

- 1 Minimum thermal resistance of this insulation layer to achieve 1.30 m²K/W.
- 2 Minimum thermal resistance of this insulation layer to achieve 1.75 m²K/W.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list ✓

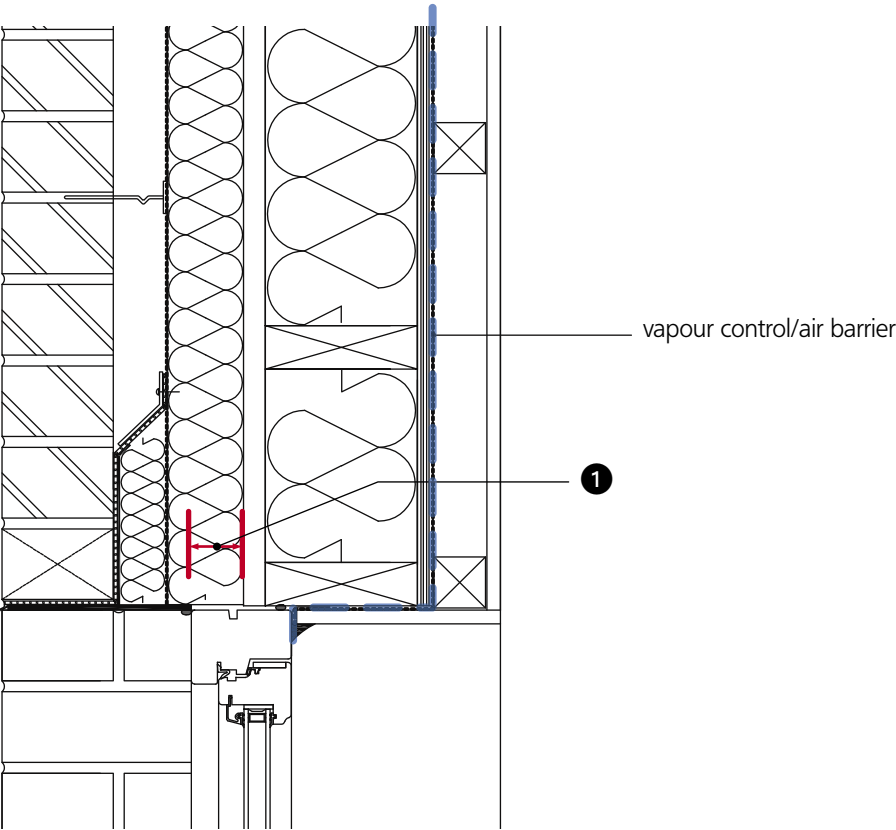
| | | |
|---|--------------------------|---|
| Pack compressible insulation between last truss/joist and gable wall panel. | <input type="checkbox"/> | |
| Fix wall air barrier/vapour control layer to timber studs and temporarily fix to underside of first two trusses/joists. | <input type="checkbox"/> | A |
| Fix ceiling air barrier/vapour control layer to underside of trusses/joists with a taped lap of 300 mm down wall. | <input type="checkbox"/> | A |
| Fix insulation with minimum thermal resistance of 1.30 m²K/W to underside of ceiling, with edge tight to wall. * | <input type="checkbox"/> | T |
| Fix 50 mm wide (depth dependent on services to be provided) battens at maximum 600 mm centres to underside of ceiling, perpendicular to trusses. | <input type="checkbox"/> | |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Erect internal walls with header plate secured to underside of ceiling battens. | <input type="checkbox"/> | |
| Fix services to wall/underside of trusses. | <input type="checkbox"/> | |
| Place plasterboards to ceiling/walls and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Place ceiling insulation between/over trusses/joists and ensure that the full depth of insulation over trusses/joists extends to lap with insulation between studs. | <input type="checkbox"/> | T |
| N.B. This stage can be completed at any point from * above. | | |
| Provide a mastic seal to all service penetrations. | <input type="checkbox"/> | A |

