pure DECK

Quick Installation

Robust Design

Enhanced Safety

Modular Components

THE 3-in-1 SELF-LOADING PLATFORM

pure DECK

Unique self-lifting capability up to a SWL of 2T with either manual or electric winch

Proprietary swivel lifting eyes provide safe lifting points

Collapsable lifting frame and slab props for simple transport and erection

Telescopic lifting frame props allow frame to be tilted to allow crane loading

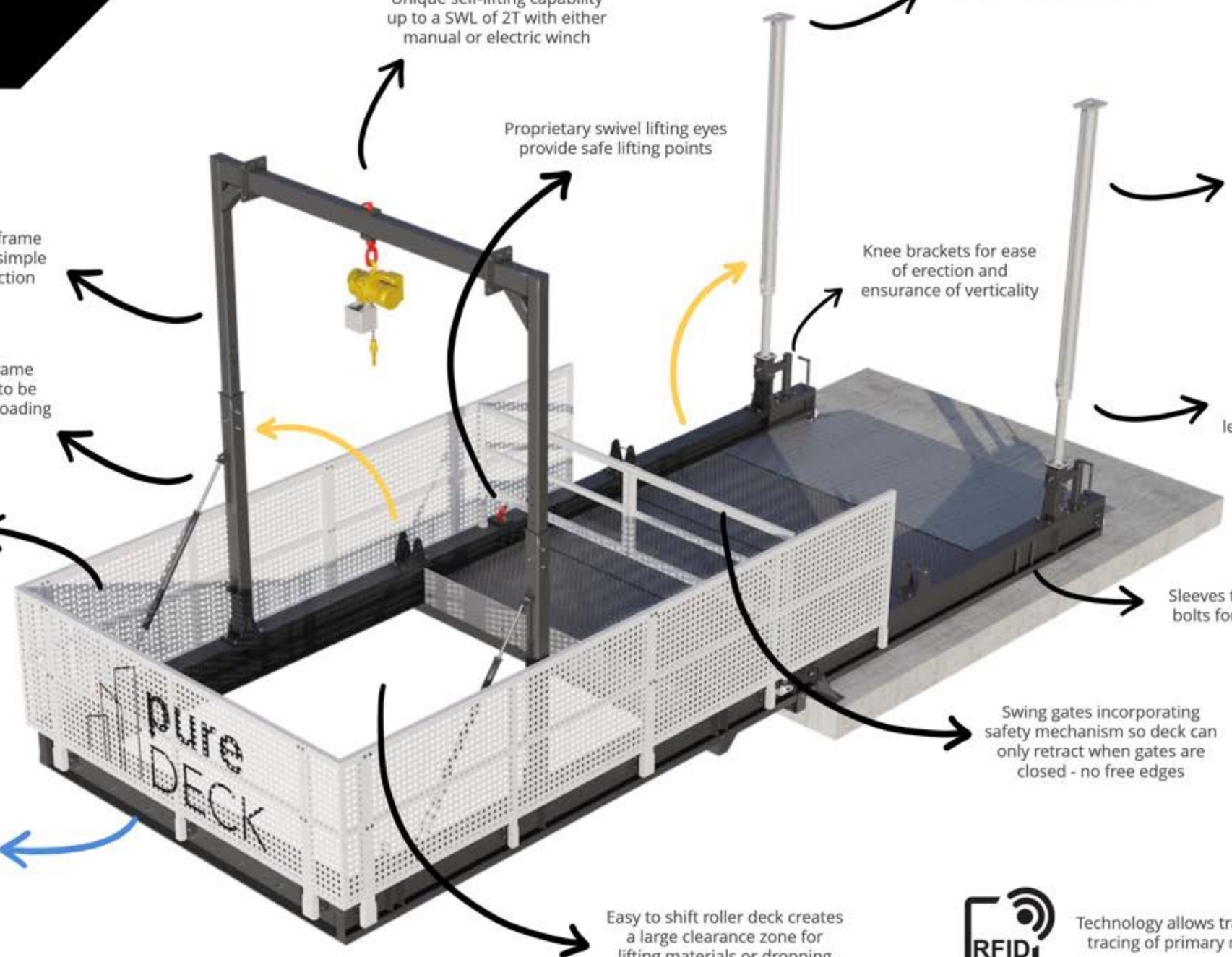
Perforated cladding to reduce wind loading while providing fully enclosed working deck

