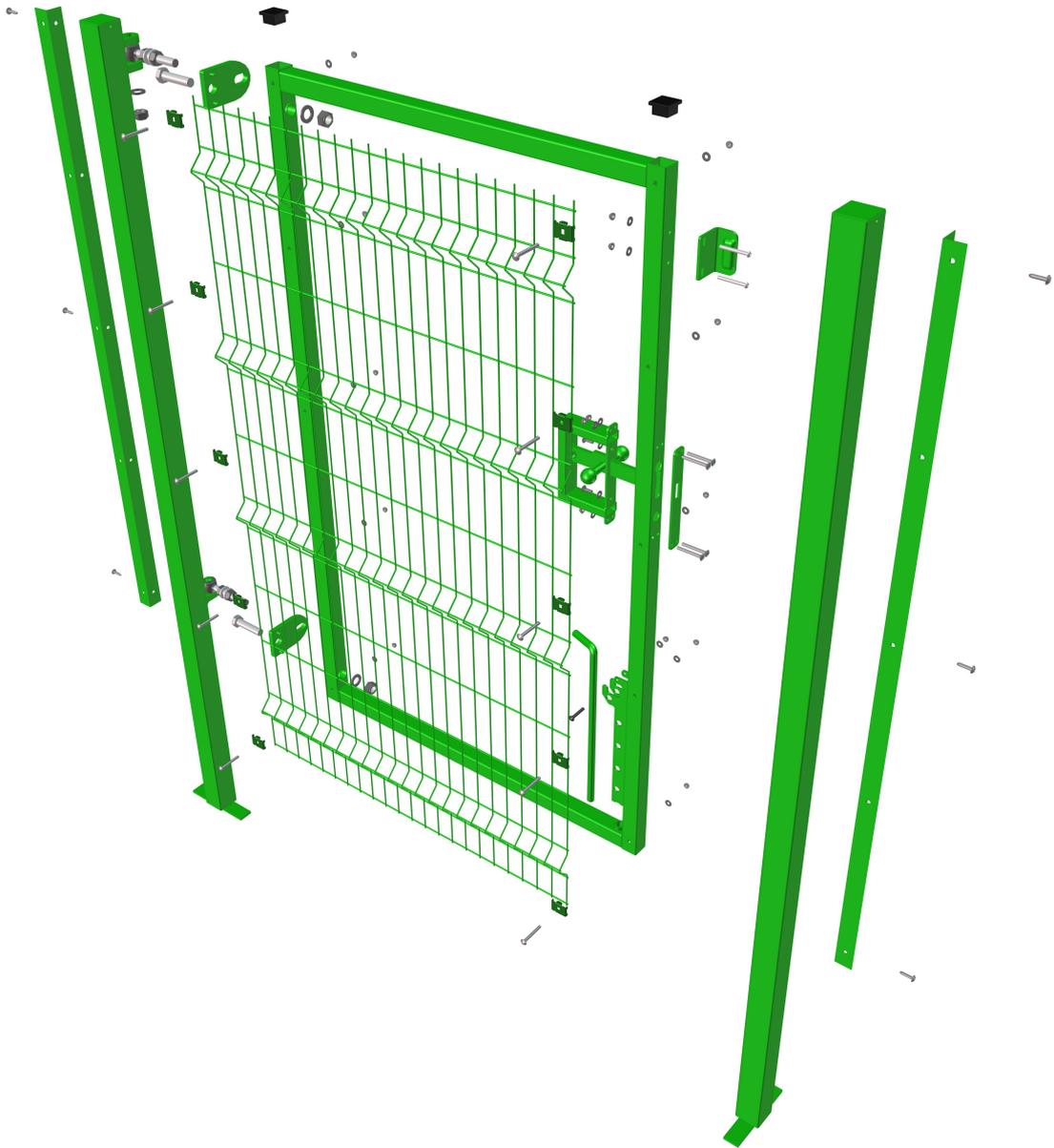




FENCING



UNIVERSAL GATE

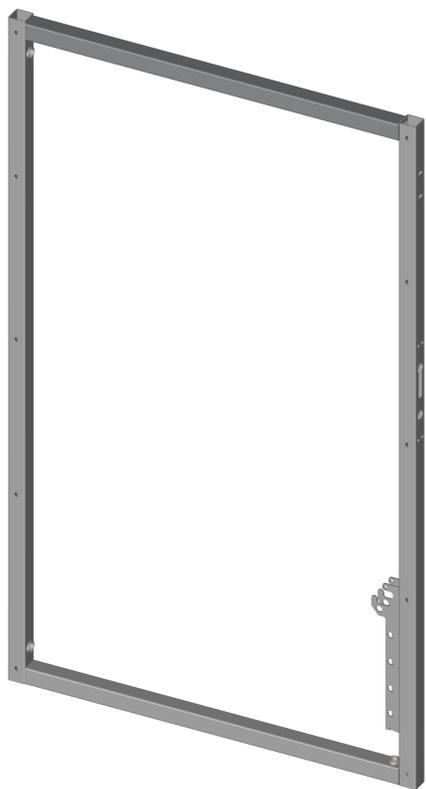
INSTALLATION & MAINTENANCE MANUAL

MOSSFIELD ROAD, ADDERLEY GREEN, STOKE ON TRENT, STAFFORDSHIRE. ST3 5BW
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Foreword

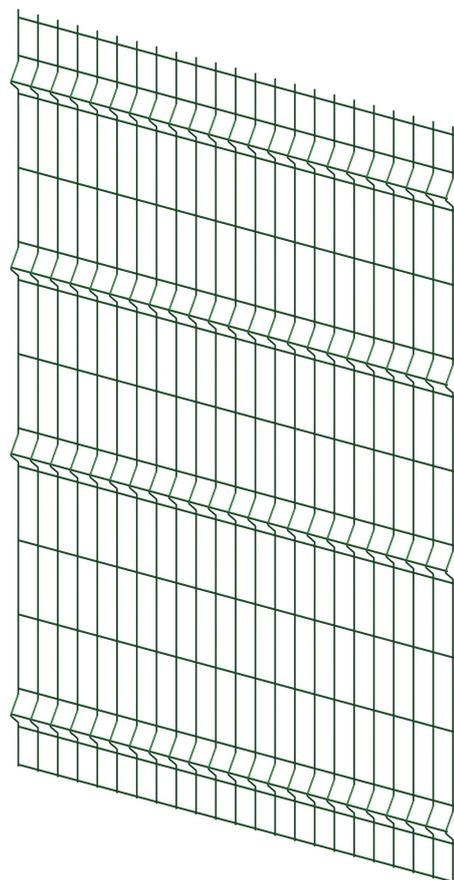
This IAE gate product is supplied in kit form to allow multiple hanging, locking and opening arrangements. This manual contains assembly instructions for the various setup options, please read carefully before beginning installation.

