Daisybank Villas 5-7 Anson Road Manchester M14 5BR

Window Replacement Justification May 2018



#### <u>Contents</u>

1 Justification

> **2** Heritage

3 Lower Ground Floor

> 5 Ground Floor

5 First Floor

5 Attic Floor

5 Precedence

5 Conclusion

#### 1 Justification

It has been noted by Manchester City Council, that there needs to be a strong Justification for the replacement of the timber windows at Daisy Bank Villas, 5–7 Anson Road, Manchester, due to its inclusion within the Victoria Park Conservation Area.

The main reason for the replacements is to enable the building and its use to be more sustainable. Currently used as student accommodation, the existing timber frames and single glazing of the windows mean the building does not hold in heat as well as it should do causing discomfort for the tenants and over-use of heating systems resulting unsustainable energy use.

The resolution for this is to replace the windows with like-for-like units with double glazing and the frames made from UPVC to enable the building to keep heat in better as well as look the part. The new material will also keep the windows maintenance free and harder to damage, which is essential for student accommodation.

Other options to increase the energy efficiency of the building have been suggested and considered for each window of the building. These include: draught-proofing and secondary glazing. These would enable the existing windows to remain in place, however many repairs are needed to bring the windows up to a decent standard, with some needing a complete full replacement.





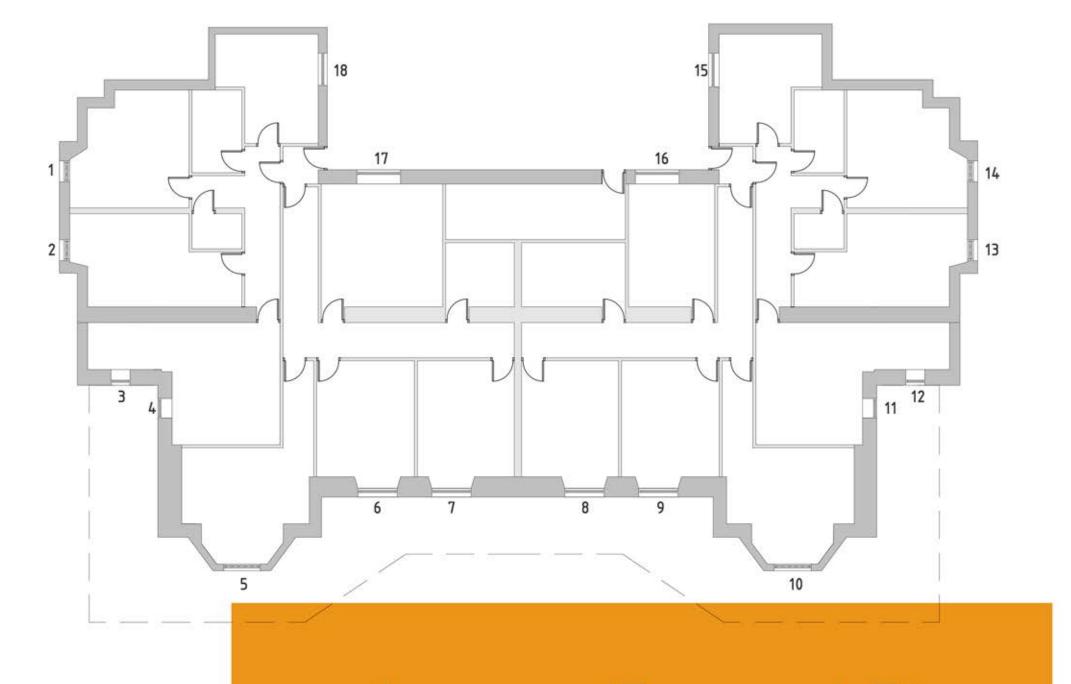


# 2 Heritage

The Conservation Area appraisal gives importance to this area of Manchester due to its architectural appearance and history of Manchester's growth.

The replacement uPVC windows would not alter the appearance of the building as the style will be replicated like-for-like, but the new windows would help the building become more sustainable as they would last a longer time and would be more suited for the use as student accommodation. Lack of maintenance and occasional damage is a typical occurrence with these types of properties, so a hard-wearing and low-maintenance solution would be the ideal option.

There are also similar properties within this area of Victoria Park Conservation Park that have already installed uPVC windows, however it is difficult to tell and is usually apparent from the modern-style openings and thicker frames. Some properties have original and new- this contrast does harm the effect of the Conservation Area and it would be preferred if all windows used the same materials to offer a uniformed appearance.



### Lower Ground Floor

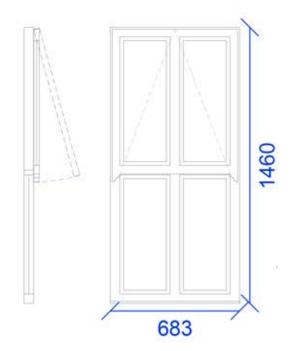


<u>Defects:</u> damaged hinge opening, cracked timber frame, mould and fungus growing into frame, gaps around bottom panes letting in moisture

<u>Joinery Fixing Option:</u> all timber frame to be replaced, bottom two glass panes to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











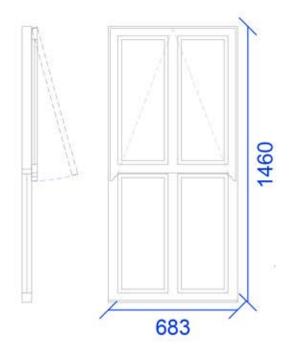


<u>Defects:</u> damaged hinge opening, cracked timber frame, mould and fungus growing into frame, gaps around bottom panes letting in moisture

<u>Joinery Fixing Option:</u> all timber frame to be replaced, bottom two glass panes to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







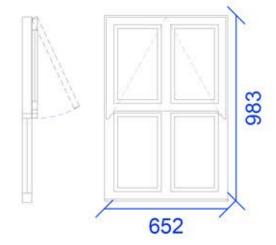


<u>Defects:</u> damaged hinge opening, window cannot open correctly which lets in moisture due to swollen timber frame

<u>Joinery Fixing Option:</u> top hung panel to be completely replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







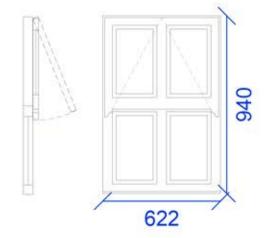


<u>Defects:</u> damaged hinge opening, window cannot open correctly which lets in moisture due to swollen timber frame

<u>Joinery Fixing Option:</u> top hung panel to be completely replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







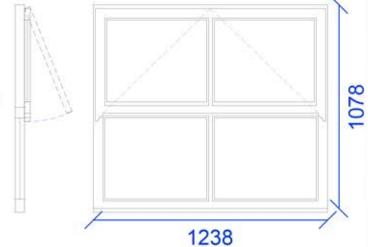


<u>Defects:</u> damaged hinge opening, cracked and split timber joints, broken seals, difficulty closing

<u>Joinery Fixing Option</u>: all timber corners to be replaced inside and out- complete replacement needed with new seals and fixings

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











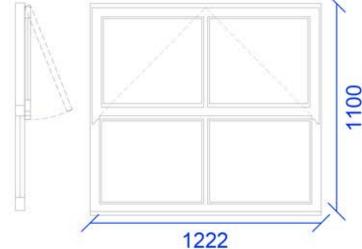


<u>Defects:</u> damaged hinge opening, swollen top hung panel will not allow correct closing

<u>Joinery Fixing Option</u>: new top hung panel with new fixings and seals to be installed which will allow proper closing

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









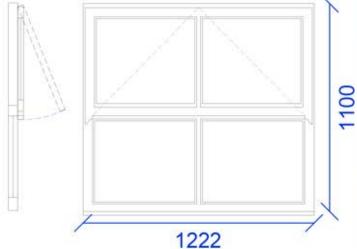


<u>Defects:</u> damaged hinge opening, swollen top hung panel will not allow correct closing

