SASH AND CASE SCOTLAND

Mavisbank Farm
Falkirk
FK1 – 2AZ
07840006534

3 Melville Terrace, Stirling, FK8 2ND

Window survey report prepared by Sash and Case Scotland

Introduction

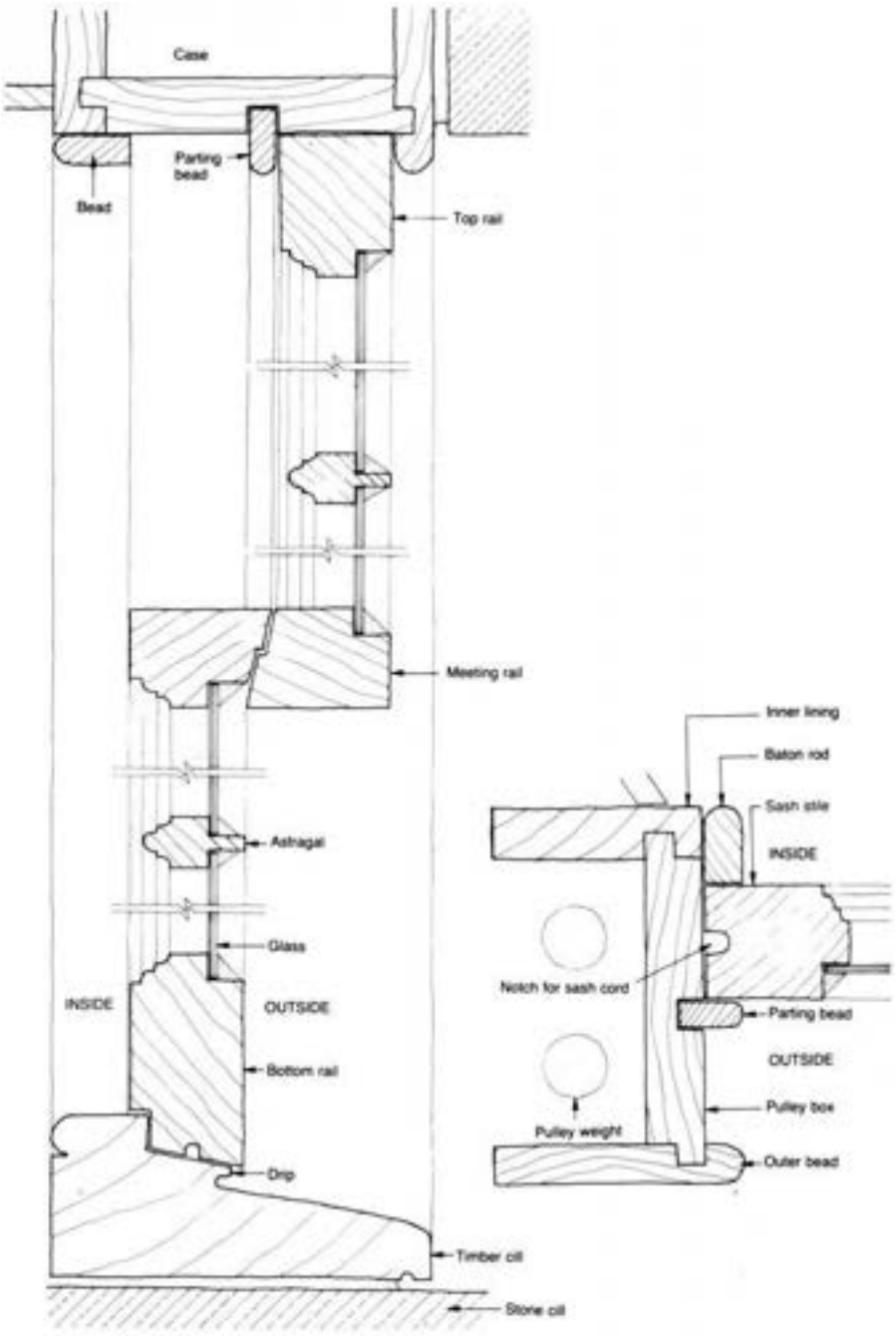
We were instructed to inspect and report on the windows at 3 Melville Terrace Stirling. The property is on 4 levels, basement, ground floor, 1st floor and attic. Category B listing dating from the 19th Century. The main part of the property has traditional timber sash and case windows, the converted stables has a mix of casement, fixed lights and sash and case.

The purpose of this report is to advise on the current condition of the windows and recommend required works to improve condition, operation, draught proofing and insulating qualities of the windows. All glass throughout the building is non-original single glazed.

Overall the proposal is to renovate the listed windows, repairing all damage with appropriate materials whilst replacing non-original glazing with thermally efficient vacuum glass which can replace the current glazing within the listed window frames.

The inspection was undertaken on the 28th of August.

