



# FLAGTRAX PRODUCT GUIDE

*New Zealand 2018*

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*Nexus Australasia is a division of Souness Developments Limited*

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Only flags, banners, or other objects authorised by Nexus Development Limited, or its licensees may be used in this patented PushPull Installation Track System. The use of unauthorised items will compromise performance, safety and intellectual property law, and will void any warranties.

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*Updated 5 May 2018*



Street flags provide colour vibrancy and movement, and are a cost effective and proven way to decorate towns and cities, or to showcase a message or brand. However street flag installation in urban areas is typically slow, resource hungry and costly often requiring cherry pickers, qualified technicians, traffic management plans and health and safety compliance.

Introducing FlagTrax® the new and hassle free way to install street flags in seconds from the safety of ground level.

## Installing street flags has never been easier!

FlagTrax® unique track system can be fitted to new and existing poles, lampposts, light stands and walls. Prime display sites that were difficult to access can now be utilised - no more cherry pickers, qualified technicians, traffic management plans or health & safety issues.

The FlagTrax® is a proven system which has been in use throughout New Zealand since 2009 and recently in Australia and the USA

# WHY CHOOSE FLAGTRAX?

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- FlagTrax® street flags are rapidly changed over with ease in seconds.
- FlagTrax® street flags can be seen day and night with the addition of optional LED lighting inserts. The ultimate 24/7 display solution.
- The initial cost of FlagTrax® and its installation is quickly recovered by the on-going savings made in flag installation.
- FlagTrax® save time on planning and allows for rapid deployment of street flags.
- FlagTrax® can be easily fitted to existing structures including lampposts, light poles and walls
- FlagTrax® means more displays, more exposure and less cost

## PLUS...

- FlagTrax is available in two standard sizes or can be configured to meet your requirements
- Displays fabric street flags up to 3.8m x 1.15m
- Optional LED ECO Lighting Strips highlight the street flag at night
- Designed to be screwed or strapped to structures
- A top support arm is required. This can be an existing arm or supplied as an option
- Made from aluminium with plastic and stainless steel fixtures.



# FLAGTRAX® – HOW IT WORKS

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## INSTALL A STREET FLAG IN LESS THAN A MINUTE!

FlagTrax® allows flags to be raised or lowered within seconds via a special track from the safety and convenience of the ground.

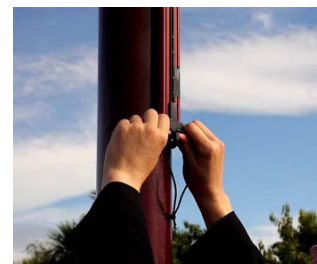
It's easy it is to raise and lower FlagTrax® flags simply...



Fit your street flag to the flexible PushPull rod



Insert the PushPull Rod and the street flag into the FlagTrax track and raise



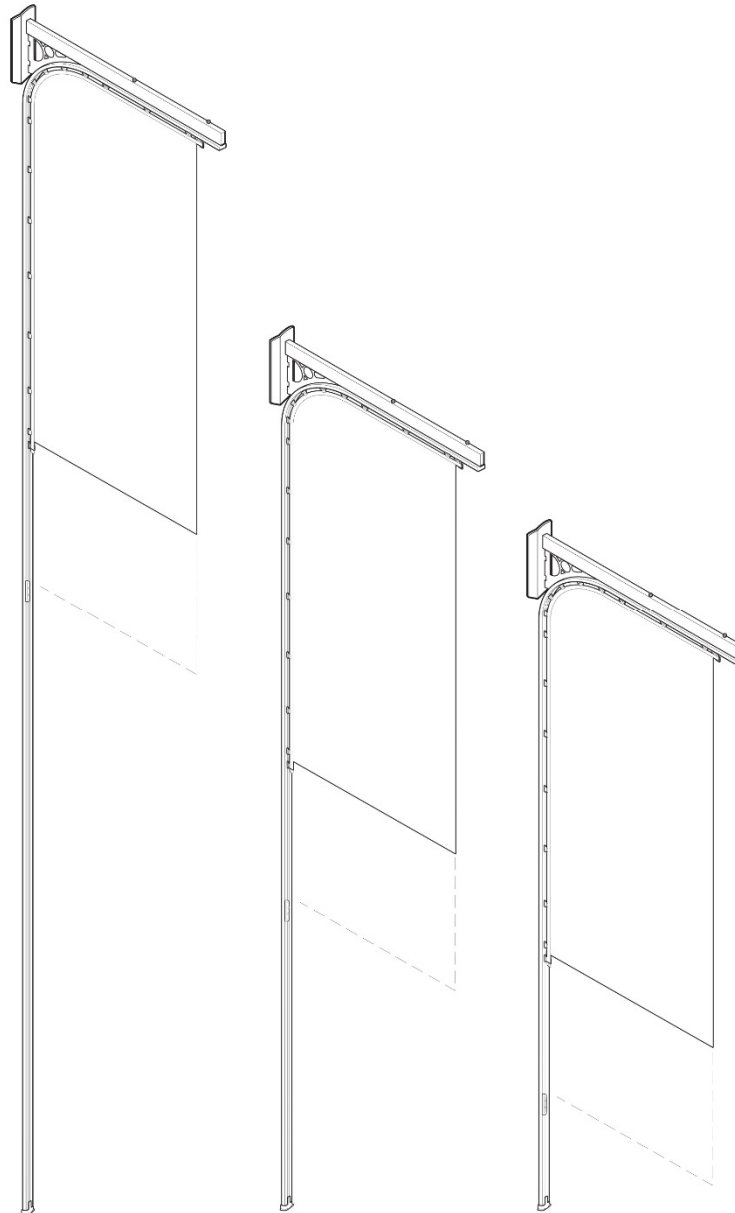
Lock securely into place

# FLAGTRAX<sup>®</sup> SIZES

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FlagTrax is available in several different standard sizes and configurations, or can be custom configured to suit specific requirements.

Standard sizes: These are detailed below and are ideal for fitting to poles or walls. (Illustrated with support brackets fitted)

**FlagTrax<sup>®</sup> 5.65m x 1.04m**

Size: 5.65m x 1.04m (H x W)  
Colour: Silver Quill (STANDARD)  
Flag: 2.65m x 0.95m,  
1.75m x 0.95m (H x W)

**FlagTrax<sup>®</sup> 4.15m x 1.04m**

Size: 4.15m x 1.04m (H x W)  
Colour: Silver Quill (STANDARD)  
Flag: 2.65m x 0.95m,  
1.75m x 0.95m (H x W)

**FlagTrax<sup>®</sup> 3.15m x 1.04m**

Size: 3.15m x 1.04m (H x W)  
Colour: Silver Quill (STANDARD)  
Flag: 2.65m x 0.95m,  
1.75m x 0.95m (H x W)

