

Proposal || Issue: 3



Siniat Proposal

NCC Class 1a - Timber Frame Duplex or Townhouses

NSW 2036

Partition and Ceiling Information

Issued By	Date	Comments
Siniat Technical Services	October 4, 2021	Siniat standard wall and ceiling systems recommended for Class 1a timber framed duplex or townhouses to meet the acceptable construction provisions of the NCC.
Reviewed By		
Approved By		

- This document is a proposal only and is subject to the project/builder's approval.
- It is the responsibility of project certifier to determine if the specified products and performance properties including FRL, RISF, Rw, Rw + Ctr, Lnw and Total R-Value, etc. ratings are suitable for the intended applications.
- For dimensions and performance properties of systems in this proposal that use products not manufactured or supplied by Etex Australia and branded Siniat, refer to the relevant product manufacturer.
- In wet areas, replace Mastashield with Watershield, Soundshield with Trurock, and Fireshield with Trurock or Multishield of same thickness, and replace 10mm Opal or 10mm Soundshield with 13mm Watershield.
- For enhanced impact resistance, replace any plasterboard with Trurock of same thickness.
- For framing design of internal steel walls and ceilings, refer to the framing tables in the Blueprint. For framing design of external steel walls and ceilings, please contact Siniat Engineering Services.

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Warranty

Siniat products are guaranteed by a 10 Year Warranty.

Visit <https://siniat.com.au> for details.

Disclaimer

Products manufactured and systems designed by Etex Australia Pty Ltd and branded Siniat, are produced in accordance with the Building Code of Australia and relevant Australian Standards. Information in this document is to be used as a guide only and is subject to project approval as many aspects of construction are not comprehensively covered. It is also the responsibility of the project to determine if our products and systems are suitable for the intended application and they meet the relevant building code and project requirements. Etex Australia Pty Ltd will not be held responsible for any claims resulting from the installation of its products or other associated products not in accordance with the recommendations of the manufacturer's technical literature or relevant Australian Standards, or for situations not covered by our certification reports

Siniat technical information is regularly updated. To ensure this document is current with the latest information, visit siniat.com.au or contact Siniat Customer Service Centre on 1300 724 505

General Notes

Siniat has attempted to match the system properties provided in this document to that published in the latest technical literature. Should there be any discrepancies, please inform Siniat Technical Services.

The total weight of a system provided in this document is an estimate based on available product data, and does not include the weight of the structural members such as columns and beams, floor/roof joists, etc. and finishes such as tiling, roofing, etc.

The Insulation Pathway Total R-Value of a system provided in this document is an estimate based on sum of the thermal resistances (R-Values) of the individual component layers in a composite element including any building material, insulating material, airspace and associated surface resistances. It is calculated along the insulation pathway only without taking into account the thermal bridging effects of framing components and is only valid for summer heat flow (mean temperature of 23°C). Only the NCC Compliant Total R-Value, if provided, complies to the Section J of Building Code of Australia, NCC 2019 Volume One.

Section 1

System List



System Reference	System Properties
<p>It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.</p>	
<p>External Wall NCC-C1a-LB-R1 (R3.8 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment)</p>	<p>Fire Protection : Rated from outside only; FRL with contribution of internal lining : 90/90/90; FRL without contribution of internal lining : 60/60/60; FRL3 : 90/90/90; Airborne Rw : 50; Airborne Rw + Ctr : 42; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 4.430</p>
<p>External Wall NCC-C1a-LB-R2 (R2.8 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment)</p>	<p>Fire Protection : Rated from outside only; FRL From Outside Only : 90/90/90; Airborne Rw : 49; Airborne Rw + Ctr : 36; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 3.13</p>
<p>External Wall NCC-C1a-LB-R3 (R2.4 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment)</p>	<p>Fire Protection : Rated from outside only; FRL From Outside Only : 90/90/90; Airborne Rw : 48; Airborne Rw + Ctr : 35; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.93</p>
<p>External Wall NCC-C1a-LB-A1 (R2.8, Rw 41 external timber wall)</p>	<p>Airborne Rw : 41; Airborne Rw + Ctr : 30; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.950</p>
<p>External Wall NCC-C1a-LB-A2 (R2.8, Rw 47 external timber wall)</p>	<p>Airborne Rw : 50; Airborne Rw + Ctr : 38; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.95</p>
<p>External Wall NCC-C1a-LB-A3-1 (R2.8, Rw 52 external timber wall)</p>	<p>Airborne Rw : 52; Airborne Rw + Ctr : 42; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.96</p>
<p>External Wall NCC-C1a-LB-A3-2 (R2.8, Rw 52 external timber wall)</p>	<p>Airborne Rw : 52; Airborne Rw + Ctr : 39; Impact Sound Resistant : Yes; Insulation Pathway Total R-Value (m2.K/W) : 2.95</p>
<p>External Wall NCC-C1a-LB-A3-3 (R2.8, Rw52 external timber wall)</p>	<p>Airborne Rw : 54; Airborne Rw + Ctr : 42; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 3</p>
<p>Separating Wall NCC-C1a-LB-1 (Separating wall, habitable room other than kitchen on one side, kitchen or non-habitable room on another side)</p>	<p>Fire Protection : Rated from both sides; Load Bearing FRL : 60/60/60; Airborne Rw : 66; Airborne Rw + Ctr : 52; Impact Sound Resistant : Yes - Discontinuous Construction; Insulation Pathway Total R-Value (m2.K/W) : 4.44</p>
<p>Separating Wall NCC-C1a-LB-2 (Separating wall, habitable room other than kitchen on each side)</p>	<p>Fire Protection : Rated from both sides; Load Bearing FRL : 60/60/60; Airborne Rw : 64; Airborne Rw + Ctr : 50; Impact Sound Resistant : Yes - Discontinuous Construction; Insulation Pathway Total R-Value (m2.K/W) : 4.42</p>
<p>Separating Wall NCC-C1a-LB-3 (Separating wall, kitchen or non-habitable room on each side)</p>	<p>Fire Protection : Rated from both sides; Load Bearing FRL : 60/60/60; Airborne Rw : 61; Airborne Rw + Ctr : 51; Impact Sound Resistant : Yes - Discontinuous Construction; Insulation Pathway Total R-Value (m2.K/W) : 4.46</p>
<p>Separating Wall NCC-C1a-LB-M-1 (Separating masonry wall between non-habitable rooms)</p>	<p>Fire Protection : Rated from both sides; FRL from Both Sides : Masonry FRL; Airborne Rw : 59; Airborne Rw + Ctr : 48; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 1.86</p>
<p>Garages Separating Wall NCC-C1a-LB-1 (Separating wall between garages)</p>	<p>Fire Protection : Rated from both sides; FRL : 60/60/60; Airborne Rw : 58; Airborne Rw + Ctr : 51; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.370</p>
<p>Partition Wall NCC-C1a-LB-A1 (Internal partition wall between home theatre or music room and bedroom)</p>	<p>Airborne Rw : 57; Airborne Rw + Ctr : 51; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.47</p>
<p>Partition Wall NCC-C1a-LB-A2-1 (Internal partition wall between lounge room and bedroom)</p>	<p>Airborne Rw : 51; Airborne Rw + Ctr : 42; Impact Sound Resistant : Yes; Insulation Pathway Total R-Value (m2.K/W) : 2.31</p>
<p>Partition Wall NCC-C1a-LB-A2-2 (Internal partition wall between lounge room and bedroom)</p>	<p>Airborne Rw : 50; Airborne Rw + Ctr : 39; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.34</p>
<p>Partition Wall NCC-C1a-LB-A3 (Internal partition wall between bedrooms)</p>	<p>Airborne Rw : 43; Airborne Rw + Ctr : 33; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.28</p>

