

NFK GLAZING & INDUSTRIAL SUPPLIES P/L ARCHITECTURAL GLASS FITTINGS STANDOFF FIXINGS



# NFK Standoff Fixings

This catalogue contains two easy to use sections.

The front portion (Express Ordering) offers fast specification / order of pre-assembled Standoff fixings. Simply find the page relevant to the diameter of fixing you require, select the code that represents the correct body length and finish, add a prefix if you wish to change the cap, and select any accessories you may need.

The back portion of the catalogue (Custom Ordering), contains loose components, which allows customised ordering of individual parts as required.



Standoff Body Length					
10 20 30 40 50					50
Satin Finish	41-4106.110.77	41-4106.120.77	41-4106.130.77	41-4106.140.77	41-4106.150.77
Polished Finish	41-4106.110.99	41-4106.120.99	41-4106.130.99	41-4106.140.99	41-4106.150.99

Standard assembly includes: 1 x Flat Cap, 1 x Cap to body M6 thread, 2 x Thermal Break Washers, 1 x Thread Bush, 1 x Body

- Manufactured in Australia from 316 stainless steel
- All 19mm<sup>©</sup> Standoffs are supplied to suit M6 metric thread.

#### Ordering Instructions:

- 1. Select appropriate code above for required body length and finish
- 2. Codes above include Flat Cap as part of a standard assembly.

  To replace the Flat Cap with a Dome Cap, please add DC to the code.
- 3. Order separately any accessories required from the table below.

Threaded Rod	Toggle	Coach Screw	Cover Disc	Masonry Anchor	Nuts & Washers
				All Co	
M6 x 70mm 40-1401.070	M6 40-1403	<b>M6</b> 40-1404	<b>32° x 3mm</b> 40-0901	<b>M6</b> 40-1406	M6 Hex Nut 40-1301
M6 x 100mm 40-1401.100			<b>38</b> <sup>ø</sup> x 3mm 40-0902		M6 Dome Nut 40-1303
M6 x 150mm 40-1401.150					M6 Flat Washer 40-1305
					M6 Spring Washer 40-1307



Standoff Body Length					
10 20 30 40 50					50
Satin Finish	40-4106.210.77	40-4106.220.77	40-4106.230.77	40-4106.240.77	40-4106.250.77
Polished Finish	41-4106.210.99	40-4106.220.99	40-4106.230.99	40-4106.240.99	40-4106.250.99

Standard assembly includes: 1 x Flat Cap, 1 x Cap to body M6 thread, 2 x Thermal Break Washers, 1 x Thread Bush, 1 x Body

- Manufactured in Australia from 316 stainless steel
- All 25mm<sup>©</sup> Standoffs are supplied to suit M6 metric thread.

#### Ordering Instructions:

- 1. Select appropriate code above for required body length and finish
- 2. Codes above include Flat Cap as part of a standard assembly.
  - To replace the Flat Cap with a Dome Cap, please add DC to the code.
  - To replace Flat Cap with a Flush fit cap, please add FFC to the code
- 3. Order separately any accessories required from the table below.

Threaded Rod	Toggle	Coach Screw	Cover Disc	Masonry Anchor	Nuts & Washers
				ALCO CONTRACTOR OF THE PARTY OF	
M6 x 70mm	M6	M6	<b>32</b> <sup>ø</sup>	M6	M6 Hex Nut
40-1401.070	40-1403	40-1404	40-0901	40-1406	40-1301
M6 x 100mm			38 <sup>ø</sup>		M6 Dome Nut
40-1401.100			40-0902		40-1303
M6 x 150mm			50 <sup>ø</sup>		M6 Flat Washer
40-1401.150			40-0904		40-1305
					M6 Spring Washer
					40-1307



- Available in 30mm or 50mm lengths
- Manufactured from cast 316 s/s
- Include NFK's unique integral washer
- High quality machine threaded base allows for various fixing options
- · Superior CNC machined finish
- Supplied with screw in adjustable base for easy installation

Ordering Codes						
	30mm Length 50 mm Length					
Satin Finish	40-4106.77	40-4107.77				
Polished Finish	40-4106.99	40-4107.99				

Standard assembly includes: 1 x Flat Cap, 1 x Cap to body M10 thread, 2 x Thermal Break Washers, 1 x Thread Bush, 1 x Body

• All 32mm<sup>o</sup> Standoffs are designed to use M10 metric thread.

#### Ordering Instructions:

- 1. Select appropriate code above for required body length and finish
- 2. Codes above include Flat Cap as part of a standard assembly.

