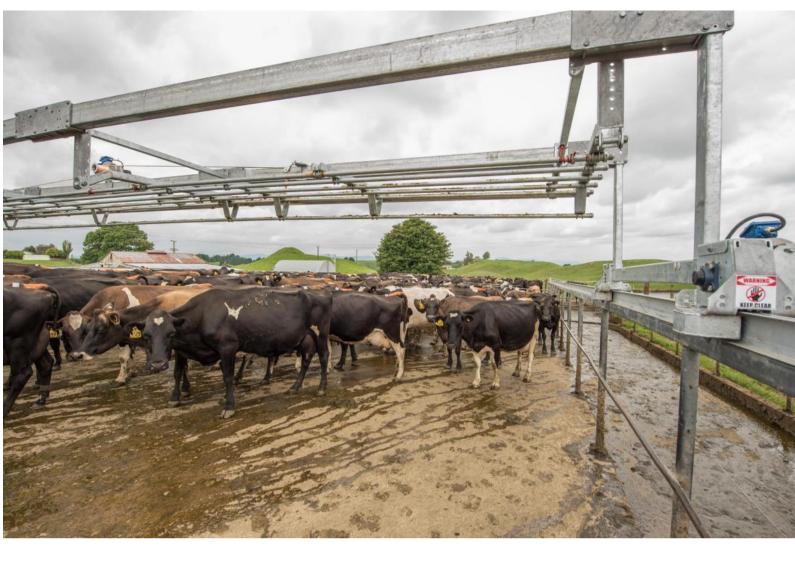
Standard and Optional Features

Reporoa Herdflow® High Lift Gate

New Improved Design Developed 2017













Standard Features*

Touch Screen Control	h Screen Control Located on gate control box for fault finding, adjusting settings and manual operation		
Button Controls	Located in shed and on gate. Controls: up, down, forward, reverse, pulse forward and wash.	Included in price	
Pulse Forward Auto Stop	High Lift Gate travels forward a predetermined (1m to 10m adjustable) distance then stops until commanded again.	Included in price	
Two Speed Forward & Reverse	High Lift Gate can travel at either fast or slow speeds in both forward & reverse directions.	Included in price	
Gate Lowering	As High Lift Gate is lowered it pauses at approx. cow back height to allow cows time to move away before lowering fully to the ground.	Included in price	
Audible Alarm	An electronic alarm is located in the control box on the gate to sound when the gate is moving. Provides audible prompt for cows and advises operators which mode the gate is operating in.	Included in price	
Electrical & Mechanical Installation	to front of yard Includes "I" beam (top rail) for gate to run on Post		
High/Low Rail Options	w Rail Options High Lift Gates built for 1200mm to 1700mm high top rail.		
Anti De-Rail Design	Rail Design Drives on top of "I" beam and clamped on with front and back side mounted idler wheels when "I" beam used.		
Programmable for Variable Wash	or Variable Can be programmed for gull wing wash, forward or reverse wash.		
Pre-wired plug & Play Electrical system			

Optional Features*

Four Wheel Drive	Four Wheel Drive An additional 2 drive units can be added to provide additional traction. Useful in extreme icy conditions or for steep yard. Yard Wash Dungbuster™ yard wash attachment including booms, solenoid & filter. Excludes drag hose. Uses approx. 40 litres/minute/metre of boom. Takes approx. 8 minutes/50 metre yard.	
Yard Wash		
Manual Yard Wash Blade Saver/Lifter	Manually operated lift to prevent wear on blades when not washing yard.	POA
Extra Gate Top Rail	Extra rail so gate has 7 rails total (Note: If gate has a manual yard wash saver/lifter then this extra 7 th rail will be included)	POA
Sprinkler Cow/Yard Wetting	Wetting Can be used in up position to travel over cows & sprinkle them with water for cooling and/or fly protection as well as wetting the yard. Can also be used in down position to wet yard.	
Wash from Where Is	Allows Dungbuster to wash part or the entire yard from where is rather than having to return to the normal start position.	
Additional Audible Alarm	An additional alarm can be supplied at the front of the yard to provide	
Visual Light & Siren	Light & Siren A flashing strobe light can be supplied on the cups on console to show gate is active.	
Breech Sensor If High Lift Gate contacts cows while pushing forward (level of pressure is adjustable) gate will stop, back off approx. 1 metre and wait until another command is made.		РОА

Optional Features (continued)*

Pull Cord Stop Start	Available in herringbone sheds. Allows basic gate operations to be controlled by a pull cord as well as a consol. Excludes wiring in and rope.	POA
Dual Controls	Provides an additional set of gate controls to be located at cups off position. (excludes electrical installation)	POA
Bail Counter	Counts the bails as the platform rotates & moves the gate forward a set distance. (e.g. 0.5m every 5 bails - number of bails & distance can be varied)	

Farmers Responsibility:

- » Supply single phase electricity, 16 amp minimum 230 volts plus neutral and earth, to the front corner of the yard & terminate wires to the gates front of yard control box which is supplied with gate.
- » Supply 18 core cable (communication grade) between front corner of collecting yard and operators console & terminate wires to the front of yard control box & console button set.
- Supply a front end loader at time of unloading and installation capable of lifting 1000kg.
 Fully read the "Customer Yard Information"

