

1. Attached Houses (new build)

Robust Detail	Separating Wall Details 2 leaves of 100mm (min) Standard, High Strength or Super Strength grade				Credit Entitlement ¹	
	Mortar joints	Width	Cavity Insulation	Finishes	Code for Sustainable Homes	EcoHomes
E - WM - 6	Traditional mortar ²	75mm minimum	Clear cavity OR Fully insulated with mineral wool (max density 40kg/m ³)	Nominal 8mm render or Gyproc Soundcoat Plus (parge) coat + 12.5mm plasterboard (8 kg/m ²) on dabs	1	3
E - WM - 10	Thin Joint ³	75mm minimum	Clear cavity OR Fully insulated with mineral wool (max density 40kg/m ³)	Nominal 8mm render or Gyproc Soundcoat Plus (parge) coat + 12.5mm plasterboard (8 kg/m ²) on dabs	-	2
E - WM - 13	Thin Joint (Untied cavity)	75mm minimum	Clear cavity OR Fully insulated with mineral wool (max density 40kg/m ³)	Nominal 8mm render or Gyproc Soundcoat Plus parge coat + 12.5mm plasterboard (8 kg/m ²) on dabs	3	4
E - WM - 15	Traditional mortar ²	75mm minimum	35mm Isover RD35	15mm plasterboard (or 12.5mm Gyproc WallBoard Ten) on dabs (9.8kg/m ²) (No parge coat required)	1	3
E - WM - 23	Traditional mortar ² OR Thin Joint ³	100mm minimum	Fully insulated with Superglass Party Wall Roll	12.5mm plasterboard (8 kg/m ²) on dabs (No parge coat required)	3	4
E - WM - 24	Traditional mortar ² OR Thin Joint ³	100mm minimum	Fully insulated with Saint Gobain-Isover RD Party Wall Roll	12.5mm plasterboard (8 kg/m ²) on dabs (No parge coat required)	3	4
E - WM - 30	Traditional mortar ² OR Thin Joint ³	100mm minimum	Fully insulated with Knauf Supafil Party Wall blown glass mineral wool insulation	12.5mm plasterboard (8 kg/m ²) on dabs (No parge coat required)	3	4

¹ Ensure Robust Details scheme requirements are met.
² Wall ties type 'A' (as per Appendix A of AD'E' and RD Handbook).
³ Ancon HRT4 or Clan PWT4 wall ties.

Flanking Wall Details applicable to all above separating walls
 100mm (min) Solar, Standard, High Strength or Super Strength grade
 12.5mm plasterboard (8 kg/m²) on dabs or 13mm plaster finishes

Construction details

See **Robust Details E-WM-6, E-WM-10, E-WM-13, E-WM-15, E-WM-23, E-WM-24 or E-WM-30** (pages 1 to 6) in the RD Handbook for full details (with notes) of junctions between the separating wall and external (flanking) wall, staggered external (flanking) wall, internal floor junctions, ground floor and roof. The above RD's do not permit flue blocks to be built in to the separating wall leaves.

Internal partitions (R_w = 40dB)

- 75mm Standard grade block with dense plaster, **or**
- 100mm Standard, High Strength or Super Strength grade block (traditional or thin layer mortar) with plasterboard on dabs or 13mm plaster finishes, **or**
- 100mm Solar grade block (traditional or thin layer mortar) finished with dense plaster or single layer of plasterboard to each face.

Internal beam and block upper floors (R_w = 40dB)

100mm (min) Celcon Standard as infill between proprietary 150mm deep inverted pre-cast concrete T beams finished with a 40mm (min) cement/sand screed and with a 12.5mm plasterboard ceiling.

Pre-completion testing (PCT) is NOT required for any of the above solutions.
 13mm plaster may be substituted for the separating wall finishes detailed in the Table above. However this will not be in accordance with the RDs and PCT will be required for the wall.

