

# Maintenance and Cleaning



ARCHITECTURAL ALUMINIUM GLAZING SYSTEMS



# Contents

General Guidance for Maintenanc Products and Systems Permacover™ Polyester Powder Anodised Finishes AA®100 50mm Curtain Wall AA®110 65mm Curtain Wall AA®100 and AA®110 CV Open Ou AA®100 Structurally Silicone Glaze AA®201 and AA®265 Unitised Cur AA®540 Series Window Systems AA®720 Series Window Systems GT70 Slimline Renovation Window AA®3720 Folding/Sliding Door AA®3572 Lift/Slide Door AA®3110 Horizontal Sliding Winde AA®3110HW Healthcare Window AA®3610/AA®3610LS Vertical Slid 190/350 Doors AA®545 Swing Door AA®720 Series Door Systems 10D Door Surface Applied Closers 451PT Framing System AA®4001 Semi-unitised Framing S

Maintenance and Cleaning



www.kawneer.co.uk

ce and Cleaning of Kawneer	
ũ	4
Coating	6
	7
	8
	10
ut	12
ed (SSG)	14
rtain Wall	16
	18
	20
N	21
	22
	23
ow	24
	25
ling Windows	26
	27
	28
	29
	30
	31
	32
System	33

# General Guidance for Maintenance and Cleaning of Kawneer Products and Systems



Introduction

A regular cleaning and maintenance regime for Kawneer products and systems is essential to ensure longevity of performance and correct functionality.

Aluminium elements require the regular use of non- aggressive cleaning agents, such as tepid water with a non-aggressive pHneutral (6-8), non-acetose ammonia-free detergent.

Kawneer products are equipped with superior quality hardware, promoting smooth, long-life system operation.

Seamless product operation is achieved through careful

attention to maximum weights and dimensions on a product by product basis (see individual product data in this guide).

# Operation

Fittings operation can be checked on the handle. Locking and unlocking forces are defined according to EN12046. Greasing or adjustment of fittings will help to increase ease of operation.

# Hardware Fastening

- System operation is dependent on correct fastening of fittings.
- Check strength and positioning of screws in aluminium profiles. Loose or damaged screws should be fixed or replaced.

# Unsuitable for Cleaning

- Hard materials, such as knives, steel wool, metal scrapers, sandpaper etc. Use of these will damage surface finishes.
- Avoid using aggressive or corrosive cleaning agents. These could potentially cause irreversible damage to surfaces.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.





Maintenance and Cleaning

# Maintenance and Cleaning Instructions - Permacover<sup>™</sup> Polyester Powder Coating



#### Introduction

Kawneer Permacover<sup>™</sup> is a high quality polyester powder paint finish, offering a wide range of solid and metallic colours providing outstanding resistance to environmental conditions.

Kawneer's world leadership in architectural aluminium systems has been achieved through an insistance on product quality and performance. Kawneer's in-house paint plant gives complete control over paint quality on all Kawneer profiles.

#### Care

1. Permacover<sup>™</sup> coated aluminium components can be damaged in transit or on site if carelessly packed and/or handled. Appropriate care should be taken when handling on site, particularly when unloading and moving to the point of installation (corners of window frames are especially susceptible to damage and it is recommended that corner protection be used).

2. If the Permacover<sup>™</sup> finish has been protected by a suitable low tack tape it must be easily removable and any adhesive residues removed with an agent recommended by the tape manufacturer as not being harmful to the finish.

3. The most effective method of stopping or preventing installation damage is by imposing an on site discipline exercising reasonable care.

4. In cases where slight damage to the coating has occurred, air drying or cold cure paints are available as repair materials; however, their use should be confined to minor scuff marks or small scratches. These paints have different weathering properties to the original stoved powder coating and may not be covered by the standard warranty. 5. Any sealant excess should be removed before it is fully cured using a mild detergent. If more aggressive cleaning agents are required, avoid those containing esters, ketones or chlorinated hydrocarbons, and always test on a small area.

# Maintenance (Normal Environments)

1. Permacover<sup>™</sup> coatings require regular cleaning at suggested intervals of 12 months, but not exceeding 18 months, unless undue soiling is apparent in which case the cleaning intervals should be reduced.

2. For small areas the coating can be cleaned by applying a solution of mild detergent in warm water with a soft cloth, sponge or natural bristle brush (avoid the use of abrasive materials).

If the coating has become heavily soiled, then the following commercially available cleaners are acceptable (test on a small area to assess their efficiency):

- Ajax Cream
- Liquid Gumption
- Flash Liquid (diluted in water)
- Ajax Liquid (diluted in water)

3. For large areas we recommend the use of companies that specialise in this type of cleaning.

## Maintenance (Polluted, Marine or Swimming Pool Environments)

1. Permacover  $\ensuremath{^{\rm TM}}$  coatings require regular cleaning at maximum intervals of 3 months.

2. As for "Normal Environments" above.

3. As for "Normal Environments" above.

#### General

In order to retain the aesthetic qualities and the expected longterm durability of the Permacover<sup>™</sup> finish, it is important that the above procedures are followed.

NOTE: It is also a condition of any Permacover<sup>TM</sup> warranty that records are kept by the building owner/occupier confirming that cleaning has been carried out in accordance with the instructions above and the specified periods.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.

# Maintenance and Cleaning Instructions - Anodised Finishes



#### Introduction

Kawneer anodised colours are obtained by giving the complete aluminium profiles a caustic etch followed by anodic treatment to produce a high density aluminium oxide coating.

A well tried colour anodising process, proven in accelerated laboratory tests, extensive field trials and contract experience gives architects and specifiers product confidence.

#### Care

1. Anodised finishes can be damaged in transit or on site if carelessly packed and/or handled. Appropriate care should be taken when handling on site, particularly when unloading and moving to the point of installation (corners of window frames are especially susceptible to damage and it is recommended that corner protection be used).

2. If the anodised finish has been protected by a suitable low tack tape it must be easily removable and any adhesive residues removed with an agent recommended by the tape manufacturer as not being harmful to the finish.

3. The most effective method of stopping or preventing installation damage is by imposing an on site discipline exercising reasonable care.

