TIMBER FRAME STANDARD DETAILS
SEPTEMBER 09
Details on Plan

1. External Wall
   1.1. External corner
   1.2. Re-entrant corner
   1.3. Separating wall junctions
   1.4. Non loadbearing wall junctions
   1.5. Window/Door Jambs
   1.6. Masonry Cladding
   1.7. Tile hanging off timber frame
   1.8. Timber boarding on timber frame
   1.9. Render on timber frame

2. Internal Walls
   2.1. Internal wall to internal wall junctions

3. Roofs
   3.1. Access hatch
   3.2. Tank stand and walkway
   3.3. Trusses:
       3.3.1. Standard truss
       3.3.2. Raised tie truss
       3.3.3. Attic truss
   3.4. Bracing – Diagonal and longitudinal
       3.4.1. Bracing 3D
   3.5. Verge Details
   3.5.2. Truss parallel to separating wall
   3.5.3. Truss perpendicular to separating wall
   3.5.4. Truss at right angles to each other at separating wall
   3.6. Purlins Connections
   3.7. Rafters
       3.7.1. Rafters on floor deck
       3.7.2. Rafters on dwarf wall
   3.8. Roof panels
       3.8.1. Roof panel connections
   3.9. Flat roof – Joist and decking
   3.10. Dormer in Section
   3.11. Dormer in Perspective view
   3.12. Parapet detail – joists perpendicular
   3.13. Parapet detail – joists parallel

Details in Section

4. External Walls
   4.1. Ground Floor
   4.2. Intermediate floor – Joist parallel
   4.3. Intermediate floor – Joist perpendicular
   4.4. Compartment floor – I Joist parallel
   4.5. Compartment floor – I Joist perpendicular
   4.6. Top floor ceiling at eaves
4.7. Eaves at window head
4.8. Window Cill
4.9. Joinery head
4.10. Door threshold
4.11. Intermediate Floor – Open Web Joist Parallel
4.13. Compartment Floor – Open Web Parallel
4.15. Compartment Floor – Solid joist Parallel
4.16. Compartment Floor – Solid joist Perpendicular
4.17. Compartment Floor with Screed – Joist Perpendicular
4.18. Compartment Floor with Screed – Joist Parallel
4.19. Compartment Floor with Screedboard – Joist Perpendicular
4.20. Compartment Floor with Screedboard – Joist Parallel

5. Internal Walls
5.1. Ground floor - loadbearing partition
5.2. Ground floor – non loadbearing partition
5.3. Ground floor – Separating wall
5.4. Upper floor – loadbearing partition
5.5. Upper floor – Non loadbearing partition
5.6.
   5.6.1 Upper floor – Separating wall Compartment Floor I joist parallel
   5.6.2 Upper floor – Separating wall Compartment Floor I joist perpendicular
   5.6.3 Upper floor – Separating wall Intermediate Floor I joist parallel
   5.6.4 Upper floor – Separating wall Intermediate Floor I joist perpendicular
   5.6.5 Upper floor – Separating wall Intermediate Floor Open Web parallel
   5.6.6 Upper floor – Separating wall Intermediate Floor Open Web perpendicular
   5.6.7 Upper floor – Separating wall Compartment Floor Open Web parallel
   5.6.8 Upper floor – Separating wall Compartment Floor Open Web perpendicular
   5.6.9 Upper floor – Separating wall Compartment Floor Solid Joist parallel
   5.6.10 Upper floor – Separating wall Compartment Floor Solid Joist perpendicular
   5.6.11 Upper floor – Separating wall Compartment Floor with Screed joists parallel
   5.6.12 Upper floor – Separating wall Comp. Floor with Screed joists perpendicular
   5.6.13 Upper floor – Separating wall Comp. Floor with Screedboard joists parallel
   5.6.14 Upper floor – Separating wall C/Floor with Screedboard joists perpendicular

5.7. Ceiling

6. Door Linings
6.1. Internal Doors
6.2. External Doors
6.3. Party wall Entrance Doors

7. Services
7.1. Chimney – External
7.2. Chimney - Internal
7.3. Specific limitations of notching and drilling joists
7.4. Specific limitations of notching and drilling studs
7.5. Electrical sockets in separating walls – Shallow fitting
7.6. Electrical sockets in separating walls – Deep fitting
7.7. Services in party floors

8. Panel Plumb Fixing Detail

9. Air Leakage Details
   9.1. Floor Junction
   9.2. Internal to External Wall Junction
   9.3. Electrical Sockets in External Wall

10. Manufacturing and Erection details
    10.1. Wall Panel Assembly
    10.2. Wall Panel connections
    10.3. Floor Assembly
    10.4. Sheet materials on joists
    10.5. Temporary bracing
PLASTERBOARD LAYERS DEPENDANT ON BUILDING CLASS, TO BE DETERMINED BY ARCHITECT

EXTERNAL WALLS INSULATED AS PER MAIN CONTRACTORS REQUIREMENTS TO MEET BUILDING REGULATIONS

BREATHER MEMBRANE LAPPED AT CORNER

9mm SHEATHING

PLASTERBOARD LAYERS DEPENDANT ON BUILDING CLASS, TO BE DETERMINED BY ARCHITECT

EXTERNAL WALLS INSULATED AS PER MAIN CONTRACTORS REQUIREMENTS TO MEET BUILDING REGULATIONS

BREATHER MEMBRANE LAPPED AT CORNER

9mm SHEATHING
WIRE REINFORCED MINERAL WOOL TO CLOSE EXTERNAL CAVITY INSTALLED IN PROTECTIVE PLASTIC SOCK FORM (ALSO REFERRED TO AS FIRESOCK). CAN ALSO BE INSTALLED IN WIDER FORM FILLING ENTIRE CAVITY.

WIRE REINFORCED MINERAL WOOL INSTALLED VERTICALLY UP CAVITY

9mm SHEATHING FOR WIND RACKING. STAGGER AT END CONDITIONS TO ALLOW FOR INSTALLMENT OF VERTICAL CAVITY BARRIER

EXTERNAL WALLS INSULATED AS PER MAIN CONTRACTORS REQUIREMENTS TO MEET BUILDING REGULATIONS

EXTERNAL WALL PLASTERBOARD LAYERS DEPENDANT ON BUILDING CLASS, TO BE DETERMINED BY ARCHITECT

MIN. 63mm MINERAL WOOL, MIN DENSITY 10Kg/m³

19mm PLASTERBOARD PLANK WITH 12.5mm PLASTERBOARD OVER, MIN DENSITY 10Kg/m³

NETLON CAN BE FITTED TO BACK FACE OF PARTY WALL TO PROVIDE SUPPORT FOR MINERAL WOOL

240mm IS MINIMUM DISTANCE ALLOWED. A BUILD TOLERANCE OF A WIDER CAVITY CAN BE USEFUL IF SPACE ALLOWS

DETAIL SHOWN REFERS TO ROBUST STANDARD DETAIL E-WT-1 AND IS SILVATEC’S PREFERRED DETAIL.

