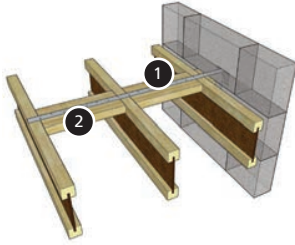


Masonite Beams Construction Details Floors



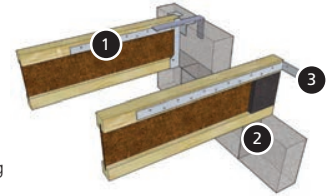
A1 MASONRY WALL RESTRAINT — PERPENDICULAR TO JOIST

- 1 Thin metal restraint strap installed in accordance with the manufacturer's instructions
- 2 Min. 38 x 97/122/147mm noggings fixed to joists by skew nails or using z clips



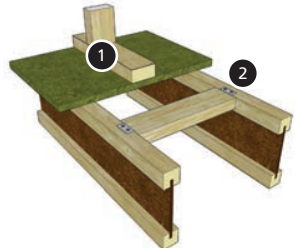
A2 MASONRY WALL RESTRAINT — PARALLEL TO JOIST

- 1 Restraint strap fitted to joist on non-restraint type masonry hanger
- 2 Parallel restraint straps may only be omitted if the joist has at least 90mm of direct bearing on the wall, provided that the height of the wall does not exceed 2 storeys
- 3 Restraint strap on built-in joist



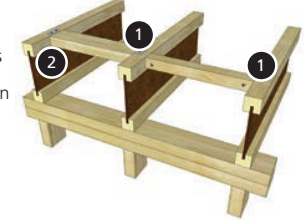
A3 PARALLEL PARTITION NOGGINGS

- 1 Non-load bearing stud partition fixed to noggings
- 2 38 x 75mm partition noggings supported by metal z-clips, nailed in accordance with the manufacturer's instructions
- i Noggings may also be attached with 2no. 3.35 x 65mm nails skew nailed at each end



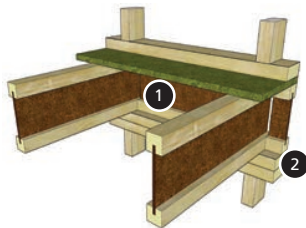
A4 PERIMETER NOGGINGS

- 1 Noggings may be skew nailed to joists or supported on z-clips
- 2 Timber noggings fitted between joists to support free edges of decking at external or internal walls. Also applicable to masonry walls



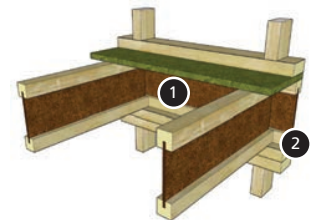
B1 I-JOIST BLOCKING PANEL

- 1 Masonite I-Joist blocking panel
- 2 Joist has full bearing on timber plate



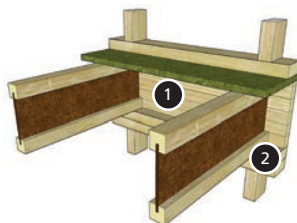
B2 RIM I-JOIST

- 1 Masonite I-Joist rim board
- 2 Joist requires 45mm minimum bearing



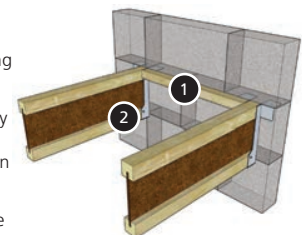
B3 RIM BOARD

- 1 38mm Glulam or 30mm LVL, or to suit wall load
- 2 Joist requires 45mm minimum bearing



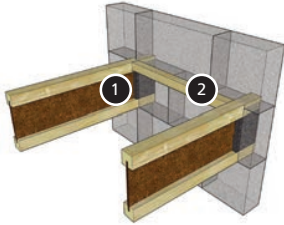
B4 MASONRY HANGER

- 1 Perimeter nogg for decking support where required
- 2 Proprietary approved masonry joist hangers - web stiffeners may be required, see notes on page 16
- i Parallel restraint straps will be required with non-restraining hangers — see A2