4. Any sealant excess should be removed before it is fully cured using a mild detergent.

#### Maintenance (Normal Environments)

1. Anodised finishes require regular cleaning at suggested intervals of 3 to 12 months, dependant on the environment. Typical recommendations are:



- Marine Environment Every 3 months
- Swimming Pool Environment Every 3 months
- Industrial Environment Every 6 months
- Urban Environment Every 8 months
- Rural Environment Every 12 months

More regular cleaning may be required in aggressive environments, but the condition of the surface finish will make this apparent.

2. The cleaning method should be a washing down with a solution of mild non-alkaline detergent in warm water (the solution should have a pH of between 6.5 & 7.5) and dried with a chamois cloth or similar.

NOTE. The use of a more aggressive cleaner will not compensate for lack of regular maintenance and can damage the surface.

3. Small areas of heavier deposits may be removed with the assistance of a stiff bristle or nylon brush.

### Maintenance (Specific)

1. If there are areas where dirt accumulates e.g. no natural wash down, then these can be cleansed using a mild abrasive such as a pumice powder and water, or Scotchbrite pads (ultra fine or very fine).

2. If the deposits are of a greasy nature, then cleaning may be done using a soft cloth dipped in white spirit.

3. Before the use of either of the above, it is recommended that a test area be chosen and the method tried and allowed to dry before judging the effect on the finish.

# Maintenance (After Cleaning)

After any cleaning process of the anodised finish should be washed down with clean water to prevent any deposits remaining on the surface.

In addition, the surface can be treated with a good quality wax polish.

# General

In order to retain the aesthetic qualities and the long term durability of the anodised finish, it is important that the above procedures are followed.

NOTE: It is also a condition of any anodised warranty that records are kept by the building owner/occupier confirming that cleaning has been carried out in accordance with the instructions above and the specified periods.

# Maintenance and Cleaning Instructions - AA®100 50mm Curtain Wall



### Introduction

A stick-frame assembly with weather performance achieved by drainage and ventilation of the glazing rebates. Drainage and ventilation is achieved via the mullion or via each individual transom on zone drained.

The system is available in a variety of mullion depths which combined with seven thermal break options, including an enhanced thermal performance option, and aesthetic external capping allows a specifier the flexibility of design to make their own statement. The system has outstanding performance and its ease of installation makes it possible to suit individual project requirements.

The AA®100 is suitable for vertical and sloped applications including faceted walls.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

#### **Glazing Gaskets**

Internal and External Glazing Gaskets, after 12 months, then every 5 years:

- Check all glazing gaskets to ensure that there is sufficient coverage/compression between the curtain wall member, the carrier section and glazed or panelled area.
- Check that the corner joints are acceptable and that gaskets have not shrunk away from these joints.
- Check state of joint between bonded corner moulds and linear gaskets internally.
- For CWCT spec and sloped glazed areas, check bonded joint between end pads and linear pressure plate gasket.

- Check that the joints are acceptable and that the gaskets have not shrunk or torn.
- Generally check all gaskets for compression, damage, shrinkage or distortion. Reseal or replace as necessary.

# Weatherproofing Sealants

Weatherproofing Sealants to all Joints and Adaptors, after 12 months and then every 5 years:

- Check sealants applied to all gaskets, joints and fixing screw heads.
- Additionally check all frame interfaces are intact and undamaged.
- Where sealant has failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

#### Drainage

After 12 months, then every 5 years:

- Check that no obstructions are present at head and cill of vertical face caps where drainage and pressure equalisation takes place.
- Where drain slots are used in underside face of horizontal face caps, check that these are clear and unblock if necessary.
- In slope glaze applications or raked transoms, check and unblock the 5mm gap between horizontal face cap and verticals.

# Curtain Wall Grid

Transom to Mullion and Purlin to Rafter Joints, after 12 months, then every 5 years:

Check to ensure that the transom to mullion or purlin to rafter fixings are still secure and that excessive gaps or misalignment have not developed.

### Damage

After 12 months, then every 5 years:

Check all aspects of the product externally for damage and where deemed necessary, the affected parts should be replaced.

#### Structural Fixings

Structural Fixings to Mullions, after 12 months, then every 5 years:

- Check mullion to structure tie backs and perimeter frame fixings to curtain wall.
- Ensure that they have not corroded excessively and the restraining fasteners are secure.

### Structural Fixings (continued)

NOTE: In practice, the most difficult to carry out as one of the main features of curtain walling is that structural fixings are hidden from view. Every consideration should be given on all curtain walling installations to a requirement for routine inspection of these fixings and we would recommend that this is achievable on at least 10% of the structural fixings.

# Product Life Span

Provided the above checks are carried out and problems developing are remedied, we would estimate that a normal building life of some 60 years is achievable.

However, during this period it may be necessary to replace glazing gaskets and other like material where either inspection or performance deterioration highlight the requirements.

From guidance received from suppliers of these items, we would anticipate that they should be changed at least once within the stated building life in order to maintain the performance specified.





# Reglazing

This should be carried out by a competent person, conversant with the Kawneer AA®100 curtain walling glazing system and in accordance with the installation instructions.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine cleaning and maintenance to maximize the product life. However, should a problem develop with the performance of the product in between checks, then appropriate action needs to be taken to overcome them.

# Maintenance and Cleaning Instructions - AA®110 65mm Curtain Wall



#### Introduction

The AA®110 65mm curtain wall system is designed as a stickframe assembly with weather performance achieved by drainage and ventilation of the glazing rebates. Drainage and ventilation is achieved via the mullion on mullion drained or via each individual transom on zone drained. The system is available in a variety of mullion depths which combined with seven thermal break options and aesthetic external capping provide flexibility of design, outstanding performance and ease of installation to suit individual project requirements.

The AA®110 is suitable for vertical and sloped applications including faceted walls. A deeper glazing rebate meets the requirements for barrier loading and enables facades to stand up to high levels of building movement. This enables the use of bigger glass sheets resulting in more natural light penetration. In addition, less metal results in an aesthetically pleasing building – on the whole better for both the environment and the building occupier.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

# **Glazing Gaskets**

Internal and External Glazing Gaskets, after 12 months, then every 5 years:

Check all glazing gaskets to ensure that there is sufficient coverage/compression between the curtain wall member, the carrier section and glazed or panelled area.

