

Response to Planner's queries

In response to structural queries raised during the meeting between the Planners and Robert Malcolm of Flanagan Lawrence:

1. Sketch (1245-Sk12) shows the extents of existing timber that is suspected to be affected by rot, and is therefore identified to be removed and replaced. HTS cannot give a dimensioned drawing, but the sketch shows that the timber is being replaced between the existing masonry walls under that provide support the to the timber.
2. A basic method statement consisting of manufacturer's literature for masonry crack repair, along with a photographic log of the two cracks that are known, is included in the attached 1245 – Masonry Repair – 15-06-02.
3. Rotten timber will be replaced as follows:
 - a. Roof finishes to be removed from on top of rotten timbers, and ceiling finishes below where fixed to the rotten elements.
 - b. Rotten timber will be removed in its entirety, including ends of timber joists where embedded in the wall.
 - c. New timber to be installed and fixed in the same manner as the existing. I.e. if timber joist ends are embedded in the wall, the new timber joists will be embedded in the wall.
 - d. Finishes reinstated to architect's details.
4. Rooftop plant loading increase:
 - a. The load increase of the rooftop plant over and above the existing roof access load may have an effect on the ***timber joists*** themselves. Joist strengthening/replacement is therefore allowed for, depending on what is found to be present. If the joists are to be strengthened, additional joists are to be installed adjacent to them, and cross nailed into the existing, as shown on previously issued "Typical Joist Strengthening" detail on drawing 1245-16. A calculation is attached showing the loadings and required sizes.
 - b. If the joists are to be replaced, the work will be carried out as per point 3 above. (Note joist strengthening can be stipulated rather than replacement).
 - c. The extra load from rooftop plant is ***insignificant*** to the ***masonry walls***. Sheets RP4 and RP5 in the attached calculation compare the before and after loads, and assess the wall capacity. The self-weight of a 215mm thick brickwork wall is included, and to demonstrate how insignificant the plant loading is, the capacity of just a 105mm thick brickwork wall is assessed. It is clear that the 105mm thick brickwork wall is more than adequate to carry the additional loads from the plant, hence the initial statement that the load increase on the wall can be considered negligible.
5. Precast concrete lintels are conventionally used to form openings in solid masonry walls. However, if steel lintels are preferred or required, a series of BOX 100 lintels can be used side by side to match the thickness of the masonry. For example, for a 330mm thick brickwork wall, 3no. BOX 100 lintels would be used, with 10mm nominal gap between them. See the attached manufacturer's brochure extract.