

The White Tower
16 Aldwick Road, Bognor Regis
PO21 2LP

Report on condition and necessity to change existing windows

Current situation, condition and causes.

The main column of the tower houses the three bedrooms each the same size and directly above each other. Access to the bedrooms is via the staircase which runs parallel to the bedrooms. (fig1)

Hot air cause by 'living' rises up the stairwell and to the top of the tower cools and vaporises, causing the walls in this area to become wet with water running down the walls (fig 2). This also occurs in the bedrooms with the hot air reaching the cold windows condensing and vaporising . This again causes damp walls and peeling wall paper (fig 3)

To combat the build-up of condensation in a normal situation the windows would be opened to ventilate the area. However in two of the three rooms there is no opening window as it is jammed shut. The warm air in the top of the tower again condensates, vaporises and when it reaches the top of the stairwell and with no opening windows has no way of escaping.

The damp is causing the house to decay with the bricks mortar and plaster all being continually damp. The plaster is loose and the bricks have started to become 'soft'

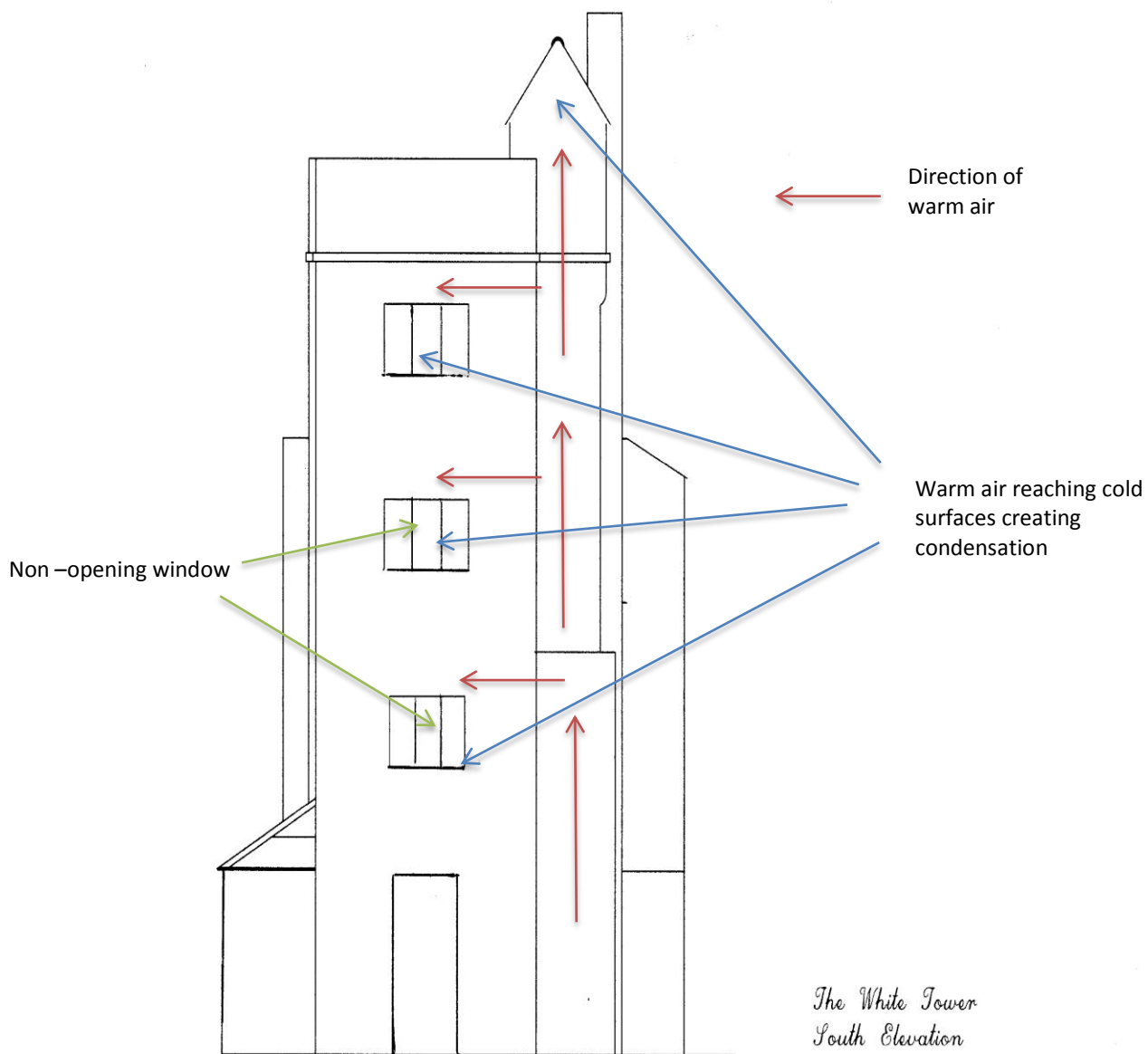
Remedies to damp

Each of the rooms needs to be ventilated to enable the hot air to disperse and reduce the condensation there is a greater need for this in winter with the use of central heating.

Each bedroom needs at the very least one fully functioning window, this widow would also need a seal double glazed unit thus creating a warm air/cold air barrier again cutting down condensation damp.

Although the windows either side of the opener are static, being double glazed will create a warm air/cold air barrier thus cutting condensation forming.

Fig 1



Advantages of new windows

The new steel framed doubled glazed windows will cut down on the condensation and therefore damp and allow the house to breathe and be drier and retain its original state. It will also allow the warm air from the central heating to be retained thus being energy saving for which there is a great need in today's society.

The windows will be made to the highest standards and retain the appearance of the original and by doing so retain the look and character of the original windows.

The windows that will be fitted can be supplied to the council to view and I would suggest a site visit is a necessity to correctly assess the situation.

'Original' windows condition

1st floor bedroom

The metal central window is twisted and does not open (pic 2) the glass is 'new' and does not diffract the light as you would expect if it was old hand-made original.

The lead you can see in the picture is adhesive lead 'stuck' on the glass both sides. (pic 1). The handle appears to be an addition and does not match any other bedroom window. This is the same with the stay which is distorted and unusable.

This window has no glazing bar for lead-light window if in fact it ever had.