DRAWING TITLE:
SEPARATING WALL JUNCTION

DRAWING No: 1.3
REVISION: –
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
PLASTERBOARD LAYERS DEPENDANT ON BUILDING CLASS, TO BE DETERMINED BY ARCHITECT

VAPOUR CONTROL LAYER TAKEN INTO REVEALS

38x47 TREATED CAVITY BATTEN

150mm DPC AROUND BATTEN AND LAPPED INTO REVEAL
TREATED SOFTWOOD CAVITY BATTEN WITH DPC LAPPED INSIDE OPENING, 
EDGE OF BATTEN IS LEFT OPEN TO VENTILATE

FOR BUILDINGS OVER 4No. STOREYS AN 
APPROPRIATE TIE MUST BE USED TO ACCOMODATE 
THE DIFFERENTIAL MOVEMENT BETWEEN THE TIMBER 
FRAME AND THE MASONRY

STAINLESS STEEL WALL TIES FITTED TO STUD 
AT 600mm HORIZONTAL CENTRES AND 
375mm VERTICAL CENTRES. FIX USING 
3.35x50mm STAINLESS STEEL ANNULAR NAIL

BRICK TIES FIXED ADJACENT TO JOINERY 
AT 225mm VERTICAL CENTRES

OPEN PERP ENDS TO VENTILATE AND 
DRAIN CAVITY AT 1200mm CENTRES

BRICKWORK MUST BE SET OUT WITH 
A MINIMUM 50mm VENTILATED CAVITY

GROUND LEVEL MUST BE 
150mm BELOW DPC OR THE 
CAVITY SUITABLY DRAINED.
WHEN USING LIGHTWEIGHT CLADDING ENSURE THAT INSULATION DETAIL WILL CONFORM TO PART L OF THE BUILDING REGULATIONS

ENSURE APPROPRIATE FIRE PROTECTION IS DETAILED WHEN THERE IS A PROPERTY WITHIN CLOSE PROXIMITY

DETAIL SHOWS FIRST BATTEN AGAINST THE TIMBER FRAME AS VERTICAL TO ALLOW FOR VENTILATION AND DRAINAGE OF CAVITY. IF A HORIZONTAL BATTEN IS USED AGAINST FRAME ENSURE TOP EDGE IS SLOPED TO MIN 15° TO REMOVE WATER FROM SHEATHING.
WHEN USING LIGHTWEIGHT CLADDING ENSURE THAT INSULATION DETAIL WILL CONFORM TO PART L OF THE BUILDING REGULATIONS

VERTICAL BOARDING

HORIZONTAL BOARDING
(SQUARE EDGE BOARDING SHOWN)

DETAIL SHOWS FIRST BATTEN AGAINST THE TIMBER FRAME AS VERTICAL TO ALLOW FOR VENTILATION AND DRAINAGE OF CAVITY. IF A HORIZONTAL BATTEN IS USED AGAINST FRAME ENSURE TOP EDGE IS SLOPED TO MIN 15° TO REMOVE WATER FROM SHEATHING.
When using lightweight cladding, ensure that insulation detail will conform to Part L of the Building Regulations. Ensure appropriate fire protection is detailed when there is a property within close proximity.

**Render on Paper Backed Lathe**

- Insulation
- Timber Frame Wall
- 9mm Sheathing Board
- Breather Membrane
- Treated Vertical Batten
- DPC Over Face of Batten
- Paper Backed Lathe
- Cement Render

**Render on Unbacked Lathe**

- Insulation
- Timber Frame Wall
- 9mm Sheathing Board
- Breather Membrane
- Treated Vertical Batten
- DPC Over Face of Batten
- Paper Backed Lathe
- Cement Render

When render is greater than one storey, ensure movement gaps are allowed in the batten at floor zone and movement joints within the render.

Render can also be fixed to fibre cement or cement-bonded particle board cladding boards, these are installed as above in place of the metal lathe.

Detail shows first batten against the timber frame as vertical to allow for ventilation and drainage of cavity. If a horizontal batten is used against frame, ensure top edge is sloped to min 15° to remove water from sheathing.

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**DRAWING TITLE:**

**RENDER ON TIMBER FRAME**

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**DRAWN BY:** T. Knight  **DATE:** Jan 08
INTERNAL WALL TO INTERNAL WALL
1/2 HOUR FIRE RESISTANCE

INTERNAL WALL TO INTERNAL WALL
1 HOUR FIRE RESISTANCE

INTERNAL WALL TO SEPARATING WALL
1/2 HOUR FIRE RESISTANCE

INTERNAL WALL TO SEPARATING WALL
1 HOUR FIRE RESISTANCE

INTERNAL WALL TO EXTERNAL WALL
1/2 HOUR FIRE RESISTANCE

INTERNAL WALL TO EXTERNAL WALL
1 HOUR FIRE RESISTANCE

VCL TURNED BACK AROUND INTERNAL WALL
VCL CAN BE FACTORY FIXED TO INTERNAL WALLS TO LAP WITH SITE FIXED VCL AND REDUCE AIR LEAKAGE
2B MUST NOT BE MORE THAN 2S–C WHERE S IS THE STANDARD SPACING

HANGER TO SUPPORT TRIMMER
TRIMMER TO FORM HATCH OPENING
TRUSS BOTTOM CHORD

DRAWING TITLE:
ROOF ACCESS HATCH

DRAWING No: 3.1
REVISION: –
SCALE: 1:10

DRAWN BY: T. KNIGHT
DATE: JAN 08
SUPPORT MEMBER SIZES FOR DOMESTIC TANKS

<table>
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<tr>
<th>TANK CAPACITY TO MARKED WATER LINE</th>
<th>MINIMUM MEMBER SIZE (mm) A + C</th>
<th>MAX TRUSSED RAFTER SPAN FOR FINK (M)</th>
<th>MAX BAY SIZE FOR OTHER CONFIGURATIONS (M)</th>
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<tr>
<td>NOT MORE THAN 300 LITRES ON 4No. TRUSSED RAFTERS</td>
<td>47x72 2/35x98 or 1/47x120</td>
<td>6.50</td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td>47x72 2/35x120 or 1/47x145</td>
<td>9.00</td>
<td>2.80</td>
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<tr>
<td></td>
<td>47x72 2/35x145</td>
<td>12.00</td>
<td>3.80</td>
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<tr>
<td>NOT MORE THAN 230 LITRES ON 3No. TRUSSED RAFTERS</td>
<td>47x72 1/47x97</td>
<td>6.50</td>
<td>2.20</td>
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<tr>
<td></td>
<td>47x72 2/35x97 or 1/47x120</td>
<td>9.00</td>
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<td>47x72 2/35x120 or 1/47x145</td>
<td>12.00</td>
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NAIL/PRESS PLATE AS PER TRUSS DESIGNERS DETAILS

STANDARD TRUSS

FIX TRUSS TO EXTERNAL WALL WITH TRUSS CLIP

TREATED SOFTWOOD SOFFIT BATTEN

FASCIA

SOFFIT BOARD

COMPRESSIBLE SEALANT TO ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN TIMBER FRAME AND MASONRY

CAVITY CLOSER

---

DRAWING TITLE: STANDARD TRUSS

DRAWING No: 3.3.1
REVISION: –
SCALE: 1:20

DRAWN BY: T. KNIGHT
DATE: JAN 08
Fix Raised tie trusses with glide shoe to avoid horizontal deflection in wall.

Treated softwood soffit batten.

Fascia.

Soffit board.

Compressible sealant to allow for differential movement between timber frame and masonry.

Cavity closer.

Nail/press plate as per truss designer's details.

Raised tie trusses are restricted by the dimension of the rake (A) and must be evaluated by a truss designer.

Ensure adequate rafter depth to accommodate insulation requirements.
ATTIC TRUSSES ARE RESTRICTED IN THEIR APPLICATION BY THE RELATIONSHIP OF THE VERTICAL MEMBERS TO THE HEIGHT OF THE CEILING. THERE IS ALSO A RESTRICTION ON THE WIDTH OF THE ROOM, THIS CAN BE OVERCOME BY INTRODUCING MID SPAN SUPPORTS.

ENSURE ADEQUATE RAFTER DEPTH TO ACCOMODATE INSULATION REQUIREMENTS

FLOOR DECKING

MID SUPPORTS MAY BE REQUIRED FOR LARGE SPANS

BOTTOM CHORD OF TRUSS ACTS AS JOIST

SECTION AA
ATTIC TRUSS BRACING

38x47mm RUNNER TO SIDE OF RAFTER

9mm RACKING PLY BETWEEN RAFTERS

DRAWING TITLE:
ATTIC TRUSS

DRAWING No: 3.3.3
REVISION: A
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
READ IN CONJUNCTION WITH DETAIL 3.4.1 – 3D ROOF BRACING

UNDER RAFTER DIAGONAL BRACING:
REPEAT CONTINUOUSLY ALONG ROOF ENSURING THEY COVER MINIMUM 3No. RAFTERS. WHERE LAP JOINTS ARE REQUIRED ENSURE THEY ARE TAKEN OVER 2No. TRUSSES. ALTERNATE DIRECTION OF BRACING ALONG THE ROOF.