$\Psi = 0.050 \text{ W/mK}$

T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



1 Minimum lap of window/door frame with insulation of 70 mm, or provide a minimum thermal resistance of this lap of 1.75 m²K/W.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list ✓

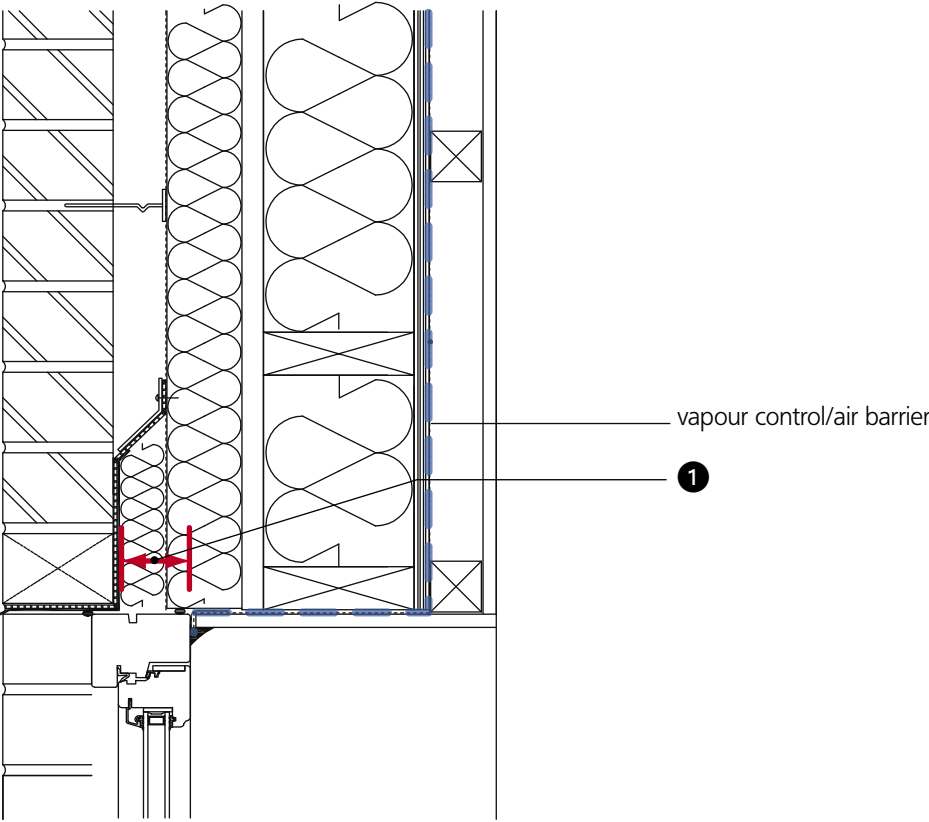
| | | |
|---|--------------------------|---|
| Place rigid/semi rigid insulation into cavity from below up to the underside of the stepped damp proof course/cavity tray. Ensure the insulation will be in contact with window/door frame. | <input type="checkbox"/> | T |
| Install window/door frame, and provide a mastic seal in gap between frame and timber frame, and place double sided tape over joint. | <input type="checkbox"/> | A |
| Fix wall air barrier/vapour control layer to timber wall panel and lap to window/door frame. | <input type="checkbox"/> | A |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Erect internal walls. | <input type="checkbox"/> | |
| Fix services to wall. | <input type="checkbox"/> | |
| Place plasterboards to walls and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Fit weatherboard to underside of outer leaf hard up to frame and seal joint with mastic. Provide a mastic seal to all service penetrations and to window/door frame internally/externally. | <input type="checkbox"/> | A |

$\Psi = 0.025 \text{ W/mK}$

T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



1 Minimum lap of window/door frame with insulation of 70 mm, or provide a minimum thermal resistance of this lap of 1.75 m²K/W.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list ✓