  To replace the Flat Cap with a Dome Cap, please add DC to the code.
- 3. Order separately any accessories required from the table below.

Threaded Rod	Toggle	Coach Screw	Cover Disc	Masonry Anchor	Nuts & Washers
M10 x 70mm	M10	M10	38 <sup>ø</sup>	M10	M10 Hex Nut
40-1402.070	40-1403.10	40-1405	40-0903	40-1407	40-1302
M10 x 100mm			50 <sup>ø</sup>		M10 Dome Nut
40-1402.100			40-0904		40-13034
M10 x 115mm					M10 Flat Washer
40-14021					40-1306
M10 x 150mm					M10 Spring Washer
40-1402.150					40-1308



NFK's adjustable base plate can be fixed using a wide range of standard fasteners



- · Available in 30mm or 50mm lengths
- Manufactured from cast 316 s/s
- Include NFK's unique integral washer
- High quality machine threaded base allows for various fixing options
- · Superior CNC machined finish
- Supplied with screw in adjustable base for easy installation

Ordering Codes					
	30mm Length 50 mm Lengtl				
Satin Finish	40-4108.77	40-4109.77			
Polished Finish	40-4108.99	40-4109.99			

Standard assembly includes: 1 x Flat Cap, 1 x Cap to body M10 thread, 2 x Thermal Break Washers, 1 x Thread Bush, 1 x Body

• All 38mm<sup>o</sup> Standoffs are designed to use M10 metric thread.

#### Ordering Instructions:

- 1. Select appropriate code above for required body length and finish
- 2. Codes above include Flat Cap as part of a standard assembly.

  To replace the Flat Cap with a Dome Cap, please add DC to the code.
- 3. Order separately any accessories required from the table below.

Threaded Rod	Toggle	Coach Screw	Cover Disc	Masonry Anchor	Nuts & Washers
	C		0	ALE CO	
M10 x 70mm	M10	M10	50 <sup>ø</sup>	M10	M10 Hex Nut
40-1402.070	40-1403.10	40-1405	40-0904	40-1407	40-1302
M10 x 100mm					M10 Dome Nut
40-1402.100					40-13034
M10 x 115mm					M10 Flat Washer
40-14021					40-1306
M10 x 150mm					M10 Spring Washer
40-1402.150					40-1308



NFK's adjustable base plate can be fixed using a wide range of standard fasteners



- Available in 30mm or 50mm lengths
- Manufactured from cast 316 s/s
- · Includes NFK's unique integral washer
- High quality machine threaded base allows for various fixing options
- Superior CNC machined finish
- Supplied with screw in adjustable base for easy installation

Ordering Codes					
30mm Length 50 mm Length					
Satin Finish	40-4110.101.77	40-4110.102.77			
Polished Finish	40-4110.101.99	40-4110.102.99			

Standard assembly includes: 1 x Flat Cap, 1 x Cap to body M12 thread, 2 x Thermal Break Washers, 1 x Thread Bush, 1 x Body

• All 50mm<sup>o</sup> Standoffs are designed to use M12 metric thread.

#### Ordering Instructions:

- 1. Select appropriate code above for required body length and finish
- 2. Codes above include Flat Cap as part of a standard assembly.

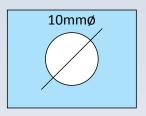
  To replace the Flat Cap with a Dome Cap, please add DC to the code.
- 3. Order separately any accessories required from the table below.

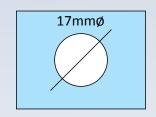
Threaded Rod	Toggle	Coach Screw	Base Plate	Masonry Anchor	Nuts & Washers
M12 x 70mm	M12	M12	50 <sup>ø</sup>	M12	M12 Hex Nut
40-14025.070	40-1403.12	40-14056	40-0817	40-1408	40-1310
M12 x 100mm					M12 Dome Nut
40-14025.100					40-1311
M12 x 115mm					M12 Flat Washer
40-14026					40-1309
M12 x 150mm					M12 Spring Washer
40-14025.150					40-1312

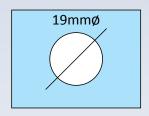


NFK's adjustable base plate can be fixed using a wide range of standard fasteners