LONGITUDINAL TIES:
RUN ALONG ENTIRE LENGTH OF ROOF INSTALLED AS CLOSE TO NOSE POINT AS POSSIBLE. SET DOWN TOP OF LONGITUDINAL TIES TO ALLOW UNDER RAFTER BRACING TO RUN THROUGH.

CHEVRON BRACING:
FIXED AT APPROXIMATELY 45° AND NAILED TO AT LEAST 3No. TRUSSES. REQUIRED AS NECESSARY TO SUIT BS5268 PART 3.
NOTE:
DETAIL SHOWN IS FOR A "SOFT PEAK". IF PARTY WALL PEAKS ARE NOT SET DOWN, OR THE TRUSSES ARE NOT SET AT A MAXIMUM OF 600mm ABOUT THE CENTRELINE, THEN THE TILE BATTEN WILL BE FORCED TO BEAR ON THE PEAKS. AS THE TRUSSES WILL DEFLECT RELATIVE TO THE PEAKS THEN OVER TIME A RAISED SECTION WILL BE FORMED IN THE ROOF PLANE. THIS IS REFERRED TO AS A "HARD PEAK" AND SHOULD BE AVOIDED.
FILL VOID BETWEEN RAFTERS WITH WIRE REINFORCED MINERAL WOOL

SCAB LOOSE 90mm TIMBER BETWEEN TRUSSES TO SPAN CAVITY

PARTY WALL PEAKS

2 LAYERS OF SQUARE EDGE PLASTERBOARD FIXED WITH STAGGERED JOINTS

SOLID BLOCK BETWEEN TRUSS HEELS

FILL VOID WITH WIRE REINFORCED MINERAL WOOL

SETBACK TRUSS VERTICAL

PARTY WALL STRAPS FITTED AT 1200mm CENTRES, 1No. ROW PER STOREY
NOTE:
DETAIL SHOWN IS FOR A "SOFT PEAK". IF PARTY WALL PEAKS ARE NOT SET DOWN, OR THE TRUSSES ARE NOT SET AT A MAXIMUM OF 600mm ABOUT THE CENTRELINES, THEN THE TILE BATTEN WILL BE FORCED TO BEAR ON THE PEAKS. AS THE TRUSSES WILL DEFLECT RELATIVE TO THE PEAKS THEN OVER TIME A RAISED SECTION WILL BE FORMED IN THE ROOF PLANE. THIS IS REFERRED TO AS A "HARD PEAK" AND SHOULD BE AVOIDED.
ENSURE RAFTER DEPTH IS ADEQUATE FOR INSULATION REQUIREMENTS

INTERNAL NON LOADBEARING PANELS SET DOWN 6mm PERPENDICULAR TO THE RAFTER LINE

90mm BEARING (MIN 75mm)

38mm STARTER PLATE

38x47mm RUNNER TO SIDE OF RAFTER
9mm RACKING PLY BETWEEN RAFTERS

SECTION AA
ENSURE RAFTER DEPTH IS ADEQUATE FOR INSULATION REQUIREMENTS

90mm BEARING (MIN 75mm)

FIX GUIDE SHOE WHEN RAFTER SPAN EXCEEDS 2.5M

LOOSE RAFTER

INTERNAL NON LOADBEARING PANELS SET DOWN 6mm PERPENDICULAR TO THE RAFTER LINE

38x47mm RUNNER TO SIDE OF RAFTER
9mm RACKING PLY BETWEEN RAFTERS

SECTION AA

DRAWING TITLE:
RAFTERS ON DWARF WALL

DRAWING No: 3.7.2
REVISION: A
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
COLD DECK ROOF

WATERPROOF MEMBRANE
SERVICE CLASS 3 (WBP)
19mm PLY SHEATHING
FIRRING PIECE* (APPROX. 1:40 FALL)
UNOBTURCTED VENTILATION
(MIN 50mm)
INSULATION

*METHOD OF FIXING FIRRING WILL VARY DEPENDING ON DEPTH

WARM DECK ROOF

WATERPROOF MEMBRANE
RIGID INSULATION LAID TO FALLS
VAPOUR CONTROL LAYER
SERVICE CLASS 3 (WBP)
19mm PLY SHEATHING

CEILING LINING
VAPOUR CONTROL LAYER
WHEN BACKSPAN IS LESS THAN CANTILEVER ENSURE THAT HANGERS ARE INVERTED

ROOF VERGE LADDER

DORMER TRUSS

VALLEY TRUSS

VERGE LADDER NAILED TO 1ST TRUSS

EXTERNAL 9mm SHEATHING

BREATHABLE MEMBRANE

-loose rafter birdsomothed over purnum and fixed with truss clip (h2.5 ties if double).

END OF LOOSE RAFTER NAILED TO TRUSS

ROOF TRUSS

LOOSE RAFTER

TRUSS FIXED WITH 2.No. A34

SKEW NAIL TRUSS BOTTOM CHORD TO FACE OF PURNUM.

PURLIN

38x47 batten nailed to side of rafter and skew nailed to purnum

CHEEK PANEL NAILED TO MULTIPLE RAFTER THROUGH NOGGINGS AND SHEATHING

PLASTERBOARD AS REQUIRED

VAPOUR CONTROL LAYER

INSULATION

TO SEE DETAIL IN PERSPECTIVE, REFER TO DRAWING No.1.2
TO SEE DETAIL IN SECTION, REFER TO DRAWING No.??

DRAWING TITLE:
DORMER – PERSPECTIVE

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<td>M.SINGLIAR</td>
<td>APR 08</td>
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NOTE: PARAPET STUDS TO BE OFFSET FROM JOISTS BY 150MM TO ENSURE THAT MTS12 STRAP CAN BE FIXED.

NOTE: DETAIL APPLIES TO A MAXIMUM PARAPET HEIGHT OF 1300MM FROM TOP OF DECK. THOSE THAT EXCEED 1100MM REQUIRE ADDITIONAL WIND CHECK.

FLOORING GRADE BOARD (COMMONLY 19MM SERVICE CLASS 3 PLY)

JOIST (FJI JOIST SHOWN)
FLOOR ZONE INSULATION OMITTED FOR CLARITY

ERECT SEQUENCE
1. FIX PANEL DOWN TO HEADER BEAM
2. FIX DOWNSTAND SHEATHING TO OUTSIDE OF HEADER BEAM
3. FIX 38 x 140 TOP TIE RAIL
4. FIX KERTO BLOCKINGS & PLY TO HEADER (IF NOT DONE IN FACTORY)
5. FIX 2 No. MTS12 TWIST STRAPS TO EVERY PARAPET STUD AT 300mm CENTRES AND DOWN FACE OF HEADER BEAM
6. FIX 38 x 47 NOGGIN TO INSIDE FACE OF BLOCKING (AT BOTH TOP & BOTTOM)
7. FIX 19mm PLY INFILL DECK
8. FIX 19mm UPSTAND PLY
9. IF PARAPET HEIGHT IS GREATER THAN 4500MM – FIX ANGLE TO TOP OF RAIL WITH 10MM COACH SCREWS

PLEASE NOTE THAT THIS DETAIL IS A CONSTRUCTION AID AND SILVATEC CANNOT TAKE ANY RESPONSIBILITY FOR THIS DETAIL ON ANY PROJECT WHERE SILVATEC DESIGN HAVE NOT UNDERTAKEN THE ENGINEERING.
NOTE: PARAPET STUDS TO BE OFFSET FROM JOISTS BY 150MM TO ENSURE THAT MTS12 STRAP CAN BE FIXED.

NOTE: DETAIL APPLIES TO A MAXIMUM PARAPET HEIGHT OF 1300MM FROM TOP OF DECK, THOSE THAT EXCEED 1100MM REQUIRE ADDITIONAL WIND CHECK BY STRUCTURAL ENGINEER.

