



Policy, Standards & Guidance

WINDOWS, EXTERNAL DOORS AND ASSOCIATED ELEMENTS

Relevance:

District Managers, Location Managers, Asset Surveyors, Property Surveyors and Technical Officers, Contractors and Designers.

Policy:

Anchor acknowledges its duty to provide places to live for customers that are safe and secure, welcoming, and weather and wind tight.

As part of this commitment, we will only install windows, doors and related components to the standards recommended by the relevant British Standards, the relevant Building Regulations and the latest industry guidance.

Change Log

Rev. No.	Date	Details of Amendments
1	11/05/2015	Standard Issued
2	01/10/2015	<p>Standards Section 1.2 – removed reference to lifecycles for windows.</p> <p>Standards Section 1.7 and associated guidance - Amended restrictor requirements (concealed restrictors instead of hinge restrictors).</p> <p>Removed any references to specific manufacturer products.</p> <p>Standards Section 2.1 – additional requirement for any external entrance doors used as alternative entrance by customers to be installed in aluminium.</p> <p>Standards Section 2.1 – additional information on any size of holes on mesh screens to louvered doors to allow compliance with gas safety regulations.</p>



Policy, Standards & Guidance

		Standards Section 2.1 – amended wording around single action opening requirements for fire exits.
3	02/11/2015	<p>Standards Section 2.1 – amended requirement for Boiler and Plant room doors to be replaced with PVCu as opposed to composite.</p> <p>Standards Section 2.1 – revised requirement to state all other communal doors should normally be replaced with Glass Reinforced Polymer (GRP) composite doors. Amended requirement for any external entrance doors used as alternative entrance by customers from aluminium to Glass Reinforced Polymer (GRP) composite doors.</p> <p>Standards Section 2.2 – added comment around material for French and other sliding individual dwelling doors.</p>
4	09/03/2016	<p>(Former) Standards Section 1.2 – removed reference to window replacement lifecycles.</p> <p>Standards Section 1.4 (now 1.3) – removed reference to windows having ‘easy clean’ hinges.</p> <p>Standards Section 1.6 (now 1.5) – removed confusing statement around critical areas of safety glazing (should be as per Diagram 5.1 of Approved Document K – 2013 Edition).</p> <p>Standards Section 1.7 (now 1.6) – removed confusing references and narrative around lockable restrictors.</p> <p>Standards Section 1.7 (now 1.6) – removed reference to risk assessment in Extra Care schemes dictating need for lockable restrictors (Extra Care and Care Homes should be dealt with the same).</p> <p>Standards Section 2.1 – removed previous reference to louvered doors to Boiler rooms and</p>




Policy, Standards & Guidance

		<p>replaced with more appropriate guidance.</p> <p>Standards Section 2.1 – removed reference to undertaking individual location assessment to determine the most suitable door material to use.</p> <p>Standards Section 2.2 – removed narrative around use of PVCu or Composite doors for exits to Disabled flats.</p> <p>Standards Section 2.2 – re-worded narrative around choice of colours for doors to Cat 1 dwellings.</p> <p>(Former) Standards Section 2.3 – removed reference to lifecycles for external door replacement.</p> <p>Added Standards Section 5 – Rainwater Goods</p> <p>Guidance Section 3.2.3 – deleted confusing statement around critical area of safety glazing.</p> <p>General – Minor re-wording where necessary.</p>
5	09/01/2017	<p>Standards Section 2.1 – added additional clarification around louvres on Boiler room and other doors (e.g. Refuse Rooms).</p> <p>Guidance Section 3.2.1 – additional clarification around suited locks for communal doors.</p>
6	03/02/2017	<p>Standards Section 1.1, 2.1, 2.2, 4.1 & 5.1 – added additional guidance around Leasehold estates.</p> <p>Standards Section 2.1, 2.2, 4.1 & 5.1 – added additional guidance around including as separate line in stock condition surveys/planned programmes.</p>


Policy, Standards & Guidance

Standards:


Item		Standard	
1	Windows	1.1	<p>General</p> <p>All windows will be white, PVCu double glazed units designed to meet the Secure by Design standard.</p> <p>Where planning restrictions do not allow this, PVCu windows with an external laminate or foil finish, e.g. Rosewood, will be provided. The internal colour for these windows will be white.</p> <p>Where the planning authority insists on installation of timber windows, high performance softwood windows will be provided.</p> <p>In Leasehold estates, where windows form part of the demised premises (residents responsibility), these will not normally be replaced by Anchor.</p>
		1.2	<p>Style</p> <p>Windows will be projected outward opening with top or side hung casement and fanlight in single or multi light windows unless planning restrictions dictate otherwise. See below for example.</p>  <p>Tilt and turn windows will only be provided where required by planning conditions.</p> <p>i see Guidance item 3.2.1</p>