Parts list - Gate frame & mesh



Gate frame

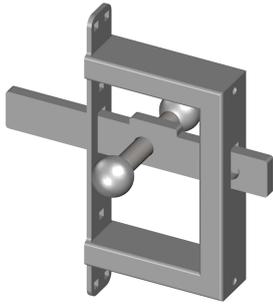
- Sizes available:-
 - 1770mm high x 1177mm long
 - 1770mm high x 2077mm long
 - 1985mm high x 1177mm long
 - 1985mm high x 2077mm long
 - 2375mm high x 1177mm long
 - 2375mm high x 2077mm long



Mesh panel

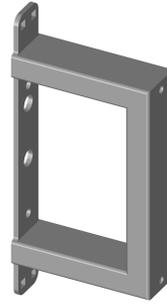
- Vmex V3 mesh sizes available:-
 - 1776mm high x 1103mm long
 - 1776mm high x 2003mm long
 - 1991mm high x 1103mm long
 - 1991mm high x 2003mm long
 - 2381mm high x 1103mm long
 - 2381mm high x 2003mm long
- Zebex Z3 mesh sizes available:-
 - 1755mm high x 1100mm long
 - 1755mm high x 2004mm long
 - 1970mm high x 1100mm long
 - 1970mm high x 2004mm long
 - 2360mm high x 1100mm long
 - 2360mm high x 2004mm long

Parts list - gate components



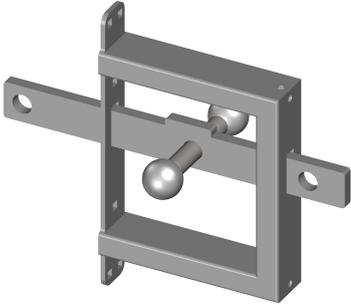
Single leaf bolt cage

- supplied with all single leaf gates (1 per leaf)



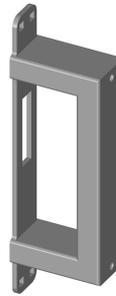
Single leaf Locinox cage

- supplied with all gate leaves fitted with a Locinox lock (1 per leaf)



Double leaf bolt cage

- supplied with all double leaf gates (1 per set)



Double leaf receiver cage

- supplied with all double leaf gates (1 per set)



Single leaf cover plate

- supplied with all single leaf and double leaf gates
- 15 x 44mm slot (1 per set)



Double leaf cover plate

- supplied with all double leaf gates
- 18 x 17.5mm slot (1 per set)



Locinox cover plate

- supplied with all Locinox gate leaves
- 15 x 44mm slot (1 per leaf)



Hinge plate

- supplied with all gates (2 per leaf)



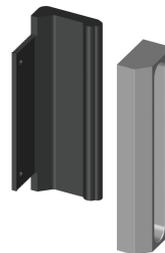
Angle slam plate

- supplied with all gates (1 per set)



Drop bolt

- supplied with all single leaf and double leaf gates (1 per leaf)



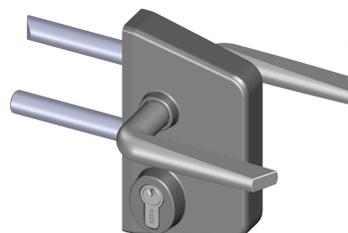
Locinox keep

- supplied with all single leaf gates with a Locinox lock (1 per leaf)



Plastic cap

- supplied with all gates (2/3 per)



Locinox lock

- supplied with all gate leaves with a Locinox lock (1 per leaf)

Parts list - fittings



M8 x 70 Cup square bolt
- (qty varies with leaf size)



M8 Permacone nut
- (qty varies with leaf size)



M8 x 50 Cup square bolt
- (1 per drop bolt)



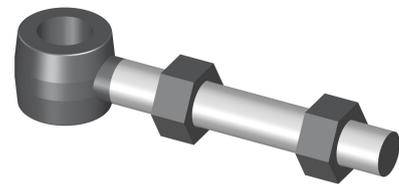
M8 Washer
- (qty varies with leaf size)



M8 x 25 Cup square bolt
- (2 per slide bolt cage)



M8 x 70 Socket button head screw
- (2 per angle slam plate)



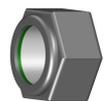
M24 x 175 Adjustable hinge eye
- (2 per gate leaf)



M24 x 120 Bolt
- (1 per gate leaf)



M24 x 100 Bolt
- (1 per hinge plate)



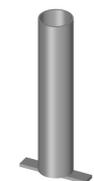
M24 Nyloc nut
- (1 per M24 Bolt)



M24 Washer
- (1 per M24 Bolt)



M24 Washer
- (2 per M24 x 100 Bolt)

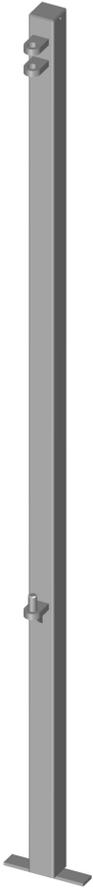


Drop bolt ground socket
- (2 per Drop bolt)



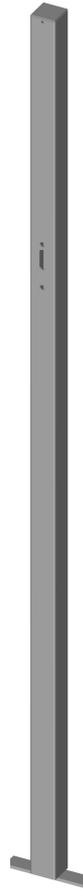
Mesh clamping clip
- supplied with all gates (qty varies)

