

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.

(6) WALLS:- INTERNAL INSULATION - CAVITY BLOCKS

TGDL 2011

Table D6	Section 6 - Hollow Block Construction	Target U-Values	
Junction detail identifier 2011 Edition	Junction detail	Hollow Block with internal insulation U-value = 0.21 W/m ² K ^{1,3} (roof U = 0.16) (floor U = 0.21)	Hollow Block with internal insulation U-value = 0.15 W/m ² K ^{2,3} (roof U = 0.14) (floor U = 0.15)
		ψ-value (W/mK)	ψ-value (W/mK)
Section 6	Details		
6.01	Ground Floor - Insulation above slab	0.039	0.031
6.02	Ground Floor - Insulation below slab	0.050	0.039
6.03	Timber Suspended Ground Floor	0.029	0.021
6.04	Timber Intermediate Floor - Within a dwelling	0.101	0.081
6.05.1	Masonry Separating (solid) Wall - plan ⁶	0.296	0.284
6.05.2	Masonry Separating (cavity) Wall - plan ⁶	0.316	0.309
6.06	Masonry Partition Wall - plan	0.155	0.156
6.07	Stud Partition	0.000	0.000
6.08/6.09	Eaves - Unventilated/Ventilated roof space	0.021	0.021
6.10.1	Eaves - Insulation between and under rafters - Ventilated rafter void - Dormer	0.022	0.022
6.10.2	Eaves - Insulation between and under rafters - Ventilated void - Pitched Ceiling Dormer	0.014	0.013
6.11.1	Eaves - Insulation between and under rafters - Ventilated rafter void - Pitched ceiling	0.003	0.002
6.11.2	Eaves - Insulation between and under rafters - Ventilated rafter void - Pitched with flat ceiling	0.020	0.020
6.12	Eaves - Unventilated - Insulation between and over rafters - Dormer	0.011	0.015
6.13	Ventilated Roof - Attic floor level	0.038	0.034
6.14/6.15	Gable - Insulation between and under rafters - Unventilated/Ventilated rafter void	0.026	0.022
6.16	Gable - Insulation between and over rafters - Unventilated rafter void	0.036	0.031
6.17	Flat Roof - Eaves	0.053	0.039
6.18	Flat Roof - Parapet	0.046	0.038
6.19	Ope - Lintel	0.037	0.042
6.20	Ope - Jamb	0.031	0.036
6.21	Ope - Sill	-0.004	0.003
6.C1	Corner	0.018	0.016
6.C2	Inverted Corner	-0.047	-0.042
Section G	General Details		
G.01.1	Masonry Separating (cavity) Wall Head - Section ⁶	0.511	0.484
G.02.2	Masonry Separating (solid) Wall Head - Section ⁶	0.488	0.458
G.05.1	Solid Masonry Separating Wall through ground floor	0.201	0.245
G.05.2	Solid Masonry (narrow) partition Wall through ground floor	0.138	0.150
	Other Details		
6.B.1	Balcony within dwelling ⁴	0.000	0.000
6.B.2	Balcony between dwelling ^{4,5}	0.020	0.020

