

Standard and Optional Features

Reporoa Herdflow® Crowd Gate

New Improved Design Developed 2017





Standard Features

Touch Screen	Located on gate control box for fault finding, adjusting settings and manual operation.	Included in price
Button Controls	Located in shed & on gate. Controls: up, down, forward, reverse, pulse forward, and wash.	Included in price
Pulse Forward Auto Stop	Crowd Gate Travels forward a predetermined distance (1m to 10m - adjustable) then stops until commanded again.	Included in price
Two Speed Forward and Reverse	Crowd Gate can travel at either fast and slow speeds in both forward and reverse directions.	Included in price
Breach Sensing	If Crowd Gate contacts cows while pushing forward (level of pressure adjustable) gate will stop, back off approx. 1 metre and wait until another command is made.	Included in price
Gate Lowering	As Crowd 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 to sound when the gate is moving. Provides audible prompt for cows & advises operators which mode the gate is operating in.	Included in price
Electrical & Mechanical Installation	Crowd Gate is installed and operational provided electricity is supplied to front of yard. Includes "I" Beam (top rail) for gate to run on. Posts must be correct height, straight and parallel.	Included in price
High/Low Rail Options	Gates built for 1200mm to 1700mm rail heights. Allows side entry of cows under gate rail.	Included in price
Adjustable Drive Tension	Adjustable spring tension on drive to prevent slippage.	Included in price
Anti De-Rail Design	Drive and idlers clamped on to "I" beam to prevent de-rail of Crowd Gate.	Included in price
Pre-wired plug & Play Electrical system	Gate is 100% pre-wired which allows the installer to commission the gate, check all functions and train users on the final day.	Included in price

Optional Features*

Four Wheel Drive	An additional 2 drive units can be added to provide additional traction. Useful in extreme icy conditions or for steep yards. Recommended for Gates > 13 metres.	POA
Yard Wash with Auto Blade Saver	Dungbuster™ yard wash attachment including booms, solenoid & filter. Excludes drag hose. Uses approx. 40 litres/minute/metre of booms. Takes approx. 8 minutes/50 metre yard. By pushing wash button, gate will travel to start position for wash mode, lower gate, lower Dungbuster™, turn on water, wash yard (once or twice optional), on completion turn off water, lift gate & Dungbuster™ ready for next herd to enter yard.	POA
Sprinkler Cow/Yard Wetting	Can be used in up position to travel over cows and sprinkle them with water for cooling &/or fly protection as well as wetting the yard. Can also be used in down position to wet yard.	Included with Yard Wash
Wash from Where Is	Allows Dungbuster™ to wash part or the entire yard from where it is rather than having to return to the normal start position.	Included with Yard Wash
Additional Audible Alarm	An additional alarm can be supplied at the front of the yard to provide another prompt for the front cows to move as the gate moves forward. (excludes electrical installation)	POA
Visual Light and Siren	A flashing strobe light can be supplied on the cups on console to show gate is active.	POA
Pull Cord Stop Start	Available only in Herringbone sheds. Allows basic gate operations to be controlled by a pull cord as well as a consol. (excludes wiring and rope)	POA
Dual Controls	Provides an additional set of gate controls to be located at cups off position. (excludes electrical installation)	POA
Remote Control	Allows control of gate functions by remote control for up to 300 metres from the gate. Includes 2 remotes.	POA

Optional Features* (continued)

Wireless Gate Camera with Screen	Camera monitors the rear of the herd immediately in front of the gate. Image is beamed to water protected screen, mounted in dairy shed. (excludes electrical installation)	POA
Cow Detector	Sensors detect cows that won't move away as gate lowers. On detection gate will cease lowering, raise back up until clear, then recommence lowering until able to be fully lowered.	POA
Bail Counter	Counts the bails as the platform rotates and moves the gate forward a set distance. (e.g. 5 metres every 5 bails - number of bails and distance can be varied).	POA

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.

*** 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 the 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, Wireless Gate Camera & Screen, and Bail Counter etc are for parts only - price excludes installation. All pricing excludes GST.