Fully modular (bolted) design allows:

- 3 different configurations to be used for the one product (fixed, retractable and self-lifting)

- Disassembly, storage and transport as a smaller volume

- Ability to increase or decrease deck width with only a few additional parts



Props have ready-made connections for header beams for use on steel structures

Proprietary lightweight aluminium props that can be erected with just 1 operative

Knee brackets for ease of erection and ensurance of verticality

Low base jack location means tightening can occur from slab level (no ladders/scaffold required)

Sleeves to fix the deck with through bolts for high floor to floor heights

Swing gates incorporating safety mechanism so deck can only retract when gates are closed - no free edges

Easy to shift roller deck creates a large clearance zone for lifting materials or dropping them through to a deck below

RFID

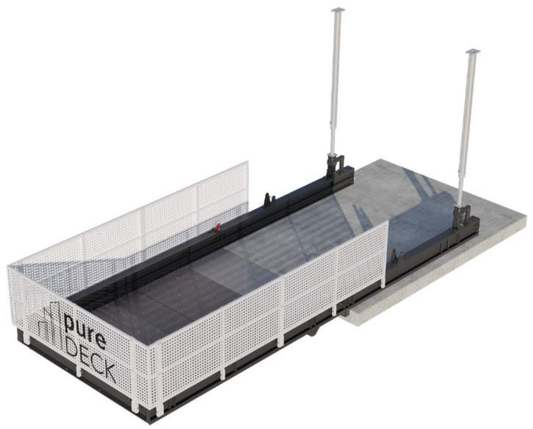
Technology allows tracking and tracing of primary members

QR code stickers allow data sheets and manuals to be accessed on site

Overview

The pureDECK self-loading platform revolutionises functionality of the traditional cantilevered deck. The system has been designed by construction experts with practicality as the key consideration. Fully modular, the single platform offers three varying configurations including the hook-time saving self-loading mode. With a unique design and a multitude of intelligent features, the pureDECK system is sure to add value to any project.

Configurations (3-in-1)



Fixed Platform (PD1-F)

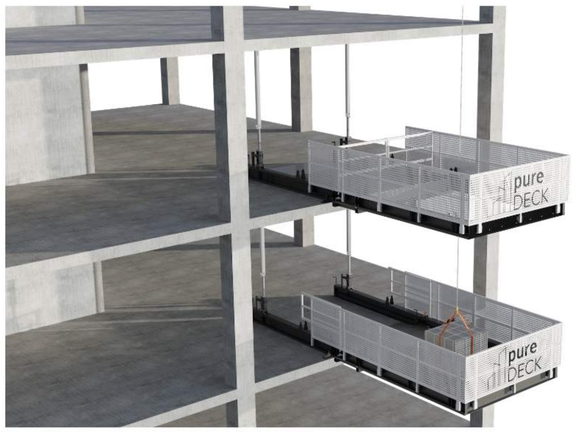
- Fixed platform with deck level flush to slab surface
- Easily installed foldable aluminium props
- Fully enclosed and compliant edge protection
- Built-in installation rollers
- Durable 'Buffalo Board' decking surface

Roller Platform (PD1-R)

- Same base features as PD1-F
- Lightweight retractable roller deck with ramp
- Gates with safety mechanism to lock roller deck
- Option to load with crane hook or PD1-SL above

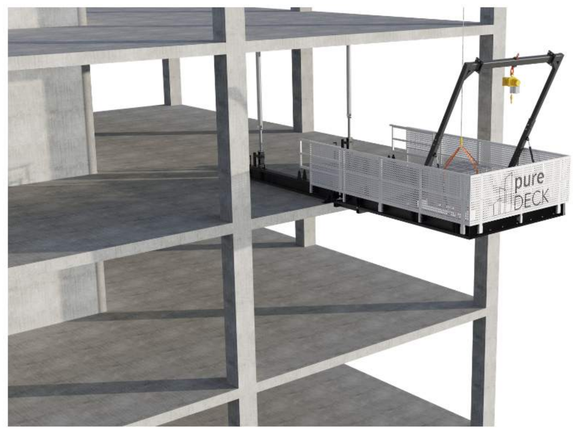
Self-Loading Platform (PD1-SL)