In pic 3 the gap can be seen at the bottom of the window, however the top of the window is touching at the top of the frame. This twisting is causing the window to be forced shut.

The outside of the window either side of centre (pic 1) window has a wood surround of 2"x2" which frames the glass again 'new' glass and adhesive lead stuck to the glass.

2nd floor bedroom

The bedroom windows on the second floor are approximately in the same condition as the 1st floor.

The inside of the window (pic 4) shows the inside of the fixed window with the wood beading supporting the glass against the 2" x 2" outer wood frame the photograph shows non original glass and adhesive lead.

This picture also shows the effect on the inside stone frame of the constant condensation/ damp causing the stone surround to disintegrate.

This bedroom has the worst condition 'opening' centre window (pic 5) The window does not open the only ventilation to the room being the fact it does not fit the frame and the window cannot be opened. This is compounded by the fact there is no window handle.



Pic 1



Pic 2



Pic 3



Pic 4



Pic 5



Pic 6

The picture also shows the distorted unusable window stay.

The final picture (pic 6) shows the relatively good condition of the outer window on this floor which would lead to presume it is a much later addition when the non-original glass and adhesive lead was installed both visible in the picture.

Third Floor bedroom

Again the third floor is approximately in the same condition window wise as the other two floors, however although easy the window in this bedroom with some effort opens to allow ventilation but does not fully close leaving a gap (pic 7)

As with all previous bedroom windows the glass is non-original and the lead is adhesive and applied to both sides of the glass which in pic 8 can be seen to be lifting.

Summary

The house needs to be correctly ventilated to reduce condensation which is causing the house to be constantly damp which is leading to its slow decay. By having opening double glazed windows it will reduce the vaporisation allowing the saturated air to escape.

A major advantage to reduce the vaporisation and then condensation would be to have the ability to open the windows in each bedroom allowing air to circulate and being double glazed would also eradicate the formation of condensation on the windows.

This will be only one measure to combat the damp but it is the most important and need to put into practise immediately as the decay of the building is only increasing.

Finally it is my understanding that the government view in association with national heritage is that

“Heritage assets are non-renewable resource and that the wider social, cultural, economic and environmental benefits should be taken into account, and therefore intelligently managed change may be necessary if heritage assets are to be maintain for the long term”

This statement particularly applies to the situation of the windows at the White Tower.



Pic 7



Pic 8