System Reference	System Properties
<p>It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.</p>	
<p>Partition Wall NCC-C1a-LB-A4 (Typical internal partition wall)</p>	<p>Airborne Rw : 34; Airborne Rw + Ctr : 25; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 0.44</p>
<p>Separating Wall NCC-C1a-C10a-LB-1 (Wall separating Class 1a building from Class 10a private garage not associated with the Class 1a building)</p>	<p>Fire Protection : Rated from the non-associated private garage side; FRL with contribution of internal wall lining : 90/90/90; FRL without contribution of internal wall lining : 60/60/60; Airborne Rw : 60; Airborne Rw + Ctr : 50; Impact Sound Resistant : No; Insulation Pathway Total R-Value (m2.K/W) : 2.480</p>
<p>Separating Wall NCC-C1a-C10a-LB-2 (Wall separating Class 1a building from Class 10a private garage not associated with the Class 1a building)</p>	<p>Fire Protection : Rated from the non-associated private garage side; FRL with contribution of internal wall lining : 90/90/90; FRL without contribution of internal wall lining : 60/60/60; Airborne Rw : 61; Airborne Rw + Ctr : 51; Impact Sound Resistant : Yes; Insulation Pathway Total R-Value (m2.K/W) : 2.440</p>

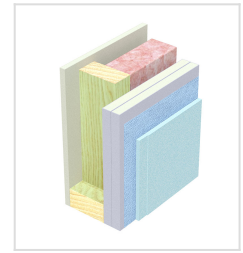


Section 2

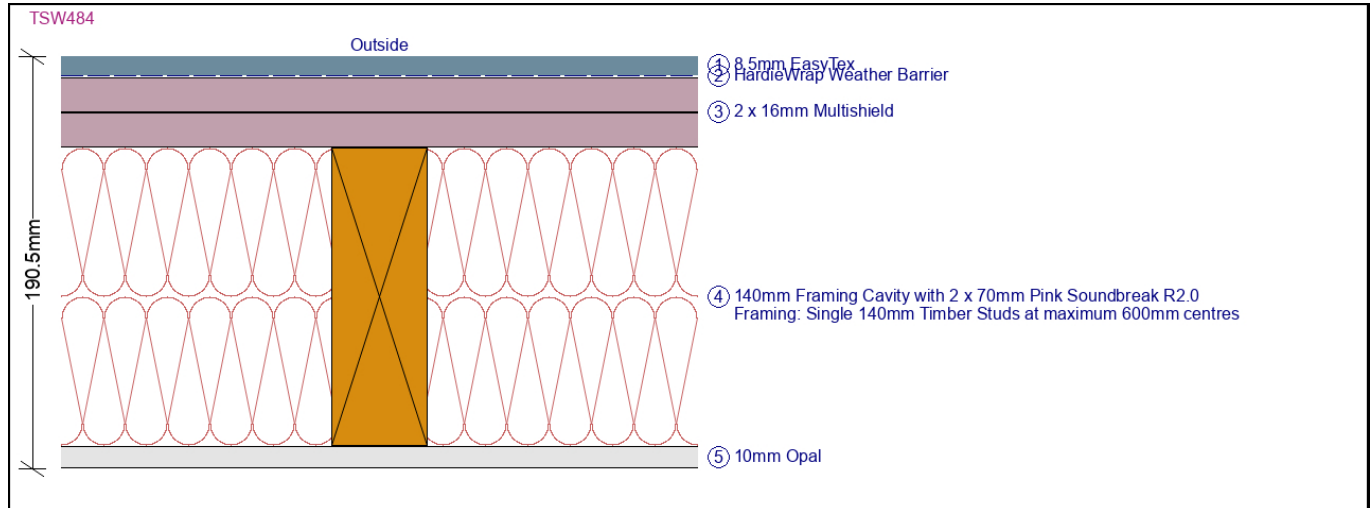
System Details



System No.	1
System Reference	External Wall NCC-C1a-LB-R1
Comments	R3.8 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from outside only FRL with contribution of internal lining: 90/90/90 FRL without contribution of internal lining: 60/60/60 FRL3: 90/90/90 Airborne R_w : 50 Airborne $R_w + C_{tr}$: 42 Impact Sound Resistant: No Total Thickness (mm): 191.00 Insulation Pathway Total R-Value (m ² .K/W): 4.430 Estimated Total Weight (kg/m ²): 50.22	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier External Lining: 2 x 16mm Multishield Wall Cavity: 140mm Framing Cavity Framing : Single Timber Studs at maximum 600mm centres Insulation : 2 x 70mm Pink Soundbreak R2.0 Internal Lining: 10mm Opal

System Notes

1. Fire Report: FAR3371
2. Use approved fire rated penetration details in the non-fire rated internal lining to maintain FRL
3. Acoustic Report: Day Design 3094-43 (Based on Siniat System TSW484.L6C2)
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

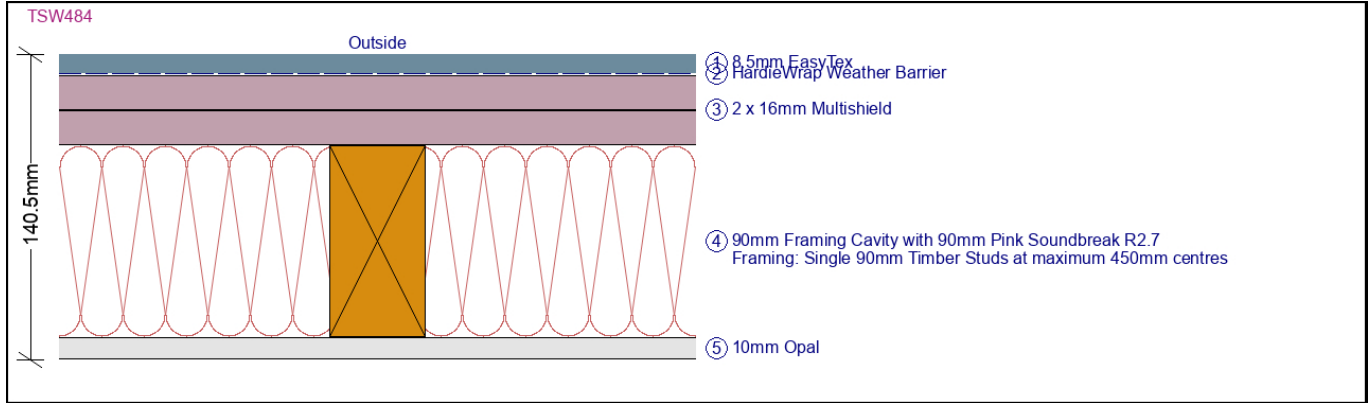
For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.



System No.	2
System Reference	External Wall NCC-C1a-LB-R2
System Code	TSW484
Comments	R2.8 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from outside only FRL From Outside Only: 90/90/90 Airborne R_w : 49 Airborne $R_w + C_{tr}$: 36 Impact Sound Resistant: No Total Thickness (mm): 141 Insulation Pathway Total R-Value (m ² .K/W): 3.13 Estimated Total Weight (kg/m ²): 54.92	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier External Lining: 2 x 16mm Multishield Wall Cavity: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Internal Lining: 10mm Opal

System Notes

1. Fire Report: FAR3371
2. Use approved fire rated penetration details in the non-fire rated internal lining to maintain FRL
3. Acoustic Report: Insul v9 prediction
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