- Same base features as PD1-F and PD1-R
- Integrated lifting frame with swivel lifting eye
- Foldable lifting frame for single lift install/relocation
- Tilting lifting frame to allow crane hook loading
- Option to load onto PD1-R below



Multiple PD1-R decks can be loaded at the same location using the crane hook

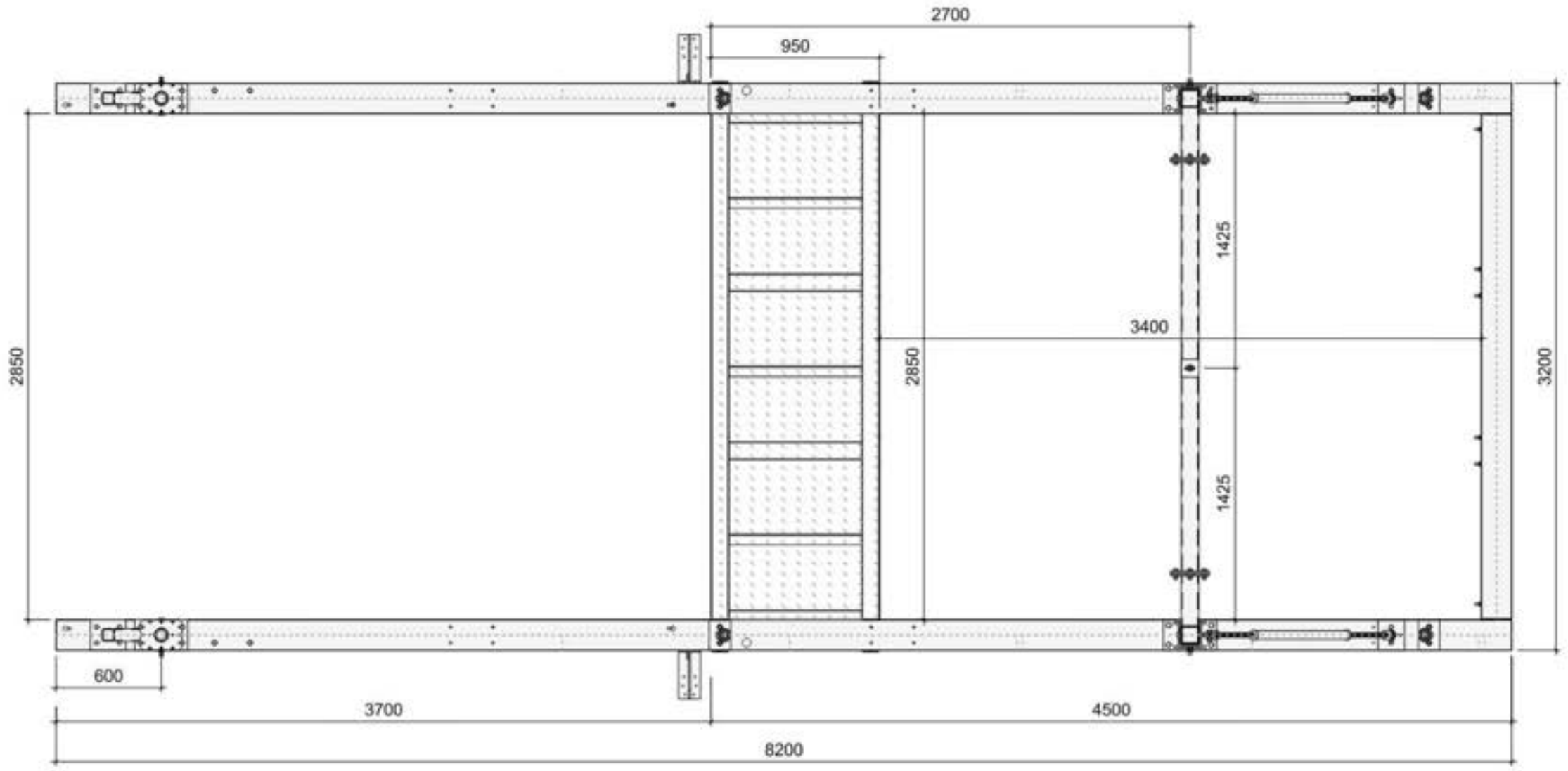
Multiple PD1-R decks can be loaded at the same location using the PD1-SL lifting frame