- Check that the corner joints are acceptable and that gaskets have not shrunk away from these joints.
- Check state of joint between bonded corner moulds and linear gaskets internally.
- For CWCT spec and sloped glazed areas, check bonded joint between end pads and linear pressure plate gasket.
- Check that the joints are acceptable and that the gaskets have not shrunk or torn.
- Generally check all gaskets for compression, damage, shrinkage or distortion. Reseal or replace as necessary.

### Weatherproofing Sealants

Weatherproofing Sealants to all Joints and Adaptors, after 12 months and then every 5 years:

- Check sealants applied to all gaskets, joints and fixing screw heads.
- Additionally check all frame interfaces are intact and undamaged.
- Where sealant has failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

### Drainage

After 12 months, then every 5 years:

- Check that no obstructions are present at head and cill of vertical face caps where drainage and pressure equalisation takes place.
- Where drain slots are used in underside face of horizontal face caps, check that these are clear and unblock if necessary.
- In slope glaze applications or raked transoms, check and unblock the 5mm gap between horizontal face cap and verticals.

# Curtain Wall Grid

Transom to Mullion and Purlin to Rafter Joints, after 12 months, then every 5 years:

Check to ensure that the transom to mullion or purlin to rafter fixings are still secure and that excessive gaps or misalignment have not developed.

#### Damage

After 12 months, then every 5 years:

Check all aspects of the product externally for damage and where deemed necessary, the affected parts should be replaced.

#### Structural Fixings

Structural Fixings to Mullions, after 12 months, then every 5 years:

- Check mullion to structure tie backs and perimeter frame fixings to curtain wall.
- Ensure that they have not corroded excessively and the restraining fasteners are secure.

NOTE: In practice, the most difficult to carry out as one of the main features of curtain walling is that structural fixings are hidden from view. Every consideration should be given on all curtain walling installations to a requirement for routine inspection of these fixings and we would recommend that this is achievable on at least 10% of the structural fixings.

### Product Life Span

Provided the above checks are carried out and problems developing are remedied, we would estimate that a normal building life of some 60 years is achievable.

However, during this period it may be necessary to replace glazing gaskets and other like material where either inspection





or performance deterioration highlight the requirements.

From guidance received from suppliers of these items, we would anticipate that they should be changed at least once within the stated building life in order to maintain the performance specified.

# Reglazing

This should be carried out by a competent person, conversant with the Kawneer system and in accordance with the installation instructions.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine cleaning and maintenance to maximize the product life. However, should a problem develop with the performance of the product in between checks, then appropriate action needs to be taken to overcome them.

# Maintenance and Cleaning Instructions - AA®100 and AA®110 CV Open Out



#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

#### Hardware

Friction Stay/Fixed Restrictor at time of installation and every 12 months:

- Lubricate all pivot points with light machine oil and wipe away excess. One drop per pivot is sufficient.
- Ensure friction is sufficient to retain the vent in position, set against environmental conditions, without affecting the normal operation of the window.

#### Every 5 years:

Clean any dirt or debris from the hinge and clear any obstructions from the pivots, sliding shoe and track.

#### All

Every 12 months:

- Clean any dirt, dust or debris from the window cavity that might impede the smooth operation of the window.
- Check all hardware operation for free movement including operating rods.
- Check all hardware is correctly located and secure.
- Check all fixings are tight/secure and are not excessively corroded.

#### Hardware (continued)

Locking Points

#### Every 12 months:

Lubricate with a light oil or grease.

1. Handles and corner transmissions are greased during manufacture and should require no additional lubrication.

2. All gear adjustments, the replacement of parts and installation and removal of vents should be executed by a window professional.

3. Frequency intervals assume normal environmental conditions and usage; adjustment should be made for more aggressive conditions and greater usage.

4. For special hardware items (not Kawneer), please refer to the supplier/manufacturer's own recommendations.

# Seals

Weatherstrips and Gasketry

Every 12 months:

- Check weatherstrips and gasketry for compression, damage, shrinkage or distortion.
- In addition, check to ensure that corner joints are still acceptable, reseal or replace as necessary.

#### Weatherproofing Sealants

Every 12 months:

- Check sealants applied to all gaskets, joints and fixing screw heads.
- Additionally check all frame interfaces are intact and undamaged.
- Where sealant has failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage or pressure equalisation slots or holes. Wipe clean around these areas.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where deemed necessary, the affected parts should be replaced.

In practice for the checks below, it may not be possible to carry out all those on 100% of the building. It is therefore acceptable Dirt pick-up may occur as stated previously; a slight change in that provided the external checks are satisfactory, the amount shade may be noted, depending on the level of contamination of internal checking required can be reduced to those areas and colour of sealant. visible, or to random checks, provided at least 10% of the Any dirt pick-up may be washed off using water and, if internal areas are covered.

Checking of structural sealant may in some circumstances require partial or whole removal of sealant, bonded gaskets or glazing tapes in order to gain visible access.

#### Frame Fixings

After 12 months and then every 5 years:

Check frame to curtain wall fixings. Ensure that they have not excessively corroded and are secure. Any removal of sealant from capped off fixing heads should be replaced.

# **Structural Sealants**

After 12 months and then every 5 years:

Check structural sealants applied to all joints and that any adaptor interfaces are intact and undamaged.

# Indication of wear and damage

The only indication of damage that would normally be seen is if the sealant was subjected to some form of mechanical damage. Changes in surface appearance of the product will only occur as a result of atmospheric pollution i.e. dirt, fuel or other airborne contaminants. This change will be indicated simply by a change in colour shade, which is due to dirt pickup. The degree of change will obviously depend on the nature of the local environment. No change in elastomeric properties will result if this change occurs.

In certain situations, poor adhesion may be observed, usually due to poor surface preparation when the existing sealant was applied.

# Method and frequency of inspection

It is difficult to give any absolute rules to follow on this point. However, typical inspection frequency may be listed as follows:

1st inspection - upon completion of sealing.

2nd inspection - after 1 or 2 years.

3rd inspection - 5 years after completion.

Method of inspection can consist of:

a. Visual inspection.

b. Exerting hand pressure on the sealant to check adhesion.