<u>Joinery Fixing Option:</u> new top hung panel with new fixings and seals to be installed which will allow proper closing

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







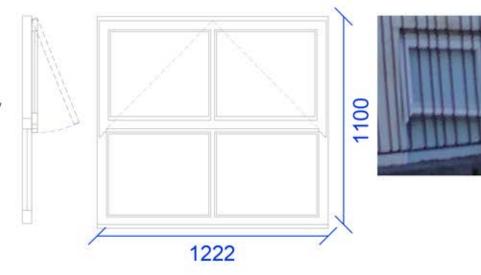


<u>Defects:</u> damaged hinge opening, swollen top hung panel will not allow correct closing

<u>Joinery Fixing Option</u>: new top hung panel with new fixings and seals to be installed which will allow proper closing

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings





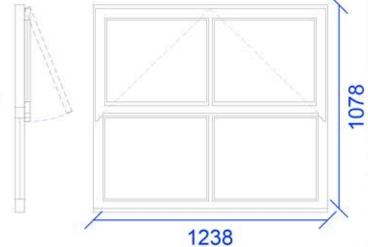


<u>Defects:</u> damaged hinge opening, cracked and split timber joints, broken seals, difficulty closing

<u>Joinery Fixing Option:</u> all timber corners to be replaced inside and out-complete replacement needed with new seals and fixings

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











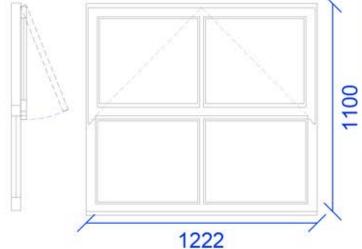


<u>Defects:</u> damaged hinge opening, swollen top hung panel will not allow correct closing

<u>Joinery Fixing Option:</u> new top hung panel with new fixings and seals to be installed which will allow proper closing

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







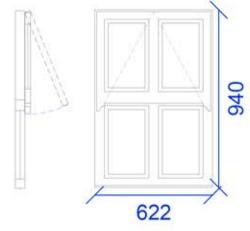


<u>Defects:</u> damaged hinge opening, window cannot open correctly which lets in moisture due to swollen timber frame, top timber frame rotten

<u>Joinery Fixing Option:</u> whole window to be completely replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









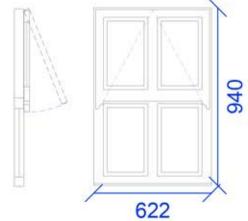


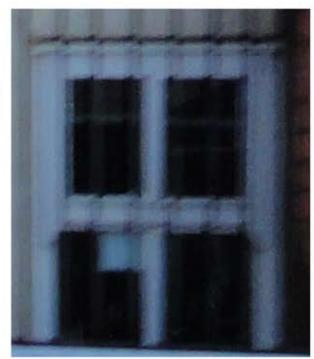
<u>Defects:</u> damaged hinge opening, window cannot open correctly which lets in moisture due to swollen timber frame

Joinery Fixing Option: most timber pieces need to be replaced- whole window would be easier

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







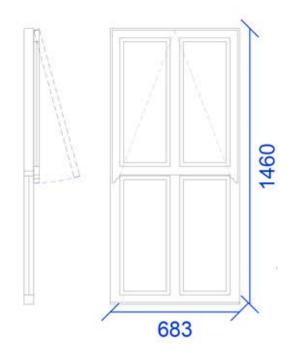


<u>Defects:</u> damaged hinge opening, cracked timber frame, mould and fungus growing into frame, gaps around bottom panes letting in moisture

<u>Joinery Fixing Option:</u> all timber frame to be replaced, bottom two glass panes to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







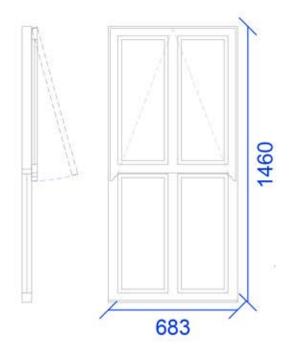


<u>Defects:</u> damaged hinge opening, cracked timber frame, mould and fungus growing into frame, gaps around bottom panes letting in moisture

<u>Joinery Fixing Option</u>: all timber frame to be replaced, bottom two glass panes to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







#### #15

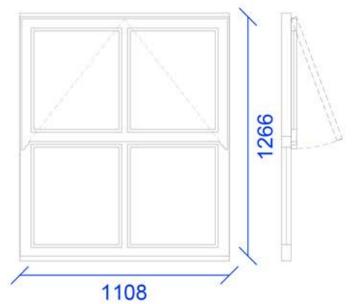
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and sash horns.

<u>Defects:</u> cracked timber frame, mould and fungus are growing into frame, gaps around bottom panes letting in moisture

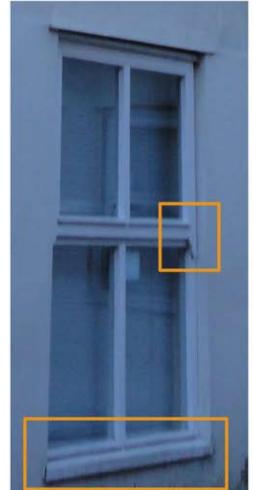
<u>Joinery Fixing Option:</u> all lower timber frames to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









### #16

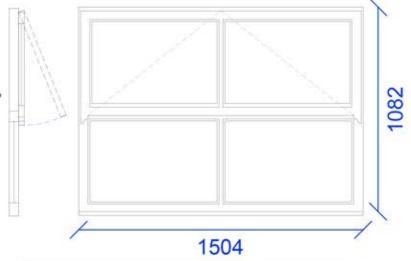
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and sash horns.

<u>Defects:</u> gaps around top hung panel will not allow the window to close properly and lets in moisture and heat escapes

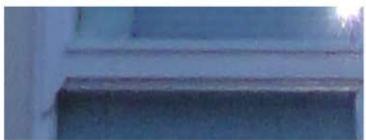
<u>Joinery Fixing Option</u>: top hung panel and fixings to be replaced including seals

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









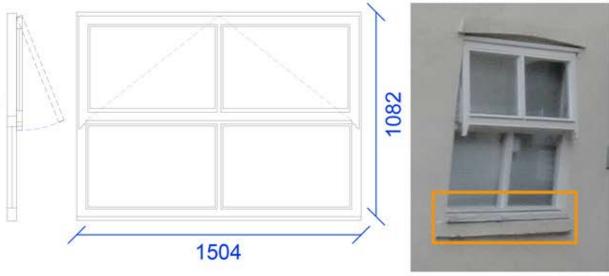


<u>Defects:</u> bottom timber frame is rotten allowing heat to escape and moisture to enter the room

<u>Joinery Fixing Option</u>: bottom timber frame needs to be replaced and new sill installed- whole window needs replacing for ease

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







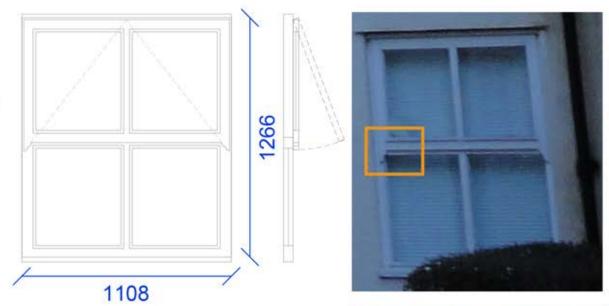


<u>Defects</u>: cracked timber frame, mould and fungus are growing into frame, gaps around top hung panel letting out heat and letting moisture in

