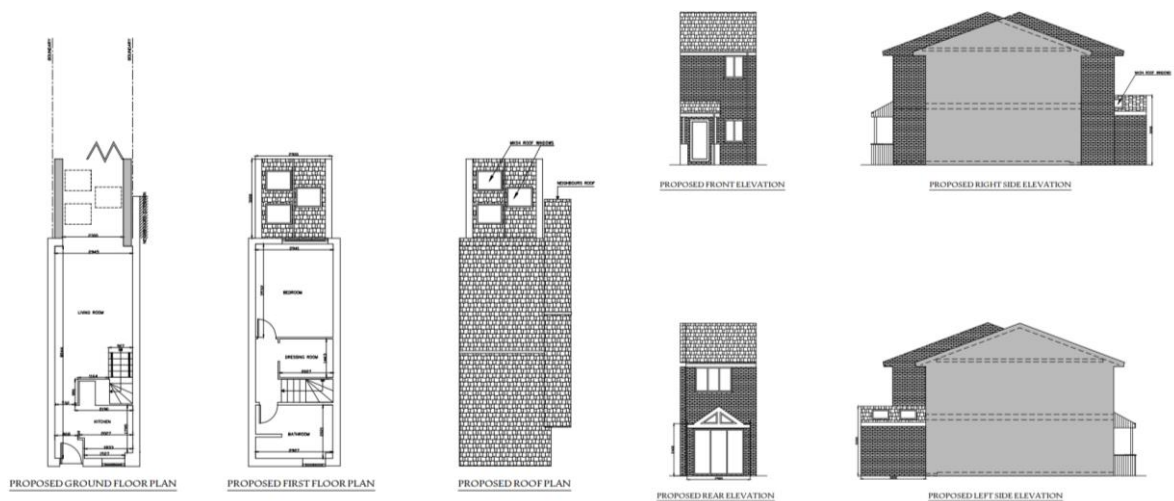


Excess Glazing SAP Calculations – Measurements

To carry out the calculations swiftly and effectively, we require detailed information of key areas. We ask that a specification sheet be completed which clearly outlines the fabric of the existing dwelling and the proposed extension, as well the existing heating and water system. This sheet will be provided to you separately. Further to this, to perform our calculations we create a model of the existing original dwelling and proposed extension, to do this we require accurate measurements of key areas.

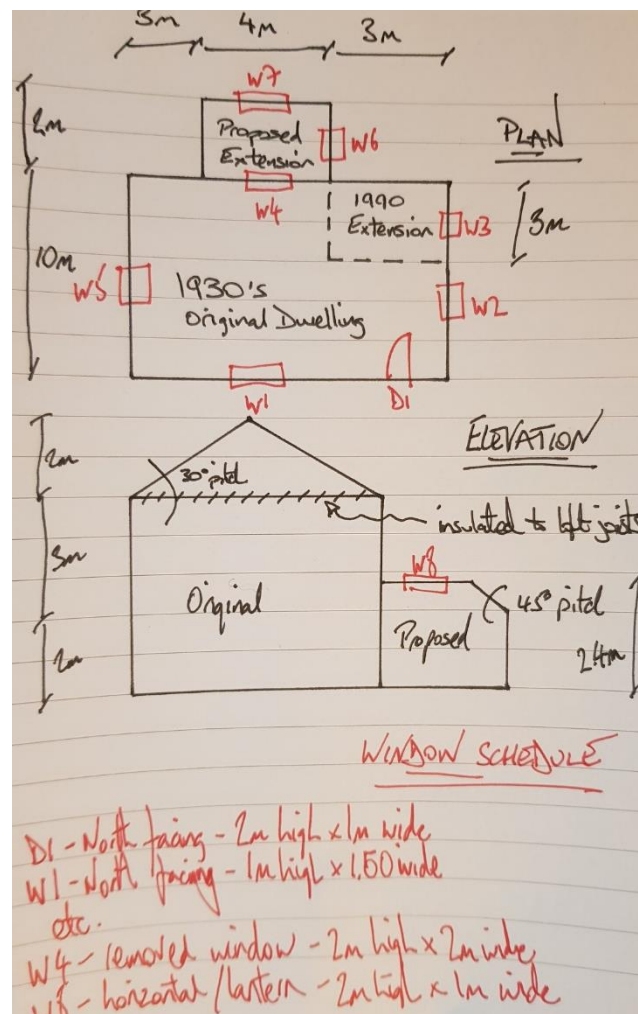
Where possible, please provide scaled drawings such as the ones below, clearly showing the original dwellings and the proposed extensions footprint and height (including any pre-existing extensions/loft conversions - the proposed extension will be calculated using the build-up provided in the specification, whereas all existing elements are based on the age bracket from when they were constructed (e.g. 1920s, 1930s, etc). Hence we only need to know their overall size and construction date).