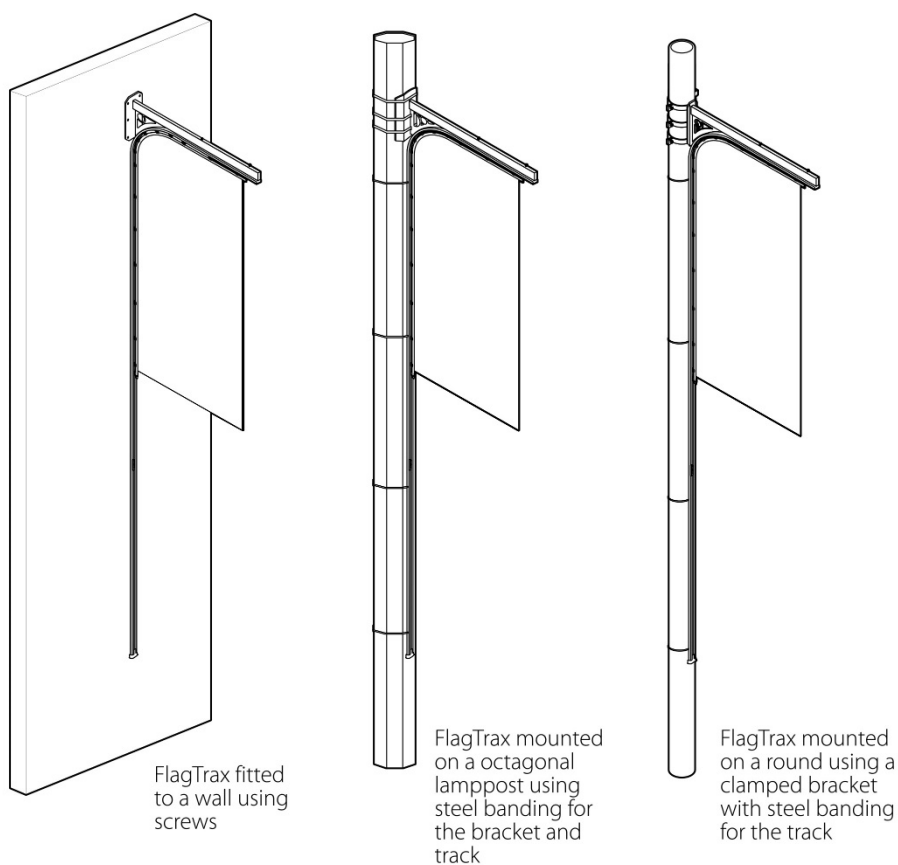
Custom sizes: These can usually be accommodated – see 'How to order'.

# FLAGTRAX® MOUNTING OPTIONS

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FlagTrax® is designed for a wide range of applications. These include mounting to lighting columns, round or octagonal steel or concrete poles, wooden lampposts etc., as well as mounting to suitable walls, stand-alone fixed poles etc.

A horizontal arm or bracket is required to support the top of the FlagTrax track and to bear the wind forces on the flag. This arm or bracket can be an integral part of the lamppost or can be retrofitted to it when the FlagTrax unit is installed.

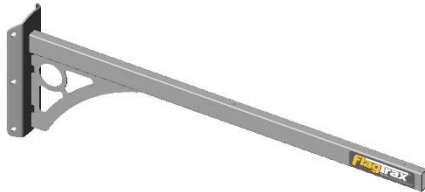


The vertical section of the FlagTrax® track is typically fixed to the structures with screws, stainless steel banding or purpose made steel clamps.

# FLAGTRAX® SUPPORT ARM BRACKETS

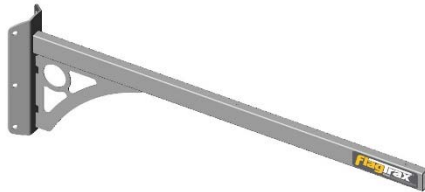
## FlagTrax® Support Arm Bracket – Standard Range

The Standard FlagTrax Support Arm Bracket is available in several configurations all using the same basic design. The various configurations allow the bracket to be retro-fitted to existing lampposts, poles and walls.



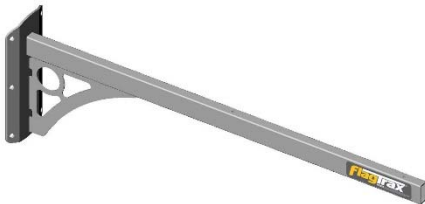
### FlagTrax® Support Arm Bracket – Standard Pole Mount

Product Code: NFT-004  
 Configuration: 75mm flat with 45° angled sides  
 Suitable for: Octagonal and Large diameter concrete or wooden poles  
 Sizes: 1040mm wide  
 Finish: Hot dipped Galvanised mild steel  
 Fastening Method: x3 19mm stainless steel band-it strapping



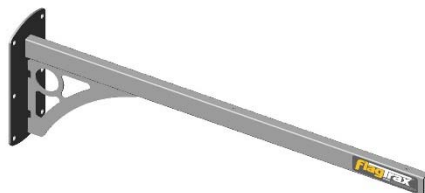
### FlagTrax® Support Arm Bracket – Narrow Pole Mount

Product Code: NFT-004N  
 Configuration: 45mm flat with 45° angled sides  
 Suitable for: Octagonal and Small diameter concrete or wooden poles  
 Sizes: 1040mm wide  
 Finish: Hot dipped Galvanised mild steel  
 Fastening Method: x3 19mm stainless steel band-it strapping



### FlagTrax® Support Arm Bracket – Wide Pole Mount

Product Code: NFT-004W  
 Configuration: 75mm flat with 22° angled sides  
 Suitable for: Large diameter round concrete or wooden poles  
 Sizes: 1040mm wide  
 Finish: Hot dipped Galvanised mild steel  
 Fastening Method: x3 19mm stainless steel band-it strapping



### FlagTrax® Support Arm Bracket – Wall Mount

Product Code: NFT-004F  
 Configuration: Flat plate with six 12mm mounting holes  
 Suitable for: walls and flat vertical surfaces  
 Sizes: 1040mm wide  
 Finish: Hot dipped Galvanised mild steel  
 Fastening Method: x6 12mm x 60mm long coach screws or similar

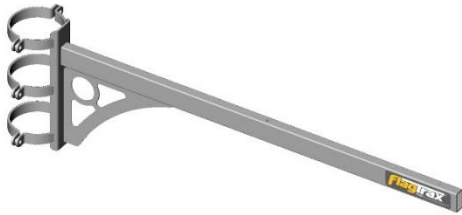


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## FlagTrax® Support Arm Bracket – Non Standard Poles

In some cases the Standard FlagTrax Support Arm Bracket will not be suitable. This can be the case when trying to fit FlagTrax to some round, square or tapered pole, where the standard fixing methodology isn't sufficient to hold the bracket firmly in heavy wind conditions.

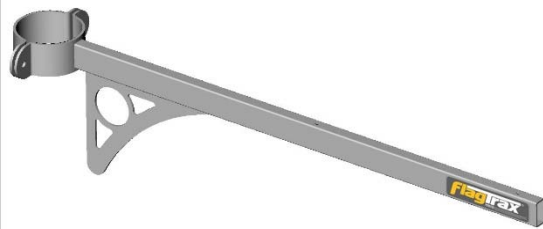
In this case, we offer a FlagTrax Support Arm Bracket with steel clamps custom fitted to your pole.