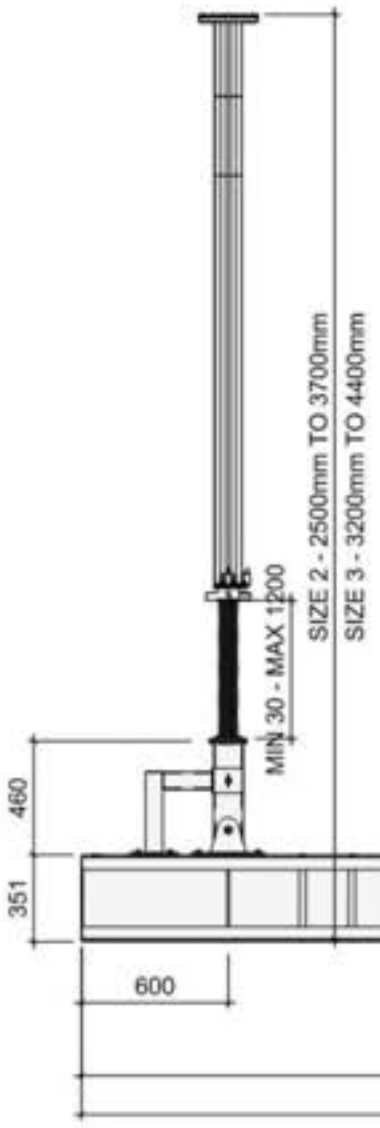
PD1-SL can be loaded using the crane hook as well as the lifting frame