Policy, Standards & Guidance

Item	Standard
	<p>If allowed by planning, fully reversible top hung windows will be provided as an alternative to tilt and turn.</p> <p>Escape windows will generally only be provided where these already exist.</p> <p>In Self Contained Housing for Sale or Rent (where there are no multiple means of escape via communal escape/access routes) the provision of new escape windows should be assessed on an individual location basis, also taking into account any particular requests/concerns from customers and local planning/conservation restrictions.</p>
	<p>1.3 Handles and hinges</p> <p>Cranked handles will be provided at a height no greater than 1700 mm above floor level.</p> <p>Cranked handles are to be the push button, non-key locking type.</p> <p>A different contrast colour to the frame is to be considered for visually impaired customers or where there are egress locations (this would need prior consultation and agreement on an individual location basis).</p>
	<p>1.4 Ventilation</p> <p>All windows will incorporate a secure night ventilation position and trickle ventilators. These will be cord operated with a flap allowing ventilation to be controlled and closed manually.</p> <p> see Guidance item 3.2.5</p> <p>Any existing natural or mechanical means of smoke ventilation on lobbies, stairways or communal escape routes/corridors (either via manually openable windows or by AOV - Automatically Opening Vents linked to the fire alarm system) should not be removed, obstructed or otherwise compromised by window replacement or other works.</p> <p>These windows do, however need to be replaced with the remainder of the windows. Where AOVs</p>

Policy, Standards & Guidance

Item	Standard
	<p>are being replaced, they must be capable of being closed from a central point.</p> <p>1.5 Glazing Double glazed sealed units will be provided (where planning restrictions allow) and include obscured glazing to bathrooms and WC's.</p> <p>All glazing will be internally beaded for enhanced security.</p> <p>All sealed units will include low emissivity (Low-E) glass, providing a WER (Window Energy Rating) band C or better and/or a U value of at least 1.6 W/m².K. <i>i</i> see Guidance item 3.2.3</p> <p>Safety Glazing will be installed in 'critical' locations as defined in Approved Document K (2013 Edition) of the Building Regulations. <i>i</i> see Guidance item 3.2.3</p> <p>Any glazing within 1.8 m of an external fire escape route, e.g. stairs or adjacent to any other external fire escape route, will be non-opening and fire resistant.</p> <p>1.6 Restrictors</p> <p>In Housing for Sale and Rent, as well as Extra Care locations, all windows must have concealed rebate restrictors fitted (which restrict opening to 100mm) – see photograph below. The catch must re-engage when the window is closed.</p>  <p>In all communal areas, including communal rooms on upper floors where a window transom is not of a height of at least 1100mm from Finished Floor Level (FFL), permanent lockable restrictors must be fitted, e.g.</p>

Policy, Standards & Guidance

Item		Standard	
			 <p>In Extra Care locations, all windows on upper floors will have permanent lockable restrictors.</p> <p>In Extra Care and Care Homes, permanent lockable restrictors will be fitted to all opening casements/sashes and balcony doors leading from bedrooms.</p> <p>In Leasehold housing, restrictors should be presented as an additional option only for customers to agree.</p>
2	External doors (excluding main entrance doors)	2.1	<p>General</p> <p>On regularly used communal doors (including service doors in care homes), Glass Reinforced Polymer (GRP) composite doors will be provided (with appropriate ironmongery).</p> <p>New fire exit doors will need to provide single action opening, e.g. surface mounted panic bars/pads, latches or push down handles as considered appropriate.</p> <p>Where there are any external doors that are used as an alternative entrance to the building by customers (who have access to a provided key), these must be replaced with Glass Reinforced Polymer (GRP) composite doors. If these doors are considered to be a fire exit an appropriate assessment must be undertaken to confirm whether a split spindle arrangement may need to be installed (which allows both single action internal operation and external opening via a key).</p>