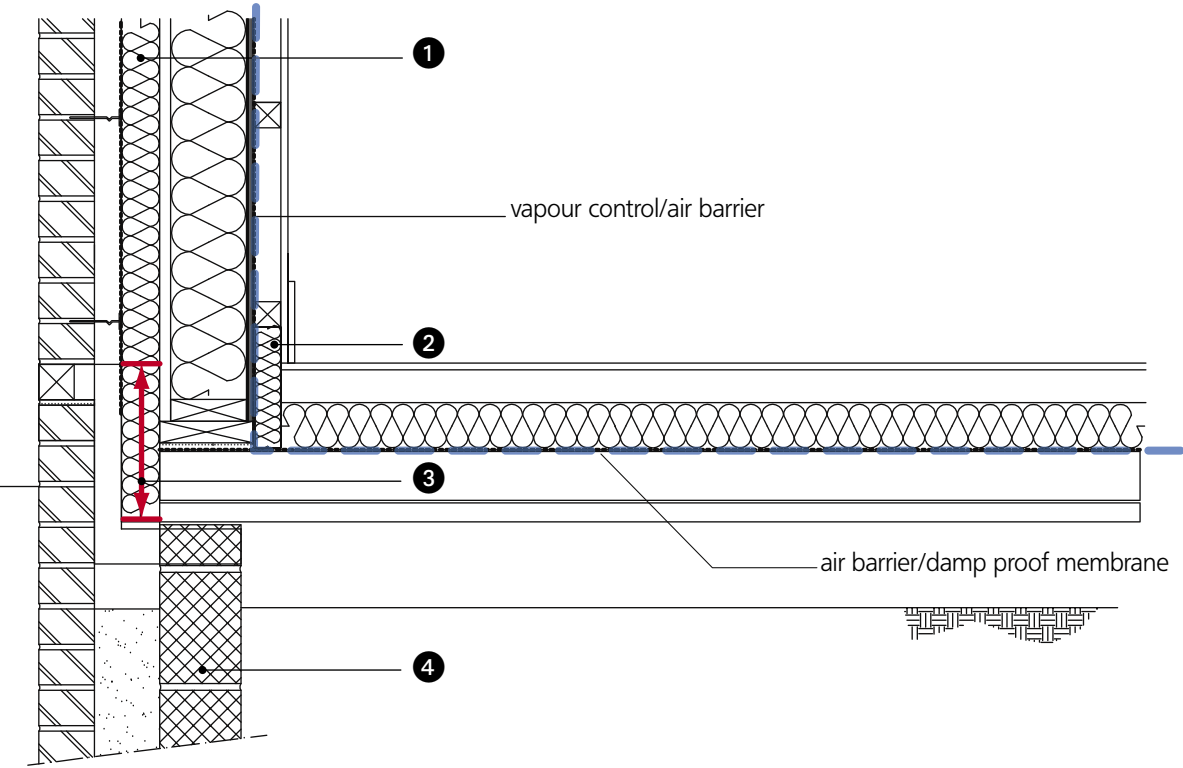
| | | |
|---|--------------------------|---|
| Place rigid/semi rigid insulation into cavity from below up to the underside of the stepped damp proof course/cavity tray. Ensure the insulation will be in contact with window/door frame. | <input type="checkbox"/> | T |
| Install window/door frame, and place double sided tape to edge of frame internally. | <input type="checkbox"/> | A |
| Fix wall air barrier/vapour control layer to timber wall panel and lap to window/door frame. | <input type="checkbox"/> | A |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Erect internal walls. | <input type="checkbox"/> | |
| Fix services to wall. | <input type="checkbox"/> | |
| Place plasterboards to ceiling/walls and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Provide a mastic seal to all service penetrations and to window/door frame internally/externally. | <input type="checkbox"/> | A |