### FlagTrax® Support Arm Bracket - Triple Round Clamps

Product Code:	NFT-020
Configuration:	x3 steel clamps*
Suitable for:	Round steel or concrete tapered poles
Sizes:	1040mm wide
Finish:	Hot dipped Galvanised mild steel
Fastening Method:	Steel clamps secured with 12mm dia bolts and nylox nuts (supplied)

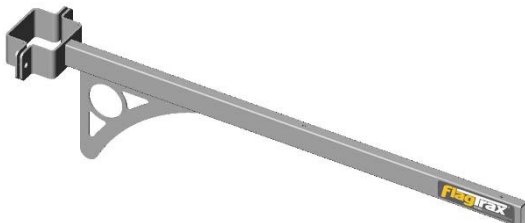
\*Clamps are manufactured to fit diameter of pole.  
(Pole Dimensions required)



### FlagTrax® Support Arm Bracket - Single Round Clamp

Product Code:	NFT-025
Configuration:	Single 65mm wide steel clamp*
Suitable for:	Round steel or concrete poles
Sizes:	1040mm
Finish:	Hot dipped Galvanised mild steel
Fastening Method:	Steel clamp secured with 12mm dia bolts and nylox nuts (supplied)

\*Clamps are manufactured to fit diameter of pole.  
(Pole Dimensions required)



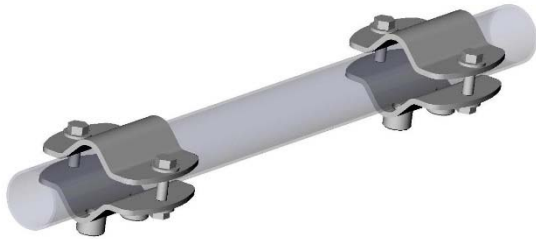
### FlagTrax® Support Arm Bracket - Square Clamp

Product Code:	NFT-005
Configuration:	Single 65mm wide steel clamp
Suitable for:	100mm square steel poles
Sizes:	1040mm
Finish:	Hot dipped Galvanised mild steel
Fastening Method:	Steel clamp secured with 12mm dia bolts and nylox nuts (supplied)

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### FlagTrax® Support Arm clamps

FlagTrax can be fitted to structures with a suitable existing support arm. If it is not possible to screw the FlagTrax track directly to your support arm we can supply clamps. The FlagTrax Support Arm Clamp is designed clamp to round tubes with a diameter between 30mm and 50mm.



#### FlagTrax® Support Arm Clamps

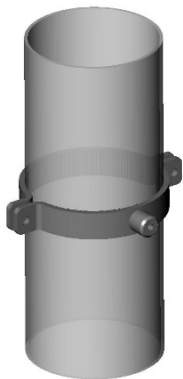
Product Code:	NFT-C001X2
Configuration:	Steel Support arm clamp
Suitable for:	Clamping to round tube 30mm – 50mm X2 Clamps required for 1040mm wide FlagTrax
Finish:	Hot dipped Galvanised mild steel
Fastening Method:	Steel clamps secured with two 8mm dia bolts and nylox nuts (supplied)

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### FlagTrax® Pole clamps

Pole clamps are typically used when other forms of attachment are not possible or when the FlagTrax® is being fitted to varying diameter decorative poles.

FlagTrax® Pole Clamps are designed to clamp to round steel poles evenly spaced up the length of the vertical section of FlagTrax® track. In most cases four pole clamps are sufficient to support FlagTrax® but there will be cases where more or less will be required.



#### FlagTrax® Pole Clamps

Product Code:	NFT-S001
Configuration:	Steel pole clamp available in several sizes to suit pole diameter
Suitable for:	Clamping to round steel poles
Finish:	Hot dipped Galvanised mild steel
Fastening Method:	Steel clamps secured with two 8mm dia bolts and nylox nuts (supplied)

# FLAGTRAX® SECURITY

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Each FlagTrax® incorporates a tamper-proof lock and key mechanism which is located at the bottom access point of the FlagTrax®. (i.e. The Locking Cap on the end of the PushPull Rod).

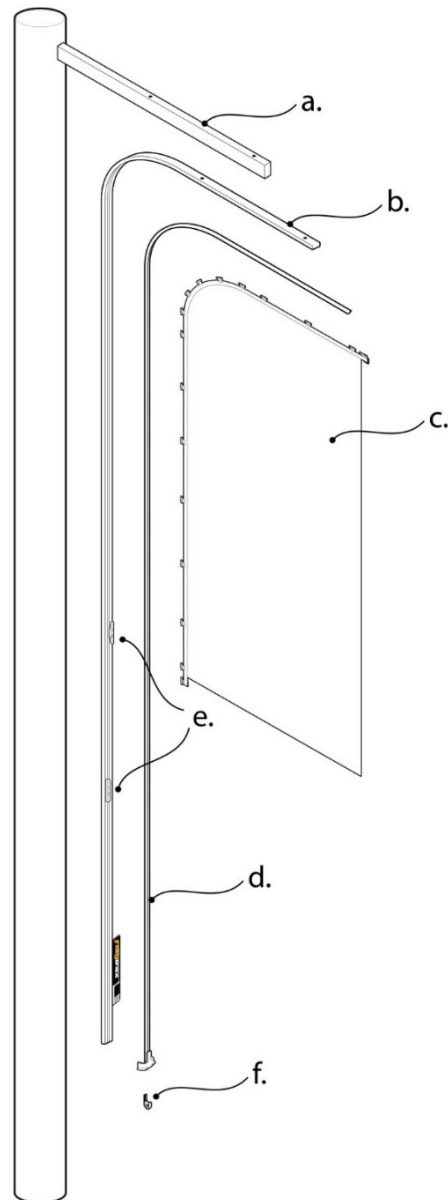


For ease of use and convenience the FlagTrax® flag access / installation point to can be at eye level, but if additional security is required the access point can be positioned higher. This can be reached readily with the use of a suitable step stool.

# FLAGTRAX<sup>®</sup> COMPONENTS

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FlagTrax<sup>®</sup> consists of the following components:



- |    |   |    |                                       |
|----|---|----|---------------------------------------|
| a. | Pole with suitable support arm bracket* | d. | FlagTrax <sup>®</sup> PushPull Rod    |
| b. | FlagTrax <sup>®</sup> track             | e. | FlagTrax <sup>®</sup> flag tensioners |
| c. | FlagTrax <sup>®</sup> flag              | f. | FlagTrax <sup>®</sup> locking key     |

Note: FlagTrax<sup>®</sup> will be supplied in sections for easy transportation and storage.

\*We can supply a suitable support arm bracket if required.

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## FLAGTRAX® TRACK

The triple slotted aluminum track forms the basis of the FlagTrax® System. The track allows flags to be installed from ground level using the FlagTrax® PushPull Rod.

FlagTrax® track can be attached to poles with stainless steel band strapping or screws. Band strapping is frequently used, in which case the track must be ordered with slots in each side to accommodate the strapping.

Slots are not required when attached with screws, and this method is usually most appropriate for walls etc., and can be used for suitable poles.

When screw fixing is used, holes must be drilled through the track precisely through the center as marked with a 'line' on the inside the track.

Holes should be positioned to ensure all screws fasten the track securely at approximately 1m intervals. If the track is being screwed to hollow cavity walls ensure the load is born by the internal framing.

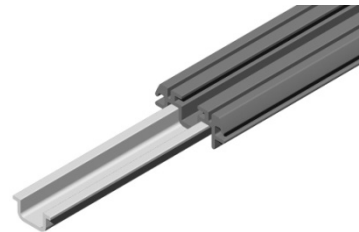
Important: When installing the FlagTrax® onto flat surfaces using the screw method (or large diameter poles) a plastic spacer must be used to support the track and prevent distortion. These purpose made spacers are available upon request.



