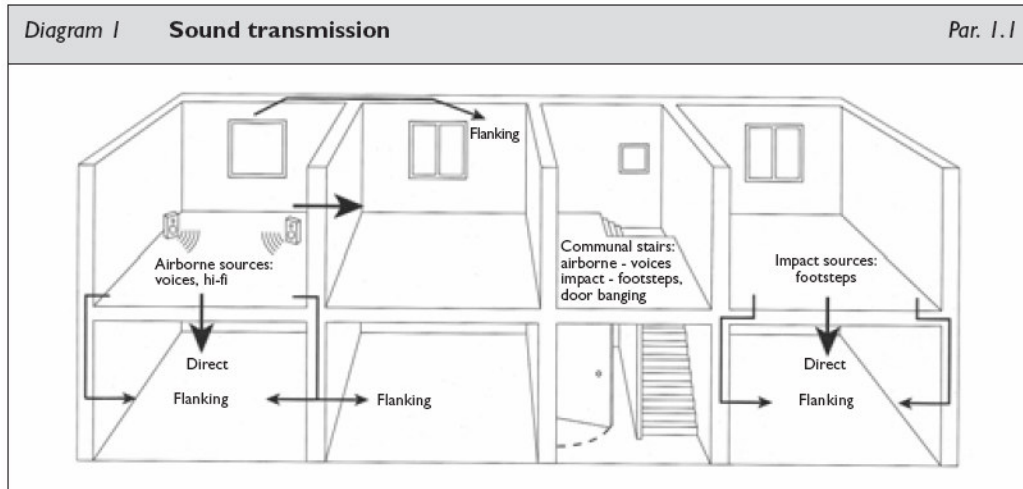


# Sound Properties of Precast Walls.

Information Source  
Building Regulations 1997  
Technical Guidance document E Sound



Extract from Diagram 5 Par 2.1 (Floor type-Concrete base)

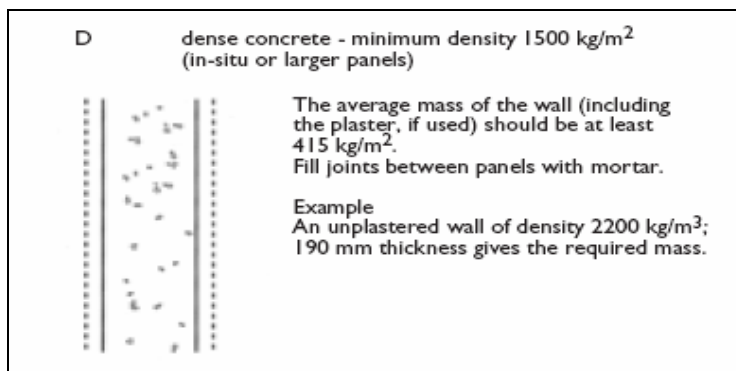
## Airbourne Sound

The resistance to airborne sound depends on the mass of the concrete wall.

## Wall specification

D. Dense concrete- minimum density 1500kg/m<sup>2</sup>.

The average mass of the wall (including any wall finish if used) should be at least 415 kg/m<sup>2</sup>. Fill joints between panels with mortar.



### **Density of Flood Wall panels.**

200mm Flood wall panel provides a mass of 480 kg/m<sup>2</sup>. The joints between panels are filled using a non-shrink grout (Fosroc Conbextra HF).

150mm Flood wall panel provides a mass of 360kg/m<sup>2</sup>. The joint between panels are filled with mortar.

### Conclusion.

If a typical apartment structure was constructed using a Flood 200mm precast wall system , the walls would achieve a density of 480kg/m<sup>2</sup> i.e. 65kg/m<sup>2</sup> more than the requirements of the current building regulations.

### **Fire Safety.**

Fire rating of the Flood Precast wall unit is based on the depth of concrete cover to the main reinforcement in the wall unit . Flood standard fire rating is 1 hour. However increasing the cover to the reinforcement in the wall panel or using various wall finishes can increase this fire rating.