#### Routine maintenance required

There is no maintenance required which relates to the performance of the sealant. Should the building be routinely cleaned as part of a cyclic maintenance programme, this may help to maintain the colour integrity of the product.



# Method of cleaning

necessary, detergent. No abrasion should be used as this could damage the surface of the sealant.

Method of repair and replacement

If an area of sealant is found to be defective, every effort should be made to identify the cause of failure. The method of repair or replacement is straightforward, in that the area of infected material should be cut out using a sharp instrument.

The joint faces should be examined to make sure they are clean and dry. A check should also be made that the backer rod is in place.

If these conditions are fulfilled, the sealant may then be gunned into place and tooled off in the usual manner.

Masking tape may be needed to prevent sealant from spreading on the external faces of the joint. The new silicone sealant would be expected to adhere to the existing silicone sealant, provided that the existing sealant is clean and dry.

NOTE - It should be ensured that the replacement sealant is fully compatible with the existing materials.

# Reglazing

This should be carried out by a competent person, conversant with structural sealant glazing systems, in accordance with the structural sealant manufacturer's instructions.

NOTE - These recommendations are what we would consider to be the minimum requirement for routine cleaning and maintenance to maximise the product life.

However, should a problem develop with the performance of the product in between checks, then appropriate action needs to be taken to overcome them.

# Maintenance and Cleaning Instructions - AA®100 Structurally Silicone Glazed (SSG)



#### Introduction

The AA®100 SSG is a system which allows glazing of the curtain walling to be achieved without the use of visible face caps giving an aesthetically pleasing appearance with flush glazing to the exterior.

It also offers the benefit of reduced on-site installation time making the AA®100 SSG a more cost effective solution.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

In practice for the following checks, it may not be possible to carry out all those on 100% of the building. It is therefore acceptable that provided the external checks are satisfactory, the amount of internal checking required can be reduced to those areas visible, or to random checks, provided at least 10% of the internal areas are covered.

Checking of structural sealant may in some circumstances require partial or whole removal of sealant, bonded gaskets or glazing tapes in order to gain visible access.

# Structural Sealants

After 12 months and then every 5 years:

Check structural sealants applied to all joints and that any adaptor interfaces are intact and undamaged.

#### Indication of wear and damage

The only indication of damage that would normally be seen is if the sealant was subjected to some form of mechanical damage. Changes in surface appearance of the product will only occur as a result of atmospheric pollution i.e. dirt, fuel or other airborne contaminants. This change will be indicated simply by a change in colour shade, which is due to dirt pick-up. The degree of change will obviously depend on the nature of the local environment. No change in elastomeric properties will result if this change occurs.

In certain situations, poor adhesion may be observed, usually due to poor surface preparation when the existing sealant was applied.

#### Method and frequency of inspection

It is difficult to give any absolute rules to follow on this point. However, typical inspection frequency may be listed as follows:

1st inspection - upon completion of sealing.

2nd inspection - after 1 or 2 years.

3rd inspection - 5 years after completion.

Method of inspection can consist of:

a. Visual inspection.

b. Exerting hand pressure on the sealant to check adhesion.

Routine maintenance required

There is no maintenance required which relates to the performance of the sealant. Should the building be routinely cleaned as part of a cyclic maintenance programme, this may help to maintain the colour integrity of the product.

#### Method of cleaning

Dirt pick-up may occur as stated previously; a slight change in shade may be noted, depending on the level of contamination and colour of sealant.

Any dirt pick-up may be washed off using water and, if necessary, detergent. No abrasion should be used as this could damage the surface of the sealant.

#### Method of repair and replacement

If an area of sealant is found to be defective, every effort should be made to identify the cause of failure. The method of repair or replacement is straightforward, in that the area of infected material should be cut out using a sharp instrument.

The joint faces should be examined to make sure they are clean and dry. A check should also be made that the backer rod is in place.

If these conditions are fulfilled, the sealant may then be gunned into place and tooled off in the usual manner. Masking tape may be needed to prevent sealant from spreading on the external faces of the joint. The new silicone sealant would be expected to adhere to the existing silicone sealant, provided that the existing sealant is clean and dry.

NOTE - It should be ensured that the replacement sealant is fully compatible with the existing materials.

### **Glazing Gaskets**

Internal and External Glazing Gaskets, after 12 months, then every 5 years:
Check all glazing gaskets to ensure that there is sufficient coverage/compression between the curtain wall member.

- Check all glazing gaskets to ensure that there is sufficient coverage/compression between the curtain wall member and glazed or panelled area. - Check that the corner joints are acceptable and that gaskets have not shrunk away from these joints.
- Check that the joints are acceptable and that the gaskets have not shrunk or torn.
- Generally check all gaskets for compression, damage, shrinkage or distortion. Reseal or replace as necessary.

# Drainage

After 12 months, then every 5 years:

- Check that no obstructions are present at head face caps where drainage and pressure equalisation takes place.
- Where accessible, check the bottom of mullions to ensure the drainage path is clear, including any slots or openings in facade interface details.

# Curtain Wall Grid

Transom to Mullion

After 12 months, then every 5 years:

Check to ensure that the transom to mullion fixings are still secure and that excessive gaps or misalignment have not developed.

### Damage

After 12 months, then every 5 years:

Check all aspects of the product externally for damage and, where deemed necessary, the affected parts should be replaced.

#### Structural Fixings to Mullions

After 12 months, then every 5 years:

- Check mullion to structure tie backs and perimeter frame fixings to curtain wall.
- Ensure that they have not corroded excessively and the restraining fasteners are secure.

NOTE: In practice, this is difficult to carry out as one of the main features of curtain walling is that structural fixings are hidden from view. Every consideration should be given on all curtain walling installations to a requirement for routine inspection of these fixings and we would recommend that this is achievable on at least 10% of the structural fixings.





# Product Life Span

Provided the above checks are carried out and problems developing are remedied, we would estimate that a normal building life of some 60 years is achievable.

However, during this period it may be necessary to replace glazing gaskets and other like material where either inspection or performance deterioration highlight the requirements.