Policy, Standards & Guidance

Item	Standard
	<p>Sliding patio doors must not be installed as threshold track are difficult for customers in wheelchairs to negotiate.</p> <p>Boiler/Plant room doors must have louvres with suitable airflow in compliance with boiler manufacturers requirements (obtained from Gas Service Contractor at PTS stage). Notice is to be given to Anchor Energy Team when works are carried out in Boiler room.</p> <p>On Refuse Room external doors, insect mesh should be installed to the inside of the louvre.</p> <p>All other louvered vents (including Boiler/Plant room) should be sufficiently spaced in order to prevent birds, bats etc. entering.</p> <p>On leasehold estates these items should only be replaced if absolutely necessary and should not be replaced necessarily at the same time as windows or other associated items.</p> <p>Any external doors should be included as a separate line of the planned programme and/or stock condition survey in addition to any line for window replacements. If there is no line for replacement of these, it is not intended that these are to be replaced. If the condition is poor and replacement is required, please contact the asset team to approve a programme variation request.</p>
	<p>2.2 Dwellings</p> <p>GRP Composite doors will be provided for external entrance doors to dwellings, e.g. Cat 1 properties.</p> <p>Any French doors or similar sliding doors to individual dwellings must be replaced in PVCu.</p> <p>The inside face of the door will be white.</p> <p>Consultation must take place with the Location Manager to decide the choice of colours currently available for the outside face. These do not need be the same colour as the window finish, unless</p>



Policy, Standards & Guidance

Item		Standard	
			<p>specific planning or conservation rules apply.</p> <p>On leasehold estates these items should only be replaced if absolutely necessary and should not be replaced necessarily at the same time as windows or other associated items. The lease should also be verified to ensure these do not form part of the demised premises.</p> <p>Any external doors should be included as a separate line of the planned programme and/or stock condition survey in addition to any line for window replacements.</p>
3	Window and door refurbishment and renovation	3.1	<p>General</p> <p>Where full window or door replacement is not permitted by the planning authority, minor refurbishment and/or major repair will need to be considered.</p> <p>Where it is clear that extensive works are needed to timber windows and doors, they will be considered for full renovation by a specialist company. i see Guidance item 3.2.8</p> <p>Where there is a requirement for original single glazed windows to be retained, secondary glazing will be considered as part of any window renovation or repair works. i see Guidance item 3.2.9</p>
4	Soffits, Fasciae, and Bargeboards	4.1	<p>Replacement</p> <p>Whenever full window replacement is to take place, soffits, fasciae and bargeboards will be replaced or over-clad (depending on condition and any local planning restrictions) with PVCu.</p> <p>These items will match the colour and material used for any window and door replacements.</p> <p>An inspection of the condition of eaves felt should also be carried out by a competent roofing contractor as part of scoping of works with a view to replace any rotted or damaged eaves felt as part of any work carried out on soffits and fascias.</p>



Policy, Standards & Guidance

Item		Standard	
			<p>On leasehold estates these items should only be replaced if absolutely necessary and should not be replaced necessarily at the same time as windows and/or doors.</p> <p>A separate line in the planned works programme and/or stock condition survey must be included for this work, in addition to any lines for window replacement. If there is no line for replacement of these, it is not intended that these are to be replaced. If the condition is poor and replacement is required, please contact the asset team to approve a programme variation request.</p>
5	Rainwater Goods	5.1	<p>Replacement Whenever full window replacement and/or soffit/fascia replacement is to take place, rainwater goods should also be considered for replacement at the same time (unless they have been previously replaced separately).</p> <p>New gutters should be made from PVCu unless Planning or Conservation restrictions apply.</p> <p>On leasehold estates these items should only be replaced if absolutely necessary and should not be replaced necessarily at the same time as windows and/or doors.</p> <p>A separate line in the planned works programme and/or stock condition survey must be included for this work, in addition to any lines for window replacement. If there is no line for replacement of these, it is not intended that these are to be replaced. If the condition is poor and replacement is required, please contact the asset team to approve a programme variation request.</p>



Policy, Standards & Guidance

Guidance:

These standards are intended to be used by Anchor's Property Team, contractors and designers in the preparation of specifications for the replacement of windows, doors and other related components in all Anchor's locations.

Operational management will also refer to this document, together with the specification and scope of works, during the consultation process with customers.

1. Relevant Housing Legislation

Windows and External Doors are classified as a key component in the Government's Decent Homes standard (as formed by the Housing Act 2000 and reinforced by the Housing Act 2004).

These components need to be both old and in poor condition for an individual dwelling to fail. There is no specific criterion that states that because windows are single glazed that they are defined as a failure, although the design, type and effect of windows can be a contributing factor to increased levels of likelihood and harm when carrying out an assessment of any hazards (e.g. condensation and mould growth) under the HHSRS (Housing Health and Safety Rating System) criterion of the Decent Homes Standard.