These are important as we need to know the following for both the original dwelling and extension:

- Footprints - note that the layout is not important
- Height/roof pitch - including whether the insulation is located at joist or rafter level
- Door/window sizes and orientation

If drawings aren't available then a sketch with similar information attached will be sufficient, such as the example provided below.



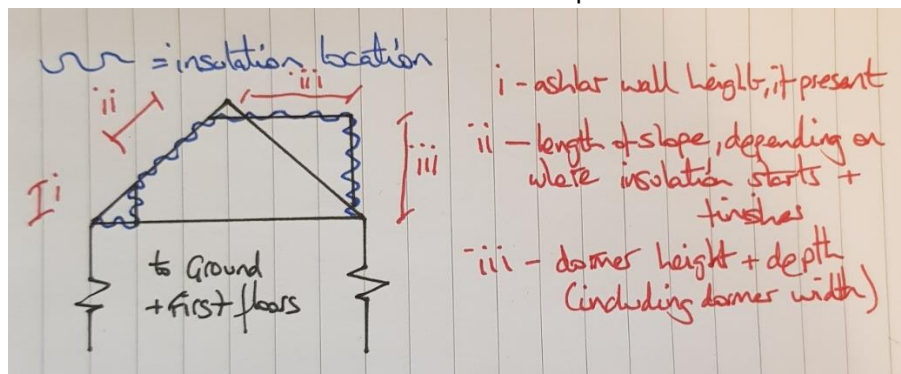
You can see above that the following information is provided for:

1. Plan view clearly showing:
 - a. The original dwellings footprint with measurements
 - b. The proposed extension footprint with measurements
 - c. A 1990's pre-existing extension built prior to the proposed one being assessed
2. Elevation clearly showing:
 - a. The original dwellings height/roof pitch (including loft insulation between joists, depicting no room in roof)
 - b. The proposed extension height (a pitched roof would require some further detail)
3. A window schedule showing:
 - a. The original dwellings window locations and measurements
 - b. The proposed extensions window locations and measurements
 - c. The removed opening (if any) measurements due to positioning of the extension

On-site measurements

When taking the measurements on-site, I would recommend something akin to the following procedure:

1. Start with the proposed extension (all internal measurements)
 - a. Using the plan, measure the length and width of the floor
 - b. Measure the height from finished floor level to ceiling
 - c. If a pitched roof, measure the height from ceiling to apex (top of pitch), including the degree of pitch
 - d. Measure all windows/doors, including orientation/elevation face
 - e. Measure the windows/doors being removed due to the location of the extension
2. Move onto the original dwelling (internal layout is not important)
 - a. Measure the width and length of the property (may be easier to measure externally, then subtract the width of the walls either end)
 - b. Where possible, try to show on the plans where the proposed extension lies in relation to the original dwelling, e.g. 1m from the side wall
 - c. Measure the height from ground level to upper storey ceiling joists – if the roof is insulated to rafters instead of loft joists, further measurements will be required:
 - i. Ashlar wall height (if present) – finished floor level to top of ashlar wall
 - ii. Pitched roof – ashlar top (if present) otherwise finished floor to apex, including degree of pitch
 - iii. Dormer (if present) – length and width of dormer ceiling, including height from finished floor level if varies from apex



- d. Measure all windows/doors, including orientation/elevation face
3. If any pre-existing extensions are present, repeat steps 2a-d, ensuring to mark these areas separately from the original dwelling, to ensure its clear which measurements relate to which age of the building.

Things to have with when taking the measurements:

1. Pencil and paper for sketching out the perimeters, writing your measurements as you go
2. Measuring tape or laser