$\Psi = 0.025 \text{ W/mK}$

T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



- 1 Minimum thermal resistance of this insulation layer to achieve 1.75 m²K/W.
- 2 Minimum thermal resistance of the perimeter insulation upstand to achieve 2.17 m²K/W.
- 3 Overlap of insulation to be 300 mm minimum.
- 4 Blockwork of maximum 0.19 W/mK dry thermal conductivity.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list



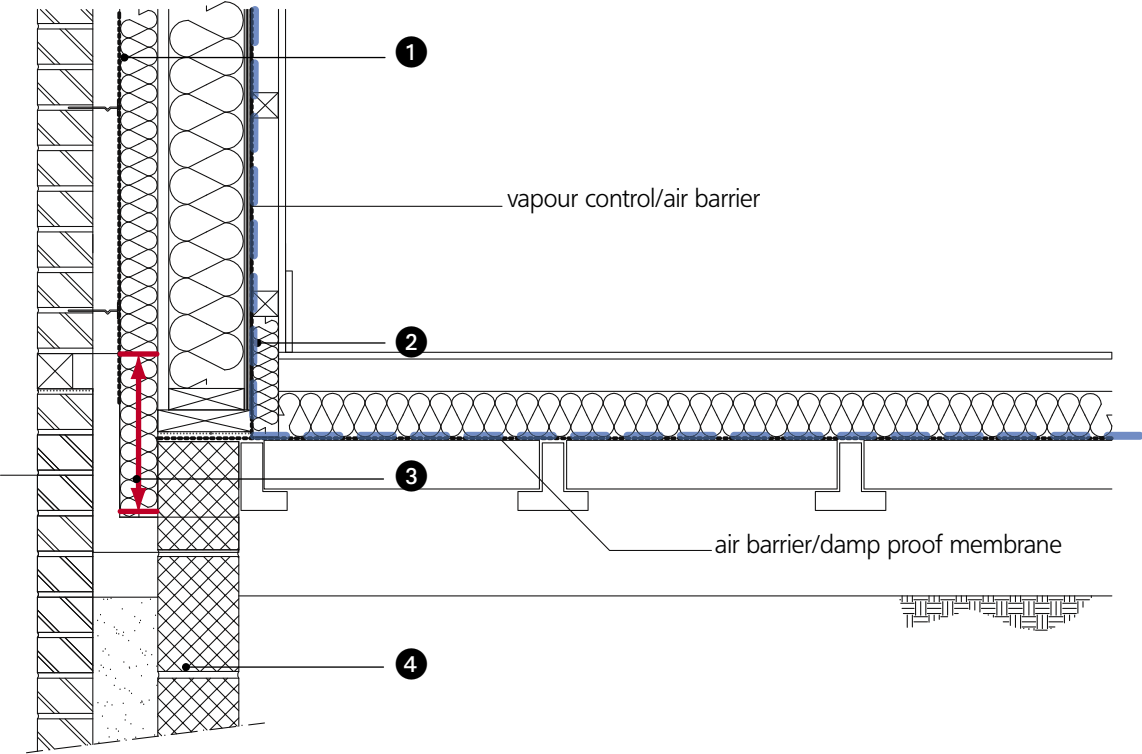
| | | |
|---|--------------------------|---|
| Grout/cement wash surface of block and beam floor to seal joints. | <input type="checkbox"/> | A |
| Lay floor damp proof membrane/air barrier over floor and lap up walls by 300 mm and temporally fix to studs. Any services penetrations through air barrier to be suitably sealed. | <input type="checkbox"/> | A |
| Fix wall air barrier/vapour control layer to timber wall panels and lap/tape over floor damp proof membrane/air barrier. | <input type="checkbox"/> | A |
| Fit perimeter upstand insulation (at least 225 mm high) with a minimum thermal resistance of 2.17 m²K/W hard up against wall panels. | <input type="checkbox"/> | T |
| Lay floor insulation hard up against perimeter insulation. | <input type="checkbox"/> | T |
| Screed floor. | <input type="checkbox"/> | |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Fix services to wall panels. | <input type="checkbox"/> | |
| Place plasterboards to wall and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Fit skirting boards and provide a mastic seal between floor and skirtings, and to all service penetrations. | <input type="checkbox"/> | A |