2. Flats and apartments (new build)

Robust Detail Floor	Flanking Leaf (100mm minimum) 12.5mm plasterboard (8 kg/m ²) on dabs or 13mm plaster finishes	Separating Wall (PCT for wall not required if RD's scheme requirements are met)	Floor PCT required?
E-FC- 1, E-FC- 6, E-FC- 7, E-FC- 11 or E-FC- 15	Any Celcon block	Celcon E-WM-6, 10, 13, 15, 23, 24 or 30	Yes ³
		Any non Celcon RD wall	Yes ³
E-FC- 12, E-FC- 13, E-FC- 14 or E-FC- 17	Any Celcon block	Celcon E-WM-6, 10, 13, 15, 23, 24 or 30	Yes ³
		Any non Celcon RD wall (except E-WM-12, 25 or 29)	Not required ²
E-FC- 4 or E-FC- 5	Any Celcon block	Celcon E-WM- 6 ¹ , 10 ¹ , 13 ¹ , 15 ¹ , 23, 24 or 30 ¹	Not required ² (200mm thick floor planks and ceiling CT5 required with E-FC-5)
		Any non Celcon RD wall (E-WM-12 not applicable with E-FC-5)	
E-FC- 8 or E-FC- 9	Celcon Standard, High Strength or Super Strength	Celcon E-WM- 6 ¹ , 10 ¹ , 13 ¹ , 15 ¹ , 23, 24 or 30 ¹	Not required ²
		Any non Celcon RD wall except E-WM-12	
E-FC- 10	Non Celcon masonry wall	Celcon E-WM- 6 ¹ , 10 ¹ , 13 ¹ , 15 ¹ , 23, 24 or 30 ¹	Not required ²
	Any Celcon block	Any non Celcon RD (wall except E-WM-12)	Yes ³
E-FC- 16	Any Celcon block	Celcon E-WM-6, 10, 13, 15, 23, 24 or 30	Yes ³
	Celcon Standard, High Strength or Super Strength	Any non Celcon RD wall (except E-WM-12, 25 or 29)	Not required ²

¹ At least one storey of the separating wall flanking the separating floor must be built in higher strength, otherwise PCT of floor will be required.
² Ensure RD's scheme requirements are met.
³ H+H UK Limited may be prepared to test the constructions for compliance with AD 'E' as part of our ongoing Research programme. This would be undertaken at our expense and at no cost to the client but please contact our Technical Department at the Design stage.

Construction details

See the RD Handbook pages 1 to 6 of the relevant Wall and Floor Robust Detail for full details (with Notes) of junctions between the separating wall and external (flanking) wall, staggered external (flanking) wall, internal floor junctions, ground floor, separating floor and roof.

Internal partitions

Any construction listed under 'Flanking Leaf' for appropriate separating floor type in table above. In addition, for Solar block only, the plaster finish option should be 13mm of dense plaster where 40dB Rw is required for the partition.

3. Detached houses (new build)

Internal partitions ($R_w = 40\text{dB}$)

- a) 75mm Standard grade block with dense plaster, **or**
- b) 100mm Standard, High Strength or Super Strength grade block (traditional or thin layer mortar) with plasterboard on dabs or 13mm plaster finishes, **or**
- c) 100mm Solar grade block (traditional or thin layer mortar) finished with dense plaster or single layer of plasterboard to each face.

Internal beam and block upper floors ($R_w = 40\text{dB}$)

100mm (min) Celcon Standard as infill between proprietary 150mm deep inverted precast concrete T beams finished with a 40mm (min) cement/sand screed and with a 12.5mm plasterboard ceiling.

Pre-completion testing (PCT) is NOT required for any of the above solutions

4. House or flats formed by material change of use *or* Rooms for residential purposes

Separating walls of floors in this category are not covered by Robust Details, PCT will be required for all forms of construction. Notwithstanding this, any of the wall and floor solutions given in Sections 1 & 2 above for new build will be suitable, in addition:

Separating wall ($D_{nT,w} + C_{tr} = 43\text{dB}$)

- a) Minimum 215mm Standard, High Strength or Super Strength grade single leaf wall (traditional mortar), with 13mm plaster on both room faces, **or**
- b) Minimum 250mm Celcon Standard, High Strength or Super Strength single leaf wall (thin layer mortar), with 13mm plaster on both room faces.

Flanking walls

Minimum 100mm Solar, Standard, High Strength or Super Strength grade blockwork (traditional or thin layer mortar), with 13mm plaster on both room faces.

Internal partitions ($R_w = 40\text{dB}$)

- a) 75mm Standard grade block with dense plaster, **or**
- b) 100mm Standard, High Strength or Super Strength grade block (traditional or thin layer mortar) with plasterboard on dabs or 13mm plaster finishes, **or**
- c) 100mm Solar grade block (traditional or thin layer mortar) finished with dense plaster or single layer of plasterboard to each face.