

## FLOOR LOADINGS (2007)

Andrew Thorn has requested that I provide some advice regarding the short term storage of the Cardamone Collection within Villa Alba -

### 1. Butler's Pantry Floor

In order to ascertain the allowable floor loading for the Butler's Pantry the reinforcement in the slab will need to be investigated by a specialist Contractor using 'high resolution radar' or 'cover meters' or similar. The cost of such an investigation could be thousands of dollars. It should be noted that if the reinforcement in the slab does not comply with current standards it may be difficult to verify the slab for a 'storage' type loading.

### 2. Dining Room Floor

As discussed with Andrew this morning I have little knowledge of the construction of the Dining Room floor structure and given that access to the sub-floor is not available it is difficult to advise on a safe 'storage' type loading for the floor. Notwithstanding this, it should be possible to stack boxes to a height of say 0.5 m in the room - it should be noted however that there is some risk associated with the proposed storage loading as the weight of the boxes may cause any rotted sub-floor timbers to crush or break, and damage the flooring.

### 3. First Floor Rooms

The storage of boxes to a maximum height of say 0.5 m in the First Floor rooms should be configured as follows:

- Any storage in the rooms above the Vestibule should be located in strips within 1 m of the northern and southern walls and should be kept away from the eastern and western walls by say 1.5 m.
- Similarly in the remainder of the first floor rooms the storage should be located in strips within 1 m of the eastern and western walls and should be kept away from the northern and southern walls by say 1.5 m.
- The reason for the above configuration is that when timber joists are loaded they deflect and if this deflection occurs immediately next to a parallel wall the ceiling below can be 'sheared' and crack. It should be noted that there is also some risk associated with the proposed storage in the First Floor Rooms and any movement in the floor structure may damage the ceilings below.

Please do not hesitate to call if you have any queries.

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