$\Psi = 0.045 \text{ W/mK}$

T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



- 1 Minimum thermal resistance of this insulation layer to achieve 1.75 m²K/W.
- 2 Minimum thermal resistance of the perimeter insulation upstand to achieve 2.17 m²K/W.
- 3 Overlap of insulation to be 300 mm minimum.
- 4 Blockwork of maximum 0.19 W/mK dry thermal conductivity.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list



| | | |
|---|--------------------------|---|
| Grout/cement wash surface of block and beam floor to seal joints. | <input type="checkbox"/> | A |
| Lay floor damp proof membrane/air barrier over floor and lap up walls by 300 mm and temporally fix to studs. Any services penetrations through air barrier to be suitably sealed. | <input type="checkbox"/> | A |
| Fix wall air barrier/vapour control layer to timber wall panels and lap/tape over floor damp proof membrane/air barrier. | <input type="checkbox"/> | A |
| Fit perimeter upstand insulation (at least 225 mm high) with a minimum thermal resistance of 2.17 m ² K/W hard up against wall panels. | <input type="checkbox"/> | T |
| Lay floor insulation hard up against perimeter insulation. | <input type="checkbox"/> | T |
| Screed floor. | <input type="checkbox"/> | |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Fix services to wall panels. | <input type="checkbox"/> | |
| Place plasterboards to wall and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Fit skirting boards and provide a mastic seal between floor and skirtings, and to all service penetrations. | <input type="checkbox"/> | A |

$\Psi = 0.028 \text{ W/mK}$

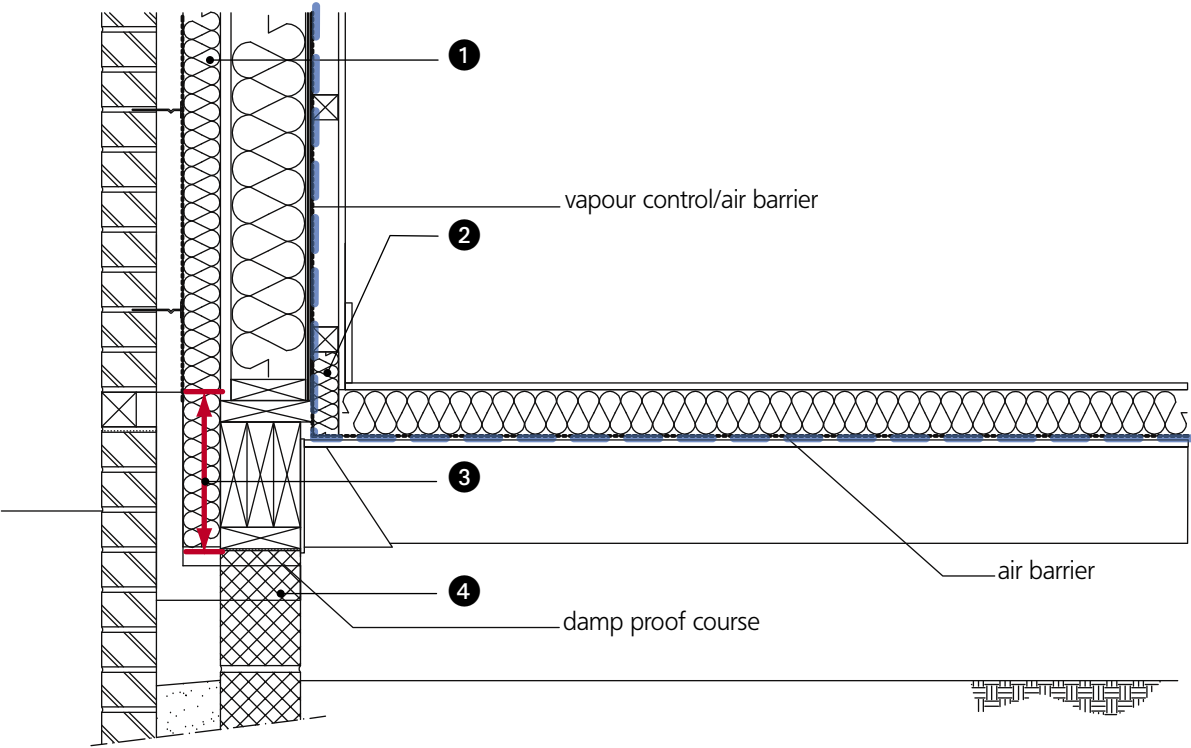
T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