FLOORING GRADE BOARD (COMMONLY 19MM SERVICE CLASS 3 PLY)

JOIST (FJI JOIST SHOWN)
FLOOR ZONE INSULATION OMITTED FOR CLARITY

ERECT SEQUENCE

1. FIX KERTO BLOCKINGS & PLY TO HEADER (IF NOT DONE IN FACTORY)
2. FIX HEADER BEAM TO EVERY STUD WITH LSTA18 STRAIGHT STRAP
3. FIX PANEL DOWN TO HEADER BEAM
4. FIX DOWNSTAND SHEATHING TO OUTSIDE OF HEADER BEAM
5. FIX 38 x 140 TOP TIE RAIL
6. FIX 2 No. MTS12 TWIST STRAPS TO EVERY PARAPET STUD AT 300mm CENTRES AND DOWN FACE OF HEADER BEAM
7. FIX 38 x 47 NOGGIN TO INSIDE FACE OF BLOCKING (AT BOTH TOP & BOTTOM)
8. FIX 19mm PLY INFILL DECK
9. FIX 19mm UPSTAND PLY
10. IF PARAPET LENGTH IS GREATER THAN 4500MM — FIX ANGLE TO TOP OF RAIL WITH 10MM COACHSCREWS

PLEASE NOTE THAT THIS DETAIL IS A CONSTRUCTION AID AND SILVATEC CANNOT TAKE ANY RESPONSIBILITY FOR THIS DETAIL ON ANY PROJECT WHERE SILVATEC DESIGN HAVE NOT UNDERTAKEN THE ENGINEERING.

| DRAWING TITLE: PARAPET FIXING — JOISTS PARALLEL |
| DRAWING No: 3.13 | REVISION: — | SCALE: 1:10 |
| DRAWN BY: T.ROBERTS | DATE: DEC 08 |
ALL SOLEPLATES AT GROUND FLOOR LEVEL MUST HAVE A PRESERVATIVE Treatment IN ACCORDANCE WITH CURRENT STANDARDS.

**IMPORTANT:**

SEE NOTE 1 BELOW

---

**NOTE 1:**

DPC SHOULD IDEALLY ALWAYS BE 150mm ABOVE THE EXTERNAL GROUND LEVEL. IN CASES WHERE THIS IS NOT POSSIBLE THIS DIMENSION CAN BE REDUCED TO A MINIMUM OF 75mm AS LONG AS THE CAVITY IS SUITABLY DRAINED, AS SHOWN ABOVE WITH A MINIMUM OF 225mm BETWEEN DPC AND DRAINAGE MEDIUM, WHERE THE SITE IS NOT SUBJECT TO A HIGH WATER TABLE OR WHERE THE CAVITY WILL NOT HAVE STANDING WATER. THE DETAILING OF THE CAVITY AND GROUND LEVELS ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER AND NOT THE TIMBER FRAME DESIGNER. THIS DETAIL SHOULD BE CLEARED WITH THE BUILDING WARRANTOR WHERE USED.

WHERE THE GROUND IS LEVEL TO THE TOP OF SLAB THE DETAIL BELOW IS TO BE USED BUT AGAIN MUST BE CHECKED WITH BUILDING WARRANTOR AND FOUNDATION DESIGNER.

---

**DRAWING TITLE:**

EXTERNAL WALL - GROUND FLOOR

**DRAWING No:**

4.1

**REVISION:**

A

**SCALE:**

1:10

**DRAWN BY:**

T. KNIGHT

**DATE:**

JAN 08
1ST JOIST CENTERED TO WALL

ADDITIONAL VAPOUR CONTROL LAYER CAN BE LAPPED AT FLOOR ZONE TO IMPROVE ON BUILDING AIR TIGHTNESS. PLEASE NOTE THAT IF AIR MOVEMENT IS RESTRICTED TOO MUCH THEN MECHANICAL VENTILATION WILL BE REQUIRED.
PLASTERBOARD AS REQUIRED
VAPOUR CONTROL LAYER
INSULATION
SILICONE SEAL
FLOORING GRADE BOARD (COMMONLY 22mm CHIPBOARD)
JOIST (CLS JOIST SHOWN)
FLOOR ZONE INSULATION OMITTED FOR CLARITY

BLOCKING BETWEEN JOIST CENTERED TO WALL
(WHERE ENGINEERED JOISTS ARE USED THESE
BLOCKINGS CAN BE MADE FROM JOIST OFFCUTS)

ADDITIONAL VAPOUR CONTROL LAYER CAN BE LAPPED
AT FLOOR ZONE TO IMPROVE ON BUILDING AIR
TIGHTNESS.
PLEASE NOTE THAT IF AIR MOVEMENT IS RESTRICTED
TOO MUCH THEN MECHANICAL VENTILATION WILL BE
REQUIRED.

DRAWING TITLE:
EXTERNAL WALL – INTERMEDIATE FLOOR
JOISTS PERPENDICULAR

DRAWING No: 4.3
REVISION: –
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
DETAILS SHOWN COMPLY TO E–FT–1 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE–COMPLETION SOUND TESTING.
DETAILS SHOWN COMPLY TO E–FT–1 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE–COMPLETION SOUND TESTING.
ENSURE WINDOW IS INSTALLED TIGHT AT THE HEAD WITH GAP AT BOTTOM OF WINDOW FRAME TO ALLOW FOR DIFFERENTIAL MOVEMENT DEPENDING UPON HEIGHT WITHIN BUILDING

WINDOW FRAME IS TO BE FIXED TO TIMBER FRAME WITH FRAME CRAMPS AND MUST REMAIN INDEPENDENT FROM MASONRY TO ALLOW FOR DIFFERENTIAL MOVEMENT
ENSURE WINDOW IS INSTALLED TIGHT AT THE HEAD WITH GAP AT BOTTOM OF WINDOW FRAME TO ALLOW FOR DIFFERENTIAL MOVEMENT DEPENDING UPON HEIGHT WITHIN BUILDING

WINDOW FRAME IS TO BE FIXED TO TIMBER FRAME WITH FRAME CRAMPS AND MUST REMAIN INDEPENDENT FROM MASONRY TO ALLOW FOR DIFFERENTIAL MOVEMENT
ENSURE WINDOW/DOOR IS INSTALLED TIGHT AT THE HEAD WITH GAP AT BOTTOM OF FRAME TO ALLOW FOR DIFFERENTIAL MOVEMENT DEPENDING UPON HEIGHT WITHIN BUILDING

JOINERY FRAME IS TO BE FIXED TO TIMBER FRAME WITH FRAME CRAMPS AND MUST REMAIN INDEPENDENT FROM MASONRY TO ALLOW FOR DIFFERENTIAL MOVEMENT
TIMBER SOLEPLATE OFF SLAB

HARDWOOD TIMBER SILL
PUNTH BRICK
DPC FIXED TO UNDERSIDE OF SILL AND DRESSED DOWN FACE OF SOLEPLATE
TREATED SOLEPLATE WITH TIMBER PACKER UNDER SILL
TIMBER NOGGINGS TO FORM STEP
DPC UNDER SOLEPLATE TURNED INTO CAVITY AND LAPPED UP INNER FACE OF SOLEPLATE

UPSTAND ENGINEERING BLOCK

HARDWOOD TIMBER SILL
PUNTH BRICK
DPC FIXED TO UNDERSIDE OF SILL AND DRESSED DOWN FACE OF SOLEPLATE
GROUND LEVEL

WHEN A FLUSH THRESHOLD IS REQUIRED ENSURE SUITABLE DRAINAGE IS ALLOWED FOR TO KEEP THE MOISTURE AWAY FROM ANY TIMBERS

DRAWING TITLE:
EXTERNAL WALL - DOOR THRESHOLD

DRAWING No: 4.10
REVISION: -
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
EXTERNAL 9mm SHEATHING
BREATHABLE MEMBRANE

PLASTERBOARD AS REQUIRED

VAPOUR CONTROL LAYER

INSULATION

SILICONE SEAL

FLOORING DECKING 22mm
FLOORING GRADE CHIPBOARD

OPEN WEB-JOIST

INSULATION AT FLOOR ZONE

ADDITIONAL VAPOUR CONTROL LAYER CAN BE LAPPED AT FLOOR ZONE TO IMPROVE ON BUILDING AIR TIGHTNESS.