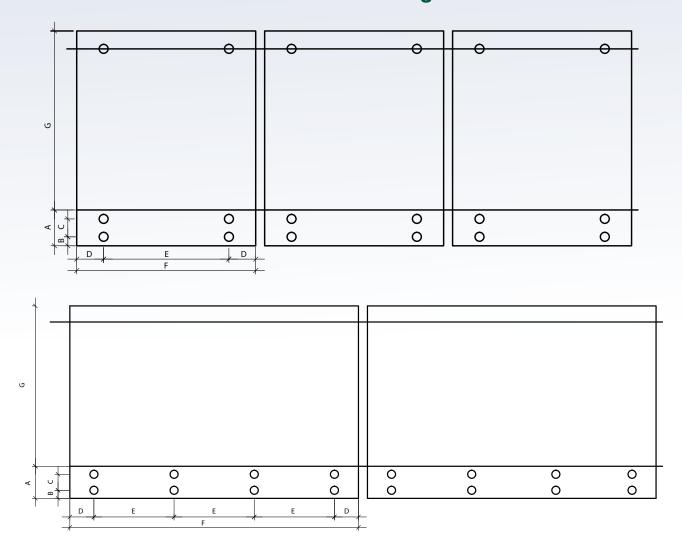






N. B: Dimensions are minimum possible sizes. Please allow for desired tolerance by increasing hole diameter accordingly.

### Technical considerations for cantilevered glass fixed with Standoffs



A number of factors come into play when correctly designing cantilevered balustrades. The two examples shown, cover the most common design criteria.

A, B and C are three dimensions that play an important part in any good design. Typically "A" ( depth of fixing face ) dictates "C" being the vertical centre to centre spacing of the standoffs. A distance of 100mm between vertical hole centres should be considered bare minimum, while  $200 \sim 250$ mm will offer much greater rigidity and structural support. Dimension "B" should be calculated to maintain a distance between glass edge and edge of the hole that is no less than 2 times the glass thickness.

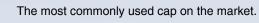
Dimension D should be greater than 100mm where possible and generally not more than 150mm.

When only four fixings are used to cantilever glass balustrades, a maximum width of  $1000 \sim 1200$ mm would be suggested. In high load applications, this span may be broken with additional fixings as shown in the alternative detail.

All applications using monolithic toughened glass, protecting a fall greater than 1 meter require a load bearing and interlinking handrail. NFK stock a selection of railing systems, suitable for most applications.

The above information is conveyed as a simple guide only, we strongly recommend installers to seek formal engineering advice and confirmation of specific design criteria prior to commencing work. NFK are able to assist with all glass engineering, through third party certified engineers.

#### Flat Cap



Precision machined to produce a very fine satin finish.

Manufactured from high quality 316 stainless steel.

All caps are 10mm thick.

NFK can custom machine caps in any quantity and to any design.

	19 <sup>ø</sup>	<b>25</b> <sup>ø</sup>	32 <sup>ø</sup>	38 <sup>ø</sup>	<b>50</b> º
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	40-0102.99	40-0103.99	40-0105.99	41-0107.99	40-0109.99
Satin Finished	40-0102	41-0103	41-0105	41-0107	40-0109



#### **Dome Cap**

All machined in Australia from 316 stainless steel.

Precision machined to produce a very fine satin finish.

NFK can custom machine caps in any quantity and to any design.

	19 <sup>ø</sup>	<b>25</b> <sup>ø</sup>	<b>32</b> <sup>ø</sup>	38 <sup>ø</sup>	<b>50</b> <sup>ø</sup>
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	40-0111.99	40-0112.99	40-0113.99	40-0114.99	40-0120.99
Satin Finished	40-0111	40-0112	40-0113	40-0114	40-0120



#### **Flat Cap with Boss**

This cap is the same style as our standard flat cap with the addition of a threaded

boss which protrudes from the back, offering increased strength & adjustability.

Manufactured from high quality 316 stainless steel.

	19 <sup>ø</sup>	25 <sup>ø</sup>	<b>32</b> <sup>ø</sup>	38 <sup>ø</sup>	50 <sup>ø</sup>
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	*	*	*	*	40-0116P
Satin Finished	*	*	*	*	40-0116

<sup>\*</sup> Locally manufactured on request



#### **Cone Cap**

Designed for applications where foot holds are of concern.

Being 20mm thick, the internal thread length is increased over standard caps.

Manufactured from high quality 316 stainless steel.

	19 <sup>ø</sup>	25 <sup>ø</sup>	<b>32</b> <sup>ø</sup>	38 <sup>ø</sup>	<b>50</b> <sup>ø</sup>
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	*	*	*	*	40-0197P
Satin Finished	*	*	*	*	40-0197

<sup>\*</sup> Locally manufactured on request



#### **CSK Tapered Flat Cap**

The taper on the face of this cap creates a low profile appearance, while retaining its strength.

