Molnar Hoists have prepared this document as more detailed guide to installing Nussbaum Power Lift HL 2.30 K on concrete floors in Australia.

The advice provided here is a general guide for the minimum requirements for safe installation.

For full advice on specific installations, please consult an architect or engineer.
Floor Specifications

**WARNING:** Do not install hoist on a floor that does not satisfy the minimum floor requirements and specifications. Replace floor if necessary, see replacement slab specifications.

- Floor Specification: Fully Cured
- Reinforced Concrete Slab
- (in Good Condition)
- on Compacted Base

- Recommended Concrete Thickness: 200mm
- Minimum Concrete Thickness: 150mm
- Recommended Concrete Compressive Strength: 32MPa
- Minimum Concrete Compressive Strength: 25MPa
- Minimum Reinforcement Specifications: SL72 Mesh with 30mm cover
- Minimum Concrete Base Thickness: 100mm
- Minimum Concrete Base Specifications: Quarry Rubble
  compacted to 95% MMDD

- Minimum Distance to Concrete Edge
  *(including expansion joints, cold joints, etc.)*
  - Front/Rear Edge of Hoist Base Plate: 1200mm
  - Outside/Inside Edge of Hoist Base Plate: 500mm
- Minimum Distance from Bolt Hole to Existing Bolt Holes: 200mm
- Maximum Floor Out of Level: 1 degree (in any direction)
- Maximum Shimming at any point: 10mm

**Levelling Posts**

- Once posts are in position, check posts for vertical alignment using a spirit level.
- Ensure posts are secured at all times while checking and adjusting posts levelling until securely bolted to the floor.
- Shim posts adjacent to the anchor bolt holes in the base plate until both are vertical in both planes.
- NOTE: The maximum allowable amount of shimming is 10mm at any point.
- If shimming is used, the centre of the base plate must be supported by shims or with an appropriate cement grout.
Replacement Slab Specifications

- Replacement Slab Specification: Fully Cured
  - Reinforced Concrete
  - Single Homogenous Slab
    - (in Good Condition)
  - on Compacted Base

- Minimum Concrete Thickness: 200mm
- Minimum Concrete Compressive Strength: 25MPa
- Minimum Reinforcement Specifications: SL72 Mesh with 30mm cover
- Minimum Concrete Base Thickness: 100mm
- Minimum Concrete Base Specifications: Quarry Rubble
  - compacted to 95% MMDD

- Minimum Distance to Concrete Edge
  - (including expansion joints, cold joints, etc.)
    - Front/Rear Edge of Hoist Base Plate: 1200mm
    - Outside Edge of Hoist Base Plate: 500mm
- Minimum Distance from Bolt Hole to Existing Bolt Holes: 200mm
- Maximum Floor Out of Level: 1 degree (in any direction)
- Maximum Shimming at any point: 10mm
- Connection: Pinned to surrounding existing floor
- Minimum Undercut: 100mm on all sides
Anchor Specifications

**WARNING:** Do not install hoist where the minimum anchor bolt requirements and specifications cannot be satisfied. If the specific bolt cannot be sourced, a bolt of equivalent of higher strength should be used and follow the manufacturer’s instructions.

- Anchor Bolt Specification: Ramset Tru-Bolt T20215GH
  - 20mm diameter
  - 215mm Long
  - Galvanised
- Drill Hole Diameter: 20mm
- Drill Hole Depth: 150mm (measured from the top surface of the concrete)
- Anchor Torque: 355Nm

**WARNING:** If anchor bolts cannot be tightened to the correct torque, this indicates that the floor is not to specifications and will need to be rectified or replaced.

Anchor Bolt Installation

Installation of Ramset Tru-Bolt

1. **Step 1** Using the Base Plate as a Template Drill or Core a hole. Clean the hole thoroughly with a hole cleaning brush. Remove the debris with a hand pump, compressed air, or vacuum.

2. **Step 2** Insert the anchor through the fixture and drive with a hammer until either the bottom of the anchor bolt contacts the bottom of the hole or the washer contacts the base plate.

3. **Step 3** Tighten the nut with a torque wrench to the specified torque setting.

**WARNING:** If anchor bolts cannot be tightened to the correct torque, this indicates that the floor is not to specifications and will need to be rectified or replaced.

4. **Step 4** After all bolts are correctly tightened, trim the protruding thread so the top of the bolt is flush with the top of the nut. Make sure to protect the hoist when trimming the bolt. Coat the cut section of the bolt with Cold Gal or equivalent Zinc Rich Primer to protect bolt from corrosion.