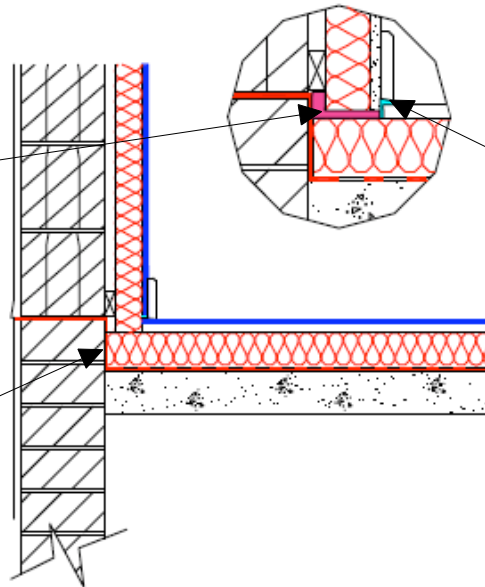
- ψ values for a Target U-value for the wall of 0.21 W/m²K can be used for a range of U-values down to 0.18 W/m²K for the construction type specified. The U-values of the flanking elements to the wall can vary from the flanking element target U-value as follows: Pitched roof insulation on slope, insulation on ceiling = 0.13 to 0.16 W/m² K; Flat Roof = 0.16 to 0.2 W/m² K; Ground Floor = 0.16 to 0.21 W/m² K.
- ψ 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/m² K; Flat Roof = 0.11 to 0.17 W/m² K; Ground Floor = 0.12 to 0.18.
- 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 (ψ) 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%.
- This is an externally supported balcony (the balcony slab is not a continuation of the floorslab) where the wall insulation is continuous and not bridged by the balcony slab.
- Value of Ψ is applied to each dwelling.
- Psi value is for whole junction. Half the value should be applied to each dwelling on either side of the junction.

THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

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

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; raft foundation; in-situ suspended ground floor slab; precast suspended ground floor. Insulation above slab, with timber floor finish

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

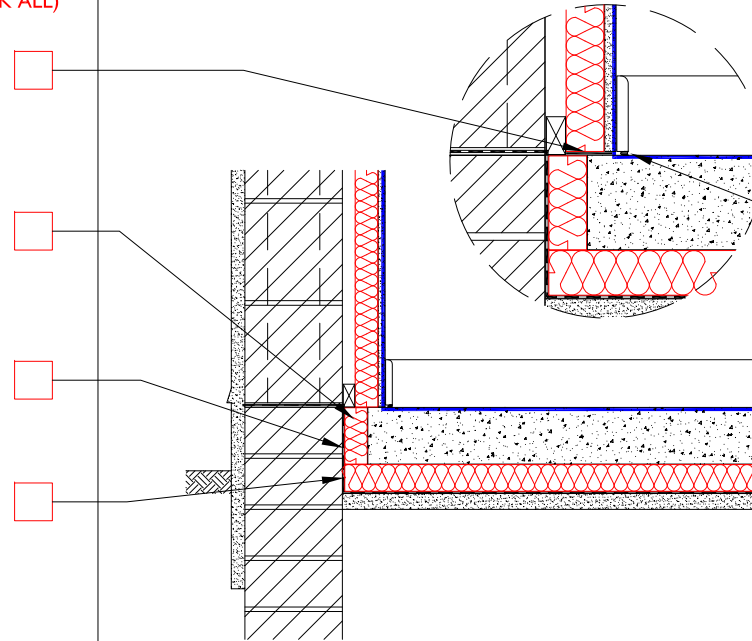
CHECKLIST
(TICK ALL)

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

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

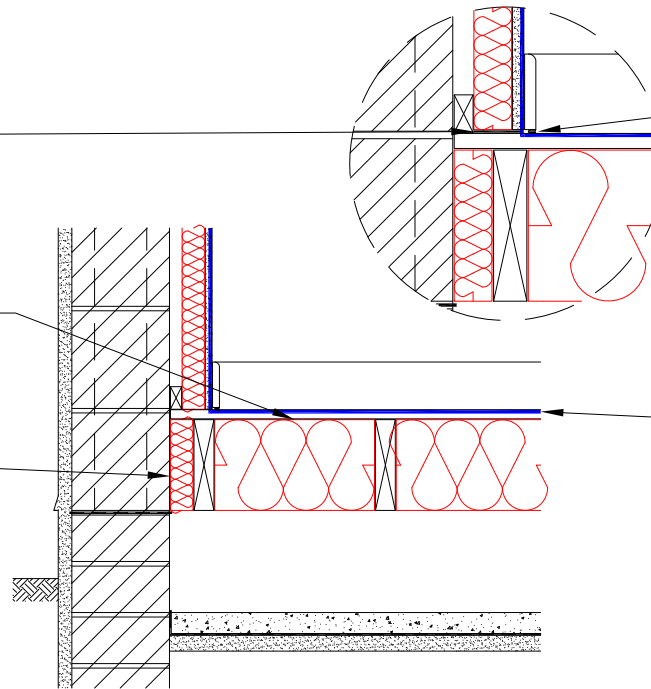
THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