PLEASE NOTE THAT IF AIR MOVEMENT IS RESTRICTED TOO MUCH THEN MECHANICAL VENTILATION WILL BE REQUIRED.
NOTE: JOISTS CAN ALSO BE TOP CHORD/FLANGE SUPPORTED

ADDITIONAL VAPOUR CONTROL LAYER CAN BE LAPPED AT FLOOR ZONE TO IMPROVE ON BUILDING AIR TIGHTNESS. PLEASE NOTE THAT IF AIR MOVEMENT IS RESTRICTED TOO MUCH THEN MECHANICAL VENTILATION WILL BE REQUIRED.
Details shown comply to E–FT–3 of the Robust Standard Details. Other acoustic floor details are available but may be subject to pre–completion sound testing.
NOTE: JOISTS CAN ALSO BE TOP CHORD/FLANGE SUPPORTED

DETAILS SHOWN COMPLY TO E–FT–3 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE–COMPLETION SOUND TESTING.
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Details shown comply to E-FT-5 of the Robust Standard Details. Other acoustic floor details are available but may be subject to pre-completion sound testing.
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ALL SOLEPLATES AT GROUND FLOOR LEVEL MUST HAVE A PRESERVATIVE TREATMENT IN ACCORDANCE WITH CURRENT STANDARDS

LOADBEARING WALLS MUST BE A MINIMUM OF 38x75mm STUD

SITE FIXED Noggings to pick up wall finishes and prevent screed from forming into stud zone

DPC TURNED UP BEHIND PLASTERBOARD

SCREED

INSULATION

SOLEPLATE CLIPS AT CENTRES SPECIFIED BY ENGINEER

BEAM AND BLOCK FLOOR DETAILING BY OTHERS

FLOOR BUILD TO BE SPECIFIED BY ARCHITECT TO SATISFY SAP CALCULATIONS

DPC SHOULD IDEALLY ALWAYS BE 150mm ABOVE THE EXTERNAL GROUND LEVEL. IN CASES WHERE THIS IS NOT POSSIBLE THIS DIMENSION CAN BE REDUCED TO A MINIMUM OF 75mm AS LONG AS THE CAVITY IS SUITABLY DRAINED AS SHOWN IN DETAIL 4.1 (EXTERNAL WALL – GROUND FLOOR). THE DETAILING OF THE CAVITY AND GROUND LEVELS ARE THE RESPONSIBILITY OF THE BUILDING DESIGNER AND NOT THE TIMBER FRAME DESIGNER. THIS DETAIL SHOULD BE CLEARLY WITH BUILDING WARRANTOR WHERE USED.

WHERE THE GROUND IS LEVEL TO THE TOP OF SLAB THE DETAIL BELOW IS TO BE USED BUT AGAIN SHOULD BE CHECKED WITH BUILDING WARRANTOR AND FOUNDATION DESIGNER.

LOADBEARING WALLS MUST BE A MINIMUM OF 38x75mm STUD

PLASTERBOARD AS REQUIRED

TREATED SOLEPLATE ENGINEERING BLOCK (MIN. 7Nmm²)

DPC TURNED UP BEHIND PLASTERBOARD

SOLEPLATE FIXED TO ENGINEERING BLOCKS WITH PLUG AND SCREW FIXINGS AT CENTRES SPECIFIED BY ENGINEER

SCREED

INSULATION

BEAM AND BLOCK FLOOR DETAILING BY OTHERS

FLOOR BUILD TO BE SPECIFIED BY ARCHITECT TO SATISFY SAP CALCULATIONS FOR GROUND CONDITIONS
ALL SOLEPLATES AT GROUND FLOOR LEVEL MUST HAVE A PRESERVATIVE TREATMENT IN ACCORDANCE WITH CURRENT STANDARDS

NON LOADBEARING WALLS CAN BE DESIGNED WITH 63mm STUD WALLS. IT IS RECOMMENDED THAT MID HEIGHT NOGGINGS ARE INSTALLED TO 63mm WALLS TO PROVIDE A MORE ROBUST FINISH ON SITE. SPECIAL CARE MUST BE TAKEN FOR PLASTERBOARD WHEN 63mm STUD IS TO BE USED FOR AN ACOUSTIC WALL INSIDE A DWELLING AS PER PART E OF THE BUILDING REGULATIONS.

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WHERE THE GROUND IS LEVEL TO THE TOP OF SLAB THE DETAIL BELOW IS TO BE USED BUT AGAIN SHOULD BE CHECKED WITH BUILDING WARRANTOR AND FOUNDATION DESIGNER.
DETAIL SHOWN IS IN ACCORDANCE WITH ROBUST STANDARD DETAIL E–WT–1.
CAVITY TO BE MINIMUM 60mm BUT RECOMMEND A TOLERANCE IS ALLOWED FOR PLUMB OF PANEL DURING ERECTION,
ALTERNATIVELY FIX PANEL PLUMB TO WALL PANELS AS PER SILVATEC DETAIL B.1.

ALL SOLEPLATES AT GROUND FLOOR LEVEL MUST HAVE A PRESERVATIVE TREATMENT IN ACCORDANCE WITH CURRENT STANDARDS

ALL LOADBEARING WALLS WHICH ARE NOT PLASTERBOARDED ON BOTH SIDES AND HAVE NO SHEATHING TO THE CAVITY SIDE MUST HAVE MID HEIGHT NOGGINGS TO RESTRRAIN STUDS FROM BUCKLING IN THE WEAK AXIS AS PER THE BRITISH STANDARDS.
INTERMEDIATE FLOOR

'Z' CLIP

89x38 PARTITION SUPPORT NOGGING (PSN) UNDER NON LOADBEARING PANEL ABOVE AND SUPPORTED ON 'Z' CLIPS

FLOOR DECKING

JOIST (PARALLEL TO WALL)

NON LOADBEARING WALL

NON LOADBEARING WALL SET DOWN MIN 6mm FROM FLOOR

PARTITION HEAD NOGGING AT 600mm CRS

NON LOADBEARING WALL

PLASTERBOARD AS REQUIRED

COMPARTMENT FLOOR

89x38 PARTITION SUPPORT NOGGING (PSN) UNDER NON LOADBEARING PANEL ABOVE AND SUPPORTED ON 'Z' CLIPS

'Z' CLIP

FLOATING FLOOR (SEE SILVATEC DETAIL 4.4 OR 4.5)

SUB DECK

ENGINEERED I JOIST (PARALLEL TO WALL)

NON LOADBEARING WALL SET DOWN MIN 6mm FROM FLOOR

RESILIENT BAR AND PLASTERBOARD

HEADRAIL CAN BE OMITTED IF WALLS ARE PLASTERBOARDED BEFORE CEILING

LOADBEARING WALL

PLASTERBOARD AS REQUIRED

NON LOADBEARING WALLS CAN BE DESIGNED WITH 63mm STUD WALLS. IT IS RECOMMENDED THAT MID HEIGHT NOGGINGS ARE INSTALLED TO 63mm WALLS TO PROVIDE A MORE ROBUST FINISH ON SITE. SPECIAL CARE MUST BE TAKEN FOR PLASTERBOARD WHEN 63mm STUD IS TO BE USED FOR AN ACOUSTIC WALL INSIDE A DWELLING AS PER PART E OF THE BUILDING REGULATIONS.
Details shown comply to E-Ft-5 of the Robust Standard Details. Other acoustic floor details are available but may be subject to pre-completion sound testing.

All loadbearing walls which are not plasterboarded on both sides and have no sheathing to the cavity side must have mid height noggings to restrain studs from buckling in the weak axis as per the British Standards.
DETAILS SHOWN COMPLY TO E-FT-1 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE-COMPLETION SOUND TESTING.

ALL LOADBEARING WALLS WHICH ARE NOT PLASTERBOARDED ON BOTH SIDES AND HAVE NO SHEATHING TO THE CAVITY SIDE MUST HAVE MID HEIGHT NOGGINGS TO RESTRAIN STUDS FROM BUCKLING IN THE WEAK AXIS AS PER THE BRITISH STANDARDS.
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NOTE: JOISTS CAN ALSO BE TOP CHORD/FLANGE SUPPORTED

DETAILS SHOWN COMPLY TO E-FT-3 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE-COMPLETION SOUND TESTING.