Parts list



Hang post

- Sizes available:-
 - 80 x 80 x 2500mm long
 - 100 x 100 x 2500mm long
 - 80 x 80 x 2800mm long
 - 100 x 100 x 2800mm long
 - 80 x 80 x 3300mm long
 - 120 x 120 x 3300mm long



Slam post

- Sizes available:-
 - 80 x 80 x 2500mm long
 - 100 x 100 x 2500mm long
 - 80 x 80 x 2800mm long
 - 100 x 100 x 2800mm long
 - 80 x 80 x 3300mm long
 - 120 x 120 x 3300mm long



Post flange

- Sizes available:-
 - 50 x 50 x 1780mm long
 - 50 x 50 x 1995mm long
 - 50 x 50 x 2385mm long



Gap restrictor (available separately)

- Sizes available:-
 - 50 x 50 x 1355mm long
 - 50 x 50 x 1570mm long
 - 50 x 50 x 1845mm long



M8 x 35 Cup square bolt

- used to fix the mesh to the post flange
- (qty varies with post height)



M8 x 35 Tapping screw

- used to fix the flange / gap restrictor to the post
- (qty varies with post height)

Gate assembly

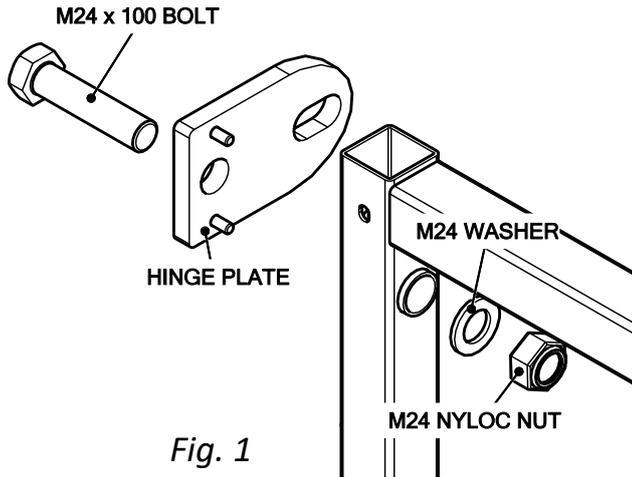


Fig. 1

If the gate leaf is to be front-hung or back-hung, it will be necessary to attach hinge-plates to the top and bottom hinge position on the gate leaf (Fig. 1). These plates will not be required if the gate leaf is to be centre-hung.

The slam-plate should be fitted onto the slam-stile of the gate leaf only where a slide-bolt setup has been used (Fig.2). The plate should protrude on the same face as the hinge plates (where fitted). Do not snap off the permacone nuts until you are certain that the orientation of the slam-plate is correct.

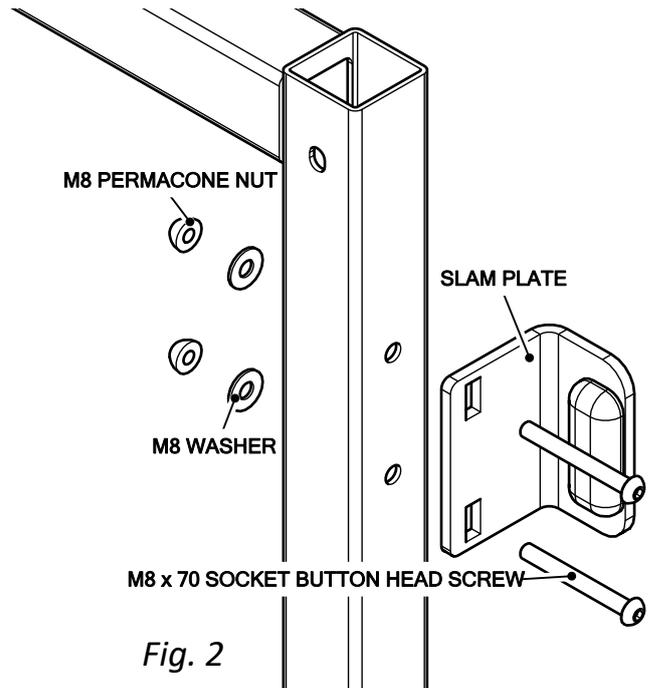


Fig. 2

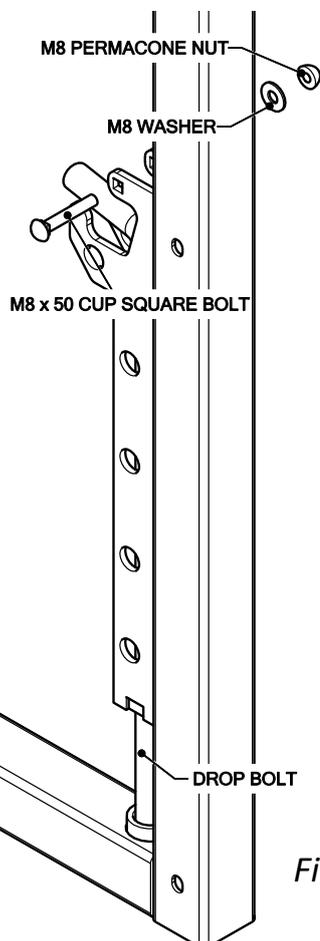


Fig. 3

Fit the drop-bolt to the gate leaf if required and secure in place using an M8 x 50 cup square bolt, washer and permacone nut (Fig. 3).

Fit the mesh to the desired face of the gate frame using the clips provided (Fig. 4).