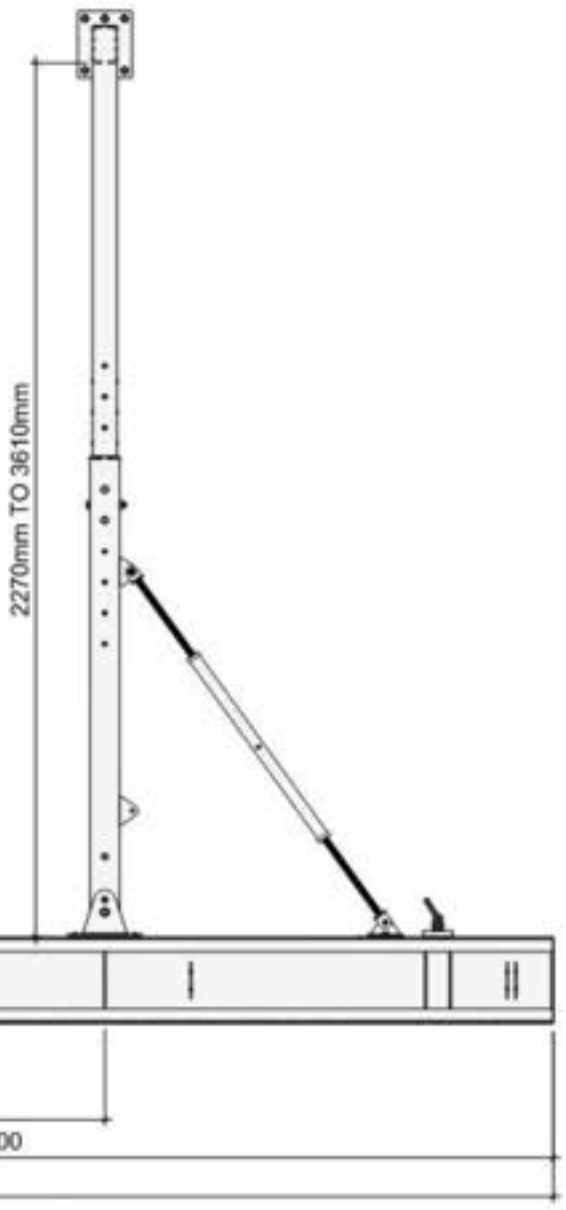
Technical Data - Dimensions

Plan View



Section View

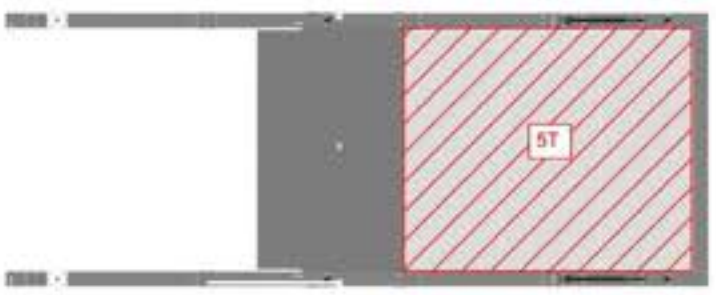




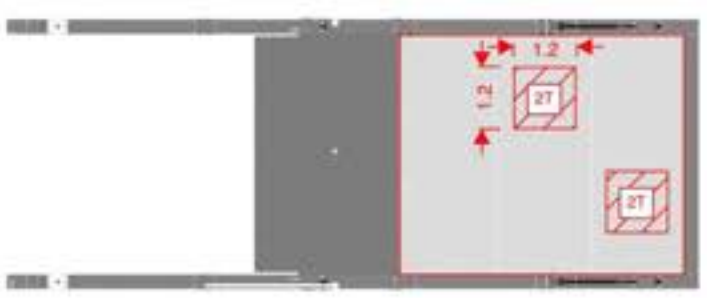
Technical Data - Loading

Allowable Vertical Loads

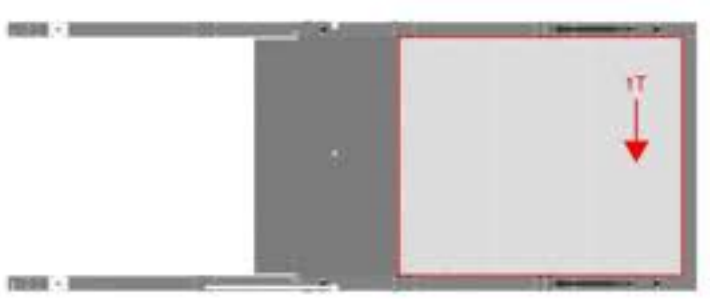
The below diagrams indicate the allowable vertical load cases.