## FLAGTRAX® TRACK JOINER

For ease of transportation and storage FlagTrax® track is supplied in sections. These sections are then joined together when the system is installed.

It is most important the butted sections of the track are perfectly aligned to ensure the PushPull Rod will pass through the join with ease. The joiner is attached to the FlagTrax® track using aluminium rivets (Alum 73 AS 6-3 Truss).



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## FLAGTRAX® KEYS



**The FlagTrax® Key is made from a flexible plastic that conforms to the internals of the PushPull Rod locking cap.**

**Please ensure the Key is inserted straight into the locking cap.**

## FLAGTRAX® PUSHPULL ROD



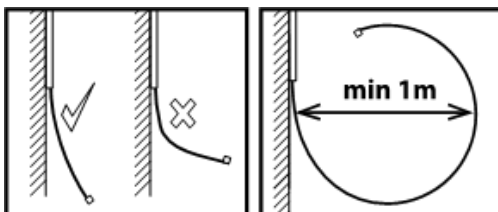
This flexible plastic rod slides into the FlagTrax® track and is used to push flags up the track. The PushPull Rod assembly includes a Locking Cap located at its base.

The FlagTrax® PushPull Rod is made from a flexible UV stabilized plastic designed to resist degradation in sunlight and to provide the necessary strength to support the forces exerted on the flag fittings.

The PushPull Rod sections simply clip together with the fiberglass reinforced plastic joiners supplied.

Care must be taken of the PushPull Rod when not fitted to the aluminum track as any form of damage can render it inoperable.

Be particularly careful in very hot climates to avoid exposure to excessive heat, and ideally flag change-outs should be made when cooler. Never place rods on surfaces that may reach extreme temperatures such as roofs, roads, pavements etc. These surfaces can reach temperatures way in excess of air temperatures and may cause plastics to soften and distort.



It must not be coiled or bent with less than a 500mm radius (i.e. minimum coil diameter 1.0m) when flags are being raised or lowered.

Wherever possible it must be stored inside the aluminum track. If this is not possible, it must be stored flat and kept clean and free from dust, and not distorted, twisted, crushed, stored in direct sunlight, or near any heat source etc.

While not recommended, if short term coiling is totally unavoidable, coils must not be less than 750mm in radius (i.e. minimum coil diameter 1.5m). Do not use packing tape as adhesive may be left on the rod, or cable ties, cord etc.

PushPull Rods will ultimately wear and should be checked regularly for damage. They are vital to the performance of FlagTrax® and must be replaced as when necessary.

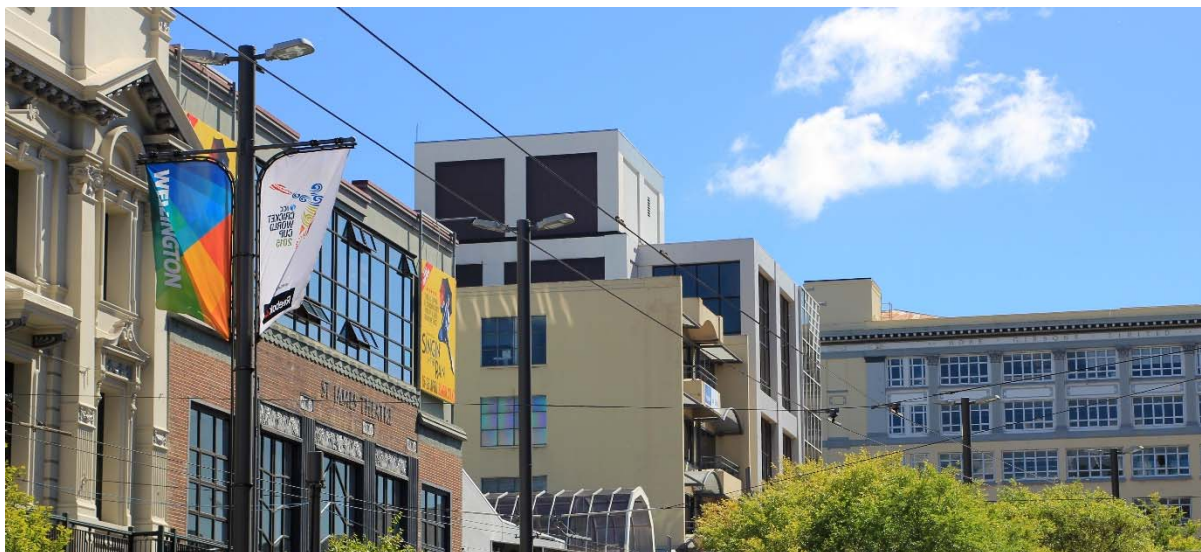
The performance and ease of use of the PushPull Rod will be enhanced with silicone lubrication. A light spray over the full length of the rod should be applied as required.

Do not use other lubricants – for example, grease or oil which will attract dust and dirt. NEVER use CRC (or similar petroleum based products) as these will react with the plastic and cause the rod deform.



# FLAGTRAX® FLAGS

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FlagTrax™ street flags are finished with special fittings and hardware enabling them to function correctly when used on FlagTrax®.

The size of the street flag is also important as they need to 'fit' the FlagTrax™ they are being installed on.

FlagTrax™ is designed to accommodate two street flag lengths. For sites exposed to very strong winds, the use of the smaller sized street flags is often appropriate.

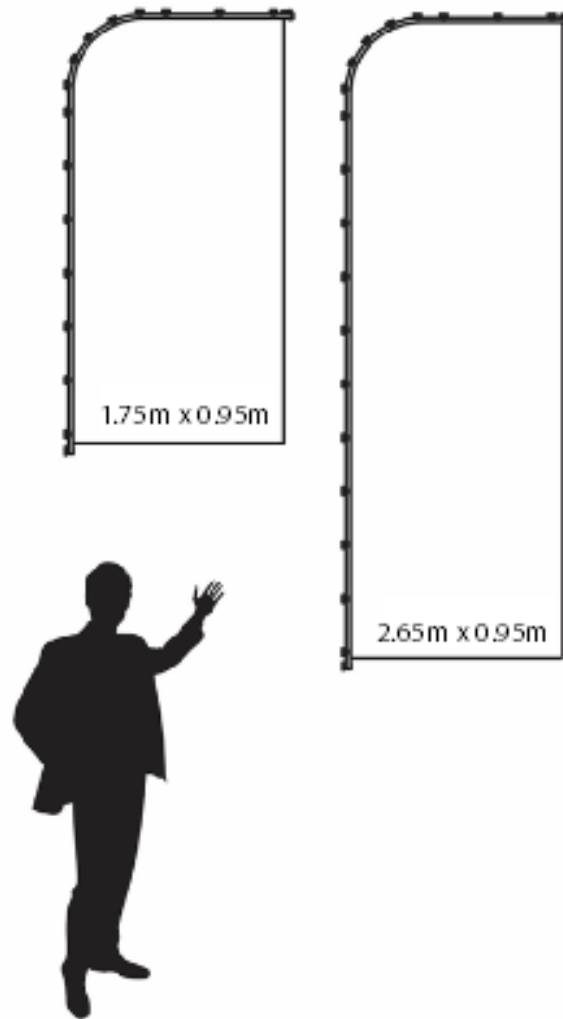
FlagTrax™ street flags can only be purchased from licensed FlagTrax® flag manufacturers

*Please note: Only flags, banners and other objects authorised by Nexus Developments limited, and sourced from licensed manufacturers are to be used on the patented PushPull track system. Flag hardware incorporated in the manufacture of the flags (specialised plastic fittings and webbing) must never be reused in the manufacture of new flags. Failure to comply will compromise safety, intellectual property law and will void any warranties.*

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## FLAGTRAX<sup>®</sup> FLAG SIZES

Each FlagTrax is designed to fit 2 different sized flags.