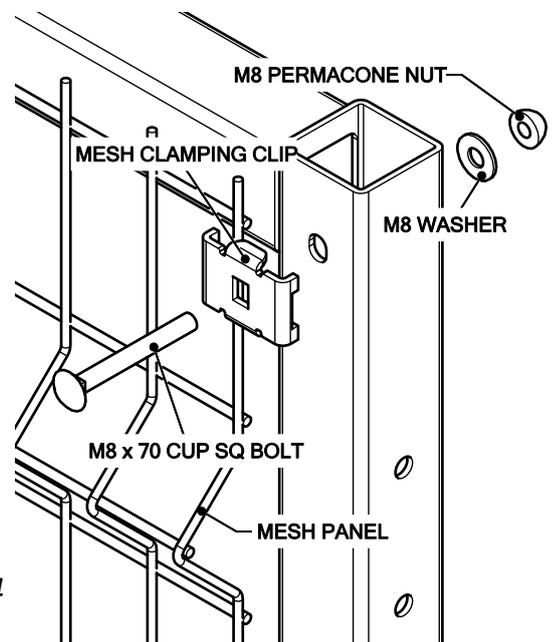


Fig. 4

Slide-bolt fitting

Single leaf slide-bolt setup (Fig. 5)

When fitting the single leaf slide-bolt cage to the gate frame it is *essential* to fit the M8 x 25 cup square bolts, washers and permacone nuts *first*. Once these bolts have been fitted, fit the cage and cover-plate to the gate using 4no M8 x 70 cup square bolts, washers and permacone nuts.

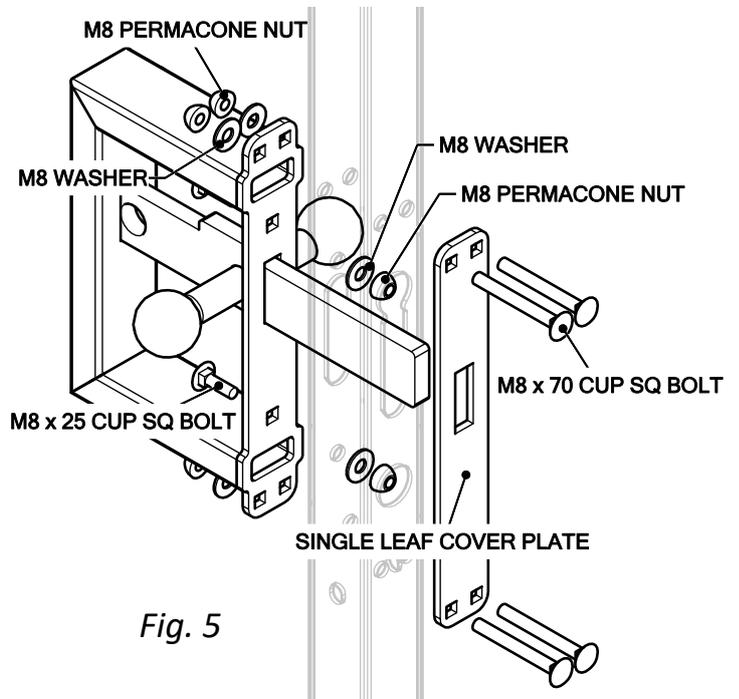


Fig. 5

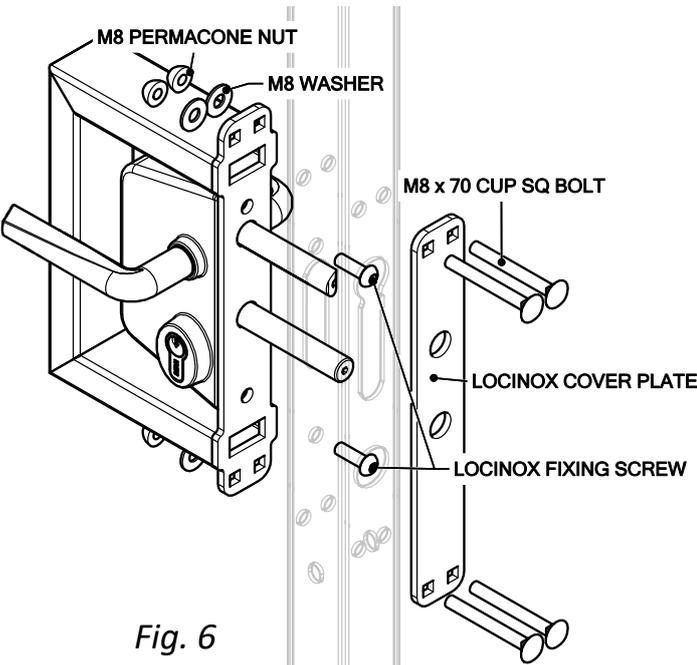


Fig. 6

Single leaf Locinox lock setup (Fig. 6)

Fit the Locinox lock and cage to the slam-stile of the gate leaf using the fixing screws provided. Once these bolts have been fitted, fit the cover-plate to the gate using 4no M8 x 70 cup square bolts, washers and permacone nuts. The shoot of the lock can be adjusted by using a hex key with the hexagonal holes in the end of the shoot-bolts.

Double leaf slide-bolt setup (Fig. 7)

Fit the slide-bolt cage to the frame using the M8 x 25mm cup square bolts, washers and permacone nuts first. Then bolt the SL slide cover plate to the same leaf. Fit the smaller cage and the DL slide receiver plater to the other leaf. The cover plate with the larger slot goes on the receiver leaf.