Enhanced Detail TF02-F01 (B)
Use this detail instead of ACD: TFW-GF-01



- 1 Minimum thermal resistance of this insulation layer to achieve 1.75 m²K/W.
- 2 Minimum thermal resistance of the perimeter insulation upstand to achieve 2.17 m²K/W.
- 3 Overlap of insulation to be 300 mm minimum.
- 4 Blockwork of maximum 0.19 W/mK dry thermal conductivity.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list ✓

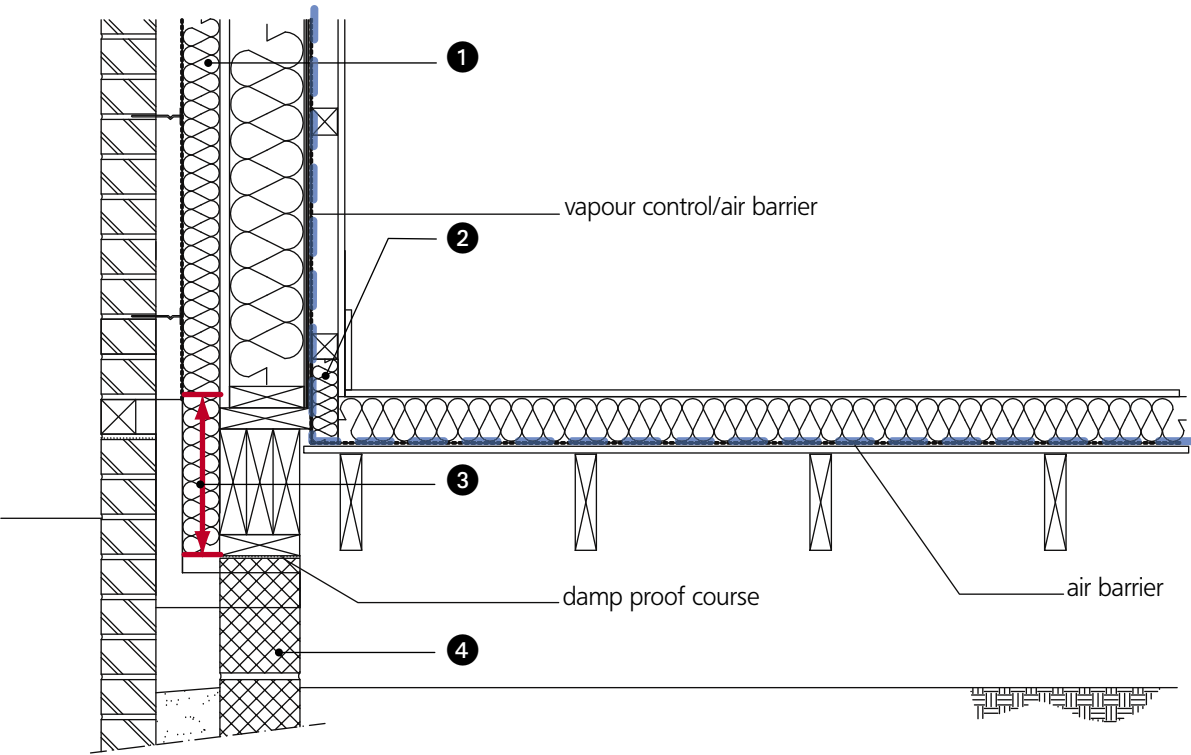
| | | |
|---|--------------------------|---|
| Provide insulation between floor joists in location of proposed internal stud walls. | <input type="checkbox"/> | T |
| Fix lower floor sheeting/decking. | <input type="checkbox"/> | |
| Lay air barrier over lower floor sheeting and lap up walls by 300 mm and temporarily fix to wall panels. Any services penetrations through air barrier to be suitably sealed. | <input type="checkbox"/> | A |
| Fix wall air barrier/vapour control layer to timber wall panels and lap/tape over floor air barrier. | <input type="checkbox"/> | A |
| Fit perimeter upstand insulation (at least 150 mm high) with a minimum thermal resistance of 2.17 m ² K/W hard up against wall panels. | <input type="checkbox"/> | T |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Erect internal walls. | <input type="checkbox"/> | |
| Fix services to wall panels. | <input type="checkbox"/> | |
| Lay floor insulation hard up against perimeter insulation. | <input type="checkbox"/> | T |
| Lay upper floor decking. | <input type="checkbox"/> | |
| Place plasterboards to wall and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Fit skirting boards and provide a mastic seal between floor and skirtings, and to all service penetrations. | <input type="checkbox"/> | A |