^{*} PLEASE NOTE: Optional Features are priced as new installations and any retro fits will need to be quoted. A separate quote is provided for retro fitting. If the yard has an existing gate this must be removed before day of installation. Yards not constructed by REPOROA HERDFLOW may incur an additional fee to cover unforeseen problems during installation. Such problems might include: yard posts not parallel; supplied measurements being incorrect; the need to provide a support beam under the "I" beam rail over a gateway; end posts being the incorrect length and/or diameter; and other unforeseen difficulties that need fixing to ensure a timely installation. Supply of components for Dual Controls & additional Audible Alarm, Pull Cord Stop & Start etc are for parts only - price excludes installation. All pricing excludes GST.



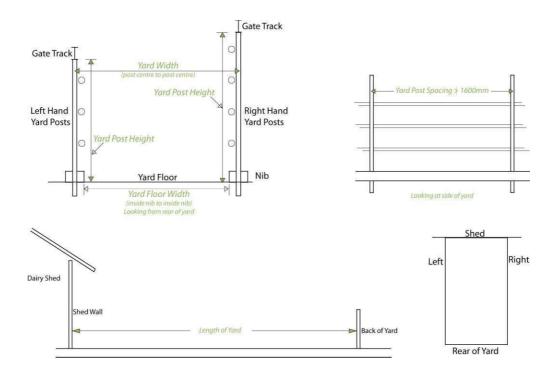
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IMPORTANT INFORMATION PLEASE READ CAREFULLY

Thank you for your enquiry about purchasing a **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE. To ensure that your collecting yard and post and rail construction is capable of supporting a **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE we have established some minimum requirements. As the **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE is essentially custom fitted to your yard there are some basic measurements that we require. To make certain that we are all talking the same language we have also set out some assumptions.

ASSUMPTIONS

The drawing below sets out the terminology and measurements we use.



1. Yard Orientation

Standing at the "rear" of the yard looking towards the dairy shed

- ♦ The rails on the left of the yard are known as the left of the yard
- ♦ The rails on the right of the yard are known as the right of the yard

2. Yard Width

The yard width is determined by measuring the distance between the centres of the yard posts. (centre of yard post to centre of yard post on other side)

- Measure in 4 different places front, two mid sections & back.
- ♦ The **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE is suitable for yards between 8 and 16 metres wide.
- To achieve maximum cow flow the ideal yard width is between 10 and 13Metres

3. Yard Floor Width

The yard floor width is determined by measuring the inside distance between the nibs. Measure in 4 different places- front, two mid sections and back. We require the shortest measurement.

4. Yard Length

The yard length is determined by measuring the length of the yard railing, on the electrical side (see paragraph 10) from the dairy shed entry to the end of the collecting yard i.e. the maximum distance the Crowd Gate will travel.

♦ The **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE has proven suitable for yards between 20 and 90 metres in length. (they can be larger on a case by case basis)

5. Yard Dimensions Check Sheet

In order for us to provide either an accurate quote or to custom build your **HERDFLOW**™ HIGH LIFT GATE we require all of the information listed on the attached check sheet to be filled out. Please see the previous diagram and assumptions to ensure you are providing the correct measurements.

These dimensions are critical so they must be accurate.

Any mistakes or variations to these dimensions will likely incur additional costs to the owner.

6. Yard Posts

The height of the yard posts is determined by measuring the distance from the yard floor to the top of the post. The yard post top must be cut square and at the <u>same</u> measurement for each post down the length of the yard.

The yard posts down each side of the yard <u>must</u> be parallel to each other.

- 6.1. If the yard post height is equal to or less than 1350mm high, the yard posts must be a minimum of 50mm ID (Inside Diameter)
- 6.2. If yard posts height is greater than 1350mm high, the yard posts must be a minimum of 50mm ID but 65mm ID is preferred.
- 6.3. The end yard posts (front and back) on each side of the yard must be 80mm ID.
- 6.4. The end yard posts (front and back) on the electrical side (see below) must be at least 800mm above the standard (or chosen) height of the yard posts on that side. These end posts support the electrical cable (see below).
- 6.5. A standard collecting yard will have the yard post on each side of the yard at the same height either 1200mm or 1500mm.
- 6.6. If the farmer wants access through one of the side rails to other pens for example then a high-low rail option can be installed. The **REPOROA HERDFLOW™** HIGH LIFT GATE can be designed to accommodate this. In this case the high side yard posts can be either 1500mm or 1700mm. (We recommend 1700mm for cattle to pass under the rail.)

7. Yard Post Spacing

Yard post spacing is determined by measuring the distance between the centres of each post on the same side of the yard.

♦ Yard posts must be spaced at <u>not greater than</u> 1800mm centres.

8. Gate Track

REPOROA HERDFLOW™ will provide a custom designed "I" beam Gate Track as part of the gate kit. The installer will fit this Gate Track to the side posts, the cost of which is included in the installation of your **REPOROA HERDFLOW™** HIGH LIFT GATE.