It must be reiterated that the Decent Homes Standard is a minimum standard only and Anchor's internal decency standards aspire to a much higher level.

2. References

In the production of these standards, reference has been made to the following documents:

- 2.1** A Decent Home: Definition and guidance for implementation – June 2006 Update (Department for Communities and Local Government).
- 2.2** BS 5925:1991 – Code of practice for ventilation principles and designing for natural ventilation.
- 2.3** BS 6262: 2005 – Glazing for buildings (All Parts).
- 2.4** BS 7036-1: 1996 – Code of practice for safety at powered doors for pedestrian use.
- 2.5** BS 7722: 2010 – Surface Covered PVC-u profiles for windows and doorsets.
- 2.6** BS 8213-1:2004 - Windows doors and roof lights. Design for safety in use and during cleaning of windows, including door-height windows and roof windows.



Policy, Standards & Guidance

Code of practice.

- 2.7** BS 8213-4:2007 - Windows, doors and roof lights. Code of practice for the survey and installation of windows and external doorsets.
- 2.8** BS 8529: 2010 – Composite Doorsets. Domestic external doorsets.
- 2.9** BS 14449:2005 - Glass in building. Laminated glass and laminated safety glass. Evaluation of conformity/product standard.
- 2.10** BS EN 12150 – 2: 2004 – Glass in Building. Thermally toughened soda lime silicate safety glass.
- 2.11** BS EN 14351-1:2006 + A1:2010 Windows and Doors – Product Standard, performance characteristics.
- 2.12** BS EN 14449: 2005 – Glass in Building. Laminated Glass and Laminated Safety Glass.
- 2.13** BS EN 1303: 2005 – Building hardware. Cylinders for locks. Requirements and test method.
- 2.14** BS EN 1627:2011 - Pedestrian doorsets, windows, curtain walling, grilles and shutters. Burglar resistance. Requirements and classification.
- 2.15** Building Regulations Part F (Approved Document F1 – Means of Ventilation).
- 2.16** Building Regulations Approved Document Part K (Protection from falling, collision and impact) 2013 edition.
- 2.17** Building Regulations Approved Document Part J (Combustion appliances and fuel storage systems).
- 2.18** Building Regulations Part L (Approved Document L1B – Conservation of Fuel and Power in Existing Dwellings).
- 2.19** Building Regulations Approved Document Part M (Access to and use of buildings).
- 2.20** Building Regulations Approved Document Part N (Glazing – safety in relation to impact, opening and cleaning). To be withdrawn from 6 April 2013 to be superseded by Approved Document K (2013 edition).
- 2.21** Glass and Glazing Federation – A Guide to Trickle Ventilators.



Policy, Standards & Guidance

- 2.22 Glass and Glazing Federation – The Good Practice Guide for the Installation of Replacement Windows and Doors.
- 2.23 LHC Framework Arrangement: PVCU windows and doors plus associated products (U8).
- 2.24 National Heritage – Secondary Glazing for Windows.
- 2.25 PAS 24:2012 - Enhanced security performance requirements for doorsets and windows in the UK.

3. Technical Guidance

3.1 Procurement

Any window suppliers will be registered with the British Standards Institution under BS EN ISO 9001:2000 for manufacture and installation.

Contractors will also hold the ISO 14001 Environmental Standard in their own right.

All window suppliers will be FENSA registered (or equivalent responsible persons scheme) and be able to certify compliance with Part L of the building Regulations. Proof of compliance will be required.

Any Double Glazed units, frames and ironmongery to windows and doors are to come with a 10 year guarantee/warranty. Timber windows will also have 10 year paint and stain guarantee.

3.2 Survey and Design

3.2.1 Window style, material and design

The materials used, style and colour will be determined locally prior to any production of specifications, to reflect any planning, conservation area or customer requirements.

The style of any replacement window is not to be changed significantly so as to avoid the need to apply for consent from the local planning authority, e.g. when changing from timber to PVCu windows the frame widths and fenestration are to be similar to the original.

Where timber windows need to be installed/replaced, high performance softwood is the preferred option.



Policy, Standards & Guidance

Tilt and turn windows may be required by local planning authorities where it is not possible or preferable to have windows that open outwards, e.g. ground floor of a building on a busy street.

The local planning authority is to be consulted at an early stage in all instances. If there is any doubt as to whether planning permission will be required, an application for planning consent should be submitted.

Any changes in window design are to be discussed and agreed beforehand with the local Asset Manager to agree the brief, especially where planning regulations apply.

