Separating Wall – Cavity Masonry

**Besblock “Star Performer” dense aggregate cellular blocks**

**Render and gypsum-based board on dabs**

| Block | Only Besblock “Star Performer” 5-bridge cellular block (4-core, concrete density 1995 kg/m³, block density 1528 kg/m³, unit weight 14.5 kg) |
| Wall ties | Approved Document E ‘Tie type A’ (see Appendix A) |
| Block thickness | 100mm (min), each leaf |
| Cavity width | 75mm (min) |
| Wall finish | Gypsum based-board (nominal 8 kg/m²) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish |
| Typical render mix | 1:1:6 to 1:1½:4. Render mix must not be stronger than background (see Appendix A) |
| External (flanking) wall | Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation |

**Alternative internal render specification**

Either:

- British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm)
- Knauf Gypsum Parge Coat (nominal 8mm, minimum 6mm)

applied in accordance with the manufacturer’s instructions, may be used instead of the cement:sand render mix.

**Separating wall cavity insulation (optional)**

The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

**DO**

- Place blocks with cellular holes open to lower mortar bed
- Keep cavity and wall ties (and insulation) free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties and foundation (and insulation)
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Ensure that render is applied to the complete face of each leaf with a scratch finish (it may be omitted within the floor joist/beam zone)
- Refer to Appendix A
1. External (flanking) wall junction

- Masonry outer leaf
- External wall cavity (min 50mm)
- Close external wall cavity with a flexible cavity stop unless the external wall cavity is fully filled with built in mineral wool insulation
- Inner leaf where there is no separating floor e.g. for houses
  - 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrte block (450 kg/m³ to 800 kg/m³) or Besblock “Star Performer” block
  - internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

Inner leaf where there is a separating floor e.g. for flats/apartments
- if using robust detail for floor, refer to Table 3a in introduction to select an acceptable robust detail separating floor. Then refer to separating floor robust detail to identify acceptable inner leaf construction or use Besblock “Star Performer” block
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

2. Staggered external (flanking) wall junction

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf where there is no separating floor e.g. for houses
  - 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrte block (450 kg/m³ to 800 kg/m³) or Besblock “Star Performer” block
  - internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

Inner leaf where there is a separating floor e.g. for flats/apartments
- if using robust detail for floor, refer to Table 3a in introduction to select an acceptable robust detail separating floor. Then refer to separating floor robust detail to identify acceptable inner leaf construction or use Besblock “Star Performer” block
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

Close external wall cavity with a flexible cavity stop unless the external wall cavity is fully filled with built in mineral wool insulation