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63mm MINERAL WOOL
(MIN 10kg/m²)

90
70
90

250

HEADER JOIST
JOIST BLOCKING

ENSURE MINIMUM 76mm SOLID BLOCKING AT FLOOR ZONE

WIRE ENREFORECE MINERAL WOOL CAVITY CLOSER

19mm PLASTERBOARD PLANK WITH 12.5mm PLASTERBOARD OVER

STOP BATTEN AND DECKING 10mm FROM FACE OF PLASTERBOARD AND FIT 6mm FLANKING STRIP

SILICONE SEAL

19mm FLOORING GRADE CHIPBOARD

19mm PLASTERBOARD PLANK

78mm ACOUSTIC BATTEN WITH 25mm ACOUSTIC BLANKET LAID BETWEEN BATTENS

15mm OSB SUB DECK

SOLID JOIST (MINIMUM 220mm AT MAXIMUM 400mm CENTRES)

100mm (MIN) QUILT BETWEEN JOISTS

16mm RESILIENT BAR FIXED AT 90° TO JOISTS

19mm PLASTERBOARD PLANK WITH 12.5mm PLASTERBOARD OVER

PARTY WALL STRAPS FITTED AT 1200mm CENTRES, 1No. ROW PER STOREY

DETAILS SHOWN COMPLY TO E-FT-2 OF THE ROBUST STANDARD DETAILS. OTHER ACOUSTIC FLOOR DETAILS ARE AVAILABLE BUT MAY BE SUBJECT TO PRE-COMPLETION SOUND TESTING.

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LOAD BEARING WALL
30 MINUTES FIRE RESISTANCE

TRUSS SPAN

TRUSS

WALL FIXED TIGHT TO UNDERSIDE OF TRUSS

PLASTERBOARD NOGGING

PLASTERBOARD REQUIREMENTS MUST BE CONFIRMED WITH BUILDING DESIGNER

LOAD BEARING WALL
60 MINUTES FIRE RESISTANCE

TRUSS SPAN

TRUSS

WALL FIXED TIGHT TO UNDERSIDE OF TRUSS

PLASTERBOARD NOGGING

PLASTERBOARD FITTED STAGGERED JOINT WITH ALL JOINTS TAPED AND FILLED

NON LOAD BEARING WALL
30 MINUTES FIRE RESISTANCE

TRUSS SPAN

TRUSS

WALL SET DOWN 6mm FROM UNDERSIDE OF TRUSS

PLASTERBOARD NOGGING

PLASTERBOARD NOGGING REQUIRED AT JOINTS BETWEEN PLASTERBOARD SHEETS

ALL PLASTERBOARD SHOWN IS 12.5mm THICK AND MUST BE MINIMUM OF 10kg/m².
PLASTERBOARD MUST BE FIXED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, WITH JOINTS TAPED AND FILLED AND BACKED BY SOLID TIMBER.
ENSURE PLASTERBOARD SCREWS DO NOT PENETRATE PAPER AS THIS WILL COMPROMISE THE INTEGRITY OF THE PLASTERBOARD.

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FAX: 01483 770863
E-MAIL: design@silvatecdesign.com

DRAWING TITLE:
INTERNAL WALL – CEILING

DRAWING No: 5.7
REVISION: –
SCALE: 1:10

DRAWN BY: T.KNIGHT
DATE: JAN 08
IMPERIAL DOOR LEAF SIZES

<table>
<thead>
<tr>
<th>DOOR LEAF WIDTH</th>
<th>HEIGHT</th>
<th>STRUCTURAL WIDTH</th>
<th>OPENING FROM FFL HEIGHT</th>
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<tbody>
<tr>
<td>381 (1'3&quot;)</td>
<td>1981 (6'6&quot;)</td>
<td>457</td>
<td>2038 (ALLOW 2040)</td>
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<td>2038 (ALLOW 2040)</td>
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NOTE:
REFERENCE SHOULD BE MADE TO APPROVED DOCUMENT F OF THE BUILDING REGULATION TO REQUIREMENTS FOR VENTILATION.
### Imperial Door Leaf Sizes

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<th>Door Leaf Width</th>
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### Metric Door Leaf Sizes

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NOTE:
PART B - 10.6 STATES THAT CAVITY BARRIERS AROUND OPENINGS CAN BE FORMED BY THE DOOR FRAME.
CHECK SPECIFICATION WITH DOOR SUPPLIER.

IMPERIAL DOOR LEAF SIZES

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CAVITY CLOSER NOT REQUIRED AS LONG AS OPENING IS COVERED BY EITHER 38MM OF TIMBER DOOR FRAME OR MINIMUM 12MM GYPSUM BASED BOARD AS SHOWN.
GROUND FLOOR

MIN 100mm

RECESSED
FIREPLACE

MIN 200mm

LINTEL OVER

JOISTS OVER

MIN 20mm WIRE REINFORCED
MINERAL WOOL BETWEEN
MASONRY AND TIMBER

FIRST FLOOR

EXTERNAL FLUE

TIMBER FRAME
WALL CONTINUOUS
OVER FIREPLACE

40mm MINIMUM IF FLUE LINER
IS LESS THAN 200mm

FLUE LINER

FLUE

TIMBER
LINTEL

MOVEMENT GAP

MIN 300mm FROM
FACE OF FLUE
RECESS TO TIMBER

MIN 500mm

MIN 125mm

HEARTH

MASONRY
WALL

FIREPLACE
RECESS

DRAWING TITLE:
SERVICES – CHIMNEY EXTERNAL

DRAWING No: 7.1
REVISION: –
SCALE: 1:40

DRAWN BY: T.KNIGHT
DATE: JAN 08

Building 1 Grosvenor Court
Hipley Street
Old Woking
SURREY
GU22 9LL

TEL: 01483 769518
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E-MAIL: design@silvatecdesign.com
SERVICES – NOTCHING AND DRILLING JOISTS

NOTE: SERVICES SHOULD NOT BE RUN WITHIN A PARTY FLOOR. NOTCHING FOR CLS JOIST ONLY. FOR SERVICES WITHIN ENGINEERED 'J' JOIST HOLES DRILLED ONLY IN THIS AREA.

KEEP HOLES APART BY MINIMUM THREE TIMES THE HOLES DIAMETER

MINIMUM 100mm APART

KEEP HOLES AND HOLES

HOLES SHOULD BE VERRIFIED BEFORE DRILLING. SHOULD BE AVOIDED WITHIN TRIMMER AND CHECKED WITH STRUCTURAL ENGINEER. HOLES EXCEEDING THESE DETAILS MUST BE

1. J.3
2. SCALE:
3. DRAWING NO:
4. REVISION:
5. DESIGN:

T.KNIGHT
JAN 08
DATE:

DRAWN BY: -

E-MAIL: design@silvaletedesign.com
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Silyatec
Cus22 All,
Survey
Old Worthing
Street
Hove
Building 1 Grosvenor Court

JOIST BUT NOT BOTH AT THE SAME LOCATION
NOTCH CAN BE LOCATED IN TOP OR BOTTOM OF SPAN

0.4 x SPAN 0.25 x SPAN 0.15 x SPAN

0/18 x SPAN 0/25 x SPAN 0/07 x SPAN

0/25 x SPAN 0/25 x SPAN 0/07 x SPAN
WHEN HOLES ARE DRILLED AS PER THE FOLLOWING DETAIL THEY WILL GENERALLY NOT CLASH WITH NAIL FIXINGS FOR PLASTERBOARD. WHEN FIXINGS MAY INTRUDE ON HOLES A PROPRIETARY STEEL PLATE SHOULD BE FIXED TO PROTECT THE SERVICES RUNNING THROUGH.

DRILL HOLES IN CENTERLINE OF STUD ONLY.