Surveying and installation of windows is to be undertaken in line with the guidance set out in BS 8213-4: 2007 and a risk assessment done in line with 8213-1: 2004.

Windows, roof lights and ventilators are to be easy to open, close and adjusted safely and comply with the requirements of Approved Document K of the Building Regulations 2013 Edition (from 6 April 2013). Consideration must also be given to the design for safety in use and cleaning as per Approved Document K, as well as the code of practice set out in BS 8213-1:2004 for all types of windows

When carrying out any full window replacement, the designer needs to take the opportunity to correct any original design faults with the original windows and therefore must consider the following factors when deciding on the style of the replacement windows;

- Weatherproofing, natural light and ventilation requirements
- Ease of use and customer comfort, including safety in use
- Health and Safety
- Security, including Secured by Design Requirements
- The Disability Discrimination/Equality Act
- Relevant Building Regulations
- Local Planning/Conservation Guidelines and Planning Frameworks
- Working at Height Regulations 2005
- Means of escape in the event of fire
- Design for safety when cleaning (Approved Document K of the Building Regulations)



Policy, Standards & Guidance

- Future Maintenance
- The need for CE Marking (as per the Construction Product Regulation (CPR) which will come into force from 1st July 2013)

Window boards must not be over-clad with PVCu or replaced unless they are showing signs of rot or warping. Replacement window boards will be timber

As part of any survey or design for window replacement, it may be necessary for the supplier/contractor to remove one window in order to check the condition of the reveals and the existing damp proof course (DPC).

If any existing aperture widths need to be increased, Building Regulation control must be obtained.

Mastic and putty systems are not to be used with the exception of when retaining single glazed windows for planning reasons.

In order to prevent electrolytic corrosion, window components will not include a mixture of unsuitable metals.

Replacement windows will have welded joints and sealed (stainless steel) reinforcing chambers with no mechanical joints present.

3.2.2 Window Performance Specifications

All Replacement Windows will be compliant with BS EN 14351-1 and BS 6375-1:2009.

PVCu Windows are to comply with BS 7412:2007 and be manufactured in accordance with BS EN 12608:2003.

PVCu Windows with an external laminate or foil finish, e.g. Rosewood are to be compliant with BS 7722.

The specification of any fully finished factory assembled timber windows will comply with BS 644:2012. The bottom draining bead on any timber windows will be in a powder coated aluminium colour to match the paint finish. The main pre-finish paint/stain to any timber windows will be applied manually or electronically in the factory (with a final coat being done on site if required). The finish on any timber windows will comply with Anchor's current ICI micro-porous painting/staining specification.

The windows will have Kite mark approval to PAS 24:2012 for the improved security performance of casement windows and the manufacturer must have the certificate in their own name.



Policy, Standards & Guidance

All opening casements and fanlights will be fitted with Anti-corrosion resistant, stainless steel easy clean hinges, ironmongery and fixings. A higher grade can be considered for use in coastal locations, e.g. 316 Marine Grade, providing that there are no major cost implications.

3.2.3 Glazing

All glazing is to be selected and used in accordance with the recommendations given in the relevant parts of BS 6262.

Windows will be glazed using hermetically sealed flat double glazed units normally 28mm thick (unless individual circumstances dictate otherwise). The minimum gap between any window panes will be 16mm. All windows will have an adequate means of self-drainage

All sealed glazed units will have low emissivity (Low-E) glass that complies with the current Approved Document L1B of the Building Regulations at the time of installation.

The thermal insulation requirements of any replacement windows will be at least to the level required by the current Building Regulations at the time of the installation (Approved Document L1B)

Where it is found to be cost effective to do so and/or where additional innovation is practical, a higher level of thermal performance may be sought

When replacement windows are unable to achieve the above standards due to the need to retain the original external appearance of the building, replacement windows are to meet a centre pane U-value of 1.2 W/m².K or single glazing is to be supplemented with Low 'E' Secondary Glazing.

Safety Glazing is to be installed and manifested in 'critical' locations in accordance with Approved Document K of the Building Regulations, 2013 Edition (applicable from 6th April 2013). Critical locations include large uninterrupted areas of transparent glazing that form, or are part of the internal or external walls and doors of buildings (see Diagram 5.1 of Approved Document K – 2013 Edition).

If Glazing in a critical location is protected by a permanent screen then the glazing itself does not need to comply with requirement K4 of the Building Regulations (but the screen is to comply with the specification detailed within Approved Document K).