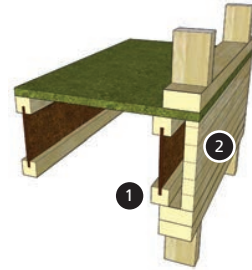
B5 MASONRY WALL BEARING

- 1 Joist end built into wall. Note some capping devices may require less than a full bearing to prevent fouling the cavity
- 2 Perimeter noggings
- i The joist bearing must be sealed to prevent air leakage. This may be achieved by the use of proprietary capping devices or end blocks fitted to the joist webs with sealant around the joist ends



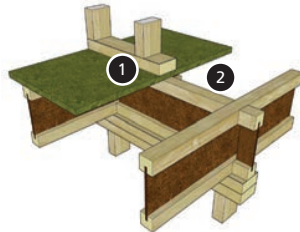
B6 PARALLEL TIMBER FRAME WALL

- 1 Masonite I-Joist with half bearing into wall
- 2 38mm Glulam or 30mm LVL, or to suit wall load



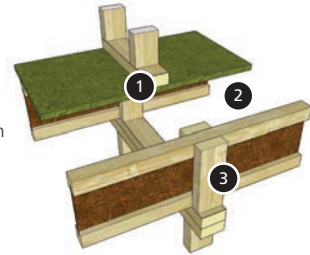
B7 INTERMEDIATE BEARING – LOAD BEARING WALL ABOVE

- 1 Load bearing wall directly above wall below
- 2 Masonite I-Joist blocking panels between joists



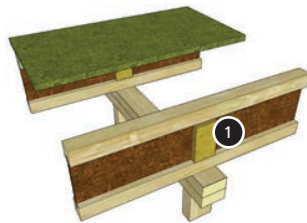
B8 INTERMEDIATE BEARING – COMPRESSION BLOCKS

- 1 Load bearing wall directly above wall below
- 2 Height of compression blocks = joist depth + 2mm
- 3 38 x 89mm minimum softwood compression blocks



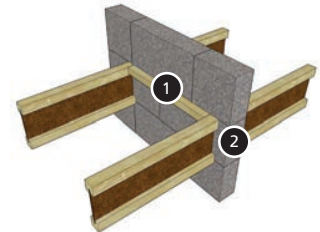
B9 INTERMEDIATE BEARING – NO LOAD BEARING WALL ABOVE

- 1 Web stiffeners where required



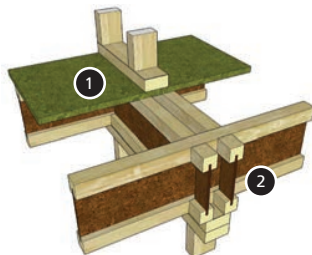
B10 INTERMEDIATE BEARING – MASONRY WALL

- 1 Perimeter noggings
- 2 Minimum 89mm bearing



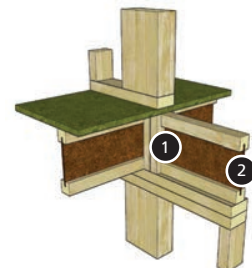
B11 INTERMEDIATE BEARING – DOUBLE BLOCKING

- 1 Load bearing wall directly above wall below
- 2 Webs of blocking in line with edge of stud wall above and below



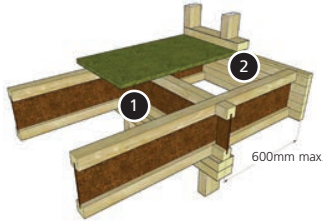
B12 COLUMN WITH COMPRESSION BLOCKS

- 1 Softwood compression blocks, min. 38 x 89mm, height = joist depth + 2mm
- 2 I-Joist blocking panels
- i Number of blocks to suit width of column above