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

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

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)

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

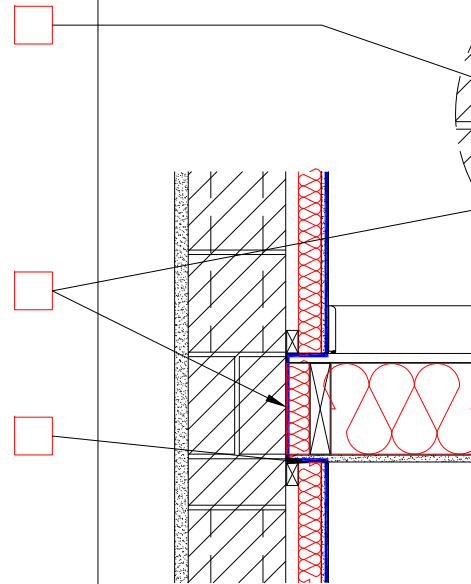
THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

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 notional, 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)

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

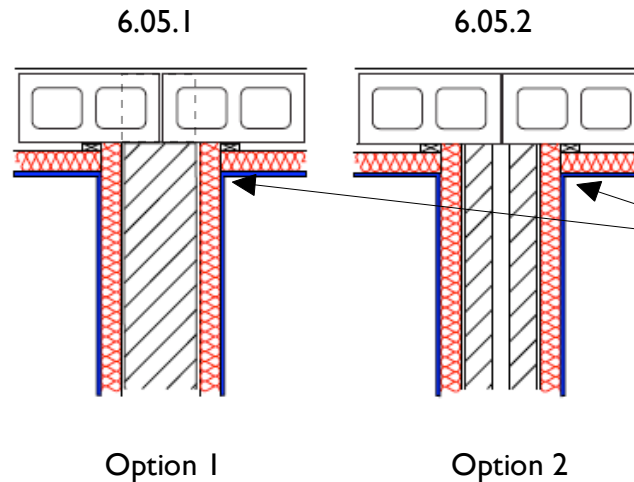
Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

Airtightness membrane and tapes

THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

Insulation to separating wall / party wall to be taken one meter in 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 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.

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

OPTION
(TICK ONE)

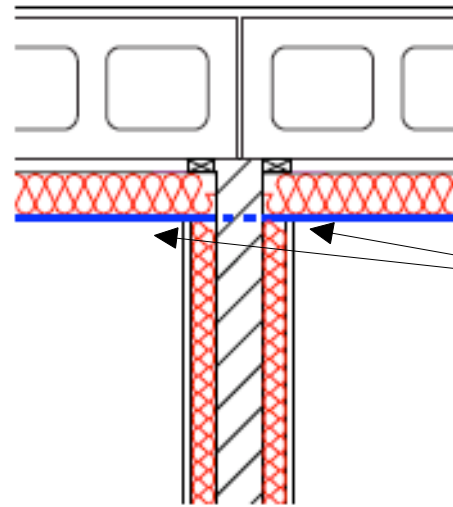
AIR BARRIER - OPTIONS

- 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)

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 partiion.)

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

GENERAL NOTES

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

OPTION
(TICK ONE)

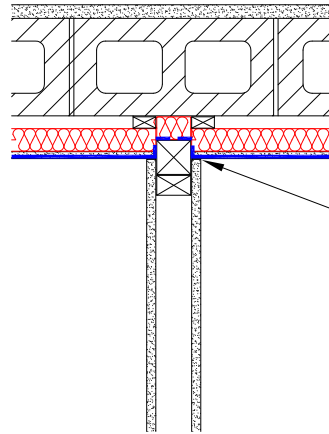
AIR BARRIER - OPTIONS

- 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 effect 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