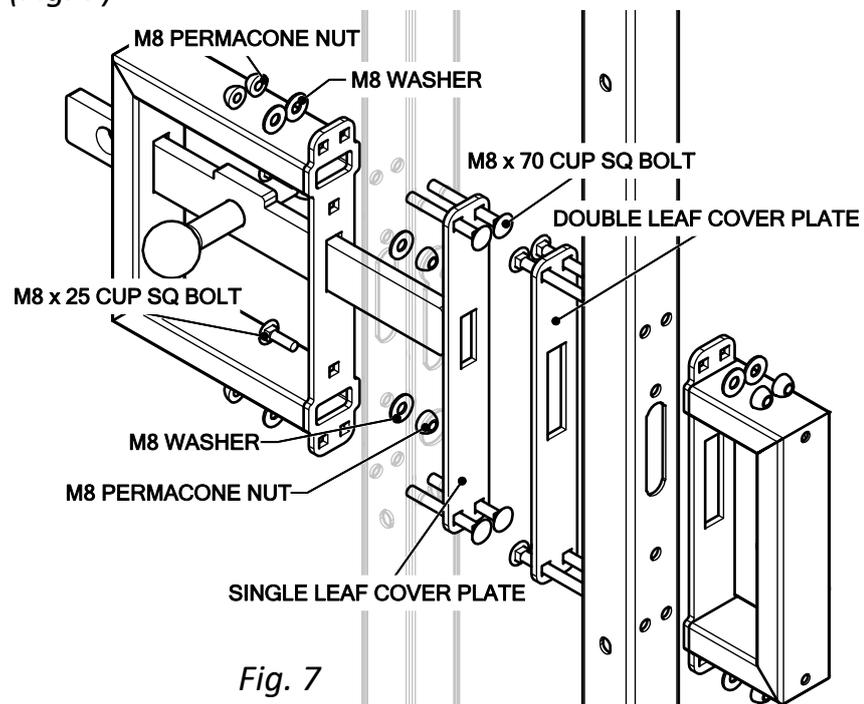


Fig. 7

Plastic caps

Plastic caps are supplied to cap off the tops of the gate stiles. These should be fitted to the gate prior to the gate being erected.

Fit the plastic cap to the tops of the gate stiles by applying an even pressure to ensure a snug fit (Fig. 8).

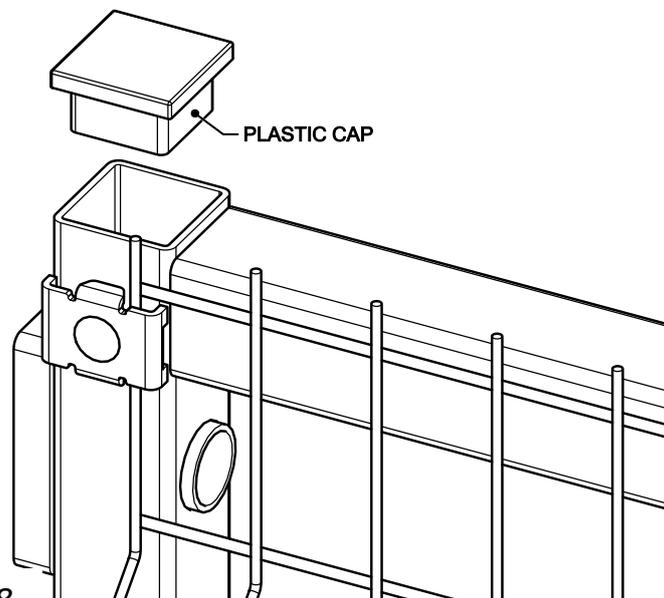


Fig. 8

Gate post installation - general elevation

The gate posts should be installed so that the mesh in the gate runs in line with the mesh in the fence line.

A ground clearance of 30mm is suggested. To achieve this, the top of the bottom hook should be 110mm above the ground level.

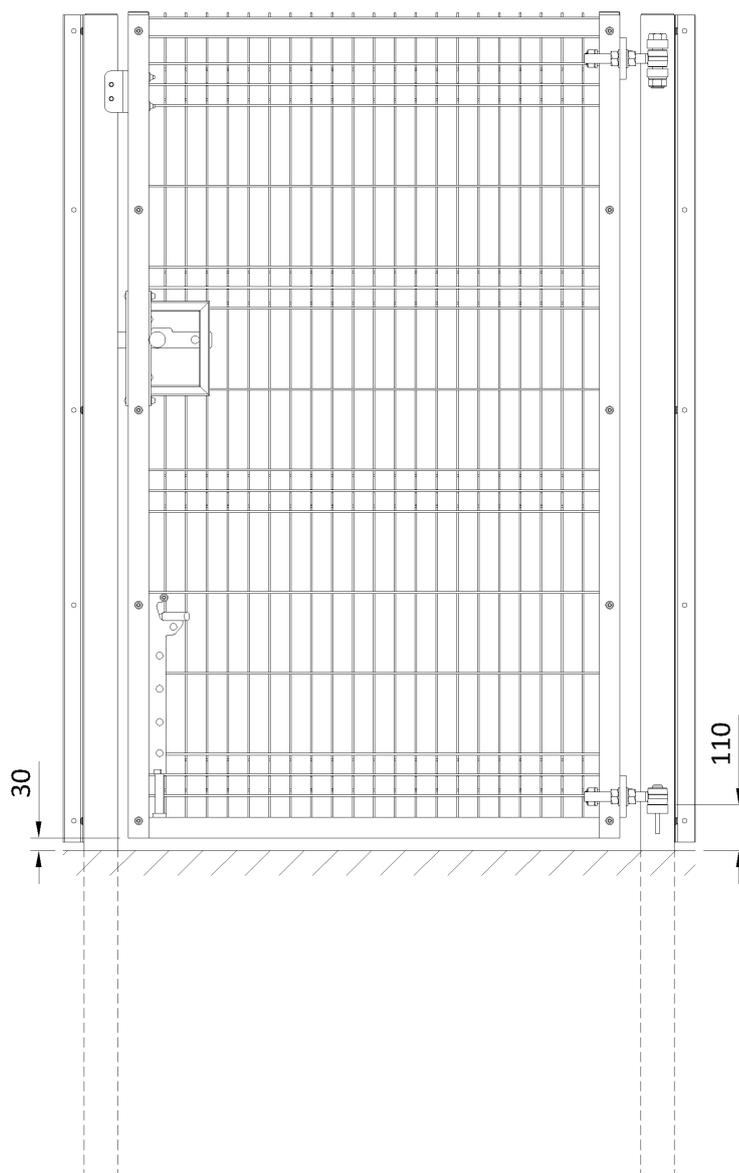
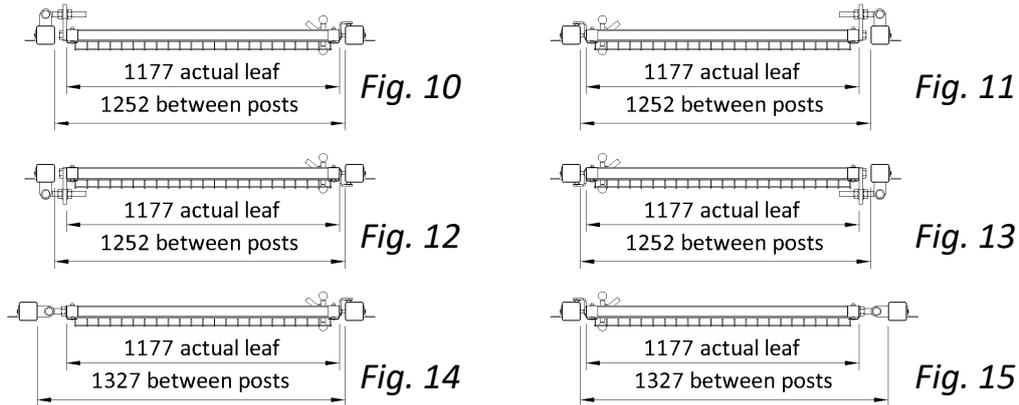