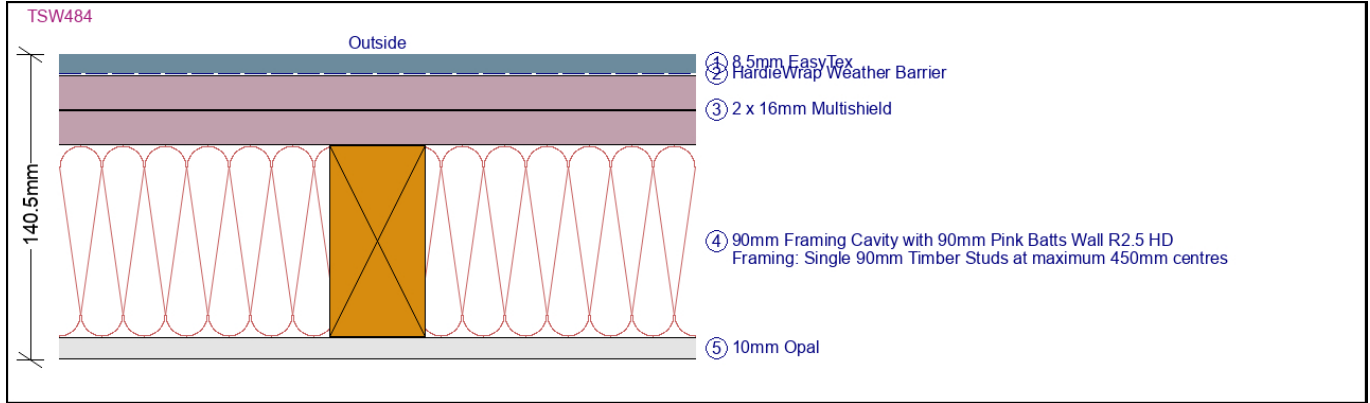
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	3
System Reference	External Wall NCC-C1a-LB-R3
System Code	TSW484
Comments	R2.4 external timber wall, less than 900mm from allotment boundary or less than 1.8 m from another Class 1 building in the same allotment



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w, R_w + C_{tr}, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from outside only FRL From Outside Only: 90/90/90 Airborne R _w : 48 Airborne R _w + C _{tr} : 35 Impact Sound Resistant: No Total Thickness (mm): 141 Insulation Pathway Total R-Value (m ² .K/W): 2.93 Estimated Total Weight (kg/m ²): 54.74	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier External Lining: 2 x 16mm Multishield Wall Cavity: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 450mm centres Insulation : 90mm Pink Batts Wall R2.5 HD Internal Lining: 10mm Opal

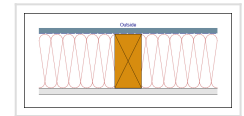
System Notes

1. Fire Report: FAR3371
2. Use approved fire rated penetration details in the non-fire rated internal lining to maintain FRL
3. Acoustic Report: Insul v9 prediction
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

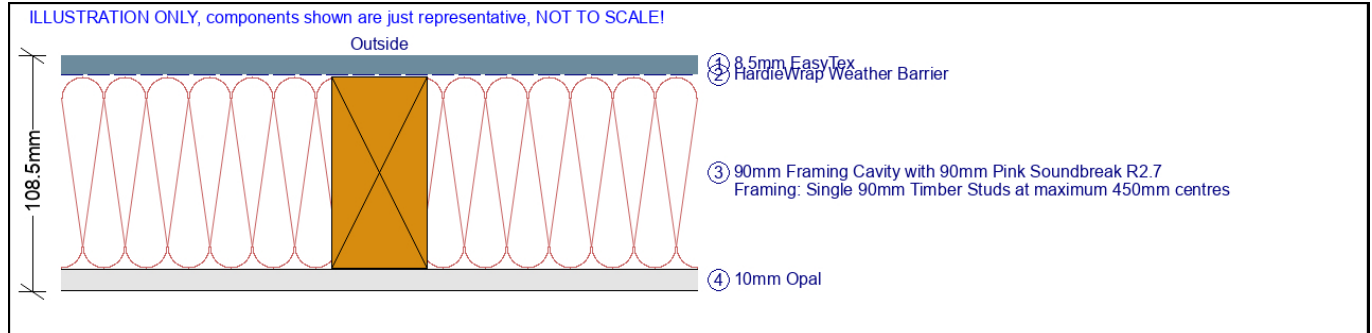
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	4
System Reference	External Wall NCC-C1a-LB-A1
Comments	R2.8, Rw 41 external timber wall



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne Rw: 41 Airborne Rw + Ctr: 30 Impact Sound Resistant: No Total Thickness (mm): 109.00 Insulation Pathway Total R-Value (m ² .K/W): 2.950 Estimated Total Weight (kg/m ²): 28.92	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier Wall Cavity: 90mm Framing Cavity Framing : Single Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Internal Lining: 10mm Opal

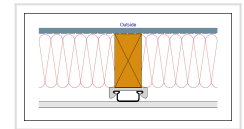
System Notes

1. Acoustic Report: Insul v9 prediction
2. Acoustic rating valid for studs at 450mm centres
3. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
4. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
5. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

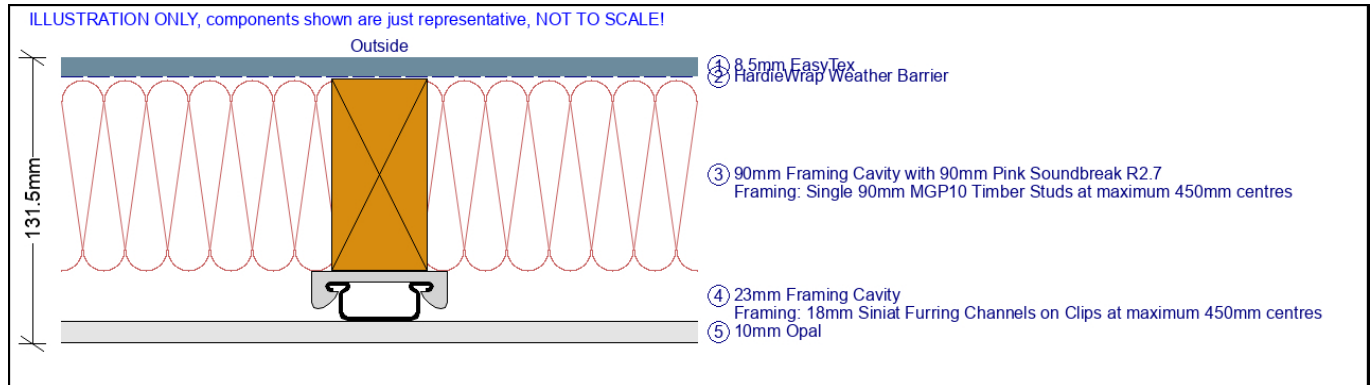
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	5
System Reference	External Wall NCC-C1a-LB-A2
Comments	R2.8, Rw 47 external timber wall



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne Rw: 50 Airborne Rw + Ctr: 38 Impact Sound Resistant: No Total Thickness (mm): 132 Insulation Pathway Total R-Value (m2.K/W): 2.95 Estimated Total Weight (kg/m2): 29.73	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier Wall Cavity: 90mm Framing Cavity Framing : Single 90mm MGP10 Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Additional Frame Cavity: 23mm Framing Cavity Framing : 18mm Siniat Furring Channels on Clips at maximum 450mm centres Internal Lining: 10mm Opal

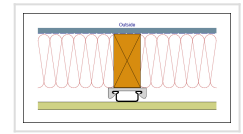
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