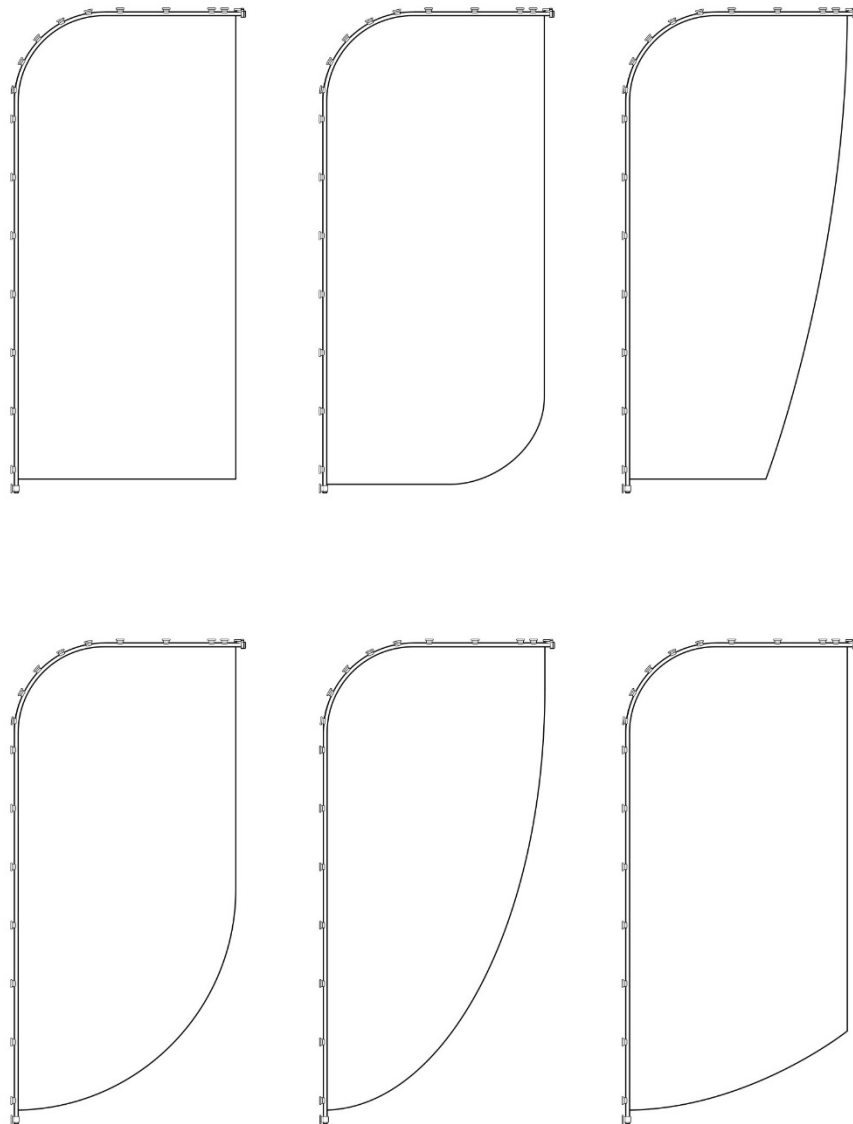


Sizes are 2.65m x 0.95m and 1.75m x 0.95m.

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## FLAGTRAX® FLAG SHAPE

Today's signage is typically produced in square or rectangular formats which can be lost in the clutter of busy urban streets. FlagTrax® flags can be finished in a variety of different shapes offering an eye-catching and elegant alternative.



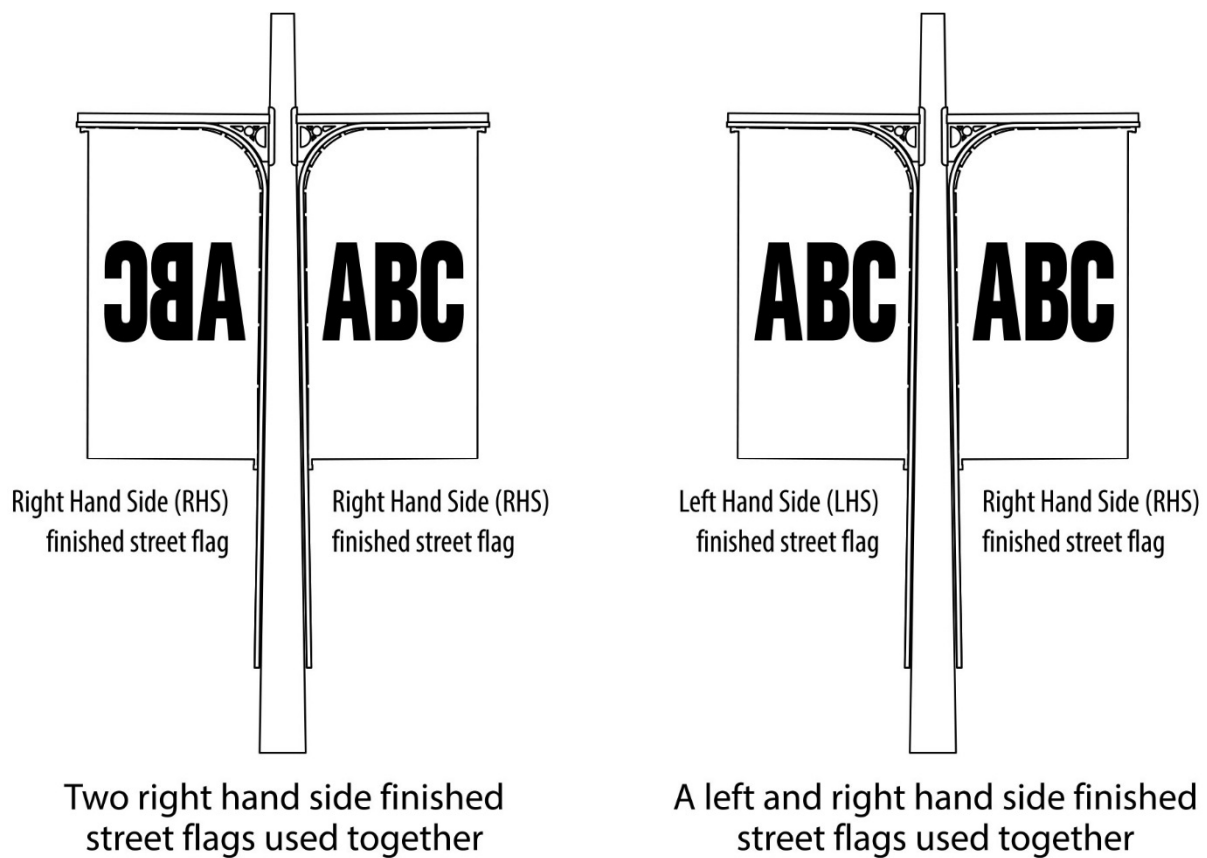
Note: It is recommended the flag be finished with a heat sealed outer edge when using the curved shapes (see FlagTrax flag finishing p19)

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## FLAGTRAX® FLAG ORIENTATION

The design on a FlagTrax® Street Flag appears on both sides, correctly when viewed from the front, and in mirror reverse when viewed from the back. This is the preferred and most cost effective method for printing street flags.