OPTION
(TICK ONE)

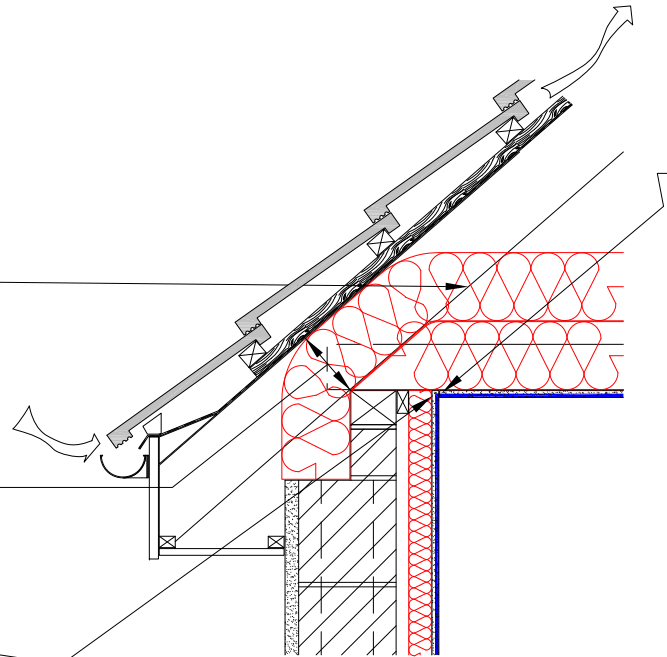
AIR BARRIER - OPTIONS

- 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 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



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 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

OPTION
(TICK ONE)

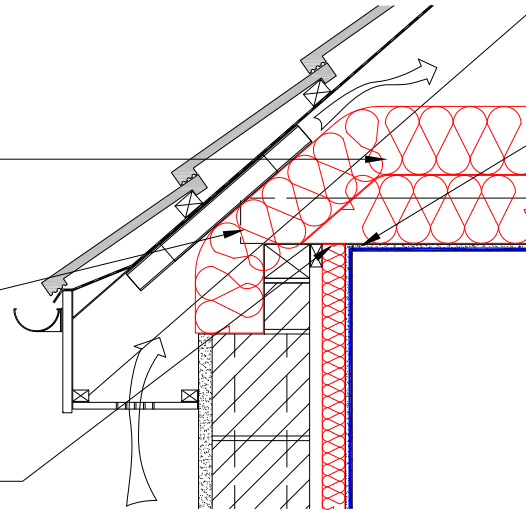
AIR BARRIER - OPTIONS

- 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 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)

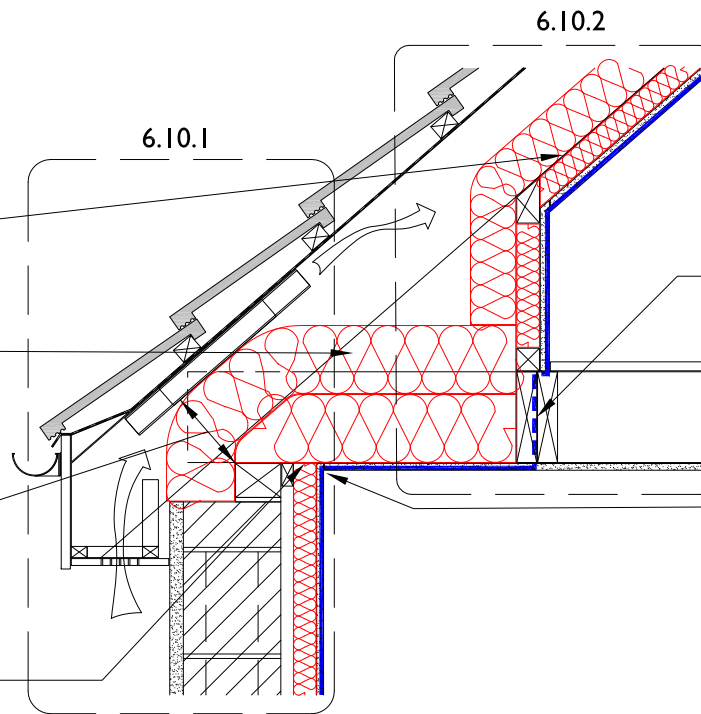
AIR BARRIER - OPTIONS

- 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 $2.65 \text{ m}^2 \text{ K/W}$
- 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)