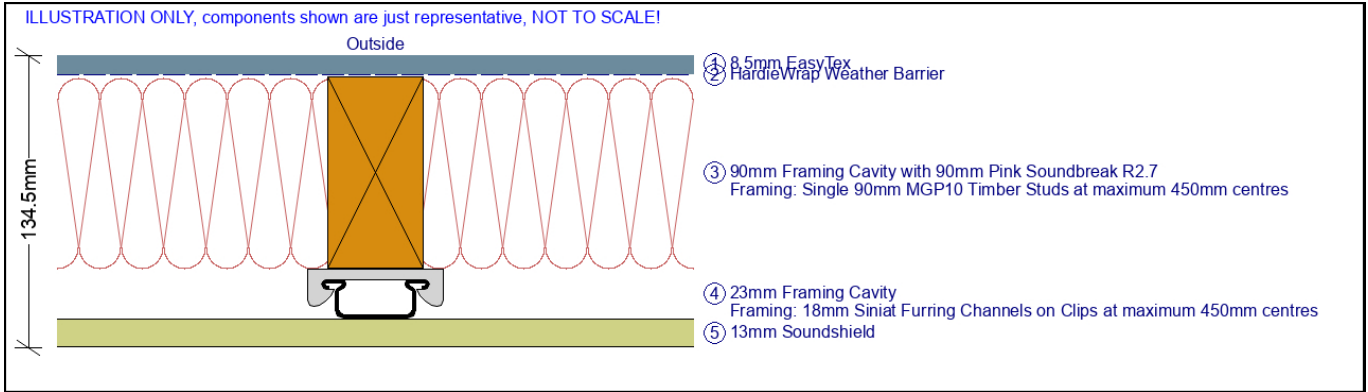
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	6
System Reference	External Wall NCC-C1a-LB-A3-1
Comments	R2.8, Rw 52 external timber wall



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne Rw: 52 Airborne Rw + Ctr: 42 Impact Sound Resistant: No Total Thickness (mm): 135 Insulation Pathway Total R-Value (m ² .K/W): 2.96 Estimated Total Weight (kg/m ²): 33.73	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier Wall Cavity: 90mm Framing Cavity Framing : Single 90mm MGP10 Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Additional Frame Cavity: 23mm Framing Cavity Framing : 18mm Siniat Furring Channels on Clips at maximum 450mm centres Internal Lining: 13mm Soundshield

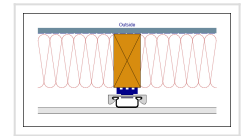
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

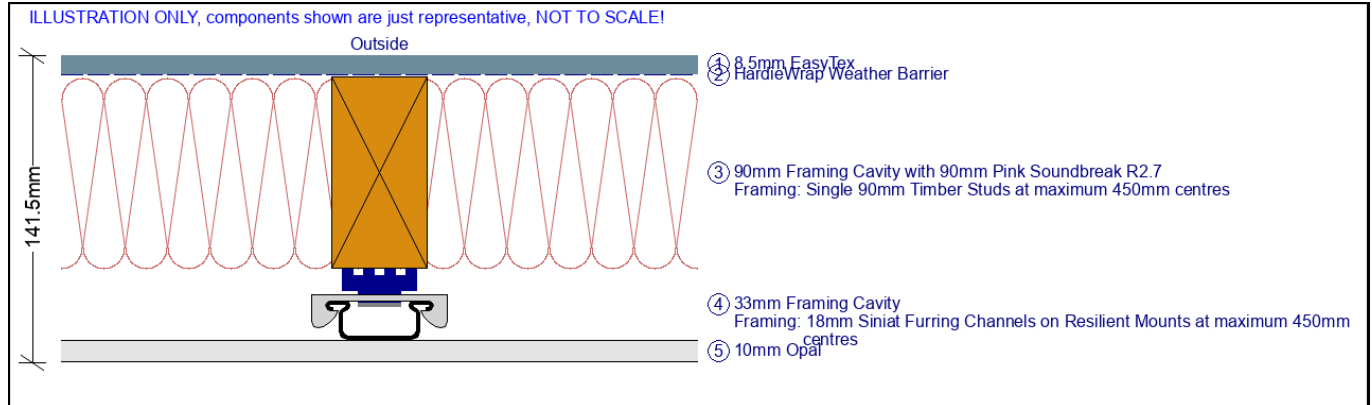
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	7
System Reference	External Wall NCC-C1a-LB-A3-2
Comments	R2.8, Rw 52 external timber wall



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne Rw: 52 Airborne Rw + Ctr: 39 Impact Sound Resistant: Yes Total Thickness (mm): 142 Insulation Pathway Total R-Value (m2.K/W): 2.95 Estimated Total Weight (kg/m2): 29.73	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier Wall Cavity: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Additional Frame Cavity: 33mm Framing Cavity Framing : 18mm Siniat Furring Channels on Resilient Mounts at maximum 450mm centres Internal Lining: 10mm Opal

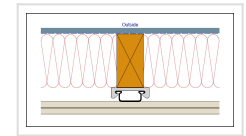
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

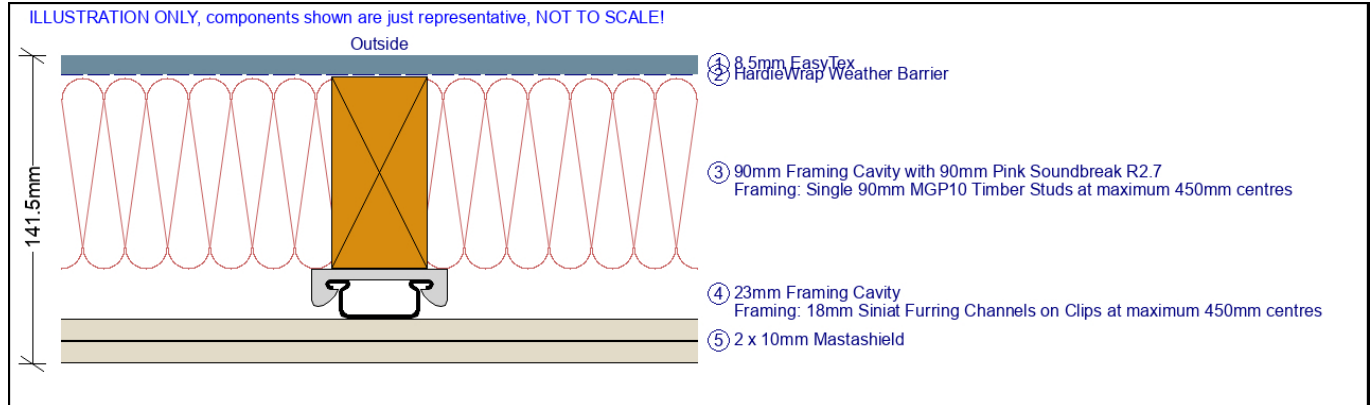
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	8
System Reference	External Wall NCC-C1a-LB-A3-3
Comments	R2.8, Rw52 external timber wall



System Illustration



System Details

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Properties	Composition
Airborne Rw: 54 Airborne Rw + Ctr: 42 Impact Sound Resistant: No Total Thickness (mm): 142 Insulation Pathway Total R-Value (m ² .K/W): 3 Estimated Total Weight (kg/m ²): 34.33	External Cladding: 8.5mm EasyTex Sarking: HardieWrap Weather Barrier Wall Cavity: 90mm Framing Cavity Framing : Single 90mm MGP10 Timber Studs at maximum 450mm centres Insulation : 90mm Pink Soundbreak R2.7 Additional Frame Cavity: 23mm Framing Cavity Framing : 18mm Siniat Furring Channels on Clips at maximum 450mm centres Internal Lining: 2 x 10mm Mastashield

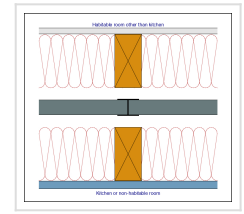
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