<u>Joinery Fixing Option:</u> all cracked timber frames to be replaced

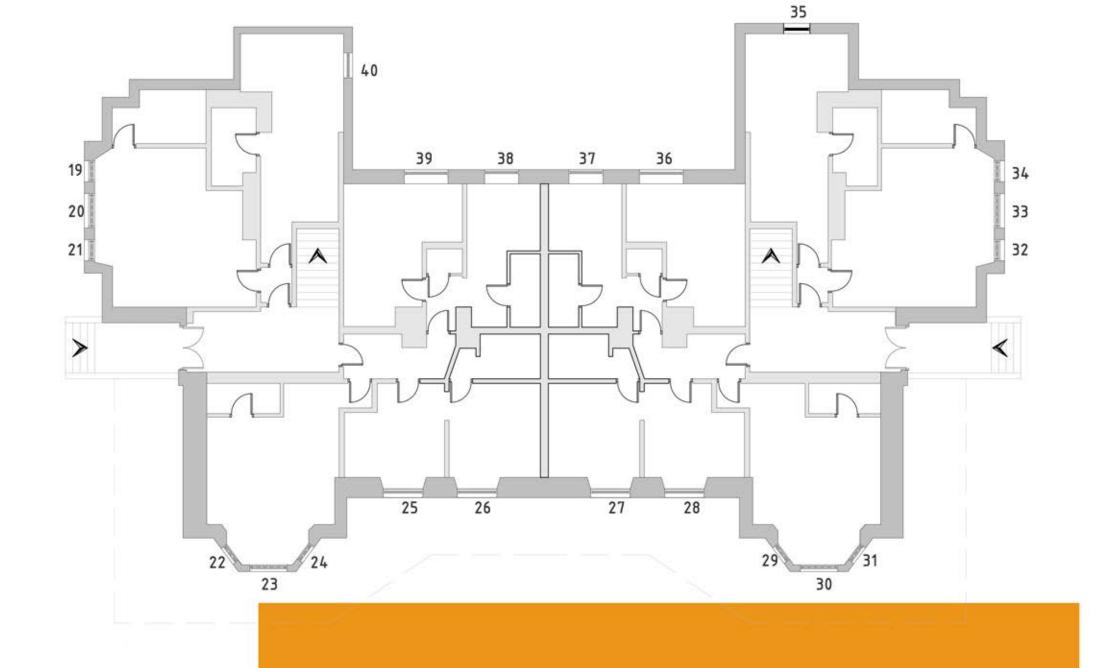
<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









## Ground Floor



<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels



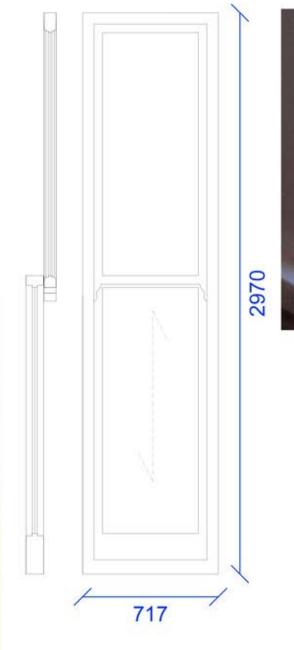


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









Defects: gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

Joinery Fixing Option: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

Draught-Proofing Option: repairs would have to be completed before adding draught-proofing to the sliding panels