$\Psi = 0.021 \text{ W/mK}$

T: Thermal Performance
A: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



- ❶ Minimum thermal resistance of this insulation layer to achieve 1.75 m²K/W.
- ❷ Minimum thermal resistance of the perimeter insulation upstand to achieve 2.17 m²K/W.
- ❸ Overlap of insulation to be 300 mm minimum.
- ❹ Blockwork of maximum 0.19 W/mK dry thermal conductivity.

Only when three complementary Energy Saving Trust Enhanced Details are used together, and in conjunction with all other relevant ACDs, can a y-value of 0.04 be used in SAP2005. See Introductory Document for full details.

Suggested construction sequence including site check list ✓

| | | |
|--|--------------------------|---|
| Provide insulation between floor joists in location of proposed internal stud walls. | <input type="checkbox"/> | ❶ |
| Fix lower floor sheeting/decking. | <input type="checkbox"/> | |
| Lay air barrier over lower floor sheeting and lap up walls by 300 mm and temporally fix to wall panels. Any services penetrations through air barrier to be suitably sealed. | <input type="checkbox"/> | ❷ |
| Fix wall air barrier/vapour control layer to timber wall panels and lap/tape over floor air barrier. | <input type="checkbox"/> | ❷ |
| Fit perimeter upstand insulation (at least 150 mm high) with a minimum thermal resistance of 2.17 m²K/W hard up against wall panels. | <input type="checkbox"/> | ❶ |
| Fix 50 mm deep (width dependent on services to be provided) horizontal battens at maximum 600 mm vertical centres to wall. | <input type="checkbox"/> | |
| Erect internal walls. | <input type="checkbox"/> | |
| Fix services to wall panels. | <input type="checkbox"/> | |
| Lay floor insulation hard up against perimeter insulation. | <input type="checkbox"/> | ❶ |
| Lay upper floor decking. | <input type="checkbox"/> | |
| Place plasterboards to wall and tape joints or provide skim finish. | <input type="checkbox"/> | |
| Fit skirting boards and provide a mastic seal between floor and skirtings, and to all service penetrations. | <input type="checkbox"/> | ❷ |

$\Psi = 0.021 \text{ W/mK}$

❶: Thermal Performance
❷: Air Barrier

This indicative guidance illustrates best practice for design and construction in respect to ensuring thermal performance and air barrier continuity, and must be implemented with due regard to site conditions and all other requirements imposed by Building Regulations.

Site Manager/Supervisor: Site Name: Plot No: Date: / /



Enhanced Detail TF02-F03 (B)
Use this detail instead of ACD: TFW-GF-03