NFK supply all 316 stainless steel Countersink Bolts with the face machined to match the cap finish.

Manufactured from high quality 316 stainless steel

	32 <sup>ø</sup>	38°	50 <sup>ø</sup>	
Thread Size M10		M10	M12	
Mirror Polished	40-01983.99	40-01982.99	40-01981.99	
Satin Finished	40-01983.77	40-01982.77	40-01981.77	



#### **CSK Flat Cap**

Classic flat countersunk cap.

Modified versions of this cap can be produced locally.

Manufactured from high quality 316 stainless steel.

NFK supply all 316 stainless steel Countersink Bolts with the face machined to match the cap finish.

	19 <sup>ø</sup>	<b>25</b> <sup>ø</sup>	<b>32</b> <sup>ø</sup>	<b>38</b> º	<b>50</b> º
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	*	*	40-0201.99	40-0202.99	40-0200.99
Satin Finished	*	*	40-0201	40-0202	40-0200

<sup>\*</sup> Locally manufactured on request



**CSK Bush** 

Made in Australia

Suitable for M10 CSK Bolts	40-0204
Suitable for M12 CSK Bolts	40-0205

See page 14 for relevant CSK Bolts



#### Flush Fit Cap

Suitable for use with standard M6 Countersink bolt or fittings with similar head dimensions and profile.

25 <sup>Ø</sup>	40-0203
25	40-0203



#### **Dome Cap with Concealed fixing**

All machined in Australia from 316 stainless steel

A versitile cap that can be fixed with any countersink fastener.

	19 <sup>ø</sup>	25 <sup>ø</sup>	<b>32</b> <sup>ø</sup>	38 <sup>ø</sup>	50 <sup>ø</sup>
Thread Size	M6	M6	M10	M10	M12
Mirror Polished	*	*	40-4103.99	40-4104.99	40-4101.99
Satin Finished	*	*	40-4103	40-4104	40-4101

<sup>\*</sup> Locally manufactured on request

### **Standoff Bodies**

- · Australian manufactured
- Made from high quality 316 Stainless Steel



	19n	nm <sup>ø</sup>	25n	nm <sup>ø</sup>	32n	nm <sup>ø</sup>	38n	nm <sup>ø</sup>	50n	nm <sup>ø</sup>
Body Length	Satin	Polished								
10	40-0401.77	40-0401.99	40-0501.77	40-0501.99	40-0601.77	40-0601.99	40-0701.77	40-0701.99	40-0801.77	40-0801.99
20	40-0402.77	40-0402.99	40-0502.77	40-0502.99	40-0602.77	40-0602.99	40-0702.77	40-0702.99	40-0802.77	40-0802.99
30	40-0403.77	40-0403.99	40-0503.77	40-0503.99	40-0603.77	40-0603.99	40-0703.77	40-0703.99	40-0803.77	40-0803.99
40	40-0404.77	40-0404.99	40-0504.77	40-0504.99	40-0604.77	40-0604.99	40-0704.77	40-0704.99	40-0804.77	40-0804.99
50	40-0405.77	40-0405.99	40-0506.77	40-0506.99	40-0607.77	40-0607.99	40-0705.77	40-0705.99	40-0805.77	40-0805.99

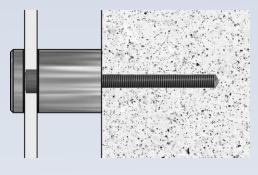
All 19mm & 25mm Bodies are machined with M6 threads All 32mm & 38mm Bodies are machined with M10 threads All 50mm Bodies are machined with M12 threads

## Standoff Tightening Tool

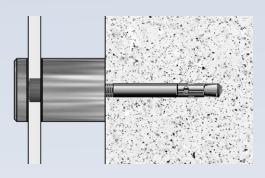
Manufactured in Australia by NFK, this simple little tool is a must for anyone using standoff fixings.

Quickly hooks into the side hole on our standoff caps to assist with tightening. Removable pins can be replaced with ease as required.