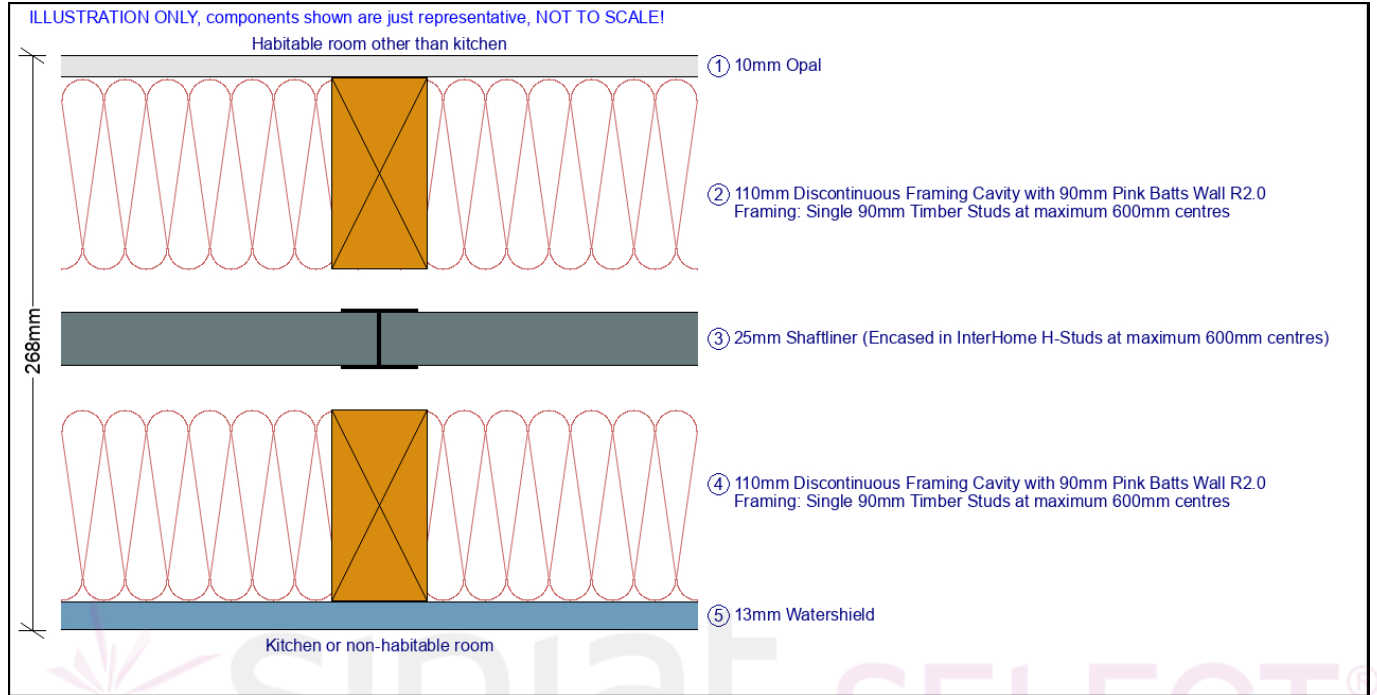
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	9
System Reference	Separating Wall NCC-C1a-LB-1
Comments	Separating wall, habitable room other than kitchen on one side, kitchen or non-habitable room on another side



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from both sides Load Bearing FRL: 60/60/60 Airborne R_w : 66 Airborne $R_w + C_{tr}$: 52 Impact Sound Resistant: Yes - Discontinuous Construction Total Thickness (mm): 268 Insulation Pathway Total R-Value ($m^2.K/W$): 4.44 Estimated Total Weight (kg/m^2): 48.4	Side 1 Lining: 10mm Opal Side 1 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Central Barrier: 25mm Shaftliner (<i>Encased in InterHome H-Studs at maximum 600mm centres</i>) Side 2 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Side 2 Lining: 13mm Watershield

System Notes

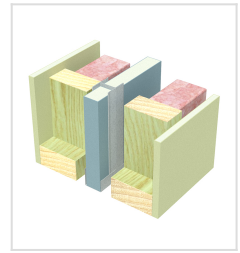
1. Fire Report: FC11661
2. Fire protection of the wall frame opposite to fire attack
3. Acoustic Report: ESTIMATE ONLY, based on Siniat System IHW41.L2C1
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

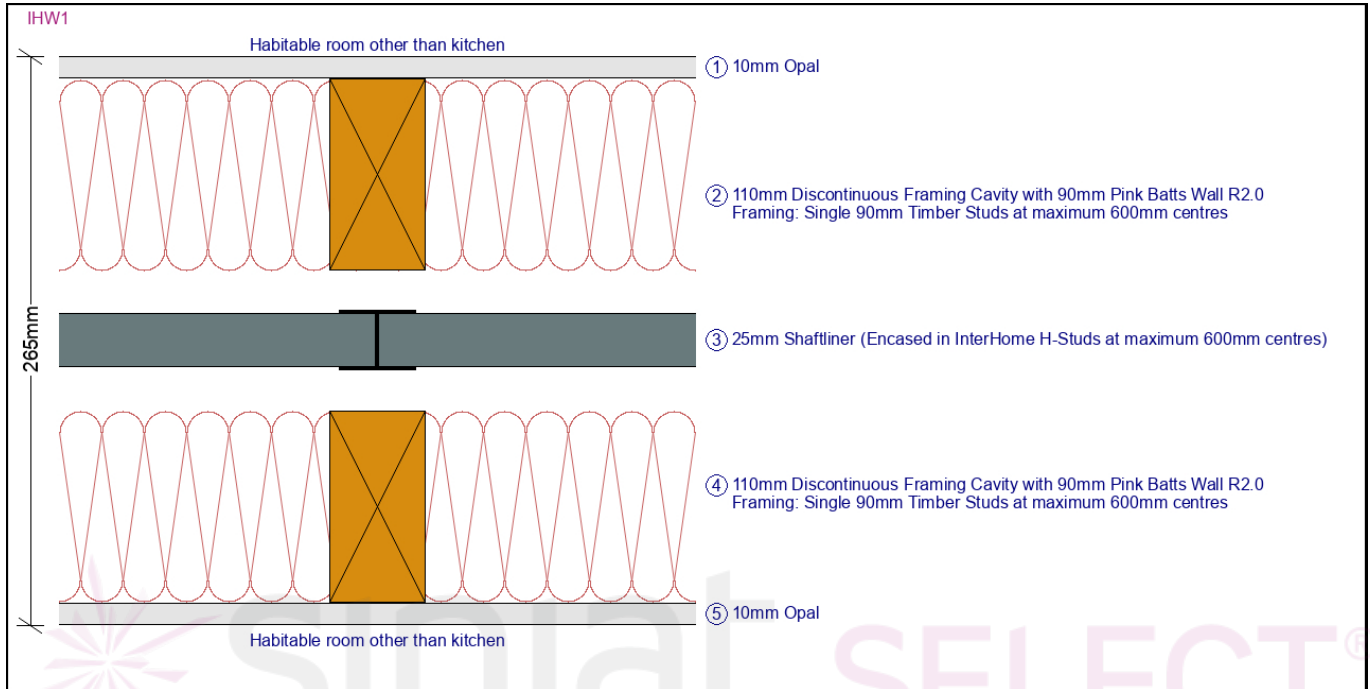
For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.



