

TIMBER WINDOW MAINTENANCE

A sustainable cost effective approach to traditional timber window refurbishment.





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INTRODUCTION



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DESIGN & IDENTIFICATION



DESIGN & FORM

- What type of traditional or historic windows may we find today?
- Where are these windows likely to be found?

• There are many shapes and sizes of historic windows, from simple shutters over rectangular openings to elaborately arched geometric and painstakingly hand crafted carved windows.

COMMON TRADITIONAL WINDOW TYPES STILL IN USE TODAY







• Casement

• Sash & Case

• Fixed Fan light

THE EVOLUTION



1400 & 1500'S





SASH & CASE WINDOWS

• Horizontal sliding sash



• Vertical sash & case



GLASS PRODUCTION

Crown Glass

• Heated, Blown, Spun then Cut





GLASS PRODUCTION

Crown Glass

• Heated, Blown, Spun then Cut





GLASS PRODUCTION

• Patent Plate Glass

• Heated, laid on a bed, rolled then Cut





GLASS PRODUCTION

Modern Float Glass

- Modern factory production
- The development of structural iron and steel and reinforced concrete in the late 19th century allowed increasing quantities and sizes of glazing in outer walls, eventually leading to fully glazed curtain walls in the early 20th century.
- The drawn flat sheet process increased the mechanised production of glass. Modern glass, characterised by its uniform appearance and availability in very large sizes, was first developed in 1959.

TRADITIONAL IRONMONGERY

- The History of the industrial revolution
- Restoration or replacement?
- Customers expectations of the final finish
- DG Upgrade means hardware upgrade
- Hardware Broken no option

TRADITIONAL LEAD BASED PAINT

Executive

TRADITIONAL LEAD PAINT REMOVAL

DOUBLE HUNG SASH AND CASE WINDOW

SINGLE HUNG SASH AND CASE WINDOW

CASEMENT WINDOWS

Parts of a window Head Fanlight Top Rail Casement Style Transom Jamb Mullion Jamb Sill Bottom Rail © 2013 Adrian Rayfield

THE BIGGEST PROBLEMS

- The softwood available from the local timber merchants these days is not good quality for external joinery products
- Low VOC paints do not offer the best protection as an external coating and good external paints can be hard to find.
- Hardwoods are becoming more expensive and more difficult to source globally

CONSERVATION & RESTORATION

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THE BUILDING SURVEY

MOST COMMON CAUSES OF FAILURE

- 1. Water ingress (timber rot)
- 2. Failing paint
- 3. Excess paint (sashes stuck shut)
- 4. Worn sash chords
- 5. Failing glazing putty
- 6. Broken glazing
- 7. Failing sand mastic
- 8. Counter weights (missing/wrong size)
- 9. Failing hardware/ironmongery

3 PART PROCESS

Conserve In-situ Repairs Restore Component repair

Upgrade Energy Efficiency upgrades

CONCLUSION

By having knowledge of the traditional craftsman we can move forward using the correct procedures and alterations in order to tackle the energy efficiency of the building. There is much evidence within to show that the traditional craftsman understood how to build sustainably, in order to make the buildings low maintenance and repairable.

These repairs today can be made cost effective by a well carried out survey and good maintenance plan.

1 DAY COURSE: SASH & CASE WINDOW MAINTENANCE

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AN EFFICIENT PROCESS

AN EFFICIENT AND EFFECTIVE WINDOW SURVEY

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SASH - FIX SASH WINDOW RENOVATION SPECIALISTS

MTC ARTISAN'S TRADITIONAL WINDOW RESTORATION DIVISION.

AN EFFICIENT AND EFFECTIVE SPECIALIST ONLINE HARDWARE STORE

MTC Sash-Fix is a division within McRitchie Traditional Carpentry, where the craftsman specialise in sympathetically restoring or upgrading traditional timber windows. When retaining the original features is unavoidable due to current legislation, Sash-fix offer a wide range of services to suit any budget.

RESTORATION

UPGRADE

AN EFFICIENT AND EFFECTIVE TRADITIONAL WINDOW REPAIR & MAINTENANCE CONTRACTOR

 Historic & Listed Building Conservation & Restoration
Traditional Building Upgrades
Domestic & Commercial
New Builds & Eco Builds
Conversions & Extensions

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Heritage Carpentry & Joinery Specialist

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AND YOU TOO CAN HAVE YOUR OLD WINDOWS BETTER THAN NEW

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