

# FERGUSON WINDMILLS COMPANY

835 Old North Rd., R.D.2, Waimauku, New Zealand Phone 09 412 8655 Fax 09 412 8655 www.windmills.co.nz

E-mail: ferman@windmills.co.nz

#### FERGUSON WINDMILLS COMPANY Windmill Makers Since 1980

We are proud to present The Ferguson Windmill for your assessment. We are confident that our windmill is the best value for money mill currently available on the market as every effort has been made to combine simplicity of design with the best of materials and manufacturing procedures to bring you a product which has proven itself in service and reliability.

For a reasonable outlay you can reap the benefits of the wind's energy with negligible ongoing costs in maintenance time or money - just compare it with the alternatives.

## The Design



The Ferguson Windmill is sturdily constructed and has been designed to give a long life of useful service.

The simplicity of design makes for fewer things to go wrong and therefore you can expect years of trouble free running. The tailless fan and pivoting head run on high quality regreasable ballraces. The crank bearing is also greasable. The pump is constructed from non-rust materials, i.e. - bronze body, stainless steel pump rod, s/s inlet valve in a brass body, leather main washer and engineering grade plastic gland piston with fitted O'ring seal.

The mast, pivoting head, fan arms, blades, screw anchors, etc, are all hot-dip galvanised.



#### **Practical Uses**

The Ferguson Windmill can pump an average of 2300 litres (500 gals) of water per day and is able to lift up to 7.5 metres (25ft) and pump to a vertical height of 52 metres (175ft).

In conjunction with an adequate reservoir this makes the mill ideally suited for stock watering, crop irrigation household water and in fact any situation where there is a need to move medium volumes of water or other liquids.

The pumping characteristics of the mill means that it is unnecessary to dig out large, costly, ponds or dams when there is a constant supply of water such as a spring or stream because the draw-off rate is low and allows the supply to replenish itself.

## Siting the Windmill



It should be noted that it is not always necessary to site the windmill directly alongside the water source. It may be more practical to place the mill some distance from the water and possibly downhill in some cases so that the pump is gravity fed just as long as the maximum lift (suction) height is not exceeded when lifting water to the pump.

### Ease of Installation.



Mills are readily assembled and erected on site by two unskilled people with only a few handtools- no power, cranes etc. required. The windmill mast and stays do not require concreteing into the ground, which greatly reduces the assembly time. Full instructions for setup and erection are supplied.

#### Minimal Maintenance Time & Costs



As all parts of the mill and pump are of a high quality a small amount of grease and a general inspection on a 4 to 6 weekly basis is the only regular maintenance required.

## What WE Supply



- MAST:- 3.5m (11'6") single pole hot-dip galvanised complete with connecting rod, alignment blocks and clamps, stay wires, tensioners and ground anchors.
- HEAD ASSEMBLY: Galvanised pivoting head with regreasable rod-end crank bearing, crankshaft bearings and pivot thrust bearing, electroplated crankshaft with fitted cast alloy fan hub.
- FAN:- Six bladed 1.8m (6') diameter all galvanised ready to assemble to fan hub.
- PUMP:- Heavy cast bronze body- stainless steel pump rod, inlet valve and ball valve
   brass valve bodies and outlet valve bronze gland sleeve and high
  quality bark tanned leather cup washers.
  Foot valve and inlet line fittings. (to suit 25mm pipe)
  35mm (1 3/8") bore x 37mm (1 1/2") stroke.
- EXTENSION MAST: 3.25m (10'9") single pole hot-dip galvanised complete with connecting rod, alignment blocks and clamps, mast joining clamp, stay wires, tensioners and ground anchors.

### What YOU Supply



The means of footing the mast (typically a piece of concrete or paving slab for the mast to stand on.)

Water supply lines to and from pump and fittings from the pump.

Reservoir or header tank as required.

Overflow return pipe from reservoir back to the supply (as required).

## Our Guarantee



Each windmill is inspected before it leaves our workshop and, subject to fair wear and tear, it is fully guaranteed against faulty materials and workmanship for a period of 12 months. This guarantee applies also to the pump, but does exclude wear and tear on the cylinder and valves and / or clogging of the valves due to corrosive or dirty water supply.

#### **Transport**



Shipping weight: Approximately 65kg. (143 lbs)

Shipping Dimensions (Approx)

Mast 3565 x 280 x 100mm.

0.17cu metres (6cu ft) 600 x 400 x 300mm. Box of Parts

FREIGHT FREE throughout North & South Island of New Zealand to your nearest national carrier's depot.

### Pricing



Prices ex works as at :- 1st. November 2011

1.8m. (6ft.) fan, standard mast, pump and accessories

Extension mast and accessories

\$ 874.00 (\$760.00 + GST)

\$ 3040.00 (\$2643.48 + GST)

PRICES REMAIN UNCHANGED AS AT

As we have no control over material costs, prices are subject to change without notice.