System No.	10
System Reference	Separating Wall NCC-C1a-LB-2
System Code	IHW1
Comments	Separating wall, habitable room other than kitchen on each side



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from both sides Load Bearing FRL: 60/60/60 Airborne Rw: 64 Airborne Rw + Ctr: 50 Impact Sound Resistant: Yes - Discontinuous Construction Total Thickness (mm): 265 Insulation Pathway Total R-Value (m2.K/W): 4.42 Estimated Total Weight (kg/m2): 47.4	Side 1 Lining: 10mm Opal Side 1 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Central Barrier: 25mm Shaftliner (Encased in InterHome H-Studs at maximum 600mm centres) Side 2 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Side 2 Lining: 10mm Opal

System Notes

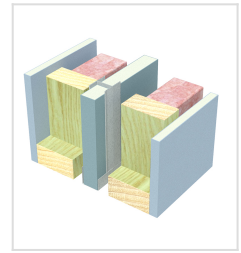
1. Fire Report: FC11661
2. Fire protection of the wall frame opposite to fire attack
3. Acoustic Report: Day Design 3094-42
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

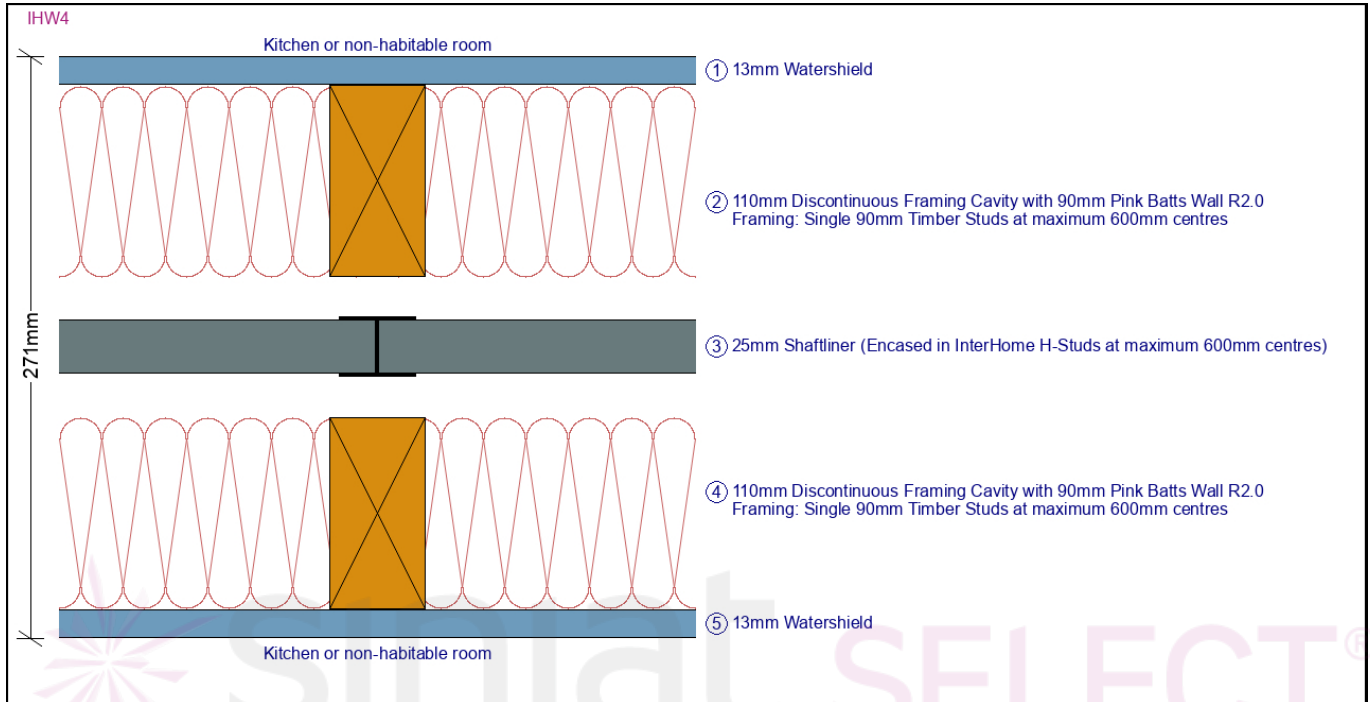
For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.



System No.	11
System Reference	Separating Wall NCC-C1a-LB-3
System Code	IHW4
Comments	Separating wall, kitchen or non-habitable room on each side



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from both sides Load Bearing FRL: 60/60/60 Airborne R_w : 61 Airborne $R_w + C_{tr}$: 51 Impact Sound Resistant: Yes - Discontinuous Construction Total Thickness (mm): 271 Insulation Pathway Total R-Value ($m^2.K/W$): 4.46 Estimated Total Weight (kg/m^2): 49.4	Side 1 Lining: 13mm Watershield Side 1 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Central Barrier: 25mm Shaftliner (Encased in InterHome H-Studs at maximum 600mm centres) Side 2 Cavity: 110mm Discontinuous Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Side 2 Lining: 13mm Watershield

System Notes

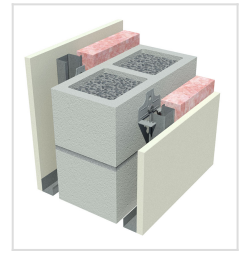
1. Fire Report: FC11661
2. Fire protection of the wall frame opposite to fire attack
3. Acoustic Report: Day Design 3094-42 (Based on Siniat System IHW4.L1C6)
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

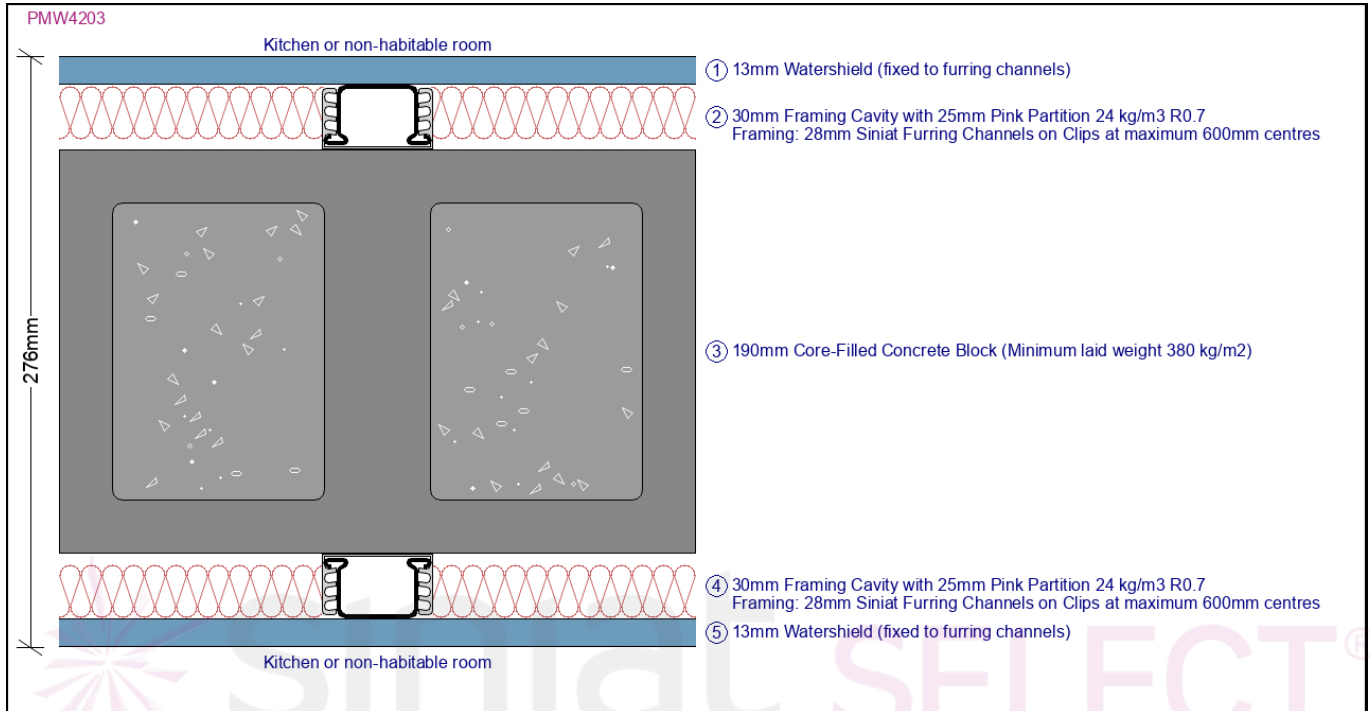
For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.



