



General Window Specification

All hardware should permit the safe cleaning of windows from within the property without putting the occupier in a dangerous position to **BS 8213- 1991 Code of Practice for Safety in Use and During Cleaning of Windows and Doors**

All opening windows are to be fitted with two pairs of **Maco Hinge Protector** non-contact hinge security device. To be positioned adjacent to, and within 100 mm from the corner of each hinge.

The adjustment of all hardware must be accessible after the window has been installed. Hardware that is used to open or close the window shall be replaceable without the need to remove the outer frame from the fabric of the building.

All hardware shall be backed by a ten year manufacturer's guarantee. A guarantee certificate is to be issued by the hardware manufacturer on commencement of the phase or project.

Evidence of compliance with **BS 7950 - Specification for Enhanced Security Performance of Casement and Tilt/turn Windows for Domestic Application** will be a condition of the tender.

Where indicated and instructed by the client window hardware wherever applicable must be supplied from a manufacturer holding a product license under the auspices of the Home Office "**Secured By Design**" initiative with the aim of fulfilling the obligations placed on the housing provider to ensure a reasonable level of security to the occupants as outlined in **Section 17 of the Crime and Disorder Act 1998**.

Written confirmation of compliance with all of the above should be given to the contract management team in advance of commencement on site.

One opening in every habitable room on the first floor, except kitchens, should provide an unobstructed area of at least 0.33m² with minimum size of 450mm in any one direction. Effectively this should provide a minimum clear opening of 450mm x 734mm. **All in accordance with Building Regulations Approved Document B** at a maximum cill height of 1.1 m

When a 90 degree opening is required to facilitate the safe exit from a building with easy clean hinges they should provide the following: - An easy clean facility that allows the window to slide along the hinge track so that the window can be safely cleaned from the inside in accordance with **BS 8213**. After cleaning the hinge should allow the window to self relocate and return to its original position and mode of operation simply by closing the opening sash.

They must be fitted to a casement with a size sufficient to provide a minimum clear opening with a width of 500 mm and a height of 850 mm at a maximum height of 1.1 m from floor to cill. All to comply with **BS 5588 Part 1: 1990 section 3.11.5a - Fire Precautions in the Design and Construction of Buildings - Residential Dwellings**. All hinges should be **BBA Approved**.

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Emergency windows after a considered and noted risk assessment can be fitted with a clearly visible and intuitive to release restrictor.

Restrictor to be either the **Maco Auto-Latch** or **Laminated Restrictor** dependant on the application, tested to comply with **BS 6375 Part 2 Section A7 Test 6.0 (Strength of Restricted Opening and Location Devices and Maximum Opening Stops)** to withstand a force of 600 N when opened at the restricted position and fitted to provide a maximum opening of 100 mm in the restricted position. Restrictor to be manufactured from Stainless Steel tested to meet the requirements of **BS 7412: 2002; BS EN 1670: 1998 Class 4 corrosion** resistance.

Written confirmation of compliance with all of the above should be given to the contract management team in advance of commencement on site. For further details on the correct application of Maco restrictors please contact **Maco Technical Services on: Tel 01795 433900.**

Locking Mechanisms

All windows to be fitted with the **Maco Mk1 Shootbolt Espagnolette Locking System**

To include passive adjustable throw shootbolts and adjustable mushroom cams, when the sash rebate size exceeds 800 mm intermediate mushroom cams are to be incorporated. All striker plates are to be manufactured from zinc die cast alloy Z410 and are to incorporate a night vent position. Mushroom striker plates are to have a fully captivated base in the locked position with a minimum of two screw fixings and free of moving parts, they are to be manufactured specifically for the specified profile system.

With a bi-directional gearbox that is endurance cycle tested to a minimum of 40,000 cycles of operation and approved by the BBA. The gearbox should be able to withstand an abusive load of 40Nm applied to the handle.

All espagnolette fittings and striker plates are to be protected by a three-stage coating comprising of high quality zinc, yellow chromate and a wax coating. All components are to comply with **BS7479: 1991** 500 hour neutral salt spray test.

No part of the shootbolt espagnolette must be concealed behind a clip in or stick on eurogroove cover clip.

All windows should be approved to **BS 7412: 2002; BSEN 1670: 1998 Class 4** corrosion resistance.

Evidence of compliance with **BS 7950 - Specification for Enhanced Security Performance of Casement and Tilt/turn Windows for Domestic Application** will be a condition of the tender.

All components should be supplied by a manufacturer complying with **BS EN 9001** accredited quality system and be covered by the manufactures ten year guarantee.

Written confirmation of compliance with all of the above should be given to the contract management team in advance of commencement on site and will be a condition of the tender

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Maco product limitations must be strictly observed within the terms of our conditions of supply. It is the responsibility of the fabricator/purchaser to ensure that the performance of the window complies with the relevant standards and specification requirements for the particular window and that the correct Maco products are selected for the chosen window system.

Advice on the supply and selection of the correct product can be obtained direct from **Maco Technical Services on: Tel 01795 433900**

Details of Maco Fittings mentioned in the above specification can be obtained by contacting:

Maco Door and Window Hardware (U.K.) Ltd
Eurolink Industrial Centre
Castle Road
Sittingbourne
Kent ME10 3LY
Tel: 01795 433900
Fax: 01795 433901
email: maco@macouk.net
Web: www.macouk.net