HOLES DRILLED ONLY IN THESE AREAS

MIN 300mm

DO NOT DRILL TO CENTRE PART OF STUD

HOLES DRILLED ONLY IN THESE AREAS

MAX 0.25 STUD WIDTH

HOLES EXCEEDING DIMENSIONS ON THESE DETAILS MUST BE CHECKED WITH STRUCTURAL ENGINEER.
SERVICES IN PARTY WALLS SHOULD BE AVOIDED IF POSSIBLE BUT SPECIAL CARE MUST BE TAKEN TO ENSURE INTEGRITY OF FIRE AND ACOUSTIC PERFORMANCE

ACOUSTIC QUILT
RECESSED 38MM NOGGIN
RECESSED 19mm PLASTERBOARD PLANK
RECESSED 12.5mm PLASTERBOARD
SHALLOW ELECTRICAL FITTING

ENSURE ELECTRICAL CABLES ARE SEALED WITH ACOUSTIC FIRE SEALANT AT POINT OF ENTRY TO ELECTRICAL FITTING

FILL CAVITY BEHIND PLASTERBOARD WITH ACOUSTIC QUILT
RECESSED 38MM NOGGIN - OF EQUAL HEIGHT & WIDTH OF PLASTERBOARD OVER.
RECESSED 1No. LAYER OF 19MM PLASTERBOARD PLANK & 12.5MM PLASTERBOARD, SET AT HEIGHT TO MEET PART W OF THE BUILDING REGULATIONS
SHALLOW ELECTRICAL FITTING FIXED TO NOGGIN THROUGH PLASTERBOARD
SERVICES IN PARTY WALLS SHOULD BE AVOIDED IF POSSIBLE BUT SPECIAL CARE MUST BE TAKEN TO ENSURE INTEGRITY OF FIRE AND ACoustic PERFORMANCE

RECESSED 19mm PLASTERBOARD PLANK

RECESSED 12.5mm PLASTERBOARD

1No. LAYER OF 19MM PLASTERBOARD PLANK & 12.5MM PLASTERBOARD RETURNED INTO RECESS AT TOP & BOTTOM & BOTH SIDES

RECESSED 38MM BACKING NOGGIN

DEEP ELECTRICAL FITTING

ENSURE ELECTRICAL CABLES ARE SEALED WITH ACOUSTIC FIRE SEALANT AT POINT OF ENTRY TO ELECTRICAL FITTING

38MM TIMBER NOGGIN FIXED FLUSH TO FACE OF STUDS.

1No. LAYER OF 19MM PLASTERBOARD PLANK & 12.5MM PLASTERBOARD RETURNED INTO RECESS AT TOP & BOTTOM & BOTH SIDES

RECESSED 1No. LAYER OF 19MM PLASTERBOARD PLANK & 12.5MM PLASTERBOARD FIXED TO FLAT 38MM BACKING NOGGIN, SET AT HEIGHT TO MEET PART W OF THE BUILDING REGULATIONS

DEEP ELECTRICAL FITTING FIXED TO BACKING NOGGIN THROUGH PLASTERBOARD

38MM TIMBER NOGGIN FIXED FLUSH TO FACE OF STUDS.
WHEN INSTALLING SERVICES IN PARTY FLOORS CARE MUST BE TAKEN TO MAINTAIN BOTH ACOUSTIC AND FIRE INTEGRITY OF THE FLOOR.

THE FOLLOWING DETAIL IS A GUIDE ONLY AND REFERENCE MUST BE MADE TO THE APPROVED DOCUMENT PART B FOR ALL FIRE ISSUES INCLUDING MAXIMUM PENETRATION SIZES.

PLEASE NOTE THAT SOME ROBUST DETAILS DO NOT ALLOW SERVICES IN PARTY FLOORS AND AN ADDITIONAL SERVICE VOID IS REQUIRED.

WHERE STOREY HEIGHT ALLOWS IT IS ADVISABLE TO DESIGN WITH A SERVICE VOID BELOW THE PARTY FLOOR TO AVOID CLASHES WITH STRUCTURAL MEMBERS WITHIN THE FLOOR ZONE AND AVOID POTENTIAL FIRE OR ACOUSTIC ISSUES.

<table>
<thead>
<tr>
<th>Drawing Title:</th>
<th>SERVICES IN PARTY FLOORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing No:</td>
<td>7.7</td>
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<tr>
<td>Revision:</td>
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<tr>
<td>Scale:</td>
<td>1:10</td>
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<tr>
<td>Drawn By:</td>
<td>T.Knight</td>
</tr>
<tr>
<td>Date:</td>
<td>Aug 09</td>
</tr>
</tbody>
</table>
ALL TIMBER FRAME WALLS MUST BE ERECTED PLUMB TO ENSURE A GOOD QUALITY BUILD, CLEAR CAVITIES ARE MAINTAINED AND ALL STUDS ARE AXIALLY LOADED TO AVOID INDUCED BENDING FROM ECCENTRICITY. TRADA (TIMBER RESEARCH AND DEVELOPMENT AGENCY) RECOMMEND A MINIMUM OF +/- 10mm OVER ANY STOREY WITH NO MORE THAN 10mm CUMMULATIVE OVER THE BUILDING HEIGHT.

STEP 1

PUSH PANEL PLUMB TIGHT TO STUD AND HOLD FIRM DURING FIXING PROCEDURE.

STEP 2

ROTATE SETTING OUT ANGLE UNTIL IT BREAKS OFF CLEANLY.

STEP 3

PANEL PLUMB FIXED TO STUD AND LEFT IN PLACE.

PANEL PLUMB IS AVAILABLE FROM SILVATEC LEVELS ON THE CONTACT DETAILS BELOW.

<table>
<thead>
<tr>
<th>DRAWING TITLE:</th>
<th>PANEL PLUMB FIXING DETAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAWING No:</td>
<td>8.1</td>
</tr>
<tr>
<td>REVISION:</td>
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<tr>
<td>SCALE:</td>
<td>1:10</td>
</tr>
<tr>
<td>DRAWN BY:</td>
<td>T.KNIGHT</td>
</tr>
<tr>
<td>DATE:</td>
<td>MAR 08</td>
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</tbody>
</table>

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**STEP 1**

![Diagram of air leakage barrier fixed to top of wall panel.]

**STEP 2**

![Diagram of air leakage barrier fixed to outside face of header & dressed over top of deck (after installation of floor).]

**STEP 3**

![Diagram of plasterboard over both vapour control layer & air leakage barrier. Vapour control layer fixed to inside face of wall (full depth) & lapped over air leakage barrier. Air leakage barrier fixed back to inside face of wall panel over. Insulation at floor zone. Vapour control layer fixed to inside face of wall (full depth) & lapped over air leakage barrier. Plasterboard over both vapour control layer & air leakage barrier.]

**Note:** DPC is not acceptable as air leakage barrier as the moisture will be trapped against the timbers in the floor zone. Correct material must be used to enable moisture to escape but trap the air molecules.
STEP 1

AIR LEAKAGE BARRIER PRE-FIXED TO END FACE OF INCOMING INTERNAL WALL

EXTERNAL FACE

STEP 2

VAPOUR CONTROL LAYER FIXED TO INSIDE FACE OF WALL — DRESSED UNDER AIR LEAKAGE BARRIER.

EXTERNAL FACE

STEP 3

AIR LEAKAGE BARRIER FIXED BACK TO INSIDE FACE OF EXTERNAL WALL — LAPPED OVER VAPOUR CONTROL LAYER.

PLASTERBOARD OVER BOTH VAPOUR CONTROL LAYER & AIR LEAKAGE BARRIER.

EXTERNAL FACE
DRAWING TITLE:
AIR LEAKAGE – ELECTRICAL SOCKETS IN EXTERNAL WALLS

DRAWING No: 9.3
REVISION: –
SCALE: 1:10

DRAWN BY: T. ROBERTS
DATE: DEC 08
LEAVES OF LINTOLS SHOULD BE NAILED TOGETHER WITH TWO STAGGERED ROWS FOR 90mm AND 140mm LINTOLS AND THREE ROWS FOR 194mm AND 235mm LINTOLS.

ALL LINTOLS COMPRISING TWO 38mm THICK LEAVES ARE TO HAVE 9mm OSB SANDWICH.

EACH LEAF OF THE LINTOL IS TO BE NAILED TO THE ADJACENT FULL HEIGHT STUD WITH: TWO NAILS FOR 90mm, THREE NAILS FOR 140mm, FOUR NAILS FOR 194 AND 235.

IN ADDITION NAILED LEAVES THROUGH TOP RAIL AT 300mm CENTRES.