System No.	12
System Reference	Separating Wall NCC-C1a-LB-M-1
System Code	PMW4203
Comments	Separating masonry wall between non-habitable rooms



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from both sides FRL from Both Sides: Masonry FRL Airborne Rw: 59 Airborne Rw + Ctr: 48 Impact Sound Resistant: No Total Thickness (mm): 276 Insulation Pathway Total R-Value (m2.K/W): 1.86 Estimated Total Weight (kg/m2): 401.64	Side 1 Lining: 13mm Watershield (fixed to furring channels) Side 1 Cavity: 30mm Framing Cavity Framing : 28mm Siniat Furring Channels on Clips at maximum 600mm centres Insulation : 25mm Pink Partition 24 kg/m3 R0.7 Masonry: 190mm Core-Filled Concrete Block (Minimum laid weight 380 kg/m2) Side 2 Cavity: 30mm Framing Cavity Framing : 28mm Siniat Furring Channels on Clips at maximum 600mm centres Insulation : 25mm Pink Partition 24 kg/m3 R0.7 Side 2 Lining: 13mm Watershield (fixed to furring channels)

System Notes

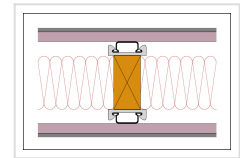
1. Fire Report: Refer to masonry manufacturer
2. Acoustic Report: Acoustic opinion 1021067 (Based on Siniat System PMW4203.L4C2)
3. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
4. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
5. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

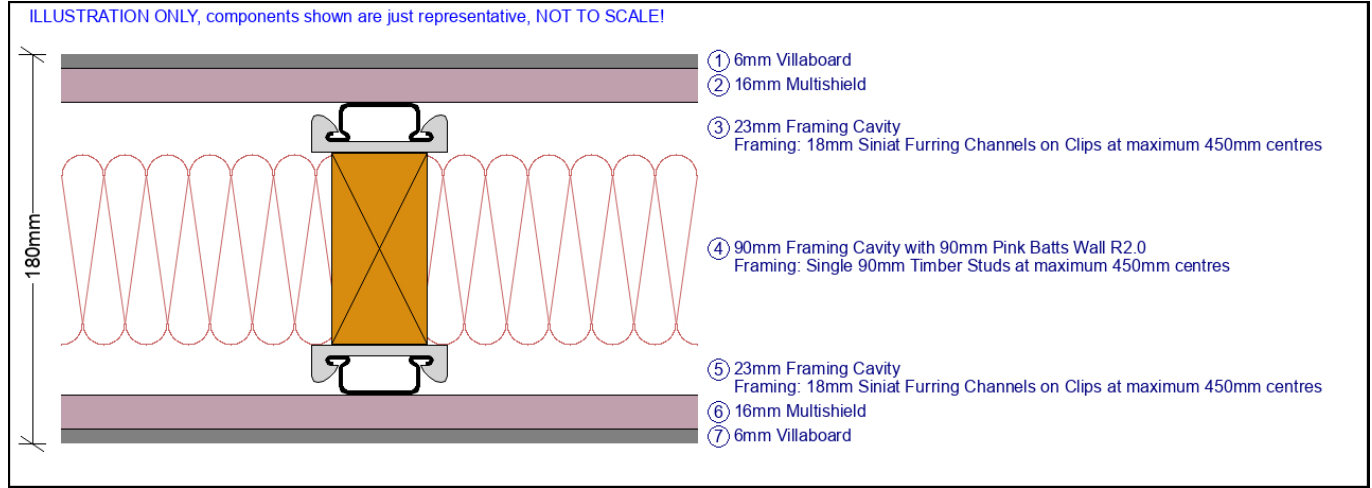
For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.



System No.	13
System Reference	Garages Separating Wall NCC-C1a-LB-1
Comments	Separating wall between garages



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, Rw, Rw + Ctr, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from both sides FRL: 60/60/60 Airborne Rw: 58 Airborne Rw + Ctr: 51 Impact Sound Resistant: No Total Thickness (mm): 180.00 Insulation Pathway Total R-Value (m2.K/W): 2.370 Estimated Total Weight (kg/m2): 53.31	Side 1: 16mm Multishield plus 6mm Villaboard Cavity 1: 23mm Framing Cavity Framing : Furring Channels on Clips at maximum 450mm centres Cavity Centre: 90mm Framing Cavity Framing : Single Timber Studs at maximum 450mm centres Insulation : 90mm Pink Batts Wall R2.0 Cavity 2: 23mm Framing Cavity Framing : Furring Channels on Clips at maximum 450mm centres Side 2: 16mm Multishield plus 6mm Villaboard

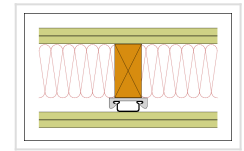
System Notes

1. Fire Report: FAR3348
2. Acoustic Report: Insul v9 prediction
3. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
4. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
5. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

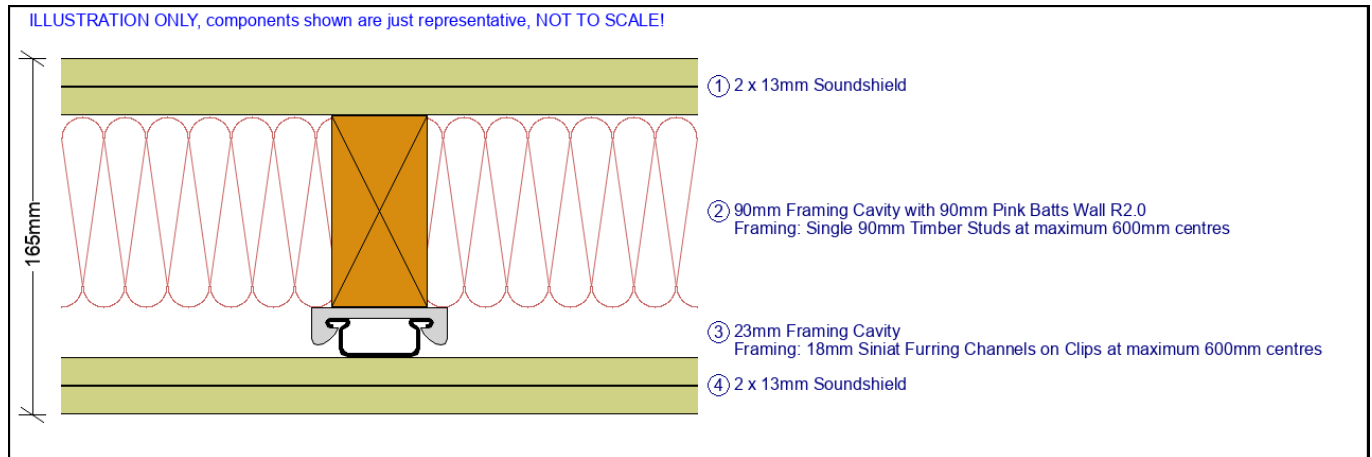
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	14
System Reference	Partition Wall NCC-C1a-LB-A1
Comments	Internal partition wall between home theatre or music room and bedroom



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne R_w : 57 Airborne $R_w + C_{tr}$: 51 Impact Sound Resistant: No Total Thickness (mm): 165 Insulation Pathway Total R-Value (m ² .K/W): 2.47 Estimated Total Weight (kg/m ²): 55.52	Side 1: 2 x 13mm Soundshield Cavity 1: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Cavity 2: 23mm Framing Cavity Framing : 18mm Siniat Furring Channels on Clips at maximum 600mm centres Side 2: 2 x 13mm Soundshield

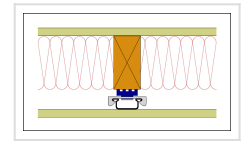
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