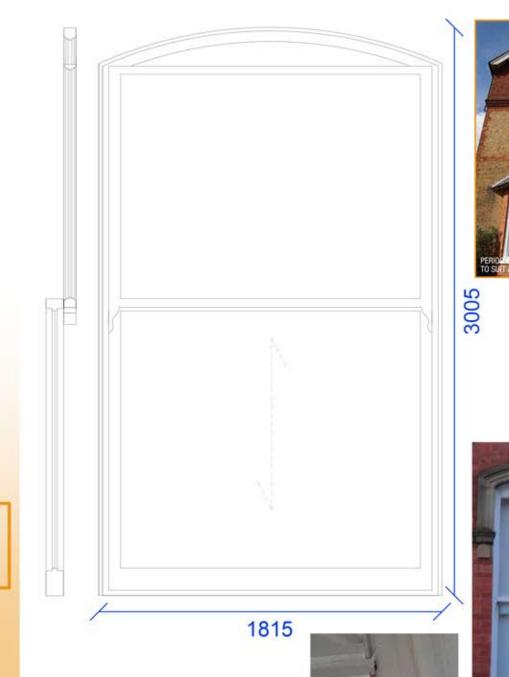


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels





<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels







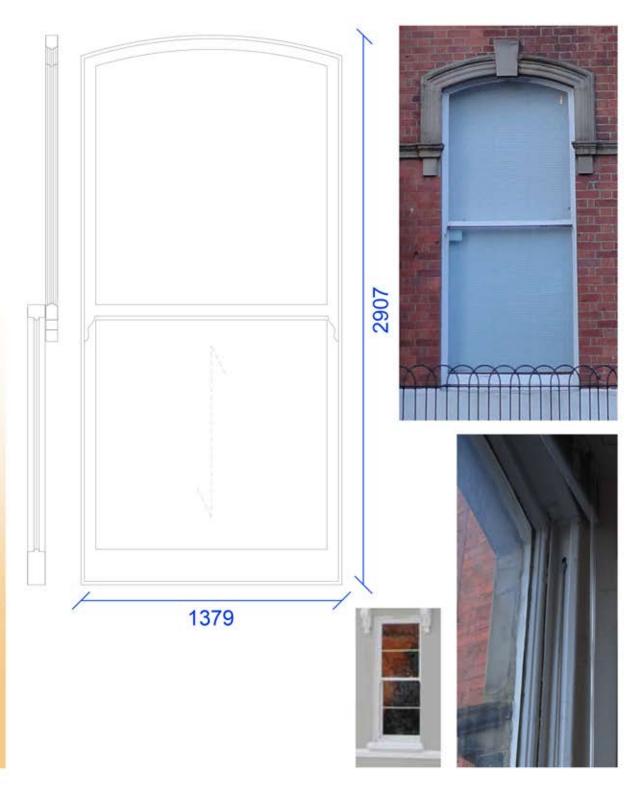


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels



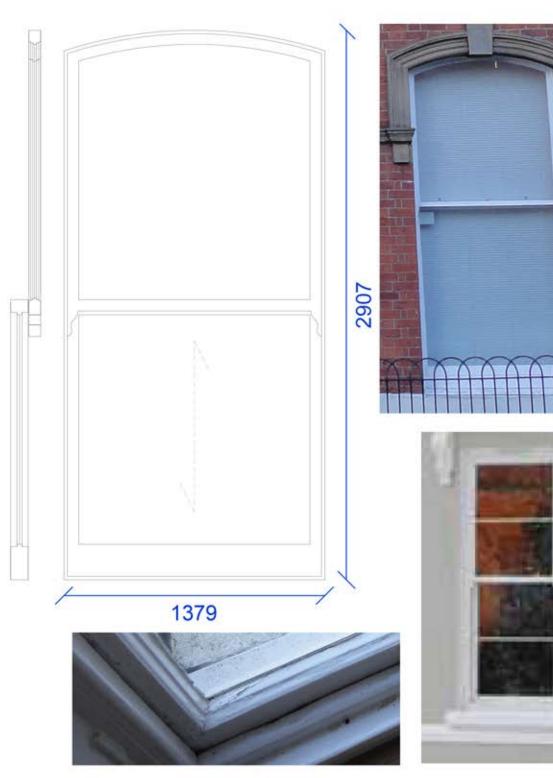


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels





<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels





<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels



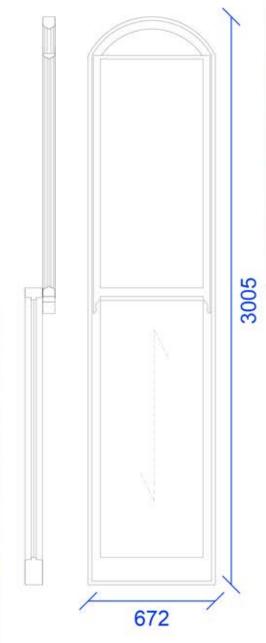


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











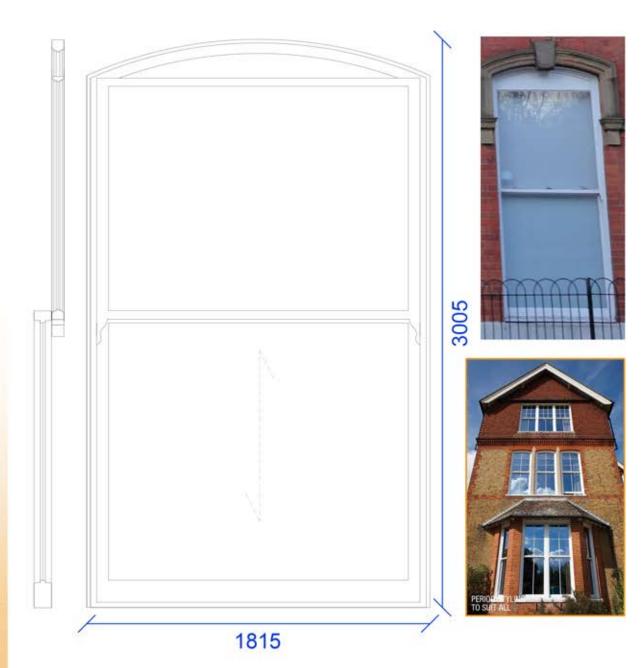


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels





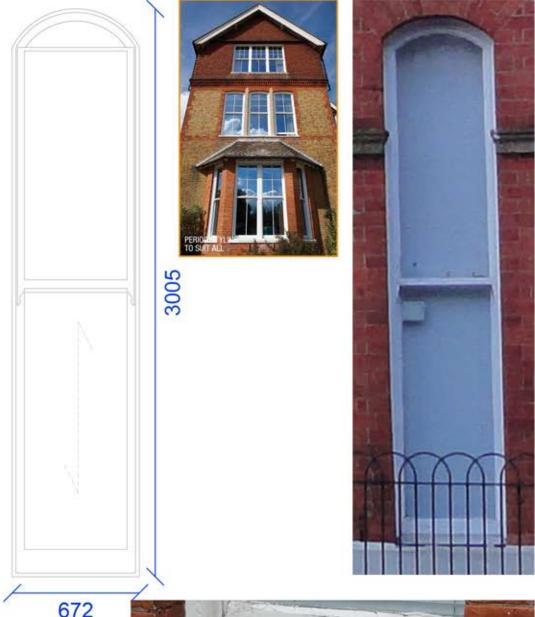
Description: Non-bar floor to ceiling coupled sliding sash windows with sash horns with top arch

Defects: gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

Joinery Fixing Option: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

Draught-Proofing Option: repairs would have to be completed before adding draught-proofing to the sliding panels



## #32

<u>Description:</u> Non-bar floor to ceiling coupled sliding sash windows with sash horns

<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











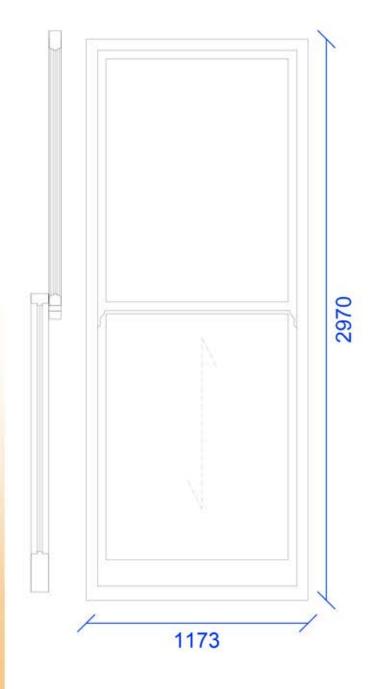
<u>Description:</u> Non-bar floor to ceiling coupled sliding sash windows with sash horns

<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









<u>Description:</u> Non-bar floor to ceiling coupled sliding sash windows with sash horns

<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











<u>Description:</u> Non-bar floor to ceiling coupled sliding sash windows with sash horns

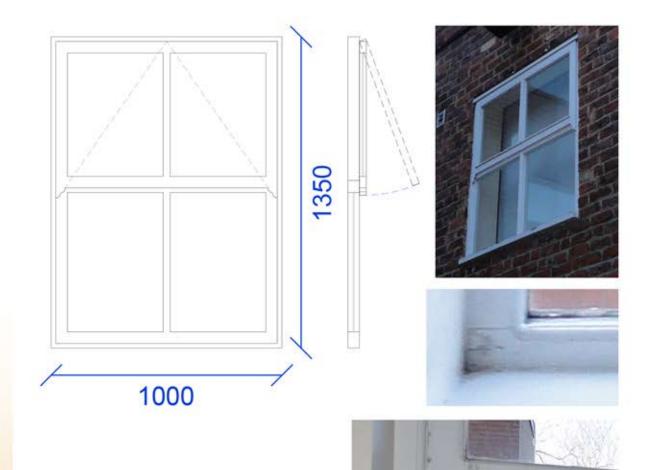
<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels

<u>uPVC Option</u>: quickest option and would allow double glazing to be installed, style can be imitated to look exactly like the existing



**Grained White** 



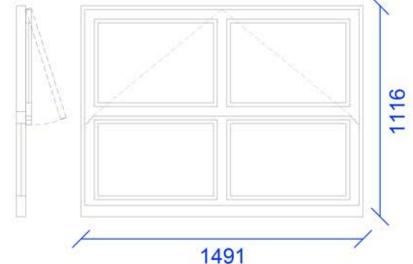


<u>Defects:</u> cracked timber frame, mould and fungus are growing into frame, gaps around top hung panel letting out heat and letting moisture in

<u>Joinery Fixing Option:</u> all cracked timber frames to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









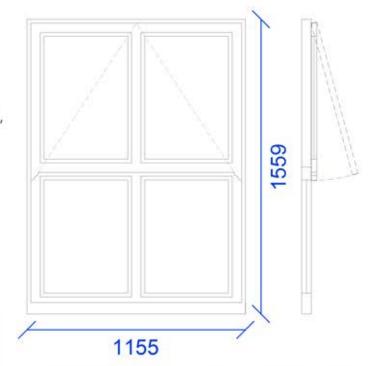


<u>Defects</u>: cracked timber frame, mould and fungus are growing into frame, gaps around top hung panel letting out heat and letting moisture in

<u>Joinery Fixing Option:</u> all cracked timber frames to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









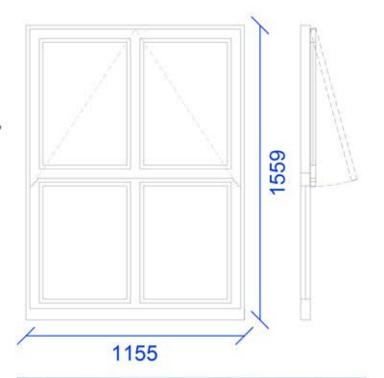


<u>Defects:</u> mould and fungus growing in and around frame, gaps around top hung panel letting out heat and letting moisture in

<u>Joinery Fixing Option:</u> all rotten timber frames to be replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









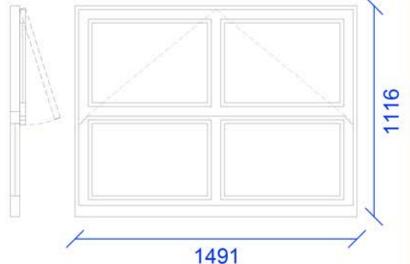


<u>Defects:</u> no seals present, no vent fitted allowing heat to escape, gaps around window and wall

<u>Joinery Fixing Option</u>: fit new ventilation piece to internal frame, fill in gaps around the outside