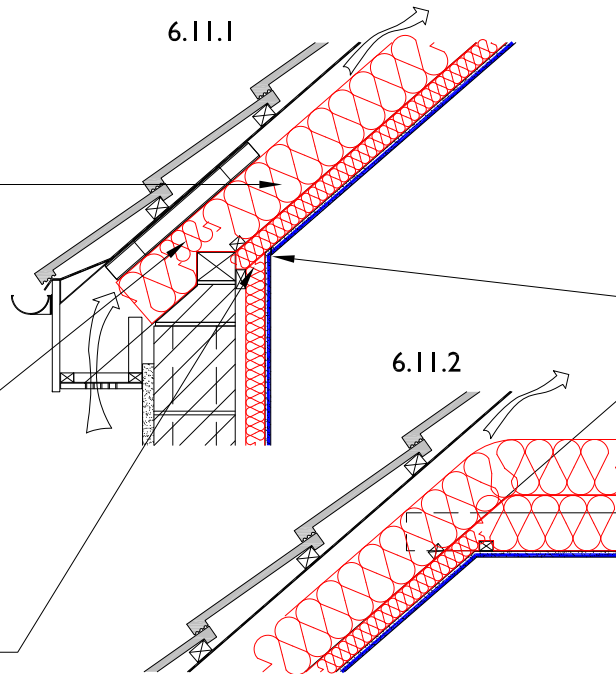
AIR BARRIER - OPTIONS

- 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 under joists abuts eaves insulation
- Ensure gap between wall plate and under rafter insulation is completely filled with insulation having a min. R-value across the thickness of $2.65 \text{ m}^2 \text{ K/W}$
- Ensure insulated dry-lining tightly abuts underside of ceiling



AIR BARRIER - CONTINUITY

CHECKLIST
(TICK ALL)

- 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

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

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 plasterboard 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

OPTION
(TICK ONE)

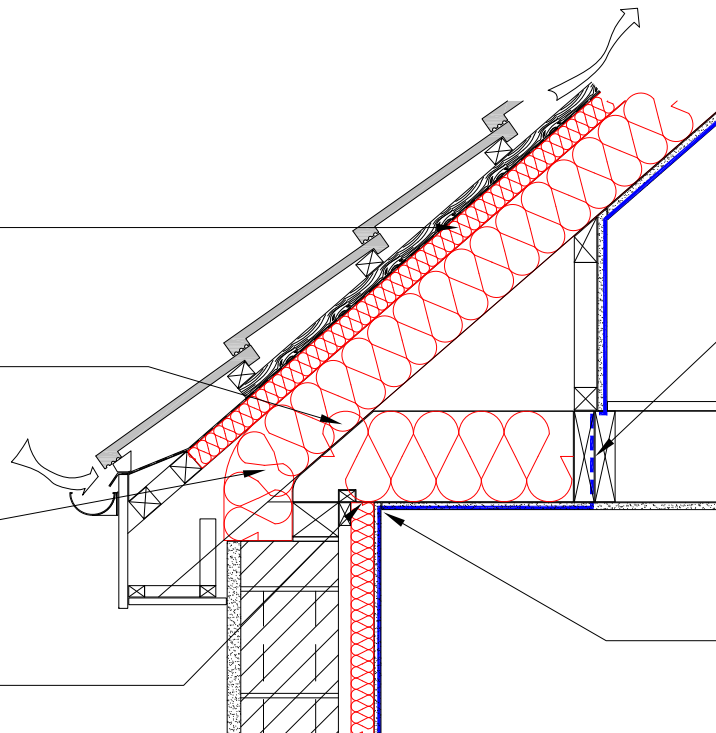
AIR BARRIER - OPTIONS

- 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 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 $2.38 \text{ m}^2 \text{ K/W}$
- 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