Each pane of safety glass used will be marked in accordance with BS EN 12150 for toughened glass or BS EN 14449 for laminated glass and will be visible after installation. The glazing will comply with BS EN 12600 for pendulum impact safety tests.



Policy, Standards & Guidance

Where fan holes are required in ground floor windows, 6mm Toughened glass will be used in place of laminated glass.

3.2.4 Security and Window Restriction

Any enhanced security options for replacement windows are to comply with BS EN 1627 to BS EN 1630 and PAS 24:2012.

Positions of transoms in all window designs are to be agreed at the Pre Tender survey meeting, and subject to a Risk Assessment in line with BS 8213-1: 2004; Table 1.

Transoms between 930 and 1300mm from Finished Floor Level (FFL) will be avoided in both communal and dwelling lounge(s). Even where the transom height conforms to Building Regulations (1.1m) there will still be a need for restrictors on communal windows.

All 'vulnerable' windows, (at ground floor or basement level and those on first floor that are easily accessible via flat roofs, balconies etc.), are to comply with PAS 24:2012 which meets the requirements of Secured by Design (<http://www.securedbydesign.com/aware/windows.aspx>).

- Sashes are to be fitted with a multi-point espagnolette locking device.
- All windows will have Excluder window locks fitted or equivalent, except where Vector stays are required, or equivalent.

Windows in difficult to reach locations (e.g. dwelling kitchens where units are installed in front of the kitchen window) will have a top hung casement with handle at cill level, so as to avoid the need for winding gear. Only where this is not possible to implement due to a particular layout of a property, will manual or electrical winding gear be provided (In this event, for dwellings any window controls will need to be located between 800 mm and 1000 mm above the floor and be easy to operate without using both hands at the same time as per Approved Document M of the Building Regulations).

Where permanent lockable window restrictors are fitted to existing frames in Care Homes, these can be refitted to any new windows, with additional lockable restrictors fitted to any additional opening sashes.

Approved stainless steel friction hinges will be fitted to side hung casements. Restriction friction hinges must not be fitted to windows



Policy, Standards & Guidance

Provision of escape windows is not a rigid requirement under the current Building Regulations. However, when replacing an existing escape window any openings will be the same size as to provide at least the same potential for escape as the window it is replacing.

It is generally considered good practice to replace any window on the first floor that is not used as an escape window with an escape window. In reality for Anchor, it is likely that the need for provision of escape windows may only need to be assessed in those Housing or Rent Locations with self-contained dwellings (i.e. front and/or rear doors entering directly to outside) where there are no multiple means of escape via a communal escape route or access.

Any requests for escape windows in any Self Contained Dwellings in Housing for Rent or Sale should be considered on an individual basis (which should include an individual risk assessment on that property and person).

Any Escape windows are to comply with Building Regulations Approved Document B for Means of Escape. Where escape windows are required the cill height is to be between 800-1100mm and the opening no less than 0.33m², with minimum 450mm width and 450mm height. Only one window per room is generally required.

Local Planning and Conservation restrictions obviously apply when considering any provision of escape windows where they do not already exist.

3.2.5 Ventilation

As part of any window replacement, renovation or secondary glazing installation, background ventilation such as adjustable trickle vents must be installed (these help provide the building with the facility for secure, draught free ventilation and provide a healthy and comfortable internal environment for dwelling and building occupants) .

Where trickle ventilators are to be fitted (where these were previously present), the new ventilation opening is not to be smaller than the original and should offer at least the same level of performance. Any trickle ventilation is to be controllable and provided in the head of the frame, wherever possible.

Background Ventilation is to meet the requirements of Approved Document F of the Building Regulations 2010 and Approved Document J (in relation to any Gas Appliances).

Approved Document F1 of the Building Regulations (2010) and BS 5925: 1991, also specifies the minimum sizes that are to be adopted when considering trickle ventilation, but as a general guideline, the following standards are to be used.

- Habitable rooms – 5000mm² equivalent area (EA)



Policy, Standards & Guidance

- A total area not less than 4000m² EA for all other rooms

Any natural smoke ventilation via manually openable windows on communal escape routes should not be compromised, hindered, obstructed or removed. Any replacement windows forming manual ventilation on escape routes should be designed, operated and installed so that they operate correctly and safely.

Depending on the number of escape stairways and the age of the property, smoke ventilation is normally found in either the stair lobbies or corridors that form the common access area to the residential flats, as well as in the staircase enclosure itself.

Simple smoke ventilation measures normally comprise of manually or automatically opening vents/windows, or in older buildings, permanently open vents.