5T UDL over full deck area



2x2T UDL anywhere on deck

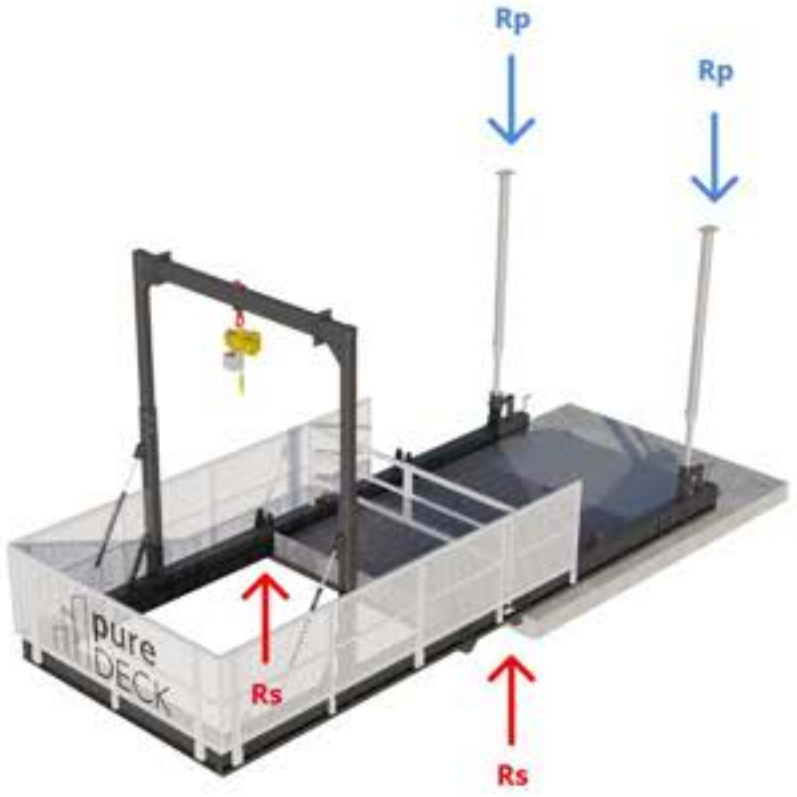


1T PL anywhere on deck

The self-lifting frame has been designed for a SWL of 2T (excluding chain block self-weight).

Supporting Structure Reactions

The reactions provided must be checked by the site engineer to ensure the supporting structure can adequately resist the maximum deck reactions (propping may be required for lighter structures).



→ **Rs = 75 kN**

→ **Rp = 36 kN**

Cantilever Deflection (SWL) ≤ 45mm

NOTES:

1. Reactions are working loads and should be factored accordingly

2. Reactions act on both sides of platform at the same time

3. The same reaction loads can be used for bolted fixing

4. Reactions provided assume supporting structure is rigid

5. Refer to testing and inspection brief for further information on deflection calculations and load testing

Wind Loads

Wind loading is highly sensitive to deck geographic location, installation height and other factors. The site engineer should check and confirm the installation location (if > 50m) has an expected mean wind speed (at installation height) less than or equal to:

In-Service: Mean Wind Speed ≤ 20 m/s (72 km/h)

Out-of-Service (Storm): Mean Wind Speed ≤ 32.8 m/s (118 km/h)

NOTES:

1. If the deck is installed higher than 50m above ground (and cladding installed), slab connection brackets should be installed with 4no. Hilti HUS3-H 14x130 (or equiv) anchors each side of deck

2. The roller deck should always be retracted when not in use

3. If a high wind event is forecast (> 100 km/h), the deck should be removed and stored at ground level

INSTALLATION SEQUENCE
(PD1-F & PD1-R)

Stage 1

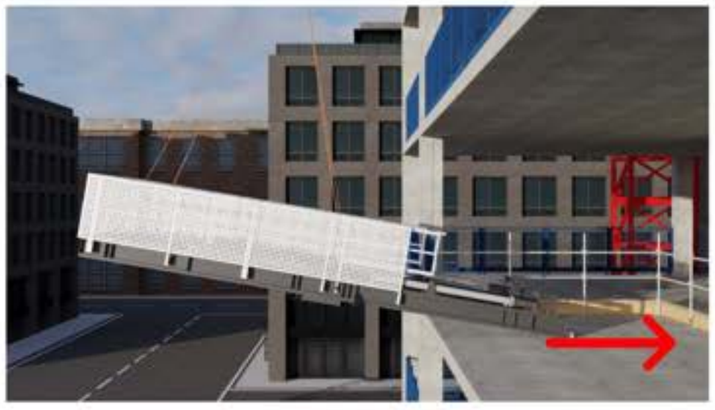
- Delivery to site (may be fully assembled or as multiple stacked units)
- If decks are not assembled, assemble on site

Stage 2

- Rig the deck using the designated lifting eyes and fix tag lines - chain angle to not exceed 30 degrees from vertical (site AP to check)
- Ensure the gates are open and drop bolts installed prior to lifting
- Prepare the installation location by removing edge protection and providing adequate temporary edge protection

Stage 3

- Tilted deck to be lifted to landing location
- Ensure exclusion zone is being monitored below



Stage 4

- Guide the deck onto the slab using installation rollers
- It is recommended to mark the ends of the primary beams on the slab to assist with final placement