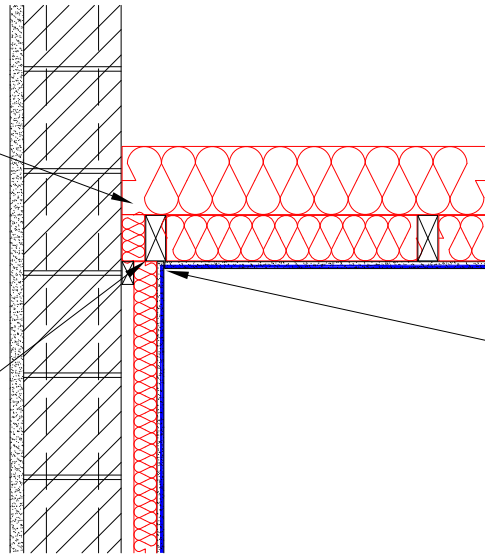
THERMAL PERFORMANCE

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 m² 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

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

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

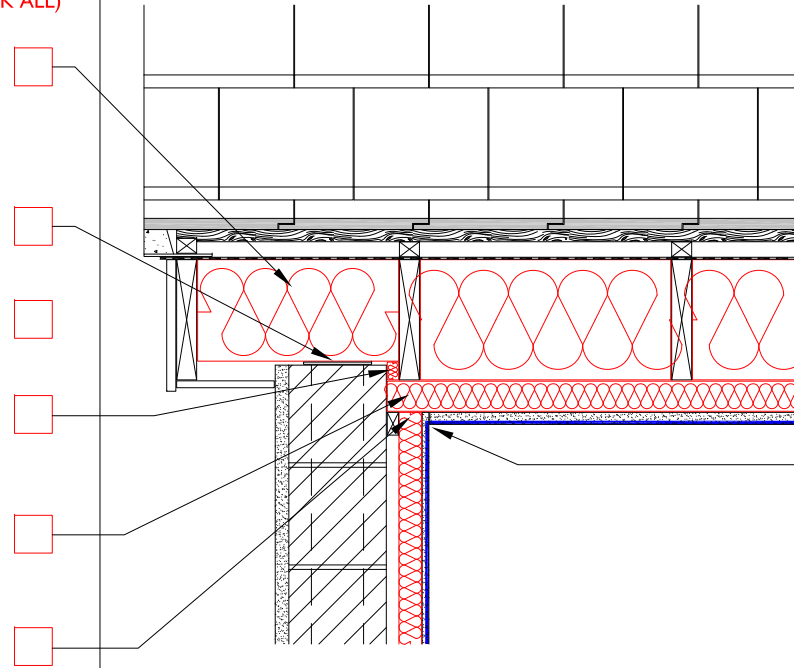
Insulated dry-lining on dabs, mechanically fixed with continuous ribbon of adhesive around all openings, along top and bottom of wall, and at internal and external corners, or

Airtightness membrane and tapes

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 $4.35 \text{ m}^2 \text{ K/W}$
- 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

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

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

OPTION
(TICK ONE)