In New Zealand, the most common orientation to finish street flags is with the left hand edge of the flag against the lamppost. This is referred to as RHS (right hand side) finishing as the flag hangs to the right of the lamppost.

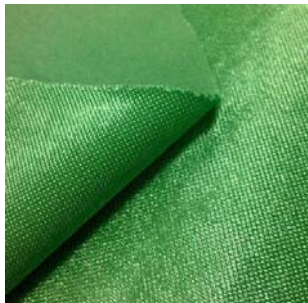


In a double FlagTrax® configuration (as above), displaying two of the same design with RHS finishing would result in the left flag being viewed “mirror reverse”.

In some cases, this is not ideal and an alternative is to finish the left flag with LHS (left hand side) finishing with the right hand edge of the flag against the lamppost.

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## FLAGTRAX® FLAG FABRICS



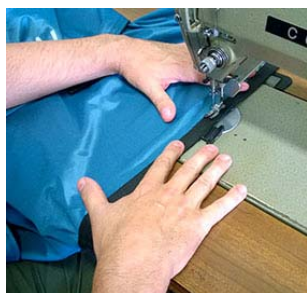
The FlagTrax® System is designed for use with single layer fabric flags such as knitted (trilobal) or woven polyester or nylon up to 150gsm. It is not suitable for use with heavy fabrics including PVC coated materials.

FlagTrax® flags are manufactured from dye screen or digitally printed fabric that will provide an eye catching soft flowing movement in the lightest of breezes. The flags are semi translucent, and will look bright and attractive whether front lit or back lit (unlike opaque materials which are in shadow when back lit).

The fabric recommended is a high sheen light weight trilobal fabric, knitted from a continuous filament yarn. It is 100% polyester, a synthetic widely used and known for its durability, and resistance to UV degradation. Polyester is also non-absorbent, and flags will not become saturated and limp in the rain.

This fabric has been tested and proven over many years and is the best choice for street flags. Other materials such as PVC coated fabrics, woven flag fabrics, canvas, heavy nylon, or fabrics using natural fibers like cotton or wool should not be used in the construction FlagTrax® flags.

## FLAGTRAX® FLAG FINISHING



FlagTrax® flags incorporate special fittings that form an integral part of the patented PushPull System and must be made to precise specifications to function correctly. Only flag manufacturers officially licensed by Nexus Developments Limited are permitted to manufacture FlagTrax® flags.

The edge of the FlagTrax® flag may be hemmed or heat sealed.

We recommend heat sealing the edges which will result in the fabric progressively wearing away over time, and a 'rounding' of the outer corner. Hemmed flags will look attractive initially, but if subjected to strong winds, or if in use for a long time, the hems will eventually tear loose and can look unsightly.

Another advantage of heat sealed edges is that flags can easily be finished in a variety of attractive shapes.

If you have any questions regarding FlagTrax® flag finishing please do not hesitate to contact your flag supplier.

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## FLAGTRAX® FLAG LIFE



It is not possible to accurately define the expected life of a FlagTrax® flag in terms of weeks, months or years.

Many variables combine to limit the life of a flag, the prime ones being wind velocity, ultra violet light, rain, dirt, pollution, and sometimes the snagging of banners against sharp objects such as rough poles, shop verandas etc.

The photo on the left illustrates where a sharp edge on the lamppost has resulted in a "sharks gill" tear on the street flag.

The arrow highlights the "sharp edge" on the lamppost.

### Types of wear and their causes:

Colour fading	-	Ultraviolet light (Sun)
Weathering	-	Rain and wind
Rubbing/whipping	-	Abrasive lampposts (E.G.concrete)
Discolouration	-	Smoke, exhaust fumes, geothermal gasses

The printing method (dye screen or digitally printed) can contribute to the visual perception of colour fading. Depending on the equipment used, digitally printed fabrics may have less than 100% colour penetration (the colour on the back is less intense than the front). As a result, the flags will appear slightly faded when viewed from the back.

Put simply, flags consist of fabric with an image made up of coloured dyes, and when flown outside they are exposed to numerous chemical and physical attacks. Because of this, all FlagTrax® flags will ultimately be subject to fading and wear to some degree. In New Zealand winds are the cause of most flag wear, and our winds are extreme. Wind speeds of 118km are classified as a type 1 hurricane, and they regularly exceed this.

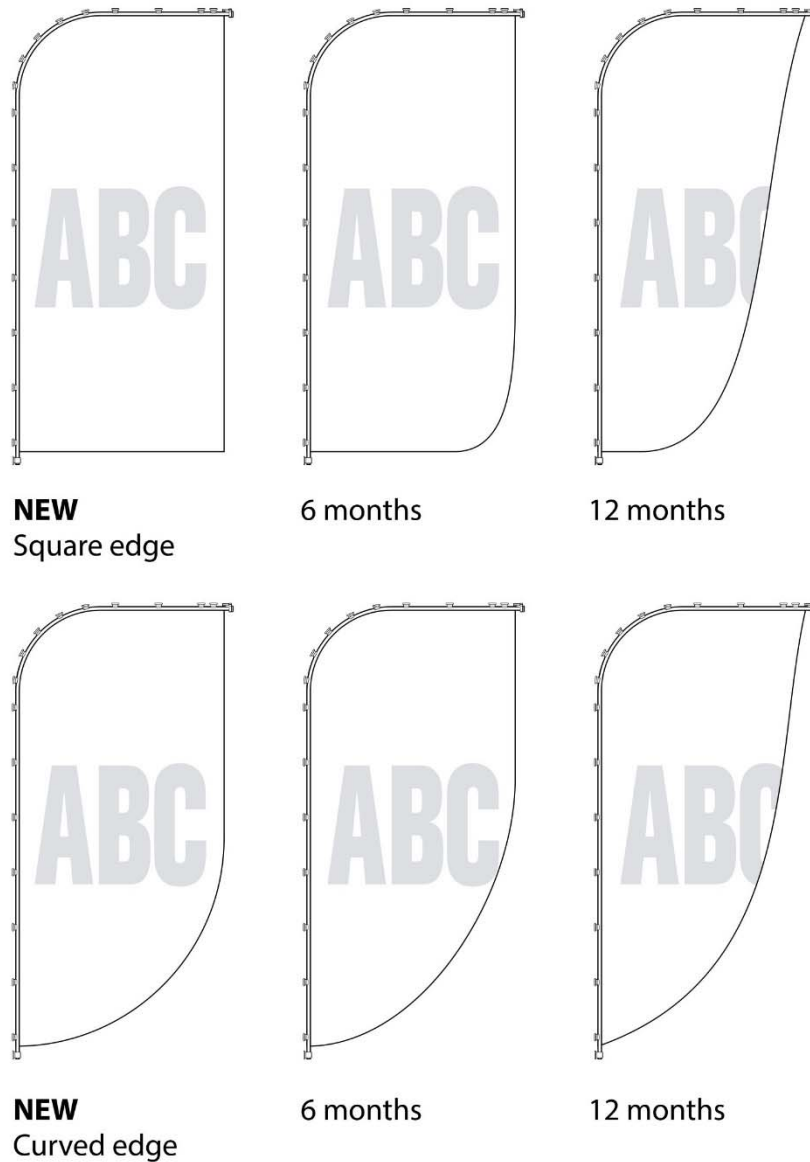
FlagTrax® can extend the life of flags considerably by enabling their inexpensive and rapid lowering when severe weather warnings are issued. They can be again easily raised once the storm has passed.