3.2.6 AOV (Automatically Opening Vents)

These windows should normally be replaced with the remainder of the windows. Where AOVs are being replaced, they must be capable of being closed from a central point and any timber sub-frames will need to be included. This is also applicable to any previous metal windows that may have timber sub frames. Any AOV that are to be replaced will have similar opening arrangements to that of the previous component as they will form part of the smoke ventilation strategy for the building.

3.2.7 Roof lights and Conservatories

Velux roof windows are very durable and it is very rare that they would need full replacement. They may need a repair and service carried out (by an approved Velux contractor) and are only to be replaced when beyond economic repair. Consideration will need to be given as to whether opening restriction is needed (depending upon location and/or service), or installation of remote operation if the unit is too high to reach.

When roof lights are to be replaced consideration will need to be given to the following (in addition to any relevant issues that have already been discussed):

- Fall Prevention
- Solar Glare Prevention
- Services access where needed
- Possible need for smoke vents (in very rare cases)



Policy, Standards & Guidance

The condition of the existing roof finish and structure is also to be assessed, including any felt detail around the window up-stand, insulation within the gap between the window frame, roof structure and vapour barrier. Any remedial works or replacement/installation in relation to these elements is to be highlighted and actioned appropriately (i.e. new felting detail around the frame, insulation, and vapour barrier may need to be provided if not already present or damaged/deteriorated). A new flashing set compatible with the roof covering may also be required.

Conservatories are to comply with BS 6399-2:1997 in order to withstand extreme weather conditions.

Conservatories however are normally exempt from building regulations when:

- They are built at ground level are less than 30m² in floor area
- The conservatory is separated from the building by external quality walls, doors or windows
- There should be an independent heating system with separate temperature and on/off controls
- Glazing and any fixed electrical installation complies with the applicable Building Regulation requirements for these elements.

3.2.8 Window Refurbishment/Renovation

Window refurbishment or renovation may be required where Buildings have a specific listed status/be a period building, located in National Parks or Areas of Outstanding Beauty, be restricted by particular conservation or planning constraints, or where the actual structure of the building does not allow for the practicality of such work (without other extensive and unaffordable structural alterations needing to take place in order to accommodate new units). These types of works are also normally to be co-ordinated with any planned external redecoration.

When window refurbishment or renovation is to be considered, an initial survey is to be carried out to identify historical and current problems with the structure and the ironmongery of the windows and doors.

- For timber windows and doors, a survey will also be required to confirm any timber damage or deterioration.
- Vertical and horizontal sliding sashes are to be checked for ease of operation.
- Glazing is also to be inspected to ascertain the extent of any failed double glazed units.



Policy, Standards & Guidance

- Following the survey and inspection, it will be clear as to whether minor refurbishment, major repairs or full renovation is required.
- A window or door will only be considered for full replacement, if uneconomic to repair and permissible under planning constraints.

Minor refurbishment/major repair works will normally consist of the following:

- All ironmongery to doors and windows are to be tightened and adjusted where needed.
- Consideration is to be given to repairing with a proprietary epoxy resin, repairing compound or replacement timber sections wherever practical.
- Draught excluders are to be provided to opening sashes where necessary.
- Vertical and horizontal sashes are to be adjusted accordingly where possible
- Where sashes are unrestricted, new sash restrictors are to be provided.
- Any failed double glazed units are to be considered for replacement or, alternatively repaired if this is more economical using specialist contractors.

Full Window Renovation may include the following works:

- Removal of sash or other windows
- Splicing in or renewing timber where existing timber is beyond repair.
- Injection of specialist resins which are moulded to match existing timber profiles
- Replacement of sash cords and servicing of pulleys
- Re-balancing of sashes
- Carrying out a performance upgrade of the unit using specialist materials and processes to fully seal the window and improve energy efficiency without altering the appearance.
- Replacement glazing and new window hardware where needed.



Policy, Standards & Guidance

Where there is a requirement for original single glazed windows to be retained, secondary glazing is to be provided as part of any window renovation or repair works.

3.2.9 Secondary Glazing

Secondary glazing must not be smaller than the glazed area of the existing window. Where secondary glazing is to be installed, the design of the original window can be used to determine the style of the secondary glazing (the dimensions of the primary window are fixed but the secondary glazing can be designed into more manageable sized units).

The original windows are not to be sealed. The secondary glazed units are to be sealed. Secondary glazing should not prevent access to the original glazing or cavity (i.e. for maintenance and cleaning).