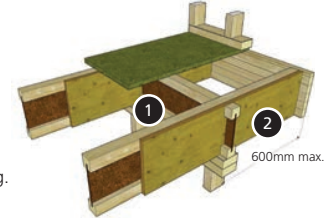
B13 CANTILEVER SUPPORTING WALL

- 1 I-Joist Blocking
- 2 38mm Glulam or 30mm LVL
- i Structural cantilever must not exceed 600mm



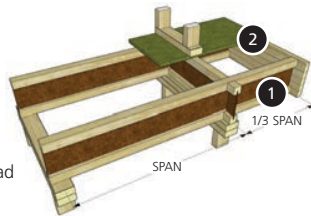
B14 REINFORCED CANTILEVER SUPPORTING WALL

- 1 I-Joist Blocking
- 2 19mm ply reinforcement one or both sides of cantilevered joists, (determined by loading) nailed at 150mm centres with 3.35mm dia. nails, 65mm long. Stagger nails when fixing ply both sides
- i Structural cantilever must not exceed 600mm



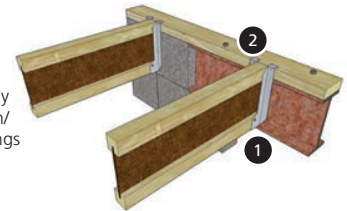
B15 NON LOAD BEARING CANTILEVER

- 1 I-Joist Blocking
- 2 38mm Glulam or 30mm LVL
- i Max. cantilever length is 1200mm. No load applied on cantilever



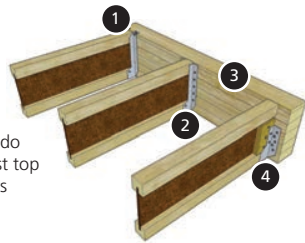
B16 WALLPLATE CONNECTION

- 1 Top mount hangers
- 2 Timber bearing plate securely fixed to flange of steel beam/ masonry wall (design of fixings by Building Designer)



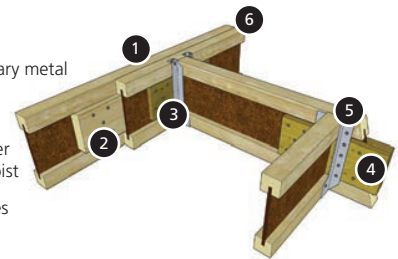
C1 I-JOIST TO SOLID BEAM CONNECTION

- 1 Top mount hanger
- 2 Face mount hanger
- 3 Glulam beam
- 4 Face mount hangers which do not laterally support the joist top flange require web stiffeners
- i Note - all hanger fixings in accordance with hanger manufacturer details



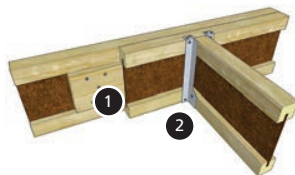
C2 I-JOIST TO I-JOIST CONNECTION

- 1 Top mount hanger
- 2 Filler block or proprietary metal clips must be installed with multiple joists
- 3 Backer block on hanger face only for double joist
- 4 Backer block both sides of single joist
- 5 Face mount hanger
- 6 Double I-Joist
- i Backer blocks nailed with 10no. 3.75mm diameter nails x 75mm long, with ends clinched if possible.



C3 I-JOIST TO I-JOIST CONNECTION –BACKERLESS

- 1 Filler block or proprietary metal clips must still be installed with multiple joists
- 2 Approved hanger designed for use without backer blocks



Use 10no. 4.00mm nails x 90mm long, for HB joists.

For top mount hangers, backer block tight to top flange of joist.

For face mount hangers, backer block tight to bottom flange.

Filler blocks fitted tight to top flange.

See table on page 16 for size of backer.

Note that approved hangers which eliminate the need for backer blocks are available. See detail C3.

BS EN1995-1-1 Version

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