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









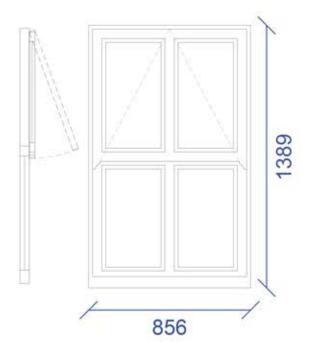


<u>Defects:</u> difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing

<u>Joinery Fixing Option:</u> fit new ventilation piece to internal frame, fill in gaps around the outside

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

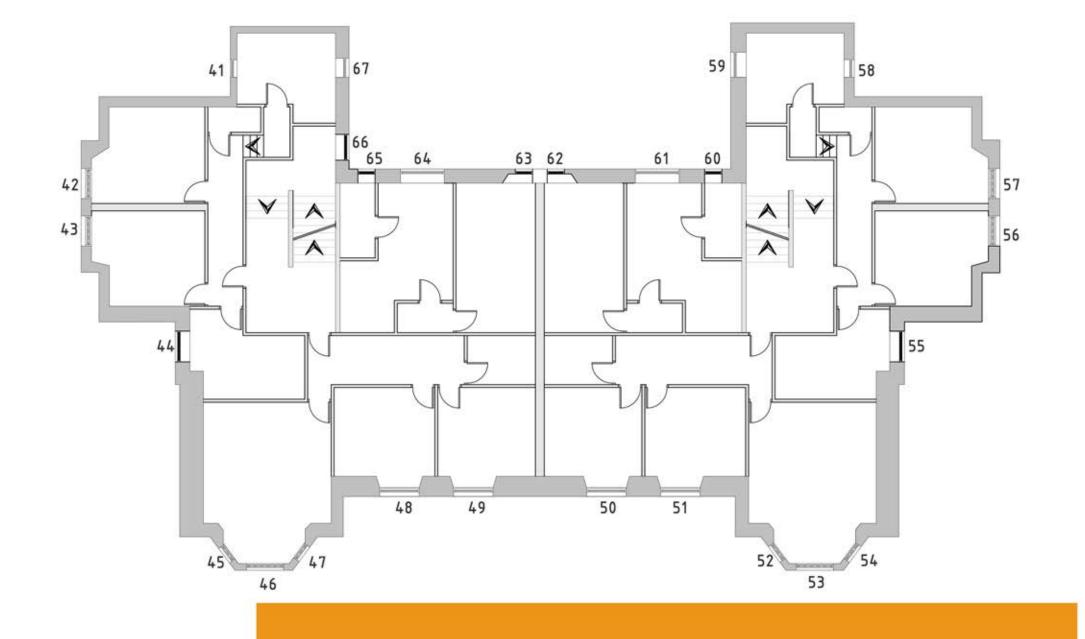
<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











## First Floor

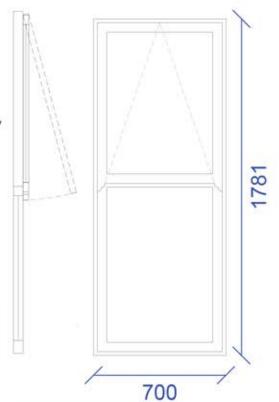


<u>Defects:</u> difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









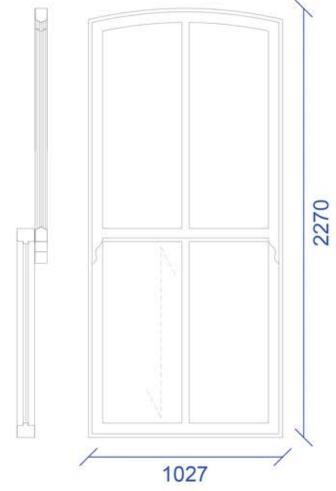


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











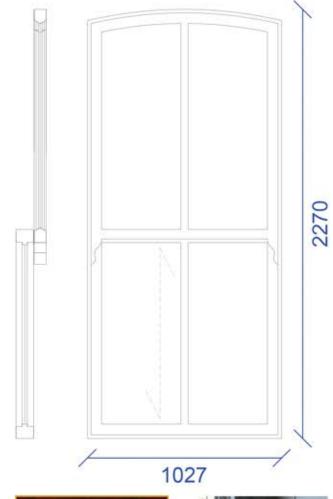


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











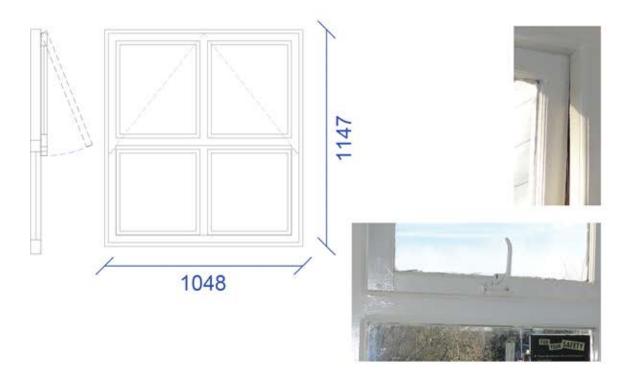


<u>Defects:</u> damaged hinge opening, mould growing into frame, gaps around bottom and top panes letting in moisture

<u>Joinery Fixing Option:</u> timber frame to be replaced, hinge to be fixed or replaced