# Reglazing

This should be carried out by a competent person, conversant with the Kawneer AA®100 SSG curtain walling glazing system and in accordance with the installation instructions.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine cleaning and maintenance to maximize the product life. However, should a problem develop with the performance of the product in between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA®201 and AA®265 Unitised Curtain Wall



# Introduction

The AA®201 and AA®265 unitised curtain wall systems are adaptable to any new construction project from two storeys upwards. The system is ideal for fast track installation where safe methods of work are required. The AA®201 and AA®265 have been exclusively designed and developed by Kawneer, with installation contracts undertaken in collaboration with its network of authorised dealers.

The AA®201 and AA®265 unitised systems give the specifier a wide choice of styles to create individual and exciting building facades. Both systems can accommodate spandrel infill materials including glass, stone and metal panels.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

In practice for the following checks, it may not be possible to carry out all those on 100% of the building. It is therefore acceptable that provided the external checks are satisfactory, the amount of internal checking required can be reduced to those areas visible, or to random checks, provided at least 10% of the internal areas are covered.

Checking of structural sealant may in some circumstances require partial or whole removal of sealant, bonded gaskets or glazing tapes in order to gain visible access.

# Structural Sealants

After 12 months and then every 5 years:

Check structural and weatherproofing sealants applied to all joints and that any adaptor interfaces are intact and undamaged.

# Indication of wear and damage

The only indication of damage that would normally be seen is if the sealant was subjected to some form of mechanical damage. Changes in surface appearance of the product will only occur as a result of atmospheric pollution i.e. dirt, fuel or other airborne contaminants. This change will be indicated simply by a change in colour shade, which is due to dirt pickup. The degree of change will obviously depend on the nature of the local environment. No change in elastomeric properties will result if this change occurs.

In certain situations, poor adhesion may be observed, usually due to poor surface preparation when the existing sealant was applied.

#### Method and frequency of inspection

It is difficult to give any absolute rules to follow on this point. However, typical inspection frequency may be listed as follows:

- Ist inspection upon completion of sealing.
- 2nd inspection after 1 or 2 years.
- 3rd inspection 5 years after completion.
- Method of inspection can consist of:
- a. Visual inspection.
- b. Exerting hand pressure on the sealant to check adhesion.

### Routine maintenance required

There is no maintenance required which relates to the performance of the sealant. Should the building be routinely cleaned as part of a cyclic maintenance programme, this may help to maintain the colour integrity of the product.

# Method of cleaning

Dirt pick-up may occur as stated previously; a slight change in shade may be noted, depending on the level of contamination and colour of sealant.

Any dirt pick-up may be washed off using water and, if necessary, detergent. No abrasion should be used as this could damage the surface of the sealant.

### Method of repair and replacement

If an area of sealant is found to be defective, every effort should be made to identify the cause of failure. The method of repair or replacement is straightforward, in that the area of infected material should be cut out using a sharp instrument.

#### Method of repair and replacement (continued)

The joint faces should be examined to make sure they are clean and dry. A check should also be made that the backer rod is in place.

If these conditions are fulfilled, the sealant may then be gunned into place and tooled off in the usual manner.

Masking tape may be needed to prevent sealant from spreading on the external faces of the joint. The new silicone sealant would be expected to adhere to the existing silicone sealant, provided that the existing sealant is clean and dry.

NOTE - It should be ensured that the replacement sealant is fully compatible with the existing materials.

## Drainage

After 12 months, then every 5 years:

- Check that no obstructions are present at head face caps where drainage and pressure equalisation takes place.
- Where accessible, check the bottom of mullions to ensure the drainage path is clear, including any slots or openings in façade interface details.

# Curtain Wall Grid

Transom to Mullion, after 12 months, then every 5 years:

Check to ensure that the transom to mullion fixings are still secure and that excessive gaps or misalignment have not developed.

#### Damage

After 12 months, then every 5 years:

Check all aspects of the product externally for damage and, where deemed necessary, the affected parts should be replaced.

#### Structural Fixings to Mullions

After 12 months, then every 5 years:

- Check mullion to structure tie backs / anchors and fixings to curtain wall.
- Ensure that they have not corroded excessively and the restraining fasteners are secure.

NOTE: In practice, this is difficult to carry out as one of the main features of curtain walling is that structural fixings are hidden from view. Every consideration should be given on all curtain walling installations to a requirement for routine inspection of these fixings and we would recommend that this is achievable on at least 10% of the structural fixings.

#### Product Life Span

Provided the above checks are carried out and problems developing are remedied, we would estimate that a normal building life of some 60 years is achievable.



However, during this period it may be necessary to replace glazing gaskets and other like material where either inspection or performance deterioration highlight the requirements.

From guidance received from suppliers of these items, we would anticipate that they should be changed at least once within the stated building life in order to maintain the performance specified.

# Reglazing

This should be carried out by a competent person, conversant with the Kawneer system and in accordance with the installation instructions.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine cleaning and maintenance to maximize the product life. However, should a problem develop with the performance of the product in between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA®540 Series Window Systems



Introduction

The AA®540 Series corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+. The AA®540 has been designed with aesthetics and energy efficiency in mind to ensure compliance with today's stringent performance requirements.

Suitable for new build and refurbishment projects, the AA®540 is the window of choice for all applications. Consisting of a Casement, Pivot and Tilturn window within the same suite, the AA®540 is suitable for Education, Healthcare, Commercial, Retail and Residential markets where cost is the key driver.

A polyamide thermal break offers the option of single and dual colour along with enhanced thermal performance. The excellent weather performance ensures that the AA®540 system is suitable for low or high rise applications

# Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

# Operation

Every 6 months:

- Operate the door to its full extent.
- Ensure any debris built up in the cavity is cleared (in very sandy or dusty environments this should be done more frequently).

#### Hardware

General

Every 12 months:

Check retention and operation of all hardware.

Locking Hardware

Every 12 months:

Tighten or replace any loose or missing screws from the hardware including locking keeps.

- Check the operation of the handle and the release button.
- Check the operation of the complete locking mechanism; the operation should be smooth.
- The operating hardware should be lubricated using bearing grease or light machine oil.
- Spray lubricants must be avoided as solvents present in these products will have an adverse effect on the lubrication already present and the protective surface coating of the hardware.
- Check retention of vent into frame and adjust the locking cams as required.
- Where safety devices are fitted, check to ensure they are correctly retained and operating satisfactorily.