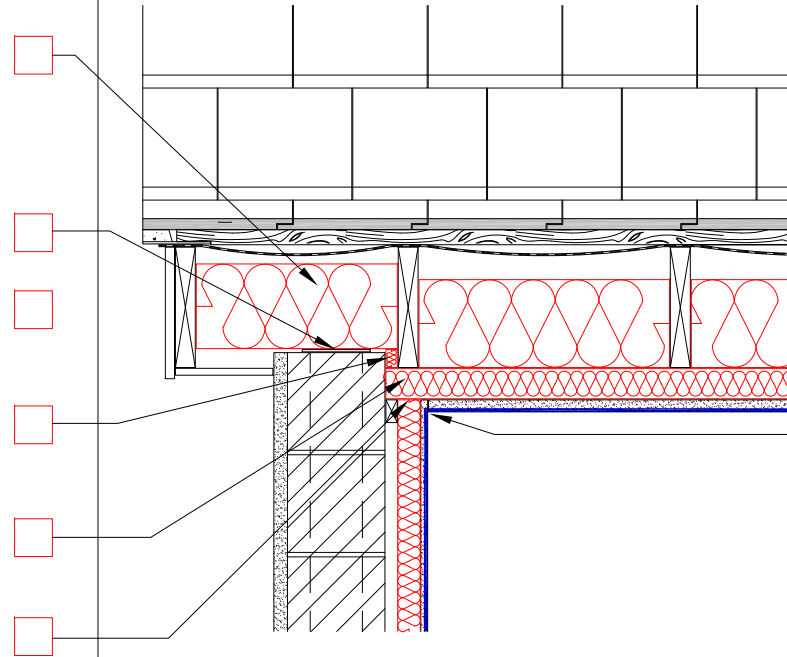
AIR BARRIER - OPTIONS

- 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)

- 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 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 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



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

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

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

OPTION
(TICK ONE)

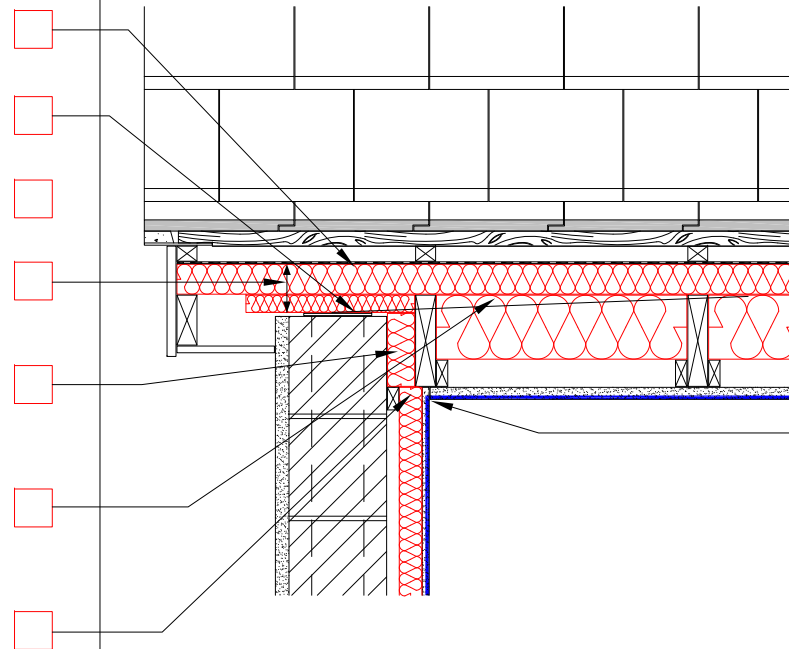
AIR BARRIER - OPTIONS

- 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)

- 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



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 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.
- 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

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

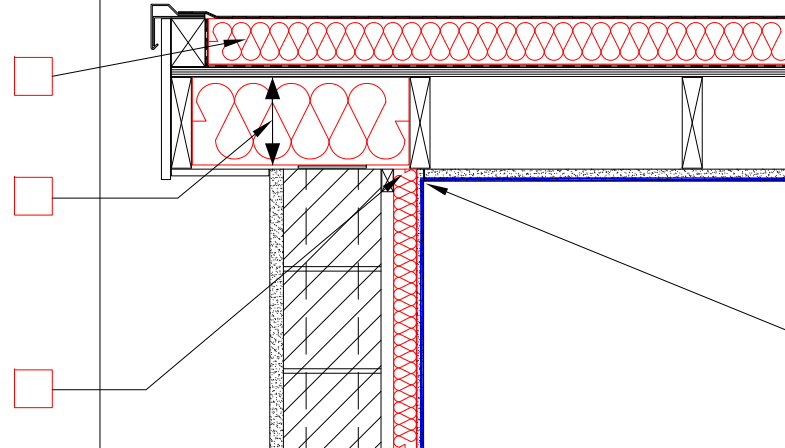
THERMAL PERFORMANCE

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



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 effect a reduced testing regime.