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Polyester knitted fabric FlagTrax® flags will slowly abrade away at the outer edges, but this will not detract from their attractiveness if the image is appropriately positioned.

Typically curved shaped FlagTrax® flags offer better wear resistance than the non-curved design.



The illustration above shows how the outer edges of the FlagTrax® flag will wear away over time (finished with a heat sealed edge). Because of this, designs should avoid any text or logo placement on the lower outside edge as this will wear first.

Please note the time periods used above are only a guide. If you have any concerns about the wear characteristics of your FlagTrax® flags please contact us.

# ORDERING THE FLAGTRAX SYSTEM

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## Step 1 – Where are you installing FlagTrax?

First establish the site or sites you have in mind are suitable for FlagTrax®. We can assist, and it often helps if photographs of the site are available, and of the poles or lampposts etc. involved.



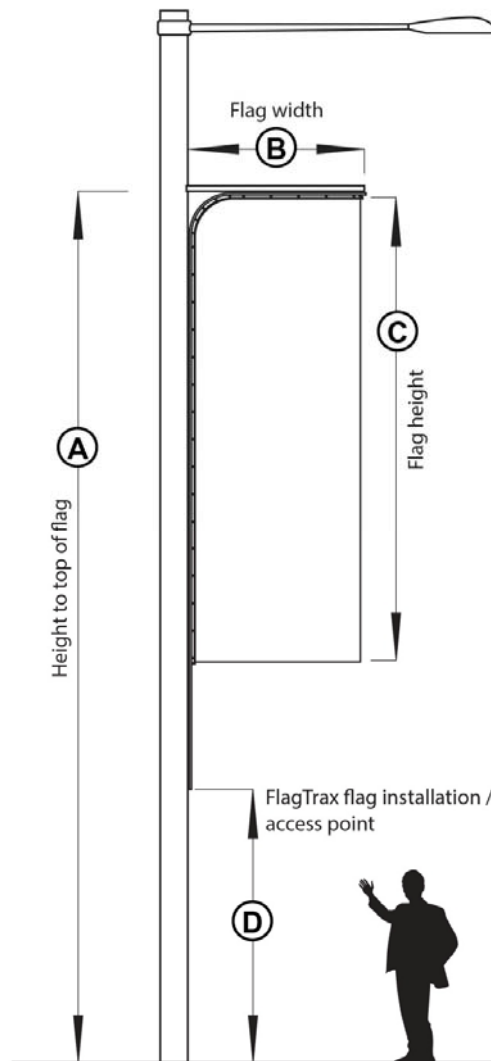
Standard FlagTrax® products are designed for mounting onto a wide range of structures. These may include lighting columns, concrete or wooden lampposts, walls, stand-alone poles etc. In all cases it is the responsibility of the purchaser to establish the suitability of the sites and the structures onto which FlagTrax® is to be fitted.

### Ordering Considerations include:

- What sized flags will be used?
- FlagTrax® will normally be set up to accommodate two flag lengths. For sites exposed to very strong winds, the use of the smaller sized flags is often appropriate.
- How high will the flags be above the ground? This will determine the height at which the Support Arm will be mounted.
- Where will the flag installation / access point be? This will determine the length of the FlagTrax® vertical track section.
- Who will be installing the FlagTrax®?
- Will a standard FlagTrax® product meet your requirements?
- Will the FlagTrax® be retrofitted to existing lampposts or light stands etc? If so, a
- Will a FlagTrax® Support Arm need to be fitted.
- Will the FlagTrax® be fitted to new lampposts or light stands? If so there are many benefits to be gained by incorporating the support arms into the pole design. We can assist with the necessary specifications.
- Does the FlagTrax® track need to be a special colour?
- Who will be raising and lowering the flags. Please ensure they receive the FlagTrax® flag raising and lowering instructions.

Customised FlagTrax® products may be available to fit less common lamppost or pole types, and for other special applications. Where possible, it is preferable to use standard designs and components to minimise the need for alterations. To retain the performance of FlagTrax® products and to minimise costs.

Key measurements in determining the most suitable FlagTrax® for your requirements are as follows:



Height to top of flag	mm
Flag width	mm
Flag height (maximum)	mm
Flag installation/access point	mm

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## Step 2 – Ordering and delivery

If one of the standard FlagTrax® products will meet your requirements, order placement is simple. Set pricing applies to standard products, but nonstandard products will need to be quoted separately.

## Step 3 – Installation

FlagTrax® installation must be carried out by an approved installer with the appropriate knowledge, skills and tools to complete the work to an appropriate standard.



To install the FlagTrax® System a small amount of pre installation fabrication and assembly work will be required.

If required, additional advice or information will be provided to installers ensuring they have the necessary knowledge and skills to carry out a rapid, economical and effective installation.

Situations will vary, but installers will typically be required to supply the necessary installation equipment such as cherry pickers, labour and small hardware items such as nuts and bolts, stainless steel strapping etc. They may also need to apply for and obtain a traffic management plan to meet the local authority's requirements.

FlagTrax® installation is a one-off cost.

Full installation instructions will be supplied with your FlagTrax® Order.

# RAISING AND LOWERING FLAGTRAX FLAGS

The following is a detailed guide to raising and lowering FlagTrax® flags. This operation should be carried out in calm weather.



Fig 1



Fig 2



Fig 3



Fig 4



Fig 5



Fig 6



Fig 7



Fig 8



Fig 9



Fig 10

1. Insert the FlagTrax® key fully into keyhole in the Locking Cap at the bottom of the PushPull Rod to release the security clip (Fig 1).
2. With the key inserted, pull the PushPull Rod a few centimeters out of the track (Fig 2).
3. Remove the key and store in a safe place.
4. Fully remove the PushPull Rod from the track (Fig 3). The best method is to carefully coil the rod as you remove it. Important, see Notes 1 & 2 below.
5. Attach the FlagTrax® flag to the top of the PushPull Rod by sliding the special plastic sliders on the flag into the slot in the PushPull rod.
6. Start with the Bottom Flag Clip fixed to the tape at the bottom of the flag (Fig 4). The 'wing' on the side of the clip will be caught by the Flag Tensioner positioned on the track (Fig 9).
7. For this reason, the 'wing' must be on the correct side, and the clip can be rotated if necessary. Some FlagTrax® systems are fitted with two Flag Tensioners at different levels to allow for flags of different heights to be used. It is therefore important the 'wing' is on the correct side of the flag to catch in the correct tensioner.
8. Fit all remaining sliders into the PushPull rod (Fig 5) and finally the Top Flag Clip which must 'click' securely into place into the hole at the end of the rod (Fig 6 & 7). This then becomes the leading edge of the PushPull Rod.
9. Insert Top Flag Clip and the PushPull Rod into the track, (Fig 8) and push the flag to the top of the track. The flag will then tension correctly as the 'wing' on the Bottom Flag Clip catches in the Flag Tensioner (Fig 9).
10. Ensure the PushPull Locking Cap 'clicks' securely into place at the base of the track (Fig 10).