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







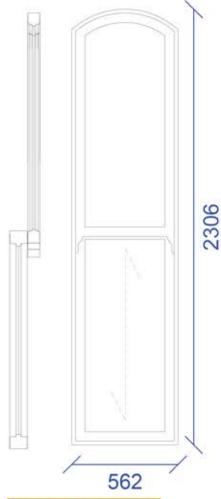


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











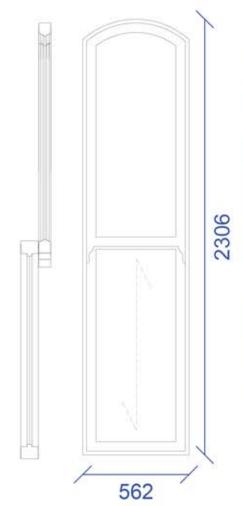


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels







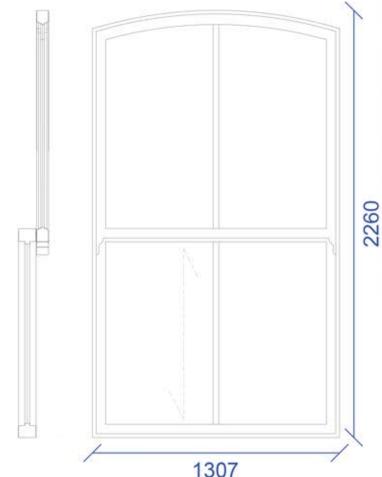


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









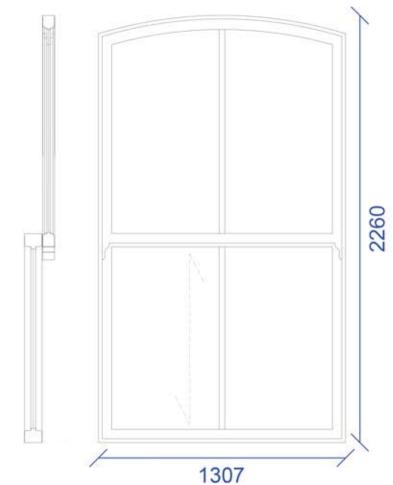


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









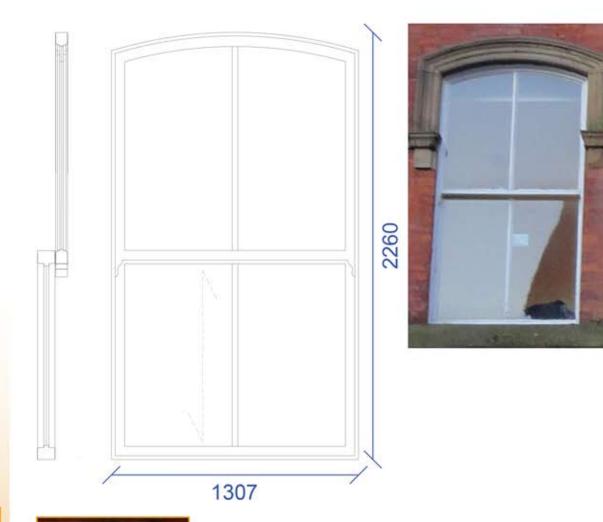


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels







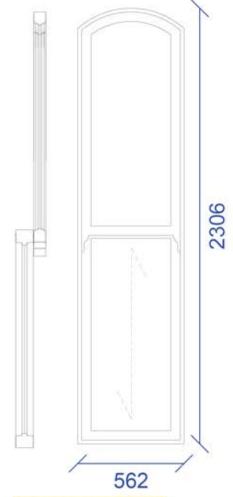


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels













<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









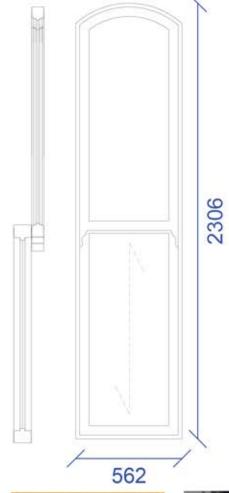


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows difficult to open for ventilation, broken timber parts along sliding track doesn't close properly

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and difficult to close

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









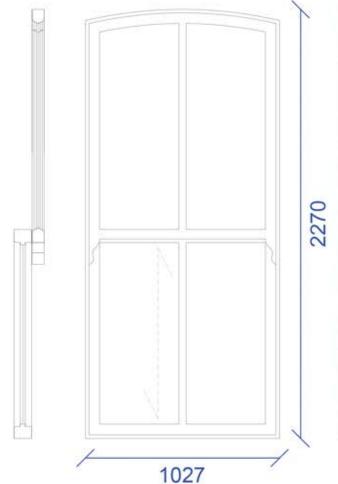


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, broken timber parts along sliding track and broken sliding ropes

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









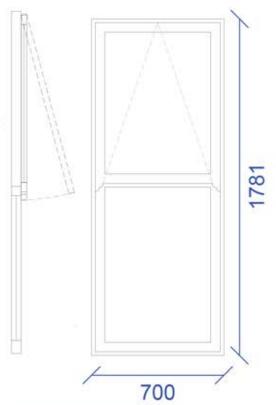


<u>Defects</u>: difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing, cracked timber frame

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten and cracked timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









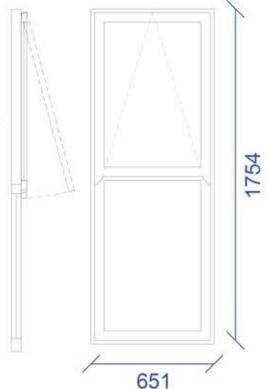


<u>Defects:</u> difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











<u>Defects:</u> damage to hinges, mould growing into frame around the single glazing, gap inside between top swing panel and fixed panel

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings







## #61

<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and sash horns.

<u>Defects:</u> damage to hinges, mould growing into frame around the single glazing, holes in timber frames

<u>Joinery Fixing Option:</u> fill in gaps around the outside, replace rotten timber pieces and broken hinges

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings



## #62

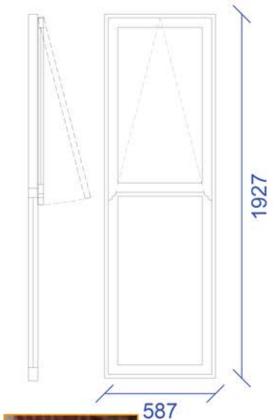
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with sash horns.

<u>Defects:</u> mould growing into frame around the single glazing, holes in timber frames, gaps between frame and walls

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option:</u> repairs would have to be completed before adding draught-proofing to the openings









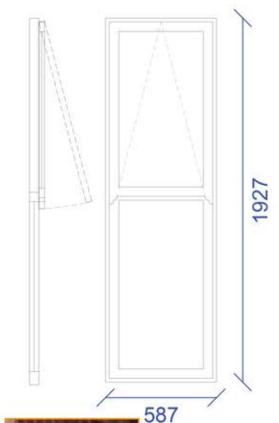


<u>Defects:</u> mould growing into frame around the single glazing, holes in timber frames, gaps between frame and walls, cracked bottom timber piece

Joinery Fixing Option: fill in gaps around the outside, replace rotten and broken timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











<u>Defects:</u> damage to corners, mould growing into frame around the single glazing, holes in timber frames

Joinery Fixing Option: fill in gaps around the outside, replace rotten and damaged timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings



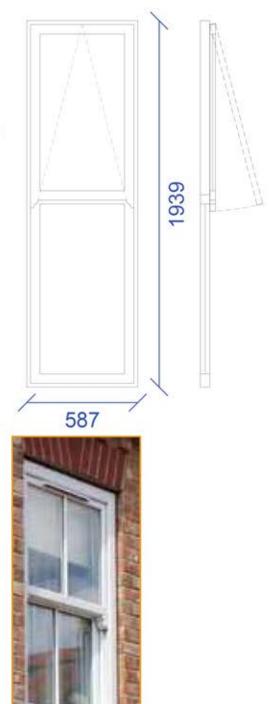


<u>Defects:</u> mould growing into frame around the single glazing, gap inside between top swing panel and fixed panel

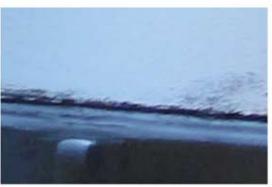
<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

Secondary Glazing Option: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









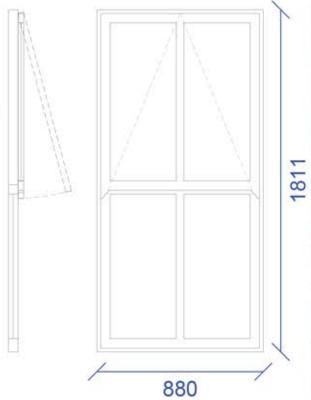
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and sash horns.

<u>Defects:</u> mould growing into frame around the single glazing, gap inside between top swing panel and fixed panel

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









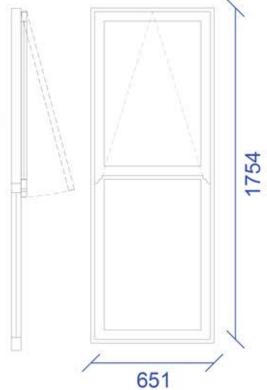
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows without central bars and sash horns.