A diagram is included to assist with interpretations of the terminology used



Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

Window Refurbishment

Window refurbishment includes the following

- Removal of paint on both case and sashes
- Repairing any defective parts as required
- Sanding of both the case and sashes
- Re-puttying as required
- Re-glaze as required
- New baton rods and parting beads to match originals
- Router timbers for concealed seal - fully draught proofed
- Painting one coat primer, two coats of topcoat
- New ironmongery
- New cords
- Re-hang and balance sashes
- New pointing/sand mastic

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

General overview.

Excluding the casement and fixed lights in the kitchen the sash and case windows contained in this property are in fair condition with respect to their age. The sash and case windows in the attic have been renewed and are not included. The casement and fixed lights in the kitchen are degraded and in poor condition due to the types of timber used and make up of their construction. The remaining sash and case windows, I would suggest, to be original although there have been some replacements and renewals over the years. There are some with sash horns and some without. The majority have a sash wood thickness of 46mm and an astragal thickness of 16mm with a sash mould that is specific to the property, single glazing throughout. Many windows have had a half or nose cill replacement and several bottom sashes are beyond refurbishing. There has been an attempt at draught proofing on some windows but not all with some being painted shut and inoperable. Overall the insulating properties of all the windows are poor. This is in large part due to the single glazing but also ill fitting sashes and lack of draught proofing. No internal access to basement windows. There is a need for mastic renewal throughout with many open joints

Comments on each window

W1
Sashes are ill fitting in case
Degrade to bottom sash, poor
Previous cill repair

W2
Replacement bottom sash
Sashes don't line up ill fitting in case
Degrade to top sash

W3
Part Draught proofed
Degrade to bottom sash
Open joints on case

W4
Sash ill fitting
Previous cill repair
Not square

W5
Previous cill repair
Sashes don’t fit / meet in the middle
Bottom sash poor degrade

W6
Fair condition

W7
Fair condition

W8
Sashes are ill fitting in case
Degrade to bottom sash, poor
Previous cill repair

W9
Standard sash mould
Previous cill repair
Sashes don’t fit case
Poor mastic

W10
Sashes don’t fit case
Degrade to bottom sash
Poor mastic

W11
Not original
Different sized astragals
Previous cill repair

W12
Sash don’t fit case
Sashes don’t meet correctly
Previous cill repair
Different thickness of astragal.

W13
Poor degrade to both sashes, not original sashes?
Previous cill repair
Open mastic joints

W14
Fair condition

W15
Fair condition

W16 / 17
Fair condition

W18
Poor degrade to bottom sash
Previous cill repair

W19
Fair condition

W20
Attic window, previous done

W21
Fair condition

W22
Poor condition
No draught proofing

W23
Poor degrade

Conclusions and recommendations.

Conclusions

As previously mentioned the overall condition of the windows are fair for their age with the fine sash mould and thin astragals specific to the property giving a feel and tone to the house. There is a requirement for the replacement of some bottom sashes and the previous cill repairs are either not lasting or are the cause of sashes not fitting. With the astragals being only 16mm and the sash wood only 46mm retro fitting even a slimline double glazed unit would be difficult with these dimensional constraints although some consideration must be given to the massive heat loss caused by the large single glazed windows. When considering improvements in a building's insulating properties then a holistic approach should be taken with the windows being one constituent part. The casements and fixed lights in the kitchen have no real architectural note and are part of a later redevelopment of the original stables.

U-value improvement options.

With the massive heat loss due to the large single glazed windows improvements to the windows U-values should be sought.

Slimline double glazed

An obvious option is to replace with slimline double glazed units however the property owners do not wish to consider this option as they feel that it is not in keeping with the property. (If slimline double glazing is sought then new sashes would need to be manufactured. These could be retro fitted into the original cases however with the sash wood being only 46 mm the max thickness that could be used would be 12mm overall 4/4/4 giving a U-value of 2.5. A lower U-Value of 1.1 could be achieved will all new sash and case windows so the sash wood could be 56mm. the astragals would need to be bigger than 16mm).

Fineo Vacuum glass

This could be retrofitted into the original sashes giving a U-value of 0.7
It could also be used in all new sash and case windows copying the originals and maintaining the 46mm sash wood and the 16mm astragals

Recommendations

Sash and case windows

As a minimum I would recommend full refurbishment and draughtproofing of the sash and case windows.

Where new bottom sashes are required then new sashes should be manufactured copying the original moulds and astragals.

Nose cill repairs should be replaced with full cill replacements.

Improvements in insulation

The gold standard would be to retro fit fineo vacuum glass to all original sashes as part of a full refurbishment on a rolling basis, i.e. windows refurbished in batches.

Casements and fixed lights W22/W23

New casements and fixed light with Fineo vacuum glass.

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2A

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2A

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ

Sash and Case Scotland
FW Joinery LTD
Mavisbank Farm, Falkirk, FK1 2AZ