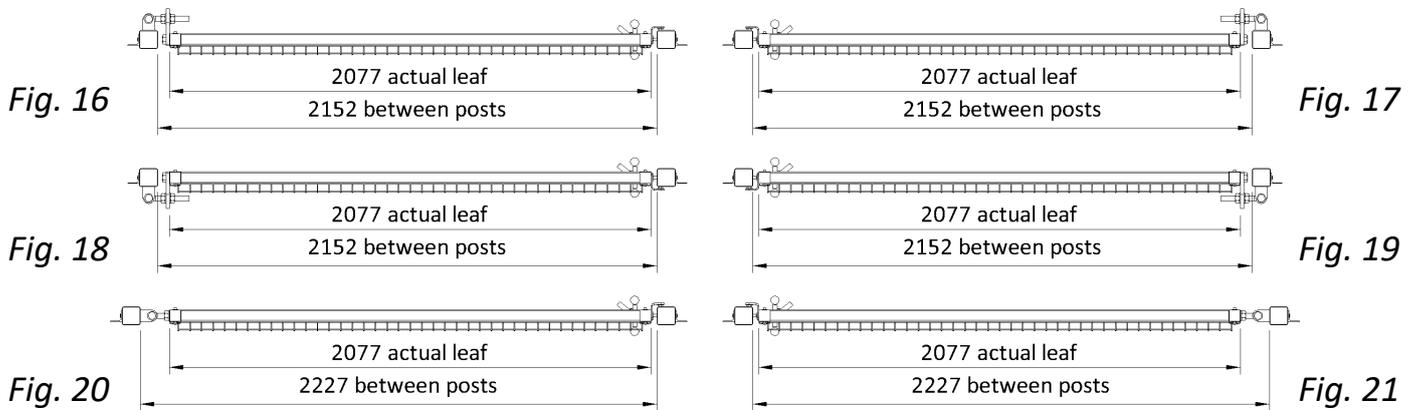
Fig. 9

Gate post installation - general plan views

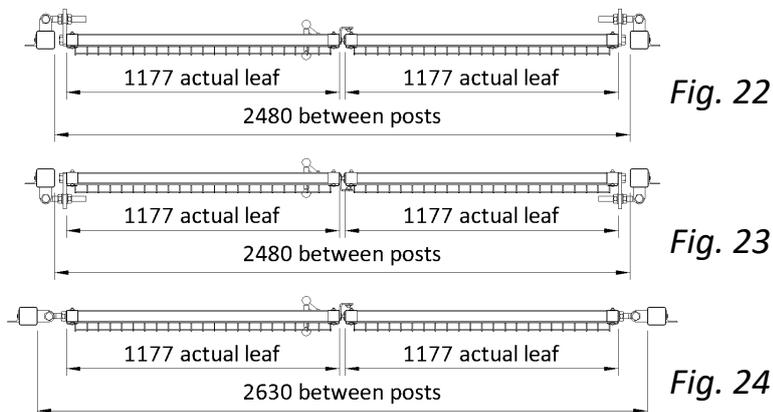
S/L SETUP OPTIONS - 1177mm GATE LEAF (BACK HANGING/FRONT HANGING/CENTRE HANGING)



S/L SETUP OPTIONS - 2077mm GATE LEAF (BACK HANGING/FRONT HANGING/CENTRE HANGING)

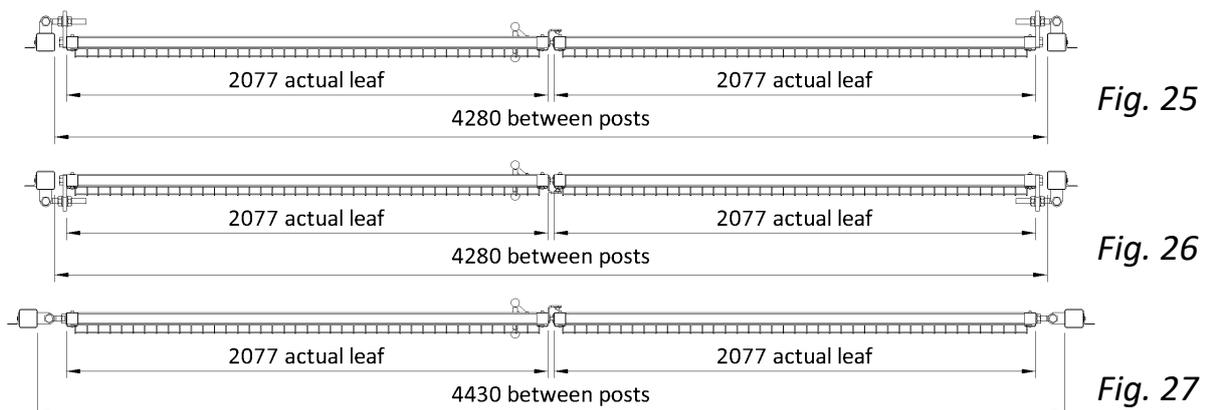


D/L SETUP OPTIONS - 1177mm GATE LEAVES (BACK HANGING/FRONT HANGING/CENTRE HANGING)



General gate installation rules:-
 Hang gap - back hung:- 50mm
 Hang gap - front hung:- 50mm
 Hang gap - in-line:- 125mm
 Slam gap - slide bolt:- 25mm
 Slam gap - Locinox:- 35mm