<u>Defects:</u> difficulty shutting top hung panel due to damage to hinges and swelling, mould growing into the frame around the single glazing

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten timber pieces

<u>Secondary Glazing Option:</u> frame and opening would not allow secondary glazing due to opening

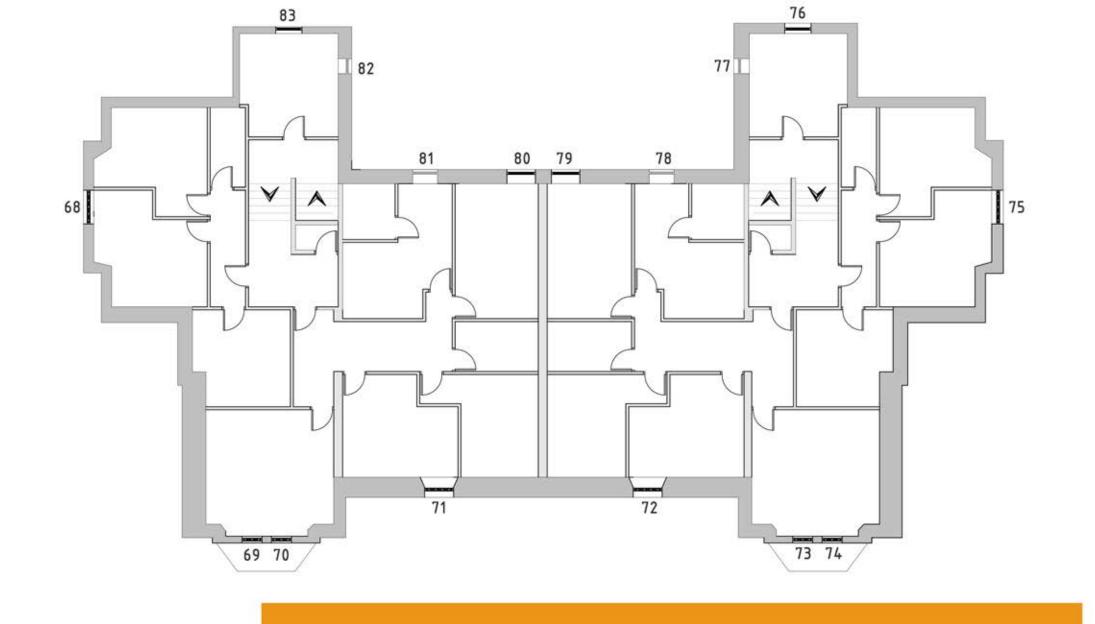
<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











# Attic Floor

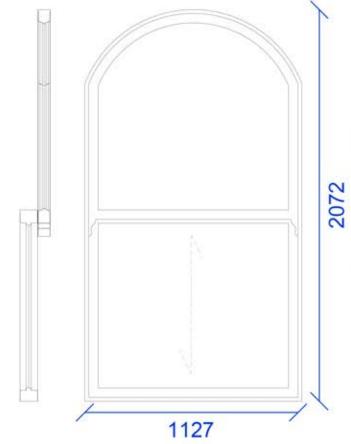


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, replacement timber bottom piece still allowing water in

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









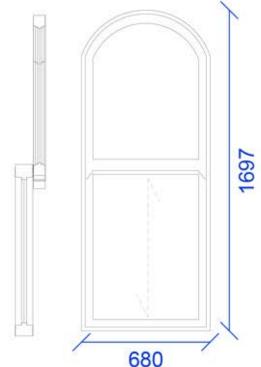


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











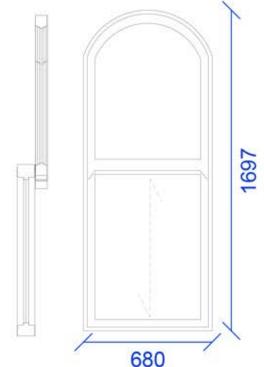


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











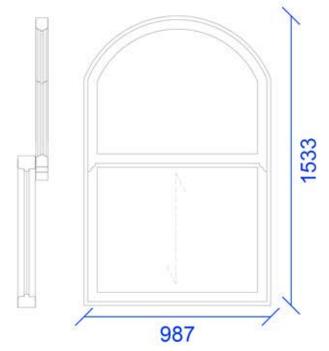
<u>Description:</u> Non-bar sliding sash windows with sash horns and true arch

<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing, damage timber sills

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











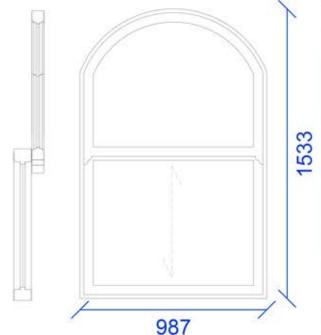
<u>Description:</u> Non-bar sliding sash windows with sash horns and true arch

<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing, damage timber

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











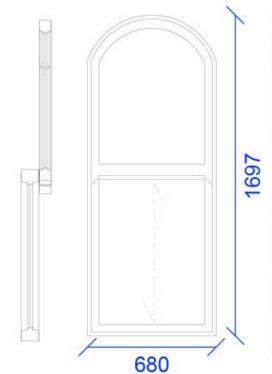


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











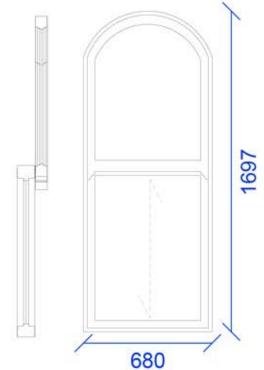


<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides cracks and holes in the frame with mould growing in corners and near the single glazing

<u>Joinery Fixing Option:</u> sand down paint and new sliding mechanisms replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels













<u>Defects:</u> gaps between panes and sliding sections, build up of paint hides crack and heavy old windows do not open for ventilation, middle rail coming away from glass

<u>Joinery Fixing Option</u>: sand down paint and new sliding mechanisms and timber rails replaced, removal of whole window would be necessary

Secondary Glazing Option: too large glass panel

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels



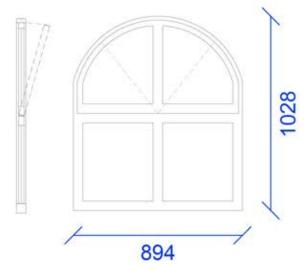
<u>Description:</u> Central hopper-style, true arch, top opening casement window with chain on internal leaf

<u>Defects</u>: mould in corners and between glazing and timber frames, condensation issues internally, broken and cracked timber frame, water settled on window sill

Joinery Fixing Option: every timber piece needs to be replaced, removal of whole window would be necessary

<u>Secondary Glazing Option:</u> opening would not allow for secondary glazing due to difficulty of installation

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











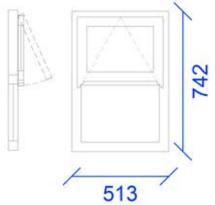
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows without central bars and with sash horns.

<u>Defects</u>: difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing, cracked timber frame

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten and cracked timber pieces

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings









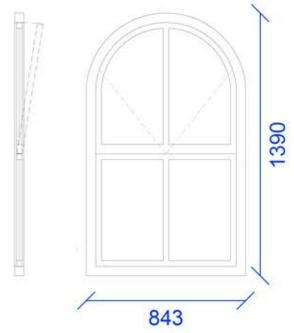
<u>Description:</u> Central hopper-style, true arch, top opening casement window with chain on internal leaf

<u>Defects</u>: mould in corners and between glazing and timber frames, condensation issues internally, broken and cracked timber frame, water settled on window sill

Joinery Fixing Option: every timber piece needs to be replaced, removal of whole window would be necessary

<u>Secondary Glazing Option:</u> opening would not allow for secondary glazing due to difficulty of installation

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











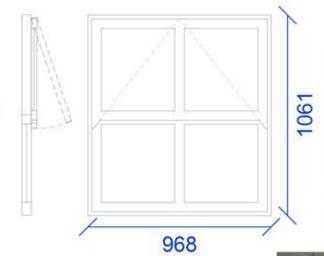
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and with sash horns.

<u>Defects</u>: difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing, cracked timber frame

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten and cracked timber pieces

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings













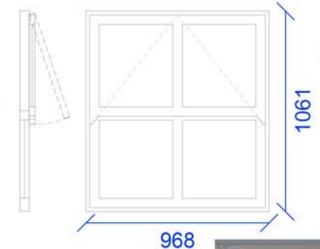
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows with central bars and with sash horns.