- Secondary Double Glazing that has a Low Emissivity (Low-E) hard coating facing the inside is to be used wherever possible.
- Insulating frames or secondary glazing that incorporates double or vacuum glazed units can also be considered, if available.
- Outer windows are to be left without draught proofing. Weather stripping is to be applied on the secondary glazing (to reduce condensation risk between the primary and secondary glazing).
- Where a higher level of sound insulation is required, thicker or acoustic laminate glass within the secondary window is to be used.
- On secondary glazed windows an aluminium frame is to be used. If this is not possible, a bespoke system may need to be designed.
- Trickle vents are to be provided

A survey of any existing window openings may indicate limitations to installing secondary glazing, e.g. insufficient depth in the reveal with which to install secondary glazing.

3.2.10 External Doors

Level access thresholds are to be provided on all external outward opening doors, (in line with Approved Document Part M of the Building Regulations).

Boiler room doors are to have louvers with suitable airflow in compliance with boiler manufacturer's requirements.



Policy, Standards & Guidance

All replacement door sets, including those used for front or rear external entrance doors are to meet the requirements of PAS 24:2012, which incorporates the requirements of Secure by Design (<http://www.securedbydesign.com/aware/doors.aspx>).

GRP Composite Doors are to be compliant with BS 8529.

The design of the any dwelling entrance door should allow for the door viewer to be centrally mounted on the door at a suitable height for the customer. The locking mechanism must incorporate a minimum of a 3-point locking system with a solid spindle and lever/lever handle operation.

Euro profile, anti-bump, anti-drill cylinders with a cylinder guard are to be installed. The locking cylinder is to comply with BS EN 1303: 2005 and PAS 24:2012. Yale type latches are not permitted.

New communal door cylinders are to match any existing master key suites. Any new suited keys should fit all communal doors (including boiler plant etc.) however the arrangement for each location should only be ascertained after consultation with the Location Manager.

Gearing to Fire Exit doors are to have a multi-point locking system, with external handle options agreed at the survey stage.

If any External doors (excluding fire exits) swing out more than 100mm towards an access route they must be protected in line with Approved Document K of the Building Regulations (2013 Edition).

NOTE: Doors should only be replaced with windows if there is a separate line and budget for them within the planned works programme. The only exception is where doors are linked with windows as part of a combination frame.

3.2.11 Soffits, Fasciae and Bargeboards

As part of any work to replace soffits and fascias the condition of guttering and eaves felt are to be reviewed by an approved roofing contractor. This may necessitate further separate works to be carried out if these components have deteriorated. In this event, it is advised that any works involving soffits, fascias and replacement eaves felt are all carried out by the roofing contractor as opposed to any window replacement contractor.

Prior to any specification of works to replace soffits and fascias, the asbestos register is to be consulted in order to identify whether there are any Asbestos Containing Materials (ACM) to the undercloaks. The result of this investigation may dictate as to whether full replacement or over-cladding is the more feasible option.



Policy, Standards & Guidance

4. Delivery, Installation and Maintenance

- 4.1 Windows within dwelling (including bedrooms in Care Homes) must be removed and replaced within the same day.
- 4.2 No window opening to flats or communal areas will be left exposed or vulnerable overnight.
- 4.3 Internal trims must be provided to make good internal redecoration within the near vicinity of replacement windows.
- 4.4 The contractor must ensure that all cavities are covered with an approved damp proof membrane before fixing of new window frames into position.
- 4.5 Net curtain hooks must be provided and fitted. Any net curtains or blinds must also to be refitted.
- 4.6 Where the removal of the original window necessitates damage to the existing cill, then a PVCu Cill must be provided.
- 4.7 The presence of any items such as television aerials and telephone wires in the window aperture must be noted. Where possible, these must be re-routed around the outer frame of the window.
- 4.8 Any damage to the fabric or construction of the building or the grounds must be made good in line with existing sound work by the contractor at their expense.
- 4.9 All removed window materials, glass, timber etc. must be sorted and disposed of responsibly for recycling.
- 4.10 If fasteners are used to install windows, they must be Austenitic.
- 4.11 Friction stays are to be fitted with Stainless Steel screws.
- 4.12 At the end of the defects liability period, the contractor is to return to carry out any maintenance required on all windows, including easing and adjusting.
- 4.13 Windows in coastal locations will have a service programmed every 5 years in order to ensure any components have not rusted or degraded. Any individual components that have deteriorated must be replaced as necessary.

Contact:



Policy, Standards & Guidance

If you have any questions about this document please speak to your manager in the first instance. If you have feedback on this document please email

propertystandards@anchor.org.uk