extreme heat underneath
- The drains at the base of the enclosure must be monitored to prevent blockages
- Do not operate the reel while the end of the cover is still down on the pool (lift up and over the edge before starting to wind
- The prolonged stagnation of organic matter on the cover, lid or reel can lead to the formation of coloured material and, in some cases, permanent stains
- Never use harsh chemical cleaners such as 60 Seconds or Wet and Forget to clean the reel or enclosure
- Never expose the reel or lid to concentrated pool chemicals
- Never use solvents to clean the reel or enclosure
- Never use abrasive cleaning solutions
- If using deck cleaning solutions seal off the lid to prevent contact
- Do not leave anything metallic on the lid. This may result in rust and related staining
- Avoid scratching the lid
- Do not pull the cover out when the reel handle is still positioned on the gearbox

6. Trouble Shooting

Water in the enclosure	Unblock drain Check that the drainage is working Recheck regularly
Reel hard to rotate	Check you are rotating the reel in the correct direction