THE SHEATHING NAILING PATTERN SHOWN ABOVE IS THE STANDARD REQUIREMENT FOR THE BASIS OF THE RACKING CALCULATIONS AS PER BRITISH STANDARD BS5268–6. IT IS NOT UNCOMMON FOR MANUFACTURERS TO DEVIATE FROM THE STANDARD NAIL DIAMETER AND THIS DEVIATION MUST BE ALLOWED FOR WITHIN THE RACKING CALCULATIONS. THE NAILS CAN RANGE BETWEEN 2.55mm AND 3.75mm AS PER THE BRITISH STANDARDS AND EACH SMALL CHANGE CAN HAVE A SIGNIFICANT EFFECT ON THE CALCULATIONS. IT IS ALSO NOT UNCOMMON FOR NAIL CENTRES TO BE DECREASED AND NAIL DIAMETERS INCREASED WITHIN THE RACKING CALCULATIONS TO PROVIDE THE NECESSARY RESISTANCE TO THE WIND. IT IS THEREFORE IMPERATIVE THAT NAIL DIAMETERS AND CENTRES ARE MARKED ON THE MANUFACTURING DRAWINGS FOR EACH PANEL.

IF A WALL PANEL IS ISSUED FOR PRODUCTION WITHOUT A SHEATHING NAILING SPECIFICATION THEN THE PRODUCTION MANAGER MUST CHECK WITH THE TIMBER FRAME DESIGNER TO CONFIRM DIAMETERS AND CENTRES.

NAILING SPECIFICATION FOR TOP AND BOTTOM RAILS TO STUDS

SKEN NAILS

TOP RAIL

2/75mm GALV WIRES

STUD

DRAWING TITLE: NAILING DETAILS – WALL PANEL ASSEMBLY
DRAWING No: 10.1
REVISION: –
SCALE: NTS
DRAWN BY: M.SINGLIAR
DATE: DEC 08
NAILING SPECIFICATION BETWEEN PARTICULAR PANELS

EX. WALL

2x75mm GALV WIRES
450mm VERTICAL CENTRES

ROTATED STUD

EX. WALL

2x75mm GALV WIRES
450mm VERTICAL CENTRES

ROTATED STUD

INTERNAL WALL

WALL PANEL A

WALL PANEL B

NAILING SPECIFICATION FOR PANEL—SOLEPLATE AND PANEL—TOP TIE RAIL

SKEW 2x75mm GALV WIRES
600mm CENTRES

TOP TIE RAIL

PANEL TOP RAIL

REFER TO SOLEPLATE LAYOUT
DRAWINGS FOR SITE SPECIFIC
SOLEPLATE FIXINGS

STUDS

SKEW 2x75mm GALV WIRES
300mm CENTRES

BOTTOM RAIL

SOLEPLATE

600

450
DECKING
ENSURE ALL SQUARE EDGE OF BOARDS ARE FULLY SUPPORTED ON JOISTS OR ALTERNATIVELY ON NOGGINGS BETWEEN JOISTS. TONGUE AND GROOVED EDGES CAN BE UNSUPPORTED WHEN THEY RUN PERPENDICULAR TO THE JOISTS. ALL BOARDS SHOULD BE LAID WITH THE ENDS STAGGERED.
ALL TONGUED AND GROOVED JOINTS SHOULD BE GLUED WITH PVC AND SIMILAR,
REFER TO MANUFACTURERS SPECIFICATION FOR INTERMEDIATE EXPANSION GAPS BETWEEN BOARDS DEPENDING ON THE BOARD TYPE USED.

TONGUE AND GROOVE EDGES FULLY GLUED AND UNSUPPORTED WHEN PERPENDICULAR TO JOISTS. IF SQUARE EDGE BOARDS USED THEN THESE MUST BE SUPPORTED ON NOGGINGS

FIX AT 150mm CENTRES TO BOARD PERIMETERS

FIX AT 300mm TO INTERMEDIATE SUPPORTS

JOINTS STAGGERED

CHECK MANUFACTURERS REQUIREMENTS FOR EXPANSION GAPS DEPENDING ON BOARD TYPE USED

FIXING
ALL TONGUE AND GROOVE BOARDS SHOULD BE GLUED WITH A POLYVINYL ACETATE (PVC) OR SIMILAR DIRECTLY TO THE JOIST. PLY OR OSB BOARDS CAN BE FIXED WITH 3.0mm ANNULAR RINGSHANK NAILS AT 150mm CENTRES TO THE BOARD PERIMETERS AND 300mm CENTRES TO THE INTERMEDIATE SUPPORTS. NAILS MUST BE 2.5 TIMES THE BOARD THICKNESS AND NAILED AT A MINIMUM OF 8mm FROM THE BOARD EDGE. CHIPBOARD BOARDS CAN BE FIXED WITH NAILS AS ABOVE BUT IT IS RECOMMENDED THAT THEY ARE SCREWED TO PREVENT SQUEAKING AT A LATER DATE. FIX AT 150mm CENTRES TO THE PERIMETER AND 300mm CENTRES TO INTERMEDIATE SUPPORTS WITH MINIMUM SIZE NO.8 SCREWS.

INSTALL SOLID BLOCKINGS OVER LOADBEARING WALLS

ALL HANGERS MUST BE FULLY NAILED WITH 3.75mm NAILS

WHEN A SOLID TIMBER FLOOR IS OVER 2.5M THEN RESTRAINT STRUTTING OR FULL DEPTH NOGGINGS ARE REQUIRED. OVER 4.5m 2No. ROWS ARE REQUIRED AT EQUAL SPACING.

Drawing Title:
NAILING DETAILS – FLOOR ASSEMBLY

Drawing No: 10.3

Drawn By: M.SINGLIAR

Date: DEC 08

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SCALE: NTS

Revision:
GAP (MIN. 300mm) BETWEEN STACKS REQUIRED FOR SHEET HANDLING.

Sheeting material – stored perpendicular to joist direction

Standard Storage

### Permissible Quantity of Sheets

<table>
<thead>
<tr>
<th>Material</th>
<th>Max. No of Sheets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chipboard (22mm)</td>
<td>9</td>
</tr>
<tr>
<td>OSB/Ply (9mm)</td>
<td>25</td>
</tr>
<tr>
<td>OSB (15mm)</td>
<td>15</td>
</tr>
<tr>
<td>Ply WBP (19mm)</td>
<td>12</td>
</tr>
<tr>
<td>Plasterboard (12.5mm)</td>
<td>15</td>
</tr>
<tr>
<td>Plasterboard (15mm)</td>
<td>12</td>
</tr>
<tr>
<td>Plasterboard (19mm)</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: Don’t exceed permissible quantity of sheets per one stack. Permissible quantity of chosen materials are shown in Table above.

Ensure that the floor is securely propped prior to loading the floor with any load greater than specified in Table. For typical joist propping arrangement see sketch – supported storage. On multiple floor buildings, props will obviously have to be continued through all subsequent floors down to the oversite.

Supported Storage

Silvatec Design
Building 1 Grosvenor Court
Hopley Street
Old Woking
Surrey
GU22 9LL

Drawing Title: Sheet Material on Joists

<table>
<thead>
<tr>
<th>Drawing No:</th>
<th>Revision:</th>
<th>Scale:</th>
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<tr>
<td>10.4</td>
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<td>1:50</td>
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</tbody>
</table>

Drawn By: M. Singliar
Date: July 09
22x75 SAWN TEMPORARY BRACE TO MAINTAIN VERTICAL ALIGNMENT TO BE REMOVED ONLY AS PLASTERBOARD IS FITTED

BLOCK OF TIMBER FIXED TO JOISTS THROUGH DECKING

22x75 SAWN TEMPORARY BRACE FIXED TO INTERNAL AND PARTY WALL PANELS TO PROVIDE RACKING RESISTANCE, TO BE REMOVED ONLY AS PLASTERBOARD IS FITTED

DRAWING TITLE:
TEMPORARY BRACING

DRAWING No: 10.5
REVISION: -
SCALE: NTS

DRAWN BY: M.SINGLIAR
DATE: JULY 09