Patent Pending 575847

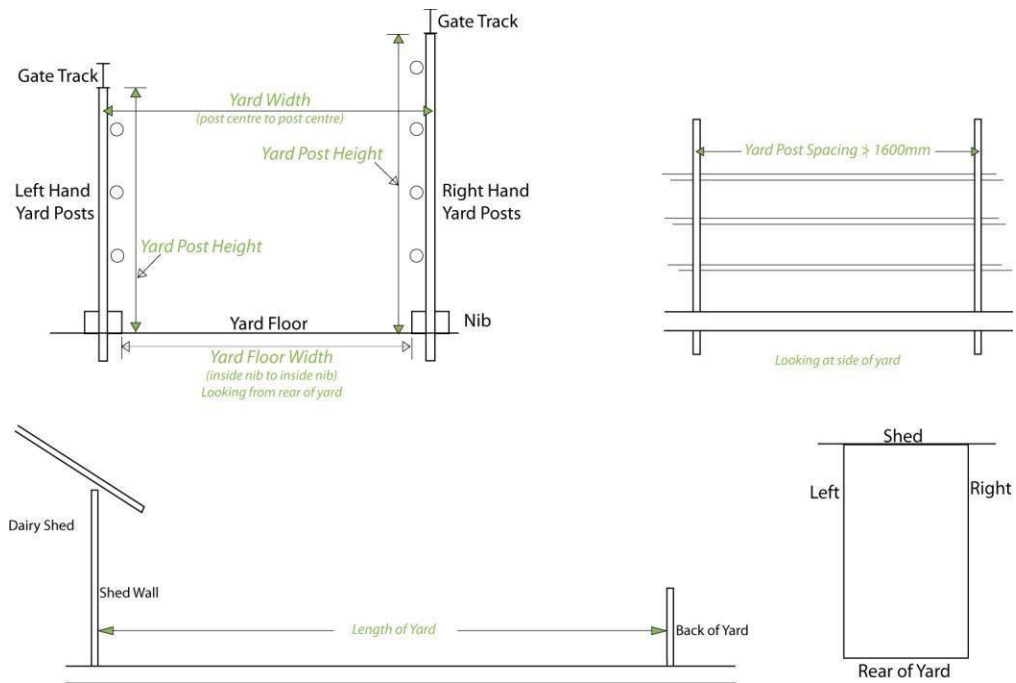
IMPORTANT INFORMATION

PLEASE READ CAREFULLY

Thank you for your enquiry about purchasing a **REPOROA HERDFLOW™** CROWD GATE. To ensure that your collecting yard and post and rail construction is capable of supporting a **REPOROA HERDFLOW™** CROWD GATE we have established some minimum requirements. As the **REPOROA HERDFLOW™** CROWD 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™ CROWD GATE** is suitable for yards between 8 and 16 metres wide.
- ◆ To achieve maximum cow flow the ideal yard width is between 10 and 13 Metres

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™** CROWD 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™** CROWD 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 same measurement for each post down the length of the yard.

The yard posts down each side of the yard must 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™** CROWD 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 not greater than 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™** CROWD 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™** CROWD 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.

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

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™ CROWD GATE. The side that is chosen to locate this overhead electricity cable is called the Electrical Side.

- ◆ 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™** CROWD 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 16 amp minimum 240 volt single phase power 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 & console button set.
- ◆ **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™** CROWD GATE installation will be at the **owner/client's** expense.



IMPORTANT MEASUREMENTS			Dimensions (mm)	Checked [
Farm Name: _____ Gate type: _____				
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 (ref: Point 6 Assumptions)		
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	Yard Slope Front to Back	Dung Buster Wash Direction Yard Slopes Down; Forward (FWD) – Towards Cowshed Reverse (REV) - Away from Cowshed		
17	Yard Slope Right to Left	Measure Rise or Fall of Yard Right to Left		
All dimensions as requested have been provided and checked according to the list above.				
Signed:		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 ongoing research and development **REPORAHERDFLOW®** reserves the right to make changes to improve the **REPORAHERDFLOW®** group of products.