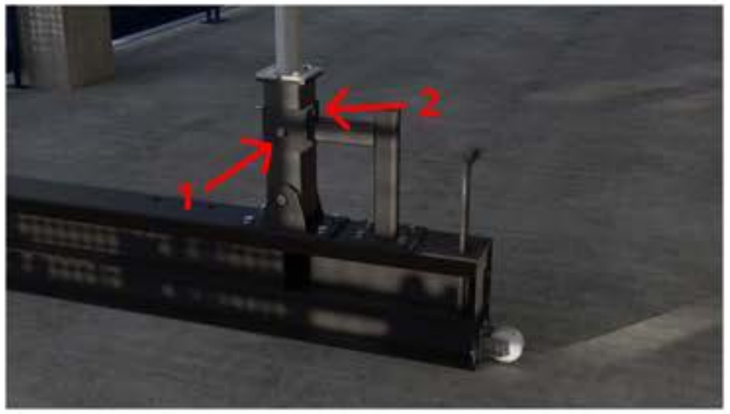
Stage 5

- Lower the deck onto the slab and ensure the H-Frame is flush with the slab edge

Stage 6

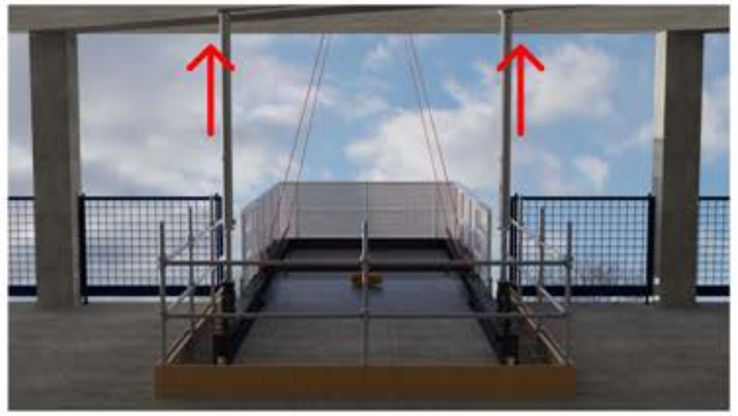
- With the deck still on the crane hook, raise the aluminium props up to their vertical positions

INSTALLATION SEQUENCE
(PD1-F & PD1-R)



Stage 7

- Once vertical, install the holding pin to retain the prop
- Install the alignment bolt and tighten



Stage 8

- Jack the aluminium props into the supporting structure above
- Check the verticality of the props with a spirit level, if not vertical then release and adjust to ensure verticality
- Once verticality is confirmed, tighten the jacks with a hammer until they are firmly installed (do not over-tighten)

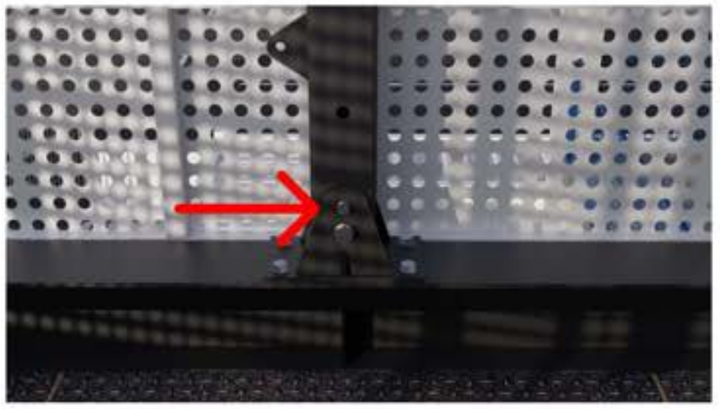
Stage 9

- Fix operatives with intertia reels / life-line harnesses
- Slowly take load off crane and remove lifting chains
- Remove temporary edge protection
- If using the roller deck, check that it can be retracted and extended
- The static/roller deck is now installed and ready for operation
- Complete on-site load testing if required

INSTALLATION SEQUENCE
(PD1-SL)