D/L SETUP OPTIONS - 2077mm GATE LEAVES (BACK HANGING/FRONT HANGING/CENTRE HANGING)



Hinge assembly

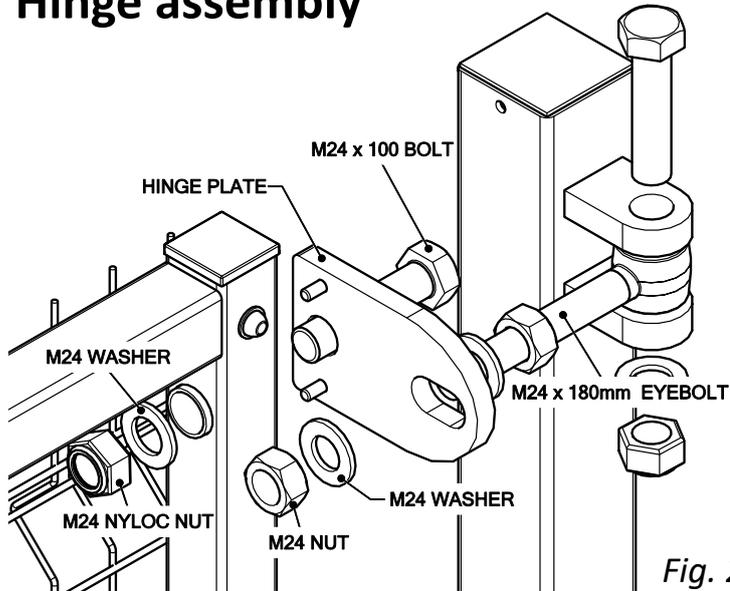


Fig. 28

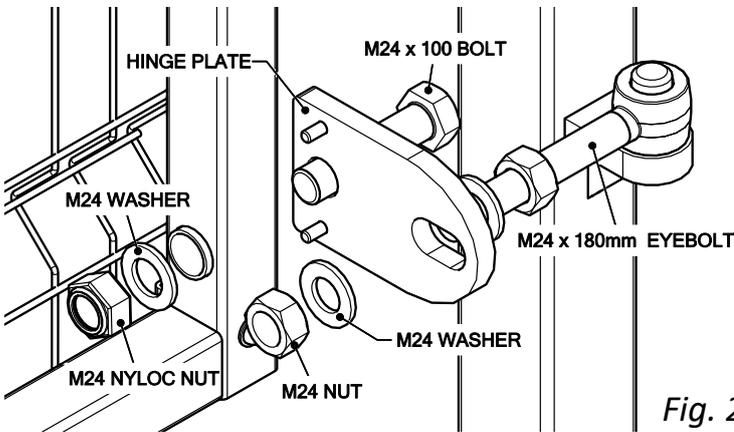


Fig. 29

Back hung / front hung setup

Fit the hinge-eye plates to gate leaf as shown on page 1 before attempting to mount the gate leaf on the post.

Loosely fit the M24 eyebolts to the plates on the gate leaf.

Offer the gate up to the hang post, sitting the bottom eyebolt on the gate leaf over the bottom hook on the hang post. Manoeuvre the gate so that the top eyebolt sits between the top hinge eyes on the hang post and drop and M24 x 100 bolt through both hinge-eyes and the eyebolt. Fit the M24 washer and nyloc nut and adjust the eyebolts as necessary. Tighten all fittings before use.

In-line setup (Fig. 30)

Loosely fit the M24 eyebolts to the plates on the gate leaf.

Offer the gate up to the hang post, sitting the bottom eyebolt on the gate leaf over the bottom hook on the hang post. Manoeuvre the gate so that the top eyebolt sits between the top hinge eyes on the hang post and drop and M24 x 100 bolt through both hinge-eyes and the eyebolt. Fit the M24 washer and nyloc nut and adjust the eyebolts as necessary. Tighten all fittings before use.

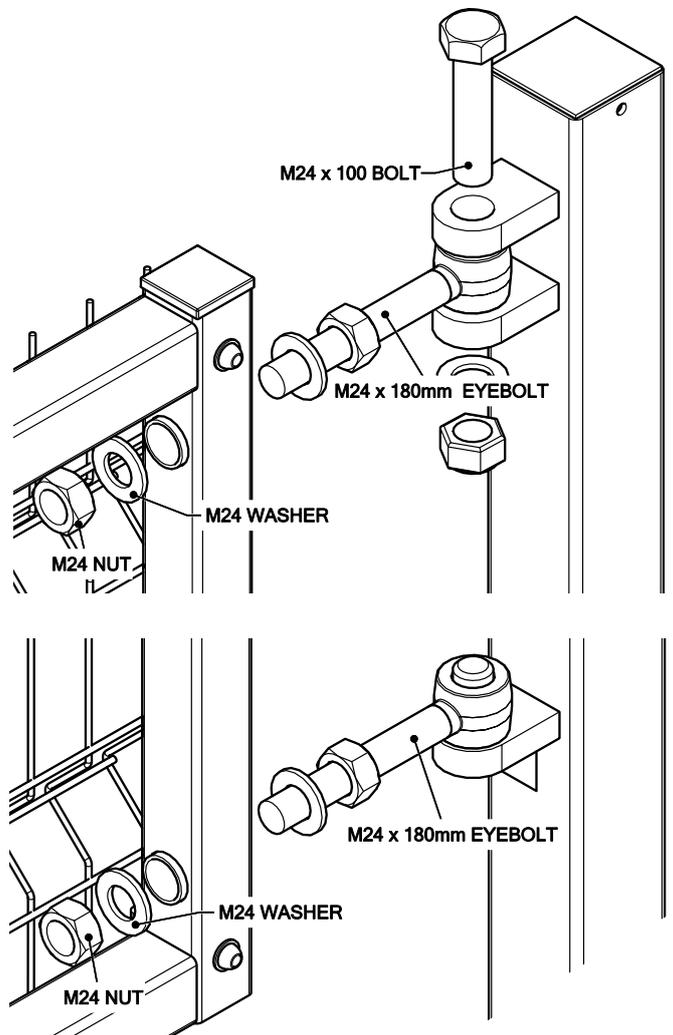
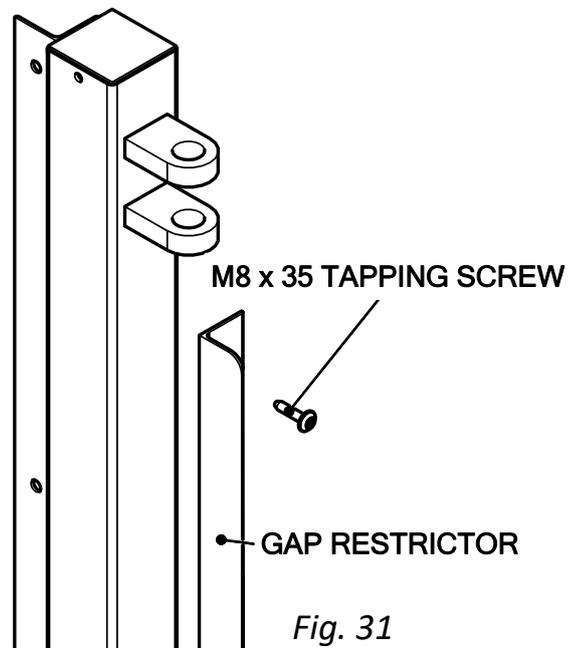