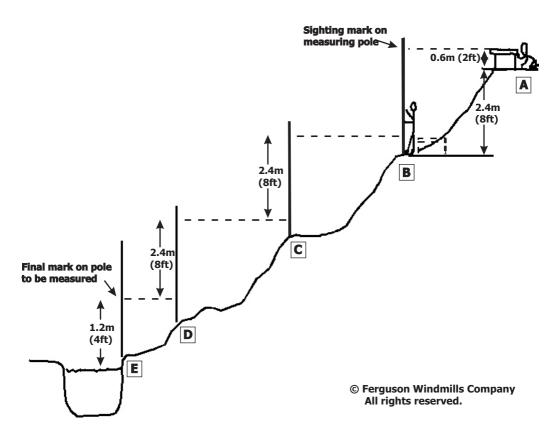
Effective - Strong - Reliable - Simple

#### CHECKING LEVELS.

A relatively accurate measure of vertical heights may be taken using a spirit level on a steady base, a box etc. packed up level to say 0.6m. (2ft) from ground to top of the spirit level, and a pole with a sighting mark on it, say at 3.m. (10 ft.).

Starting at the reservoir site (Point A), set up the box and spirit level. Have the person with the pole move down the hill until the mark is visible when sighting along the top of the spirit level (Point B)- this will be a 2. 4m. (8ft.) drop.

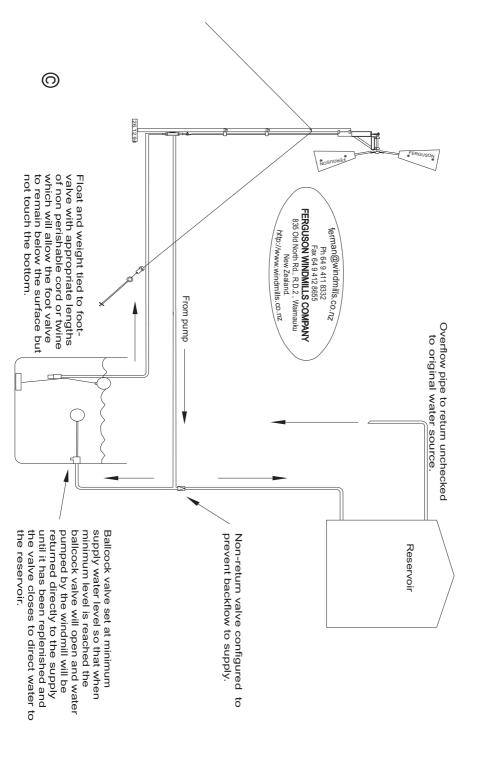
Move the box and level to ( Point B ), set up again and have the person with the pole move down the hill until ( Point C ) is determined. Repeat these steps for ( C to D, D to E ) etc . The total of the drops measured will give the height o f the hill.



Simple - Effective - Strong - Reliable

that would be pumped dry if there were not some method to control the draw off rate until the supply had been replenished naturally. The system of water reticulation illustrated here shows how to overcome the problem of a water supply, such as a spring or rainwater tank,

a costly, and potentially troublesome, relief valve and ballcock system for when the reservoir is full. The overflow return system allows the use of 15mm low density return line and does away with the need to either stop the windmill or fit



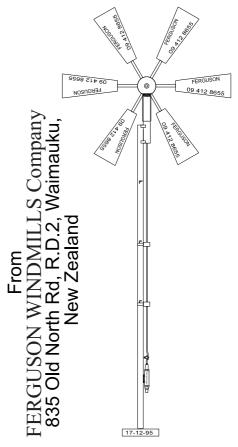
### ORDER FORM

835 Old North Road, R.D.2, Waimauku, NEW ZEALAND. 1250.  Please confirm my order for		Date:
1. 8m. (6ft.) fan & standard mast.   Extension mast.   Extension mast.	Ferguson Windmills Company, 835 Old North Road, R.D.2, Waimauku, NEW ZEALAND. 1250.	Fax 64 9 412 8655 E-mail: ferman@windmills.co.nz
Please find, accompanying this order:-    Full payment for immediate delivery. (check with us first - orders can normally be processed within one day!)    My deposit of 10% of the total purchase price. I agree to pay the balance upon completion of my order on an ex works basis.    NAME:	_	
Full payment for immediate delivery. (check with us first - orders can normally be processed within one day!)  My deposit of 10% of the total purchase price. I agree to pay the balance upon completion of my order on an ex works basis.  NAME:  ADDRESS:  PH.: (home) (work).  FAX: Email: PARTICULARS OF NEAREST CARRIERS DEPOT	Extension n	nast.
Check with us first - orders can normally be processed within one day!)   My deposit of 10% of the total purchase price. I agree to pay the balance upon completion of my order on an ex works basis.  NAME:	Please find, accompanying this order :-	
I agree to pay the balance upon completion of my order on an ex works basis.  NAME:		
ADDRESS:		
PH. : (home)	NAME:	
PH.: (home)		
PARTICULARS OF NEAREST CARRIERS DEPOT  Yours sincerely,		
	FAX:Email:  PARTICULARS OF NEAREST CARRIERS DEPOT	
( signed)	Yours sincerely,	
	( signed)	



## WINDMILL MAKERS SINCE 1980

# PROUD OF THE PRODUCT WE MAKE AND SUPPLY



Copyright 1996 - All rights reserved

To: