INTRODUCTION

The details in this section have been developed for hollow concrete block construction. Details are given for the junctions with a range of roof, ground floor and internal floor types, as well as at external wall opes.

The details are indicative. They focus on the issues of thermal performance and air tightness. Other issues are not considered fully. Insulation thicknesses for the main building elements have not been provided, as these depend on the thermal properties of the materials chosen, as well as on the desired U-value.

Due to the practicalities of fixing insulated dry lining to blockwork, depending on insulation restraint, board thickness, boards should be fixed according to relevant certificates.

These diagrams illustrate good practice for design and construction of interfaces only in respect to ensuring thermal performance and air barrier continuity. The guidance must be implemented with due regard to all other requirements imposed by the Building Regulations.

A vapour control layer should be installed on the warm side of the insulation to minimise the risk of interstitial condensation on the cold masonry behind the insulation. Care should be taken to avoid gaps in the vapour control layer at all joints, edges and service penetrations. The location of service runs on the internal face of the airtightness barrier can aid airtightness.

Where these details are used for the Target U Values and constructions described in Table D6 of TGD L 2011 the psi values published in Table D6 may be used to calculate the actual Thermal Bridging heat loss for the key thermal bridging junctions in that dwelling.
1. $\psi$ values for a Target U-value for the wall of 0.21 W/m²K can be used for a range of U-values down to 0.18 W/m²K for the construction type specified. The U-values of the flanking elements to the wall can vary from the flanking element target U-value as follows: Pitched roof insulation on slope, insulation on ceiling = 0.13 to 0.16 W/m²K; Flat Roof = 0.16 to 0.2 W/m²K; Ground Floor = 0.16 to 0.21 W/m²K.

2. $\psi$ values for a Target U-value for the wall of 0.15 W/m²K can be used for a range of U-values from 0.12 W/m²K to 0.17 W/m²K for the construction type specified. The U-values of the flanking elements to the wall can vary from the flanking element target U-value as follows: Pitched roof insulation on slope, insulation on ceiling 0.11 to 0.16 W/m²K; Flat Roof = 0.11 to 0.17 W/m²K; Ground Floor = 0.12 to 0.18.

3. Where two building elements have one U-value above its target while the other is below its target U-value, the aggregate percentage change from the respective target U-values in the table should not exceed +20% for the Psi ($\psi$) value to be valid, i.e., if for the 0.15 U-value wall, if the U-value was increased by 10% above the wall target U-value (from 0.15 to 0.165), then the roof U-value could be at most 10% below the roof target U-value (from 0.14 to 0.126), because the aggregate change would then be 20%.

4. This is an externally supported balcony (the balcony slab is not a continuation of the floor slab) where the wall insulation is continuous and not bridged by the balcony slab.

5. Value of $\psi$ is applied to each dwelling.

6. Psi value is for whole junction. Half the value should be applied to each dwelling on either side of the junction.
**GENERAL NOTES**

Detail applicable: Ground-bearing floor; raft foundation; in-situ suspended ground floor slab; precast suspended ground floor. Insulation above slab, with timber floor finish

**THERMAL PERFORMANCE**

Inject an approved expanding foam between the insulated dry-lining and floor insulation or use an approved adhesive tape at junction of both insulations

Floor insulation to tightly abut block wall

**AIR BARRIER - CONTINUITY**

Seal gap between skirting board and floor with a flexible sealant

Seal all penetrations through air barrier using approved adhesive tape or flexible sealent

**OPTION**

Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

Airtightness membrane and tapes

**AIR BARRIER - OPTIONS**
THERMAL PERFORMANCE

CHECKLIST (TICK ALL)

- Inject an approved expanding foam between the insulated dry-lining and the concrete floor / perimeter insulation

- Install perimeter insulation with a min. R-value of 4.35 m² K/W

- Ensure continuity between insulation below slab and insulation around perimeter

- Floor insulation to tightly abut blockwork wall

AIR BARRIER - CONTINUITY

CHECKLIST (TICK ALL)

- Seal gap between skirting board and floor with a flexible sealant

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.

GENERAL NOTES

Detail applicable:- Ground-bearing floor, concrete and screed. Insulation below slab

AIR BARRIER - OPTIONS

OPTION (TICK ONE)

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

- Airtightness membrane and tapes

ACCEPTABLE CONSTRUCTION DETAIL

Ground Floor - Insulation Below Slab

DETAIL 6.02, 2011
**THERMAL PERFORMANCE CHECKLIST (TICK ALL)**

- Inject an approved expanding foam between the insulated dry-lining and timber floor
- Ensure insulation is in contact with underside of timber flooring
- Install insulation with a minimum R-value of 4.35 m² K/W between the wall and the joist, or held in place with battens between joists

**AIR BARRIER - CONTINUITY CHECKLIST (TICK ALL)**

- Seal gap between skirting board and floor with a flexible sealant
- Seal joints in timber floor with suitable glue. Fully support and fix any square edge joints in the decking to the joists
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Provide similar air seals at all internal partitions

**GENERAL NOTES**

- If installing compressible insulation, fix netting to joist sides with battens to ensure full insulation depth between joists
- Fully ventilate sub-floor (vents not shown)

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

- Timber Suspended Ground Floor

**DETAIL 6.03, 2011**
Timber Intermediate Floor Within a Dwelling

**THERMAL PERFORMANCE CHECKLIST (TICK ALL)**

- Inject an approved insulating expanding foam between the insulated dry-lining and the timber floor
- Continue wall insulation across floor abutment zone. Place insulation with a minimum R-value of 4.35 m² K/W against wall, held in place by noggin or battens
- Ensure insulated dry-lining tightly abuts underside of ceiling

**AIR BARRIER - CONTINUITY CHECKLIST (TICK ALL)**

- Seal gap between skirting board and floor with a flexible sealant
- Mortar joints around built-in joists should be recessed or struck and carefully pointed with flexible sealant. Alternatively, joists may be fitted with proprietary shoes as they are installed. Seal shoe to blockwork face with a flexible sealant. (Dotted blue line is optional, to depict continuity of air barrier through floor zone)
- Fix ceilings first, and seal all gaps between ceiling and masonry wall with flexible sealant or approved tape
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

*Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.*

**GENERAL NOTES**

- Timber floor may be laid in joist hangers rather than being built-in
- For timber engineered joists, proprietary filler pieces must be fitted on both sides of web, between top and bottom flanges. Refer to manufacturers' details

**OPTION (TICK ONE)**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

Timber Intermediate Floor Within a Dwelling

DETAIL 6.04, 2011
### Masonry Separating Solid and Cavity Wall

#### General Notes

- See TGD-B for guidance on fire safety and TGD-E for guidance on sound insulation.
- Read this detail in conjunction with detail G-01, Masonry Separating Wall Head.
- Ensure that returned insulation to separating wall meets the airborne sound insulation requirements.

#### Acceptable Construction Detail

##### Option 1
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

##### Option 2
- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes.

#### Checklist

- Insulation to separating wall / party wall to be taken one meter in from external wall
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Fix insulated plasterboard to external wall first. Seal all gaps between board and separating wall with either adhesive tape or flexible sealant

#### Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.
Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.

**THERMAL PERFORMANCE**

**CHECKLIST (TICK ALL)**

Insulation to partition walls to be taken in one meter from external wall

**AIR BARRIER - CONTINUITY**

**CHECKLIST (TICK ALL)**

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Fix insulated plasterboard to external wall first. Seal all gaps between board and masonry partition wall with either adhesive tape or flexible sealant. (Dotted blue line is notional, to depict air barrier continuity through partition.)

**GENERAL NOTES**

Read this detail in conjunction with detail G-02, Masonry Partition Wall Head

**ACCEPTABLE CONSTRUCTION DETAIL**

**Masonry Partition Wall - Plan**

**DETAIL 6.06, 2011**

**OPTION (TICK ONE)**

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes
THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

Install insulation with a minimum R-value of 2.50 m² K/W between the wall and the partition stud

AIR BARRIER - CONTINUITY

CHECKLIST
(TICK ALL)

Fix partition lining first. Seal all gaps between lining and inner leaf of cavity with flexible sealant or adhesive tape (Dotted blue line is notional, to depict air barrier continuity through partition)

Seal between insulated dry-lining and partition linings

Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

Complying with checklist will help achieve design air permeability and may affect a reduced testing regime.

GENERAL NOTES

Read this detail in conjunction with details G-03, Timber Stud Partition Head, or G-04, Metal Stud Partition Head as appropriate

AIR BARRIER - OPTIONS

OPTION
(TICK ONE)

Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

Airtightness membrane and tapes
**THERMAL PERFORMANCE CHECKLIST (TICK ALL)**

Ensure continuity of Insulation throughout junction

Ensure full depth of insulation between and over joists abuts eaves insulation

Completely fill with insulation having a min. R-value across the insulation thickness of 3.00 m² K/W

Ensure insulated dry-lining tightly abuts underside of ceiling

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**AIR BARRIER - CONTINUITY CHECKLIST (TICK ALL)**

Fix ceiling first, and seal all gaps between ceiling and wall with either adhesive tape or flexible sealant

Bed wall plate on continuous mortar bed

Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

*Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.*

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**GENERAL NOTES**

Use of over joist insulation is considered best practice, as it eliminates the cold bridge caused by the joist

Use vapour permeable roof underlay in strict accordance with third party certification

Eaves insulation must not hinder free water drainage below the tiling battens

For detail on joist adjacent to gable see 6.13
For Unventilated rafter void dormer see 1.11.2

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**AIR BARRIER - OPTIONS**

OPTION (TICK ONE)

Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

Airtightness membrane and tapes
### THERMAL PERFORMANCE

**CHECKLIST (TICK ALL)**

- Ensure continuity of Insulation throughout junction
- Ensure full depth of insulation between and over joists abuts eaves insulation
- Ensure gap between wall plate and proprietary eaves vent is completely filled with insulation having a min. R-value across the insulation thickness of 2.50 m² K/W
- Ensure insulated dry-lining tightly abuts underside of ceiling

### AIR BARRIER - CONTINUITY

**CHECKLIST (TICK ALL)**

- Fix ceiling first, and seal all gaps between ceiling and wall with either adhesive tape or flexible sealant
- Bed wall plate on continuous mortar bed
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

*Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.*

### GENERAL NOTES

Use of over joist insulation is considered best practice, as it eliminates the cold bridge caused by the joist.

Use a proprietary eaves ventilator to ensure ventilation in accordance with BS5250. Installation of eaves ventilator must not prevent free water drainage below the tiling battens.

Read this detail in conjunction with detail 6-13, Gable - Attic Floor Level

### OPTION (TICK ONE)

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes
### THERMAL PERFORMANCE

**CHECKLIST (TICK ALL)**

- Ensure continuity of Insulation throughout junction
- Ensure insulation is installed tightly between rafters and is in contact with under-rafter insulation
- Ensure full depth of insulation between and over joists abuts eaves insulation
- Ensure gap between wall plate and proprietary eaves vent is completely filled with insulation having a min. R-value across the thickness of 2.65 m² K/W
- Ensure insulated dry-lining tightly abuts underside of ceiling

### AIR BARRIER - CONTINUITY

**CHECKLIST (TICK ALL)**

- Bed wall plate on continuous mortar bed
- Install double, full depth timber nogging between floor joists, and seal between nogging, ceiling and upper stud wall with a flexible sealant (Dotted blue line is notional, to depict air barrier continuity through noggings)
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

**Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.**

### GENERAL NOTES

Use a proprietary eaves ventilator to ensure ventilation in accordance with BS5250. Insulation of eaves ventilator must not prevent free water drainage below the tiling battens.

If required by BS5250, use vapour control plasterboard or separate vapour control layer behind plasterboard.

Use of over joists and under rafter insulation is considered best practice, as it eliminates the cold bridge caused by joist/rafter.

Read this detail in conjunction with detail 6-15.

### OPTION (TICK ONE)

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes
**THERMAL PERFORMANCE**

- Ensure continuity of Insulation throughout junction
- Ensure insulation is installed tightly between rafters and is in contact with under-rafter insulation
- Ensure full depth of insulation between and under joists abuts eaves insulation
- Ensure gap between wall plate and under rafters insulation is completely filled with insulation having a min. R-value across the thickness of 2.65 m² K/W
- Ensure insulated dry-lining tightly abuts underside of ceiling

**GENERAL NOTES**

- Use proprietary eaves ventilator to ensure ventilation in accordance with BS5250. Installation of the eaves ventilator must not prevent free water drainage below the tiling battens
- If required by BS5250, use vapour control plateboard or separate vapour control layer behind plasterboard
- The use of over joist and under rafter insulation is considered best practice, as it eliminates the cold bridge caused by the joist/rafter
- Read this detail in conjunction with detail 6-15

**AIR BARRIER - CONTINUITY**

- Bed wall plate on continuous mortar bed
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**OPTION (TICK ONE)**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes
**THERMAL PERFORMANCE**

**CHECKLIST (TICK ALL)**

- Ensure continuity of Insulation throughout junction
- Ensure insulation is installed tightly between rafters and is in contact with over-rafter insulation
- Ensure full depth of insulation between and over joists abuts eaves insulation
- Ensure gap between wall plate and over rafter insulation is completely filled with insulation having a min. R-value across the thickness of 2.38 m² K/W
- Ensure insulated dry-lining tightly abuts underside of ceiling

**AIR BARRIER - CONTINUITY**

**CHECKLIST (TICK ALL)**

- Bed wall plate on continuous mortar bed
- Install double, full depth timber nogging between floor joists, and seal between nogging, ceiling and upper stud wall with a flexible sealant (Dotted blue line is notional, to depict air barrier continuity through noggings)
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant

Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.

**GENERAL NOTES**

Vapour permeable roof underlay to be used in strict accordance with approved third party certification

If required by BS5250, use vapour control plasterboard or separate vapour control layer behind plasterboard

The use of over rafter insulation is considered best practice, as it eliminates the cold bridge caused by the rafter

Read this detail in conjunction with detail 6-16

**OPTION (TICK ONE)**

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

Eves - Unventilated - Insulation between and over rafters - Dormer

Ventilated Rafter Void - Dormer
### THERMAL PERFORMANCE

**CHECKLIST**  
**TICK ALL**

- Pack compressible insulation between last truss or joist, and gable wall insulation having a min. R-value across the thickness of 2.50 m$^2$ K/W
- Ensure full depth of insulation between and under joists abuts eaves insulation
- Ensure insulated dry-lining tightly abuts underside of ceiling

### AIR BARRIER - CONTINUITY

**CHECKLIST**  
**TICK ALL**

- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

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### GENERAL NOTES

The use of over joist and under rafter insulation is considered best practice, as it eliminates the cold bridge caused by the joist/rafter

Read this detail in conjunction with detail 6-09

### OPTION (TICK ONE)

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

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**ACCEPTABLE CONSTRUCTION DETAIL**

Ventilated Roof - Attic Floor Level

**DETAIL 6.13, 2011**
**THERMAL PERFORMANCE CHECKLIST (TICK ALL)**

- Fit insulation over top of wall within gable ladder. Fully fill void unless underlay requires to be draped, when 25 mm void must be maintained. Min. R-value across the thickness of 4.33 m² K/W
- Ensure top of wall is levelled with mortar to correct pitch
- Ensure insulation continuity throughout junction
- Ensure full depth of insulation between and under rafters extends to wall. Pack gap between rafter and wall with compressible insulation
- Ensure insulation is installed tightly between rafters and is in contact with under-rafter insulation
- Ensure insulated dry-lining tightly abuts underside of ceiling

**AIR BARRIER - CONTINUITY CHECKLIST (TICK ALL)**

- Seal all penetrations through air barrier using approved adhesive tape or exible sealant
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant

**GENERAL NOTES**

- Ensure ventilation to roof build-up in accordance with BS5250
- If required by BS5250, use vapour control plasterboard or separate vapour control layer behind plasterboard. Use of under rafter insulation is considered best practice, as it eliminates the cold bridge caused by the rafter

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

- Gable-Insulation between and under rafters - Unventilated Rafter Void
- DETAIL 6.14, 2011
**THERMAL PERFORMANCE**

- Fit insulation over top of wall within gable ladder. Fully fill void unless underlay requires to be draped, when 25mm void must be maintained. Min. R-value across the thickness of 4.35 m²K/W
- Ensure top of wall is levelled with mortar to correct pitch
- Ensure insulation continuity throughout junction
- Ensure full depth of insulation between and under rafters extends to wall. Pack gap between rafter and wall with under-rafter insulation
- Ensure insulation is installed tightly between rafters and is in contact with under-rafter insulation
- Ensure insulated dry-lining tightly abuts underside of ceiling

**GENERAL NOTES**

- If required by BS5250, use vapour control plasterboard or separate vapour control layer behind plasterboard
- Use of under-rafter insulation is considered best practice, as it eliminates the cold bridge caused by the rafter
- Read this detail in conjunction with detail 6.10.1, 6.10.2, 6.11.1 and 6.11.2

**AIR BARRIER - CONTINUITY**

- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant
- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

Complying with checklist will help achieve design air permeability and may affect a reduced testing regime.
### THERMAL PERFORMANCE

**CHECKLIST (TICK ALL)**

- Fit insulation over top of wall within gable ladder. Fully fill void between wall head and over-rafter insulation
- Ensure top of wall is levelled with mortar to correct pitch
- Ensure insulation continuity throughout junction
- Min. R-value across the thickness of 2.17 m² K/W
- Ensure full depth of insulation between and over rafters extends to wall.
- Ensure insulation is installed tightly between rafters and is in contact with over-rafter insulation
- Ensure insulated dry-lining tightly abuts underside of ceiling

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### AIR BARRIER - CONTINUITY

**CHECKLIST (TICK ALL)**

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant

*Complying with checklist will help achieve design air permeability and may affect a reduced testing regime.*

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### GENERAL NOTES

- Vapour permeable roof underlay to be used in strict accordance with approved third party certification
- **If required by BS5250**, use vapour control plasterboard or separate vapour control layer behind plasterboard.
- Use of over-rafter insulation is considered best practice, as it eliminates the cold bridge caused by the rafter
- Read this detail in conjunction with detail 6-12

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### OPTION (TICK ONE)

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes
### THERMAL PERFORMANCE

**CHECKLIST** *(TICK ALL)*

- Ensure full depth of over deck insulation extends to roof edge

- Tightly pack compressible insulation into void between top of wall and underside of roof deck. Min. R-value across the thickness of 4.35 m² K/W

- Ensure insulated dry-lining tightly abuts underside of ceiling

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### AIR BARRIER - CONTINUITY

**CHECKLIST** *(TICK ALL)*

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant

- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant

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### GENERAL NOTES

- BS5250 requires vapour control layer to be installed between deck and insulation

- Turn up vapour control layer at edge of roof insulation, lap with over, or roof waterproofing layer, and seal

- Use compatible materials during construction

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### AIR BARRIER - OPTIONS

**OPTION** *(TICK ONE)*

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

- Airtightness membrane and tapes
**THERMAL PERFORMANCE**

**CHECKLIST**
(TICK ALL)

- Ensure roof insulation tightly abuts inner face of parapet wall
- Insulation with a minimum R-value of 4.35 m² K/W (in heat flow direction perpendicular to wall surface)
- Ensure insulated dry-lining tightly abuts underside of ceiling

**AIR BARRIER - CONTINUITY**

**CHECKLIST**
(TICK ALL)

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant
- Fix ceiling first, and seal all gaps between ceiling and wall with approved adhesive tape or flexible sealant

**GENERAL NOTES**

BS5250 requires vapour control layer to be installed between deck and insulation.

Turn up vapour control layer at edge of roof insulation, lap with roof waterproofing layer, and seal.

**OPTION**
(TICK ONE)

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

Flat Roof - Parapet
### THERMAL PERFORMANCE

**CHECKLIST (TICK ALL)**

- Install insulation to lintel soffit, with minimum R-value of 0.65 m² K/W (alternative provision for trickle ventilation may be required)

- Window frame to be positioned no greater than 40 mm from internal face of hollow block

### AIR BARRIER - CONTINUITY

**CHECKLIST (TICK ALL)**

- Seal all penetrations through air barrier using approved adhesive tape or exible sealant

- Apply flexible sealant to interface between plasterboard internal finish, and frame members

*Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.*

### GENERAL NOTES

### AIR BARRIER - OPTIONS

**OPTION (TICK ONE)**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or

- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

- Airtightness membrane and tapes

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**ACCEPTABLE CONSTRUCTION DETAIL**

Ope - Lintel

**DETAIL 6.19, 2011**
**THERMAL PERFORMANCE**

**CHECKLIST (TICK ALL)**

- Install insulation to jamb, with minimum R-value of 0.65 m²K/W
- Window frame to be positioned no greater than 40 mm from internal face of hollow block

**AIR BARRIER - CONTINUITY**

**CHECKLIST (TICK ALL)**

- Apply flexible sealant to interface between plasterboard internal finish, and frame members
- Form air barrier to wall with scratchcoat to blockwork
- Seal all penetrations through air barrier using approved adhesive tape or exible sealant

**GENERAL NOTES**

**OPTION (TICK ONE)**

**AIR BARRIER - OPTIONS**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

**Ope - Jamb Detail**

**DETAIL 6.20, 2011**
**THERMAL PERFORMANCE CHECKLIST (TICK ALL)**

- Minimum R-value of 0.65 m² K/W for insulation under sill
- Ensure insulated dry-lining tightly abuts underside of windowboard
- Insulation to have a minimum R-value of 2.17 m² K/W

**AIR BARRIER - CONTINUITY CHECKLIST (TICK ALL)**

- Seal all penetrations through air barrier using approved adhesive tape or exible sealant
- Apply flexible sealant to interface between plasterboard and windowboard, and between windowboard and frame
- Form air barrier to wall with scratchcoat to blockwork
- Ensure air barrier continuity between window, and wall plasterboard

*Complying with checklist will help achieve design air permeability and may effect a reduced testing regime.*

**GENERAL NOTES**

**OPTION (TICK ONE)**

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

**ACCEPTABLE CONSTRUCTION DETAIL**

**Ope - Sill**

**DETAIL 6.21, 2011**
## Thermal Performance Checklist (Tick All)

Ensure insulation joins at corners

### Air Barrier - Continuity Checklist (Tick All)

- Seal all penetrations through air barrier using approved adhesive tape or flexible sealant.

## General Notes

- Masonry single leaf with, or without scratch coat applied to internal face with insulated dry-lining or composite board on pre-treated timber battens, or
- Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or
- Airtightness membrane and tapes

## Acceptable Construction Detail

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<tr>
<td>6.C1 Corner</td>
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<tr>
<td>6.C2 Inverted Corner</td>
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