<u>Defects</u>: difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing, cracked timber frame

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten and cracked timber pieces

Secondary Glazing Option: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings













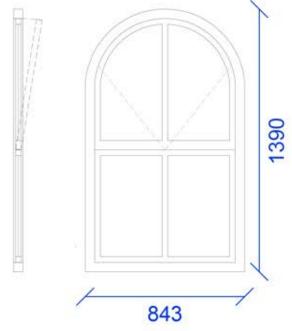
<u>Description:</u> Central hopper-style, true arch, top opening casement window with chain on internal leaf

<u>Defects</u>: mould in corners and between glazing and timber frames, condensation issues internally, broken and cracked timber frame, water settled on window sill

Joinery Fixing Option: every timber piece needs to be replaced, removal of whole window would be necessary

<u>Secondary Glazing Option</u>: opening would not allow for secondary glazing due to difficulty of installation

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels











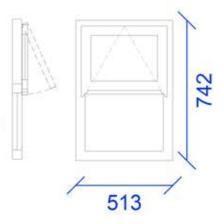
<u>Description</u>: Top hung casement window, top half opening, styled to match sash windows without central bars and with sash horns.

<u>Defects:</u> difficulty shutting top hung panel due to damage to hinges, mould growing into the frame around the single glazing, cracked timber frame

<u>Joinery Fixing Option</u>: fill in gaps around the outside, replace rotten and cracked timber pieces

<u>Secondary Glazing Option</u>: frame and opening would not allow secondary glazing due to opening

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the openings











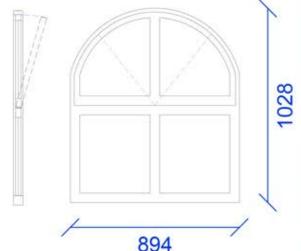
<u>Description:</u> Central hopper-style, true arch, top opening casement window with chain on internal leaf

<u>Defects:</u> mould in corners and between glazing and timber frames, condensation issues internally, broken and cracked timber frame

<u>Joinery Fixing Option:</u> hinges and some timber pieces needs replacing, removal of whole window would be necessary

<u>Secondary Glazing Option:</u> opening would not allow for secondary glazing due to difficulty of installation

<u>Draught-Proofing Option</u>: repairs would have to be completed before adding draught-proofing to the sliding panels









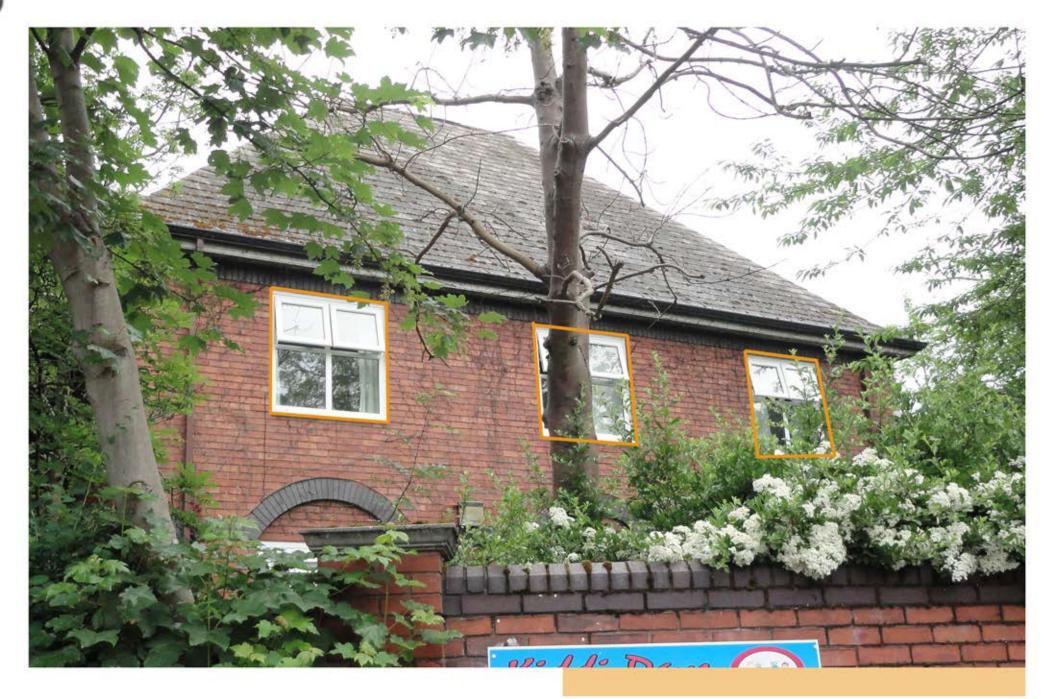


The surrounding properties hold similar values as Daisy Bank Villas- some of these show evidence of uPVC window replacements where there would have been original timber framed windows. These are also within the Victoria Park Conservation Area.

#### 4 Precedence

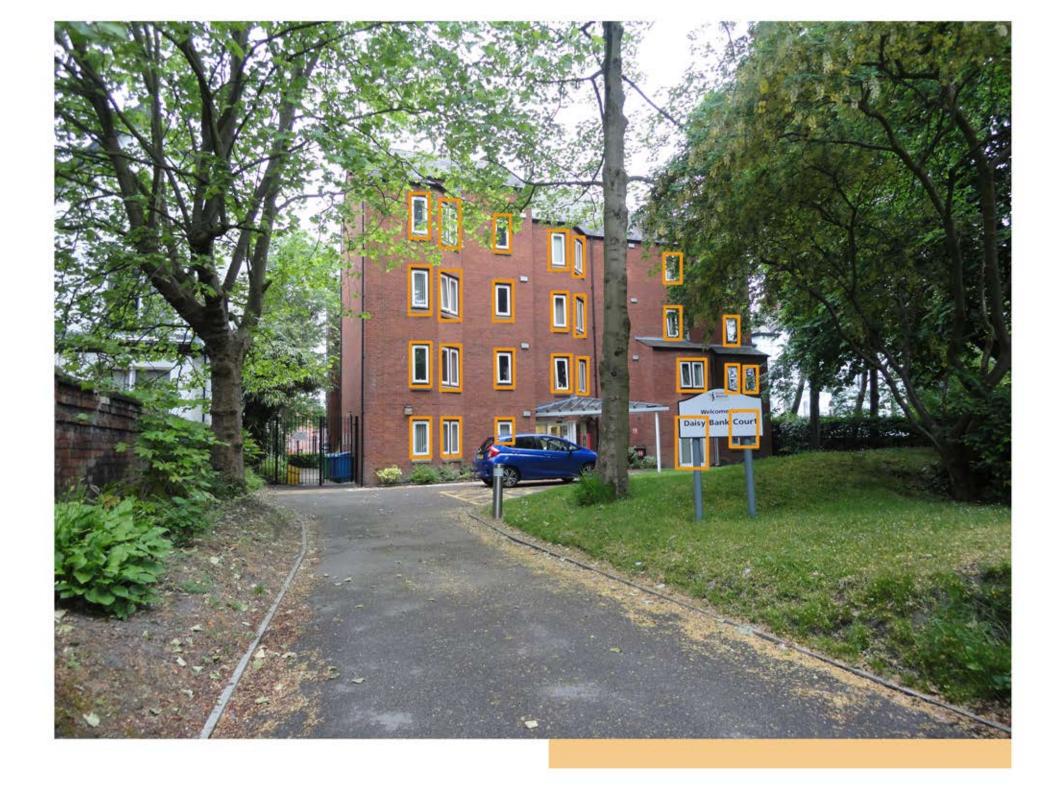
















It could be argued that draught-proofing measures would not be sufficient enough to increase the energy efficiency of the building as the windows would still be single glazed— the process would also mean most of the timber pieces of the windows would need replacing which would be an extremely lengthy process and the alterations need to be made within a strict timescale whilst the rooms are empty during the summer break. Secondary glazing would also not be appropriate due to the complexity of the windows' shapes and sizes— some pieces of glazing would be too large to fit to the existing windows and every single one would need the extra glazing fitted as well as intricate repair works to ensure no condensation can occur and the windows are in good repair.

#### 5 Conclusion