Friction Stays/Fixed Restrictors

#### Every 6 months:

All hinges with sliding shoes, which travel along a track, must be kept clear of debris at all times. We recommend that using a damp cloth and a mild solution of warm soapy water cleans the friction stays. Apply with a soft cloth and dry thoroughly afterwards. **Caution:** Care must be taken not to damage the surface of the hardware used. Abrasive cleaning agents must be avoided. For optimum performance, please lubricate all pivot points with a light machine oil.

# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

#### Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

# Damage

Every 12 months:

Check all aspects of the product for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life.

Installations in aggressive environments will require attention on a much more frequent basis. However, should a problem develop with either the performance of the product in total, or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.





# Maintenance and Cleaning Instructions - AA®720 Series Window Systems



### Introduction

The AA®720 Casement Windows are available as top hung or side hung windows and can be either internally or externally glazed. Additional advantages of the advanced thermal break technology include the options of dual colour finishes, to provide design flexibility in various applications.

The AA®720 Pivot Window is available for both horizontal and vertical pivot applications as well as vertical offset pivot, which makes it the ideal choice where natural ventilation is required.

The AA®720 Tilturn Window is designed to offer maximum weather and thermal performance at a competitive price range. Excellent thermal performance (AA®720 HI Reflex) has been met using Reflex technology with foam meeting the most demanding specification performance on any project.

# Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

#### Hardware

Every 12 months:

- Check operation of locking mechanism and free movement of any operating rods (lubricate with light oil) retention of vent in position set against environmental conditions (all).
- Check locking strikes, keeps and handles are correctly located and secure (all).
- Adjust friction on stays and pivots to ensure retention of vent (casement and pivot).
- Where special safety devices are fitted these should also be checked to ensure they are correctly retained in operating satisfactorily (all).

Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

#### Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and that adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clean around these areas.

#### Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.



# Maintenance and Cleaning Instructions - GT70 Slimline Renovation Window



### Introduction

The GT70 Slimline Renovation Window is an elegant aluminium fenestration solution designed specifically to replicate the appearance of steel windows. Suitable for installation in new build or refurbishment projects, the GT70 window combines the optimum technical performance expected of today's aluminium windows, with the fine sightlines characteristic of original steel windows. These slender sightlines are enhanced further by optional bevelled designed feature caps adding a unique sculptured effect to the external surface of the building.

#### Cleaning

Please refer to the appropriate Anodised and Permacover<sup>™</sup> cleaning instructions.

# Hardware

Every 12 months:

- Check operation of locking mechanism and free movement of any operating rods (lubricate with light oil) retention of vent in position set against environmental conditions (all).
- Check locking strikes, keeps and handles are correctly located and secure (all).
- Adjust friction on stays and pivots to ensure retention of vent (casement and pivot).
- Where special safety devices are fitted these should also be checked to ensure they are correctly retained in operating satisfactorily (all).

# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

www.kawneer.co.uk

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and that adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clean around these areas.

# Damage

Every 12 months:

Check all aspects of the product for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA®3720 Folding/Sliding Door



#### Introduction

The AA®3720 Folding/Sliding Door is a solution for projects that demand the highest levels of thermal and weathering performance at a competitive price. The AA®3720 uses advanced thermal break technology, ensuring thermal efficiency and full compliance with Approved Document L. The polyamide thermal break allows for single and dual colour options. The use of extruded gasket profiles and drain and ventilate strategy enable the system to achieve its weathering performance.

The AA®3720 provides a door with market leading capabilities, equally suited to the discerning home owner or installed in commercial premises that wish to enhance their environment.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

#### Operation

Every 6 months:

- Operate the door to its full extent.
- Ensure any debris built up in the cavity is cleared (in very sandy or dusty environments this should be done more frequently).
- Especially important for top and bottom roller guides.

# Hardware

General

Every 12 Months:

Check retention and operation of all hardware.

#### Locking Hardware

Tighten or replace any loose or missing screws from the hardware including locking keeps.

Check the operation of the handle and the lock cylinder.

Check the operation of the complete locking mechanism; the operation should be smooth.

#### Every 6 months:

We recommend using a damp cloth and a mild solution of warm soapy water to clean the hardware. Apply with a soft cloth and dry thoroughly afterwards.

**Caution:** Care must be taken not to damage the surface of the hardware used. Abrasive cleaning agents must be avoided.

### Seals

Sealants

# Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

## Damage

Every 12 months:

Check all aspects of the product for damage and where practicable the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life.

Installations in aggressive environments will require attention on a much more frequent basis. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.

# Maintenance and Cleaning Instructions - AA®3572 Lift/Slide Door

### Introduction

The AA®3572 Lift/Slide Door is a solution for projects that demand the highest levels of thermal and weathering performance. The AA®3572 thermally insulated system delivers optimum levels of quality and performance with the lift/slide technology providing effortless operation enabling maximum panel sizes up to 3m x 3m with maximum weights up to 400kg.

Robust profiles with high insulation values enable large areas of glass for freedom of design. The option of slim meeting stiles allow the system to remain unobtrusive. As a sliding system, it is an ideal space saving solution where safety is a consideration and projecting swing doors are undesirable. The double EPDM gasket with continuous rebate provides exceptional weathering performance and high levels of sound reduction.

#### Cleaning

Please refer to the appropriate Anodised and  $\mathsf{Permacover}^{\mathsf{TM}}$  cleaning instructions.

# Operation

Every month:

Operate sliding panel to full extent to ensure any debris built-up on the track is cleared (in very sandy or dusty environments this should be done more frequently).

## Hardware

Every 12 Months:

- Check retention and operation of all handles, lock keeps and cylinders (where appropriate)
- Where special security devices are fitted, these should also be checked to ensure they are correctly retained and operating satisfactorily.

### Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

### Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.



# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

# Damage

Every 12 months:

Check all aspects of the product for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA®3110 Horizontal Sliding Window



### Introduction

The AA®3110 Horizontal Sliding Window is designed to meet the needs of any project that requires maximum ventilation, including general healthcare applications and mental health facilities. The AA®3110 horizontal sliding window has been designed to ensure that the needs of the user are paramount with its easy to operate functions and compliance with the HTM 55 regulations.

# Cleaning

Please refer to the appropriate Anodised and Permacover<sup>™</sup> cleaning instructions.