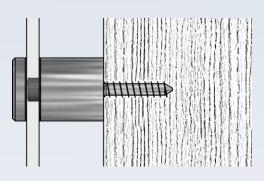




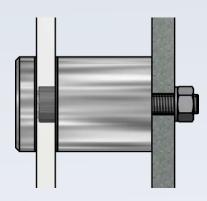
Chem-set threaded rod



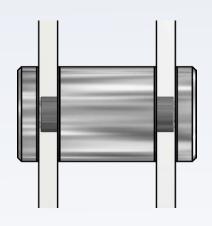
**Mechanical Masonry Anchor** 



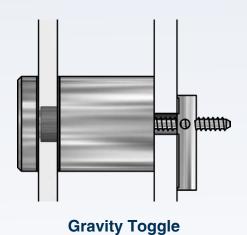
Coach Screw, fixed into timber



Threaded Rod with Nut and Washer



**Threaded Rod with Flat Cap** 





### **Fixings**

#### Threaded Stud (Short)

Typically used for connecting caps to body when assembling standoffs from loose components.

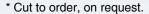


	20mm	25mm	30mm	35mm	40mm
М6	40-1101	40-1102	40-1103		
M10	40-1107	40-1104	40-1105	40-1106	40-1108
M12			40-1110	40-1111	40-1112

#### Threaded Rod (Long)

Manufactured from 316 stainless steel.

Used to fix standoffs to the supporting structure.





	70mm	100mm	115mm	150mm
M6	40-1401.070	40-1401.100		40-1401.150
M10	40-1402.070	40-1402.100	40-14021	40-1402.150
M12	40-14025.070	40-14025.100	40-14026	40-14025.150

#### **CSK Bolts**

Suitable for use with our CSK caps or CSK plastic bushes.

All machined in Australia from 316 stainless steel.

Bolts are supplied standard with the face CNC machined to match the finish on our caps.



	20mm	25mm	30mm	35mm	40mm	50mm
M6	40-1201		40-1201.30	40-1202		
M10		40-1203.25	40-1203	40-1204	40-1205	40-1205.40
M12			40-1208	40-1207	40-1205.40	40-1205.50



#### **Coach Bolts**

Available in zinc plated or stainless steel.

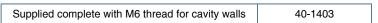
Conventional hex head coach bolts are also available for NFK's 32mm°, 38mm° & 50mm° Standoffs.

М6	15mm metal thread + 35mm Timber thread	40-1404
M10	15mm metal thread + 45mm Timber thread	40-1405
M12 15mm metal thread + 40mm Timber thread		40-14055

#### **Gravity Toggles**

Suitable for  $19mm^{\emptyset}$  &  $25mm^{\emptyset}$  Standoffs.

Can be supplied to suit  $32\text{mm}^{\circ}$ ,  $38\text{mm}^{\circ}$  &  $50\text{mm}^{\circ}$  Standoffs for light weight applications.





# **Fixings**



#### **Mechanical Masonry Anchor**

Supplied in zinc plated stainless steel & other varieties available on request.

M6 X 35mm	40-1406
M10 X 50mm	40-1407



#### **Thread Bushes**

A critical component required to protect glass from contacting the connecting thread.

NFK can supply custom sizes & design on request.

М6	6mmID x 9mm <sup>o</sup> x 6mm wide	40-1003
M10	11mmID x 16mm <sup>©</sup> x 9mm wide	40-1001
M12	13mmID x 18mm <sup>ø</sup> x 10mm wide	40-1002



#### **Thermal Break Washers**

Made from clear, UV stable PVC.

Required to separate glass from metal components.

Various other thicknesses available on request.

19 <sup>ø</sup> Standoff	18mm <sup>o</sup> x 6mmlD x 1mm	40-1501
Flush Fit Cap	Flush Fit Cap 24mm <sup>o</sup> x 16mmID x 1mm	
25 <sup>ø</sup> Standoff	24mm <sup>o</sup> x 6mmID x 1mm	40-1502
32 <sup>ø</sup> Standoff	30mm <sup>ø</sup> x 10mmID x 1mm	40-1504
38° Standoff 36mm° x 10mmlD x 1mm		40-1505
50 <sup>ø</sup> Standoff	49mm <sup>o</sup> x 12mmID x 1mm	40-1508



#### Stainless Steel Nuts Hex and Dome

316 Stainless Steel	Hex Nut	Dome Nut
M6	40-1301	40-1303
M10	40-1302	40-1304
M12	40-1310	40-1311



#### **Stainless Steel Washers Flat and Spring**

316 Stainless Steel	Flat Washer	Spring Washer
M6	40-1305	40-1307
M10	40-1306	40-1308
M12	40-1309	40-1312





### NFK GLAZING & INDUSTRIAL SUPPLIES P/L

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