

New Build - Timber Frame with Floating Floor

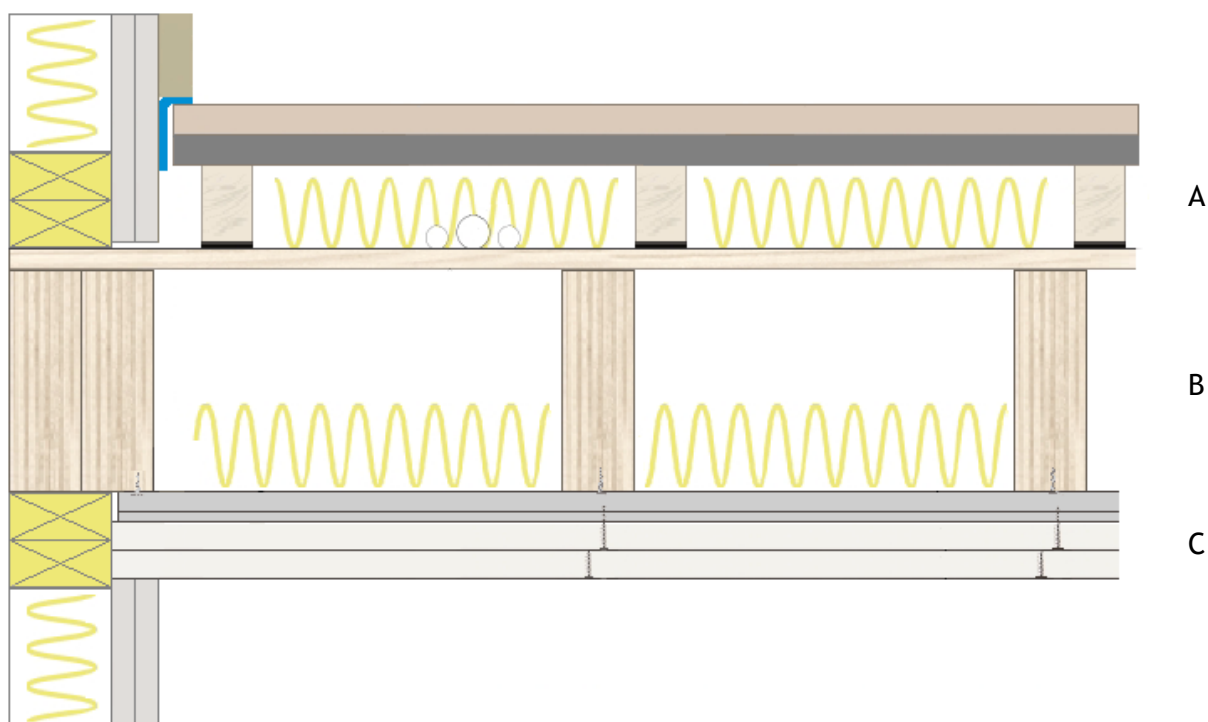
Acoustic treatment for low mass timber frame structural floor

Solution - InstaCoustic deep acoustic batten with high performance recycled rubber resilient layer and resilient bar ceiling system

Robust Detail Compliant E-FT-1 & 2 (Check allowable combinations of joists in the RD Handbook).

- A. InstaCoustic B60T deep acoustic batten floor system with insulation in void
- B. 240mm (min) timber I joists, 220mm (min) solid timber joists, 253mm (min) metal web joist with 100mm (min) mineral wool quilt between joists
- C. 16mm Resilient bar ceiling system (check RD handbook for component options)

B60T Deep Acoustic Batten 16mm Resilient Bar Acoustic Ceiling System



Field Sound Test Report - F24

Results	Achieved On Site	ADE Regulations
Airborne	51 dB $D_nT_w + C_{tr}$	45 dB $D_nT_w + C_{tr}$
Impact	56 dB L_nT_w	62 dB L_nT_w

Key Issues

- Resilient flanking strip must be applied around perimeter of floor to seal and isolate from structure
- Always use mineral wool insulation between the acoustic battens
- Service pipes in void of the acoustic floor must not come into contact with the timber battens or chipboard floor as this would cause a direct transmission path for sound
- Stagger the joints of plasterboard on ceiling and stop resilient bar short of walls
- Make sure that the plasterboard screw fixings do not extend beyond the resilient ceiling bar causing points of contact with the joists