Fig. 30

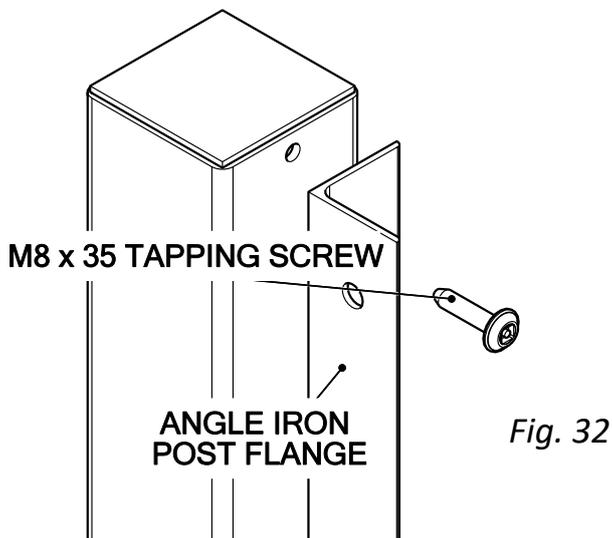
Gap restrictors

Where gates are fitted “in-line” i.e. the hinges are in-line with the gate rather than at 90°, a gap restrictor angle (available separately) can be used to minimise the gap between the post and the hang stile of the gate.

Offer the gap restrictor angle up to the post, ensuring that it is square and mark out the fixing holes. Drill $\varnothing 7\text{mm}$ holes to the face of the post and then fix the angle to the post using the self-tapping screws provided (Fig 31).



Post flange assembly



Angle brackets can be fitted to the gate posts to facilitate the gate being installed in a run of fencing.

Offer the angle bracket up to the post, ensuring that it is square and mark out the fixing holes. Drill $\varnothing 7\text{mm}$ holes to the face of the post and then fix the angle to the post using the self-tapping screws provided (Fig 32). The bracket should be fixed in at least 3 places.

Where the mesh returns in the same plane as the hinge fitting, the mesh can be fitted to directly to the post using clips and self-tapping screws (Fig 35).

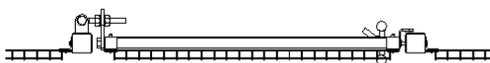


Fig. 33

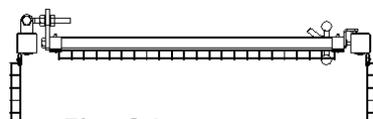


Fig. 34

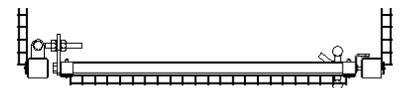
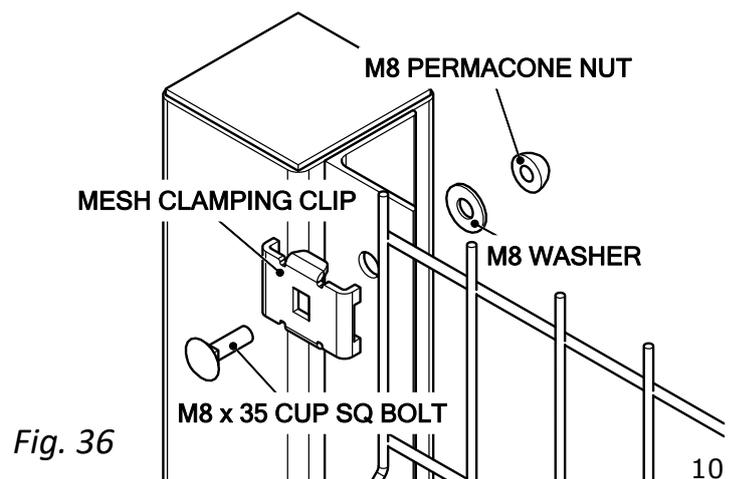


Fig. 35

Fitting the mesh to the posts

Fix the mesh to the angle bracket using mesh clamping clips, M8 x 35 cup square bolts, M8 washers and M8 permacone nuts (Fig. 36).



Maintenance

Although IAE equipment is designed to withstand adverse weather conditions and prolonged heavy usage, monthly inspections and regular maintenance will help to extend the longevity of the product. The following checklist may be useful:

- Pressure wash at regular intervals.
- Check all over the universal gate for any loose or missing fittings and tighten/replace as necessary.
- Lubricate all moving parts at regular intervals.
- Check the plastic components for signs of wear and replace as necessary.
- Check for any signs of corrosion or wear.
- Remove surface dirt with a diluted household detergent - do not use any substance that contains solvents or abrasives.
- Minor repairs to the painted finish can be achieved using the touch-up paint provided.

Galvanising

It is normal for a galvanised product to dull over a period of time. This does not impact the protective properties of the finish.