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

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

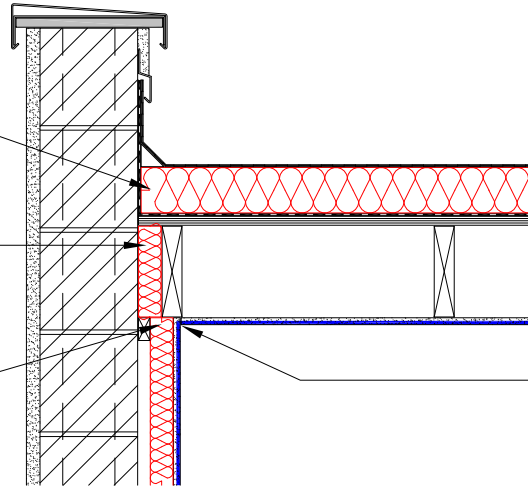
THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

Ensure 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

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

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

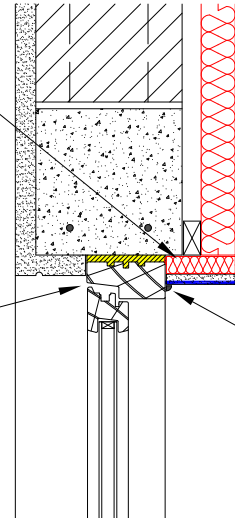
Airtightness membrane and tapes

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 flexible 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

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

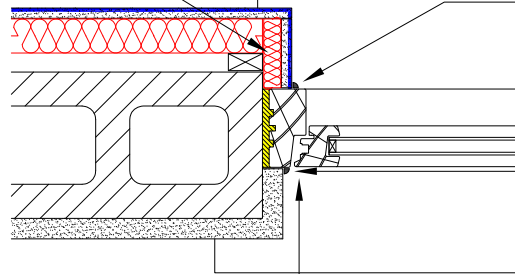
Airtightness membrane and tapes

THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

Install insulation to jamb, with
minimum R-value of 0.65 m² K/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

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

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

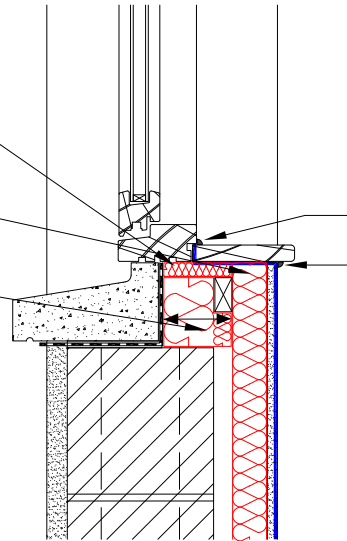
THERMAL PERFORMANCE

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 sealent 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)

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

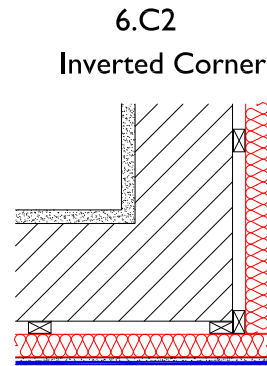
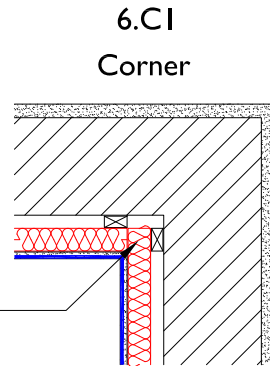
THERMAL PERFORMANCE

CHECKLIST
(TICK ALL)

AIR BARRIER - CONTINUITY

CHECKLIST
(TICK ALL)

Ensure insulation joins at corners



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

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

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