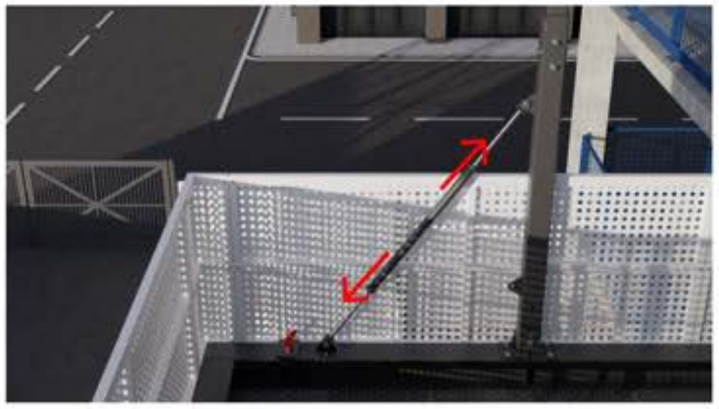
Stage 10

- Install the chain block onto the lifting beam
- Attach the crane hook to the lifting eyes on top of the lifting beam using a min 1m extension chain
- Using the crane, rotate the lifting beam up to vertical position



Stage 11

- Fix the verticality bolt through the base bracket



Stage 12

- Extend the telescopic prop and rotate until engaged
- Check the verticality of the lifting frame column

Stage 13

- Raise the lifting beam up to the desired level
- Fix the three bolts between outer and lower columns

Stage 14

- The lifting frame is now installed and ready for operation
- Complete on-site load testing if required

PD1-SL INSTRUCTIONS

Stage 1

- Ensure gates are closed and then retract the deck
- Insert drop bolts to secure the deck
- Set-up exclusion zone at ground level
- Ensure load is located directly below the hoist block (vertical lift)
- Rig the load as per site AP requirements (confirm less than SWL)

Stage 2

- Slowly lift the load above the deck level
- Ensure that maximum hoisting speed is not exceeded

Stage 3

- Extend the roller deck back into the closed position
- Insert drop bolts to secure the deck

Stage 4

- Slowly lower the load onto the deck
- Open the gates to gain safe access

Stage 5

- Remove the lifting gear and retract the hoist block

Stage 6

- The load can now be shifted onto the floor

Safety Instructions

General

Any person associated with the use of the deck should be competent and have relevant experience in assembling, installing and operating this type of equipment

A project-specific risk assessment and method statement must be produced and approved by relevant parties prior to usage of the system

PPE should always be worn by site personnel when using this equipment

The data sheet, user guide and other relevant documents should be read in full and understood by all personnel involved with the operation of this equipment

Measures must be taken to protect site personnel as well as members of the public, with any lifting equipment exclusion zones should be maintained at all critical times

Operation

The loads imparted on the supporting structure must be checked by a qualified engineer prior to use

Do not load the platform or lifting frame unevenly, or in any other way to that described in this document

Do not overload the platform or lifting frame and ensure SWL signage are clearly visible at all times

Ensure the crane lifting eyes are not overloaded (SWL is marked on the eyes)

Always follow local regulations and guidelines regarding the use of this type of equipment

A thorough examination of this product should be completed regularly (max 6 months) by a competent individual and any signs of damage identified and remediated prior to use

Storage and Maintenance

Always store this equipment in a stable manner on solid foundations

Always store this equipment raised above ground level to ensure there is no damage from water pooling

The equipment should be maintained regularly including greasing of roller wheels and re-painting

Declaration of Conformity

Product: pureDECK

Product Code: PD1-F / PD1-R / PD1-SL

EC Directive/Regulation: 2006/42/EC
Lifting Operations & Lifting Equipment Regulations 1998
Provision & Use of Work Equipment Regulations 1998

Harmonised Standards: BS EN ISO 12100
BS EN 13155
BS EN 13374
BS EN 1991 / 1993

SWL: Deck = 5000kg
Lifting Frame = 2000kg

We hereby declare that the listed equipment is in compliance with the requirements of the EC directive and regulations and that a technical file containing all supporting documentation is available upon request.

This declaration is to be deemed null and void shall any modification be made to the supplied equipment without consent.

Signed: _____

Andrew Lipshut, Director

Date: Auguest, 2022

pure DECK

If you would like to learn more or request pricing, please contact:

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