If additional work is created by problems such as the posts being cut to the wrong height, the posts not being parallel, the wrong spacing or the wrong size, then either additional costs may be incurred by the farmer or in a worst case scenario the gate may not be able to be installed.

9. Side Entry Gates

If the high-low rail option is chosen, gates can be fitted in to the side rails. In order for the **REPOROA HERDFLOW™** HIGH LIFT GATE to pass over the top of the gate way which may exceed the 1800mm maximum distance between yard posts then additional strength to carry the Gate Track must be installed. This additional strength would typically be in the form of 100mm x 50mm x 5mm galvanized RHS.

10. Electrical Side Front and Rear Yard Posts

The end yard posts must be 80mm ID to support the power cable that drives the **REPOROA HERDFLOW**™ HIGH LIFTGATE. The side that is chosen to locate this overhead electricity cable is called the Electrical Side.

The installation of this strengthening material is the **owner/client's** responsibility.

- ♦ 80mm ID post at 800mm above the bottom of track (or the top of the chosen height for the yard posts on that side of the yard)
- ♦ Front and Rear Yard Posts must be directly in line with the yardposts

11. Non Electrical Side Front and Rear Yard Posts

- Front and rear yard posts must be 80mm ID at the same height as the yard posts.
- Front and rear posts must be directly in line with the yard posts



12. Yard Surface

Yard surface must be clean and dry of effluent and clear of all material on days of installation of the **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE.

13. Lifting Device

- ♦ **Owner/client** is to provide a suitable tractor and frontend loader with pallet forks (Capable of lifting 1.1 tonne) for lifting the gate components and track during the installation
- ♦ All lifting straps/chains will be provided by the installation team

14. Power Supply

- ♦ **Owner/client** is to supply single phase power 16 amp minimum 230 volts to the top of the post at the front corner of the electrical side of the yard & terminate to the gate's front- of- yard control box.
- ♦ Owner/client is to provide electrical cabling (18 core communication grade) between the yard front corner post and operators consoles & then must terminate wires to the gate's front yard control box & console button set.

15. Additional Work Required

All additional work incurred over and above the **REPOROA HERDFLOW**_{TM} HIGH LIFT GATE installation will be at the **owner/client's** expense.



IMPORTANT MEASUREMENTS			Dimensions	Checked	
Farm Name:		Gate type:	(mm)		
1	Yard Width	Distance between centres of yard posts (ref: Point 2 Assumptions)			
2	Yard Floor Width	Inside distance between the nibs (ref: Point 3 Assumptions)			
3	Yard Length	Length concrete from dairy shed entry to end of collecting yard (ref: Point 4 Assumptions)			
4	Type of Top Rail (if any)	Size, diameter & shape of top Rail			
5	Yard Posts (Right Hand side of Yard)	Distance from yard floor to top of post on the right hand side of yard - measure to under side of the top rail if it has one <i>(ref: Point 6 Assumptions)</i>			
6	Yard Posts (Right Hand side of Yard) Diameter	Diameter of RH yard posts (size in NB = ID of pipe) (ref: Point 6 Assumptions)			
7	Yard Posts (Left hand side of yard)	Distance from yard floor to top of post on the left hand side of yard – measure to under side of the top rail (ref: Point 6 Assumptions)			
8	Yard Posts (Left Hand side of Yard) Diameter	Diameter of LH yard posts (size in NB = ID of pipe) (ref: Point 6 Assumptions)			
9	End Yard Posts	Diameter of end yard posts must be 80 NB = 80 ID (ref: Point 6 Assumptions)			
10	Height end yard posts on electrical side	Must be 800mm above height of yard posts on that side (ref: Point 6, Assumptions)			
11	High/Low rail option	High side yard post measurement (ref: Point 6, Assumptions)			
12	Electrical Side Front and Rear Yard Posts	Internal diameter of front & rear posts (must be 80 NB = 80 ID) (ref: Point 10, Assumptions)			
13	Yard Post Spacing	Distance between the centres of each post on the <u>same</u> side of the yard NOT greater than 1600mm (ref: Point 7, Assumptions)			
14	Side Entry Gates	Distance between posts of side entry gate. If post centres exceed 1600mm, additional strengthening material is required (ref: Point 9 Assumptions)			
15	Electric Side	Left hand side (LHS) or Right hand side (RHS) See clause 10, page 4			
16 17	Yard Slope Front to Back Yard Slope	Dung Buster Wash Direction Yard Slopes Dowr Forward (FWD) – Towards Cowshed Reverse (REV) - Away from Cowshed Measure Rise or Fall of Yard Right to Left	;		
	Right to Left				
All dimensions as requested have been provided and checked according to the list above.					
Sigi	ned:	Name: Phone No:	Date:		

ALL INTELLECTUAL PROPERTY RIGHTS ARE RESERVED:

Products are protected by: Trade Mark, Copyright, Design Protection, Patent or a combination of all.

Any breach will result in immediate legal action.

Due to continued on going research and development **REPOROA HERDFLOW®** reserves the right to make changes to improve the **REPOROA HERDFLOW®** group of products.