Removal of FlagTrax® flag is the reverse of the above.

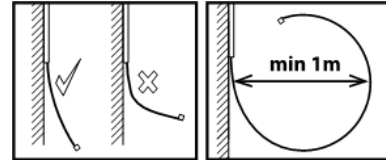
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## TIPS ON RAISING AND LOWERING FLAGTRAX FLAGS

1. When removing or inserting the PushPull Rod keep it as parallel as possible to the track. Never bend it at an angle.

2. The PushPull rod must be loosely coiled - the diameter of the coil must not be less than 1.0m.

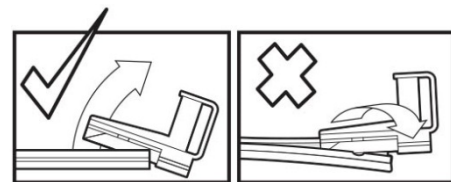
3. The PushPull Rod should slide up the track relatively freely, but some resistance will be felt as it moves around the curved section of the track. An aerosol can of silicone spray may be used on the PushPull Rod to reduce friction if required. Never use petroleum based lubricants as these will damage both plastic and aluminum components.



4. Treat the PushPull Locking Cap with care and ensure the locking clip engages correctly in the bottom of the track and is not bent or damaged.

5. When no flag is fitted to FlagTrax®, the PushPull Rod should be replaced in the track for safe keeping wherever possible. If it must be stored elsewhere, it should be kept clean, straight and flat, away from heat, and must not be crushed, twisted or distorted in any way.

6. When removing the Top Flag Clip from the PushPull Rod use a pivoting motion as illustrated. Do not twist the clip as this may damage the PushPull Rod.



**Removing Top Flag Clip**

7. Be particularly careful in very hot climates to avoid exposure to excessive heat, and ideally flag change-outs should be made when cooler. Never place rods on surfaces that may reach extreme temperatures such as roofs, roads, pavements etc. These surfaces can reach temperatures way in excess of air temperatures and may cause plastics to soften and distort.
8. If, in the unlikely event the flag catches on any protrusions on the pole while being raised or lowered, never use force. Simply move it up or down a few centimeters to release it, and then carefully move it again past the protrusion.
9. FlagTrax® enables the rapid raising and lowering of flags from the safety of ground level. To avoid possible damage to flags or FlagTrax® components, the precautionary removal of flags prior to any severe weather events is recommended.

**Please note:** Only flags, banners and other objects authorised by Nexus Developments Limited, and sourced from licensed manufacturers are to be used on the patented PushPull track system. Flag hardware incorporated in the manufacture of the flags (specialised plastic fittings and webbing) must never be reused in the manufacture of new flags. Failure to comply will compromise safety, intellectual property law and will void any warranties.



# PATENTED SYSTEM

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The patented PushPull System was designed and developed in New Zealand by Nexus Developments Limited, a company that specializes in designing innovative products for the international flag and banner industry.

The system allows approved flags, banners, lighting, signage (or other objects), to be conveniently raised, lowered or repositioned, typically in difficult to reach areas.

FlagTrax® is a product that utilizes the PushPull system specifically to raise and lower fabric flags and banners. The flags are attached to a flexible PushPull rod which is then pushed up a unique track.

Nexus Developments Limited owns the international intellectual property rights to the PushPull system, which is protected by a number of patents and patents pending in several countries.

One patent protects the intellectual property incorporated in the apparatus for remotely raising, supporting and lowering the objects, and also covers the objects themselves when they have been designed specifically for use in the apparatus.

Another patent relates to the shape of the flag or banner designed to fit the curved or shaped track system, and a third patent application relates more specifically to the function of the system.

## PATENT INFORMATION

*FlagTrax®, FlagTrax® Duo® and other products incorporating Nexus's PushPull™ Technology, including the flags, banners, lights and other objects displayed on them are protected in many countries by numerous patents, design registrations and copy rights, including but not limited to*

*Patents: New Zealand 544347 and 541624 | Patent Applications: New Zealand 614128, Australia 2012201021, Canada 2675043, International PCT/NZ2012/000237/WO2013/089566 | Design Registrations Applied for: New Zealand 417903, Australia 201313857*

# FIT FOR PURPOSE

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Due to the wide range of possible applications and environmental conditions the FlagTrax range of products and accessories may be exposed to, the purchaser and/or end-user of these products must satisfy themselves of the suitability of the product, its siting and its installation for their purpose and intended usage.

Nexus Australasia and our specialist distributors will be pleased to assist customers and their installers in this process and we will endeavor to make all available performance data accessible at their request, Nexus does not assume any responsibility or liability for any advice furnished or for the performance or results of any installation or use of these products.

# PRODUCT WARRANTY

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FlagTrax® consist primarily of a powder coated aluminium track in which a sliding 'PushPull' rod is used to raise and lower display items. The track is warranted for five (5) years. 'PushPull' rods are manufactured from semi flexible plastics that, when installed correctly in the tracks, are resistant to the effects of sun exposure and weathering, and are warranted for two (2) years. Nexus Support Arm Brackets are required for use with some systems, manufactured from hot dip galvanised steel, and are warranted for five (5) years.

## Notes:

1. Warranties apply from the date of Nexus's invoice against defects in material and workmanship when installed and used according to Nexus's installation instructions and usage instructions, and when used to support flags, banners and/or LED lights as appropriate to the system type and the site, and when manufactured strictly in accordance with Nexus's specifications by Nexus's licenced manufacturers/distributors.
2. Wind forces on flags and banners are transferred to the track and its components, as well as to the structures to which the track is attached (brackets, poles, lampposts and walls). High wind tests involving 1.8m x 0.9m flags have been successfully conducted, but all flags and banners (especially if larger than 1.8m x 0.9m) should be removed in advance of severe weather.
3. Track and bracket installations must be inspected 30 days after their initial installation and every 90 days thereafter, making any necessary adjustments immediately.
4. Warranties do not apply where equipment is used, or installation performed, in any manner contrary to Nexus's specifications and instructions, nor where equipment is altered or modified.
5. In the event of a potential breach of product warranty Nexus is to be informed immediately the issue is identified, and if proven to be a breach, Nexus will replace or repair (or pay for the repair of) such products, at the option of Nexus.
6. Warranties do not cover installation, removal, packing, freight or other incidental costs incurred by customer.
7. Only flags, banners and other objects authorised by Nexus Developments limited, and sourced from licensed manufacturers are to be used on the patented PushPull track system. Flag hardware incorporated in the manufacture of the flags (specialised plastic fittings and webbing) must never be reused in the manufacture of new flags. Failure to comply will compromise safety, intellectual property law and will void any warranties.

## Special Note:

The supply, installation, usage and maintenance of Nexus's FlagTrax® Systems typically involve a number of entities supplying one or more of the following products or services:

- a) Supply of track system/support arm bracket
- b) Installation of track/bracket
- c) Installation/wiring for lighting
- d) Supply of flags/banners
- e) Supply of LED lighting inserts
- f) Raising and lowering of flags/banners
- g) Raising and lowering of lighting
- h) Maintenance

Nexus's role and warranty relates to a) only, and because of the numerous variables involved in the siting, supporting, installation, fixing and use of these systems, purchasers/installers/users must satisfy themselves of the suitability of all aspects of the system, installation and application.