#### Operation

#### Every month:

Operate sliding panel to full extent to ensure any debris builtup on the track is cleared (in very sandy or dusty environments this should be done more frequently).

# Hardware

Every 12 Months:

- Check retention and operation of all handles, lock keeps and cylinders (where appropriate).
- Where special security devices are fitted, these should also be checked to ensure they are correctly retained and operating satisfactorily.

# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

#### Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

#### Damage

Every 12 months:

Check all aspects of the product for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.



# Maintenance and Cleaning Instructions - AA®3110HW Healthcare Window



### Introduction

Working in partnership with several Healthcare Trusts across the UK, Kawneer developed the AA®3110HW horizontal sliding window with key features which makes this window suitable for use within the Mental Healthcare sector. Our experience has highlighted the need to be flexible with the patients needs whilst ensuring that their safety and well being is paramount.

# Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions:

# Operation

Every month:

Operate sliding panel to full extent to ensure any debris builtup on the track is cleared (in very sandy or dusty environments this should be done more frequently).

# Hardware

Every month:

- Check retention and operation of all handles, lock keeps and cylinders (where appropriate).
- Where special security devices are fitted, these should also be checked to ensure they are correctly retained and operating satisfactorily.

#### Seals

Every 6 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.



# Sealants

Every 6 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 6 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

# Damage

Every 6 months:

Check all aspects of the product for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However when used in high risk or forensic rooms it is the building occupiers responsibility to ensure that all windows are checked in line with the locations demands. This may be on a much more frequent basis. Should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA®3610/AA®3610LS Vertical Sliding Windows



#### Introduction

The AA®3610 and AA®3610LS are the products to specify if maximum ventilation is critical to your project requirements. The ease of operation together with the optimum air flow make these windows ideal for schools and hospitals. The systems offer a fully integrated, flexible thermally broken vertical slider that has been designed with performance and aesthetics in mind.

Thermal insulation is achieved by utilising a unique polyamide thermal break design to give ultimate weather and thermal performance and smooth operation. The AA®3610LS is a unique solution which opens the top and bottom sashes simultaneously allowing stale air out of the top of the window whilst allowing cool fresh air to be drawn in via the bottom.

#### Cleaning

Please refer to the appropriate Anodised and  $\mathsf{Permacover}^{\mathsf{TM}}$  cleaning instructions.

#### Hardware

Every 12 Months:

- Check operation of locking catches.
- Check keeps and catches are correctly located and secure.
- Where special safety devices are fitted these should also be checked to ensure they are correctly retained in operating satisfactorily.
- Check operation of balances.

# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

# Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

#### Every 12 months:

Check that no obstructions are present at drainage slots and holes and wipe clear around these areas.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.

# Maintenance and Cleaning Instructions - 190/350 Doors



### Introduction

Kawneer design, engineer and manufacture complete door systems for any application. High standards of processing ensure equally high standards of performance throughout the lifetime of Kawneer products.

# 190 Narrow Style

All-purpose door, recommended for use in heavy traffic areas and automatic entrances. The 190 Door can be installed with the 'Finger Guard' option, which safeguards against injury to fingers accidentally caught between the hinge stile and frame.

#### 350 Heavy Duty

A heavy duty door which provides extra width stiles for accommodation of varying lock options and heavy aesthetic appearance, providing the durability needed in high traffic areas.

#### Cleaning

Please refer to the appropriate Anodised and  $\mathsf{Permacover}^{\mathsf{TM}}$  cleaning instructions.

#### Hardware

Every 12 months:

- Check lubrication and operation of all locks, hinges, closers, shoot bolts and other accessories and where necessary, carry out adjustment and lubrication of moving parts as detailed in the installation literature, or in the case of nonstandard hardware, to the suppliers recommendations.
- Retention of all components should also be checked and corrected where necessary.





# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

- Every 12 months:
- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - AA<sup>®</sup>545 Swing Door



#### Introduction

The AA®545 Swing Door completes the AA®540 Series Window & Door range and has been designed to offer optimum weather and thermal performance at a competitive price.

The AA®545 Swing Door is a high performance door which uses multi-chamber thermal break technology and a thermally enhanced centre seal, ensuring thermal efficiency and full compliance with Approved Document L. With the use of extruded gasket profiles, this system achieves its weathering performance by means of drained and ventilated glazing rebates.

Designed for direct fix into prepared openings and within ribbon windows, the range can suite with the Kawneer curtain walling and framing systems and is suitable for low or high rise buildings.

The AA®545 Swing Door is available as a single action open- in or open-out swing door and can be single or dual colour.

#### Cleaning

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.

#### Hardware

Every 12 months:

- Check lubrication and operation of all locks, hinges, closers, shoot bolts and other accessories and where necessary, carry out adjustment and lubrication of moving parts as detailed in the installation literature, or in the case of nonstandard hardware, to the suppliers recommendations.
- Retention of all components should also be checked and corrected where necessary.

#### Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and that adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

### Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes, and wipe clean around these areas.

# Damage

#### Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.



# Maintenance and Cleaning Instructions - AA®720 Series Door Systems



# Introduction

The Kawneer AA®720 Door has been developed to meet the latest European requirements for thermal performance and has been future proofed against expected changes in thermal regulation up to 2019.

To enable complete flexibility of design, performance and cost, the AA®720 Door is available in two levels of thermal performance, the AA®720 and the AA®720HI.

The 72mm profiles incorporate the very latest thermal technology including; extruded polyamide thermal breaks, insulated centre seals and foam isolators.

As well as being fully integrated, the AA®720 Door can suite with Kawneer's curtain walling and framing products and is suitable for installation in low or high rise buildings for commercial and domestic new build or refurbishment projects.

# Cleaning

Please refer to the appropriate Anodised and Permacover<sup>™</sup> cleaning instructions.

# Hardware

Every 12 months:

- Check lubrication and operation of all locks, hinges, closers, shoot bolts and other accessories and where necessary, carry out adjustment and lubrication of moving parts as detailed in the installation literature, or in the case of nonstandard hardware, to the suppliers recommendations.
- Retention of all components should also be checked and corrected where necessary.

### Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and that adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Drainage

Every 12 months:

Check that no obstructions are present at drainage slots and holes, and wipe clean around these areas.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.



# Maintenance and Cleaning Instructions - 10D Door



#### Introduction

The 10D Door has been designed to offer flexibility in design, durability and ease of installation. The strength of the tie rod construction means the door provides an economic solution to light/medium traffic applications in a variety of markets, including retail, commercial and public sectors.

## Cleaning

Please refer to the appropriate Anodised and  $\mathsf{Permacover}^{\mathsf{TM}}$  cleaning instructions.

# Hardware

Every 12 months:

- Check lubrication and operation of all locks, hinges, closers, shoot bolts and other accessories and where necessary carry out adjustment and lubrication of moving parts as detailed in the installation literature, or in the case of non-standard hardware, to the suppliers recommendations.
- Retention of all components should also be checked and corrected where necessary.

#### Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

#### **Sealants**

Every 12 months:

Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged. Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

#### Damage

#### Every 12 months:

- Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.
- NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them.

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.



# Maintenance and Cleaning Instructions - Surface Applied Closers



# Introduction

Kawneer design, engineer and manufacture complete door systems for any application. High standards of processing ensure equally high standards of performance throughout the lifetime of Kawneer products.

#### Maintenance

- All internal working parts are immersed in highest quality anti-oxidising Hydraulic Oil to ensure maintenance-free operation over many years.
- Surface applied closers are also protected by overload safety valves against accidental or deliberate misuse.
- Clean down polyester powder coated aluminium (or more frequently in aggressive environments).

#### Maintenance Check List

Once the door closer has been installed no further adjustment should be necessary. However an annual check should ensure that:

1. The door leaf closes freely and positively into its frame from



# Maintenance and Cleaning



any angle without slamming. A little light oil on the hinges and latch may be helpful.

2. If the model has a backcheck its resistance is such that, when the door leaf is forcibly thrown open, it is brought to a halt without coming into contact with any obstruction

3. All fixing screws are tight.

4. The hexagonal bolt is tight.

### Features

- The closer can be used for left or right hand hinged doors.
- Adjustable speed control and adjustable latching control are fitted as standard.
- Delayed closing and adjustable backcheck are available as options.

# Adjustment

- Adjust closing speed of door by adjusting valve. Clockwise to slow the door and vice versa.
- Adjust the latching speed in the same manner. The latching speed adjusts the last 20 degrees of movement before closing.
- If fitted, adjust the delay to suit the time required for the door to remain in the fully open position.
- If fitted, the backcheck valve adjusts the strength of hydraulic buffer.
- Adjust as per other valves.

# Maintenance and Cleaning Instructions - 451PT Framing System



Introduction

The thermally efficient 451PT Framing System was designed in close collaboration with Scape. The system meets the needs of the education, refurbishment and new-build markets.

It is also suitable for use on commercial projects in the public sector and is also ideal for large display windows in the retail sector. The 451PT Framing System provides slimline, dual colour, and multi-glazed framing modules of varying widths and heights that feature fixed lights, opening vents and insulated panels.

### Cleaning

Please refer to the appropriate Anodised and Permacover<sup>™</sup> cleaning instructions.

# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be replaced.

NOTE: These recommendations are what we would consider to be the minimum requirement for routine maintenance and cleaning to maximise the product life. However, should a problem develop with either the performance of the product in total or of the components fitted to the product, between checks, then appropriate action needs to be taken to overcome them

NOTE: Marine, aggressive or chlorine environments carry additional cleaning and maintenance demands, which should be handled on a project basis, and according to the manufacturers requirements.



# Maintenance and Cleaning

# Maintenance and Cleaning Instructions - AA®4001 Semi-unitised Framing System



#### Introduction

The AA®4001 Semi-unitised Framing System, designed in line replaced. with the DfE's 'Building Schools For The Future' is compliant with current building regulations, acoustics BB93 and NOTE: These recommendations are what we would consider environmentally friendly classrooms BB95. As well as traditional to be the minimum requirement for routine maintenance and stick build and semi-unitising, the system offers the advantage cleaning to maximise the product life. However, should a of fully unitised assembly and also enables it to meet the problem develop with either the performance of the product demands of fast track work schedules and restricted working in total or of the components fitted to the product, between conditions. The AA®4001 Semi-unitised Framing System is checks, then appropriate action needs to be taken to overcome adaptable to any new construction project, and due to the fact them that it can be quickly installed in occupied buildings with NOTE: Marine, aggressive or chlorine environments carry minimal disturbance, the system is ideal for refurbishment additional cleaning and maintenance demands, which should projects. be handled on a project basis, and according to the Cleaning manufacturers requirements.

Please refer to the appropriate Anodised and Permacover™ cleaning instructions.







# Seals

Every 12 months:

Check weatherstrips for damage, shrinkage or distortion and replace or reseal as necessary.

# Sealants

Every 12 months:

- Check glazing gaskets and sealants applied to all joints and around fixing screw heads and adapter interfaces are intact and undamaged.
- Where gasket or sealant has been damaged or failed, it should be replaced and care taken to ensure aesthetic appearance of product is not compromised.

# Damage

Every 12 months:

Check all aspects of the product externally for damage and, where practicable, the affected parts should be







Kawneer UK Ltd Astmoor Road, Astmoor Industrial Estate Runcorn, Cheshire WA7 1QQ, United Kingdom

Tel: +44 (0) 1928 502500 Fax: +44 (0) 1928 502501

London Office 12 Berwick Street Soho London W1F 0PN

Tel: +44 (0) 207 287 5911

Email: kuk.kawneer@arconic.com www.kawneer.co.uk

Other brochures available on request from Kawneer are:

- Architectural Aluminium Systems Finishes
- Door Systems
- Framing Systems
- Curtain Wall Systems
- Unitised Curtain Wall Systems
- AA®130 Brise Soleil System Solar Shading for Reduced Solar Heat Gain
- Window Systems
- Door and Window Sliding Systems
- Residential Aluminium Glazing Systems
- Specialist Horizontal Sliding Window Solutions for your Healthcare Project
- Fire Resistant Systems
- The Architects Guide to Aluminium in Building
- Sustainability



Kawneer's continuous development and engineering programmes may bring about product changes. Kawneer reserves the right to introduce without notice such changes which will not detract from the product's performance © KAWNEER UK LTD