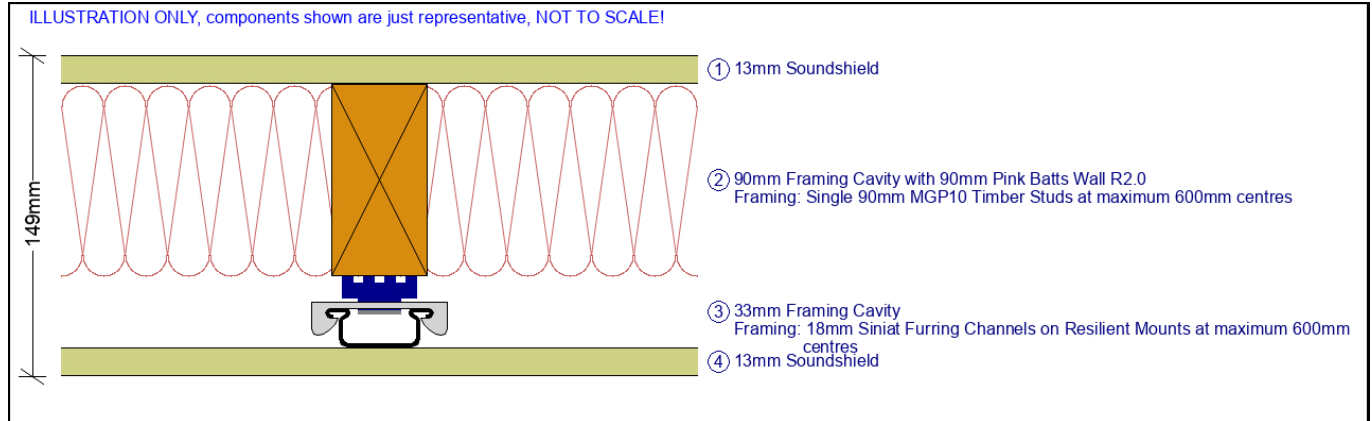
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	15
System Reference	Partition Wall NCC-C1a-LB-A2-1
Comments	Internal partition wall between lounge room and bedroom



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne R_w : 51 Airborne $R_w + C_{tr}$: 42 Impact Sound Resistant: Yes Total Thickness (mm): 149 Insulation Pathway Total R-Value (m ² .K/W): 2.31 Estimated Total Weight (kg/m ²): 30.72	Side 1 Lining: 13mm Soundshield Stud Cavity: 90mm Framing Cavity Framing : Single 90mm MGP10 Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Additional Frame Cavity: 33mm Framing Cavity Framing : 18mm Siniat Furring Channels on Resilient Mounts at maximum 600mm centres Side 2 Lining: 13mm Soundshield

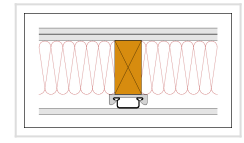
System Notes

1. Acoustic Report: Day Design 3094-45 (Based on Siniat System TSW255)
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

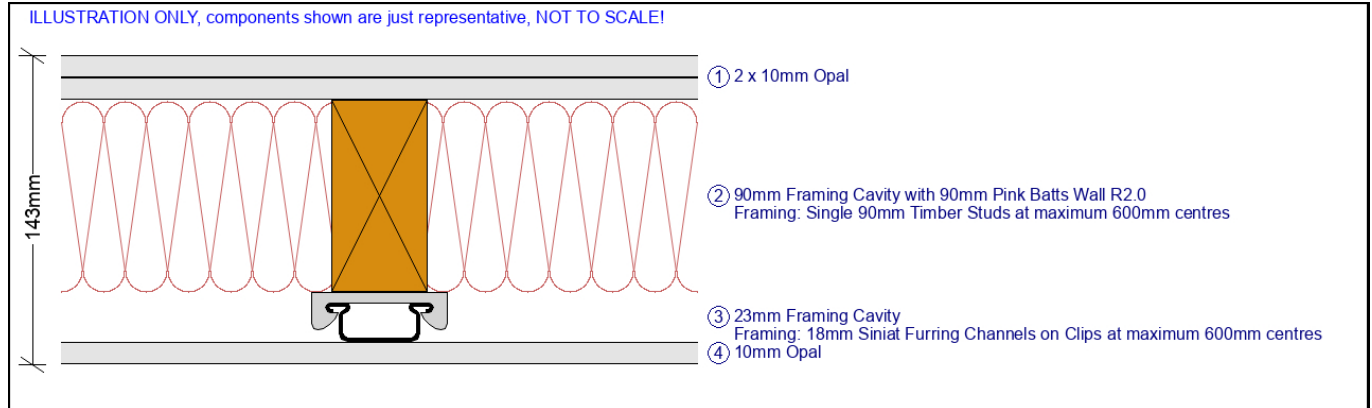
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	16
System Reference	Partition Wall NCC-C1a-LB-A2-2
Comments	Internal partition wall between lounge room and bedroom



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne R_w : 50 Airborne $R_w + C_{tr}$: 39 Impact Sound Resistant: No Total Thickness (mm): 143 Insulation Pathway Total R-Value ($m^2.K/W$): 2.34 Estimated Total Weight (kg/m^2): 31.12	Side 1: 2 x 10mm Opal Cavity 1: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Cavity 2: 23mm Framing Cavity Framing : 18mm Siniat Furring Channels on Clips at maximum 600mm centres Side 2: 10mm Opal

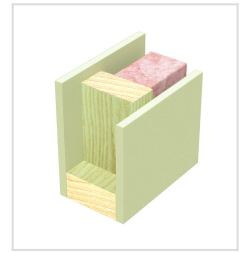
System Notes

1. Acoustic Report: Insul v9 prediction
2. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
3. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
4. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

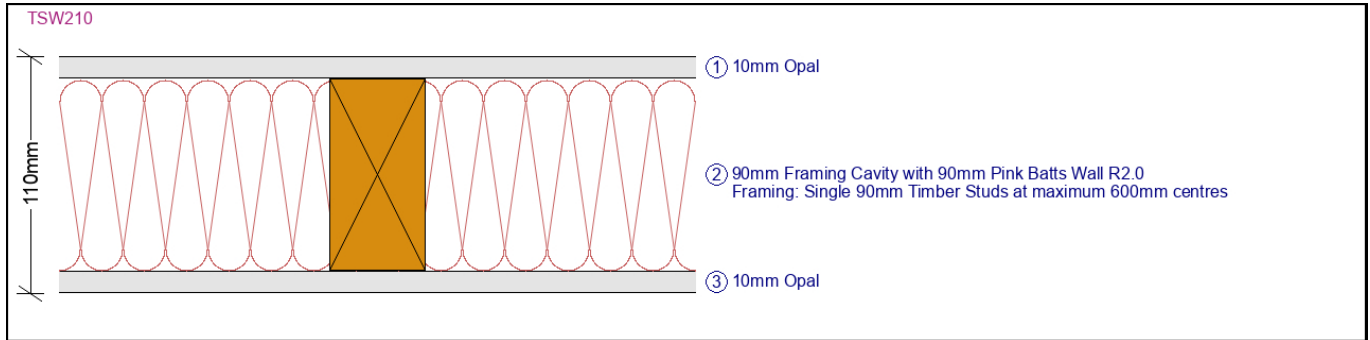
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	17
System Reference	Partition Wall NCC-C1a-LB-A3
System Code	TSW210
Comments	Internal partition wall between bedrooms



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne R_w : 43 Airborne $R_w + C_{tr}$: 33 Impact Sound Resistant: No Total Thickness (mm): 110 Insulation Pathway Total R-Value (m ² .K/W): 2.28 Estimated Total Weight (kg/m ²): 22.1	Side 1 Lining: 10mm Opal Cavity: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Insulation : 90mm Pink Batts Wall R2.0 Side 2 Lining: 10mm Opal

System Notes

1. Acoustic Report: Day Design 3094-45 (Based on Siniat System TSW210.L1C6)
2. Acoustic ratings valid for studs at 600mm centres
3. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
4. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
5. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

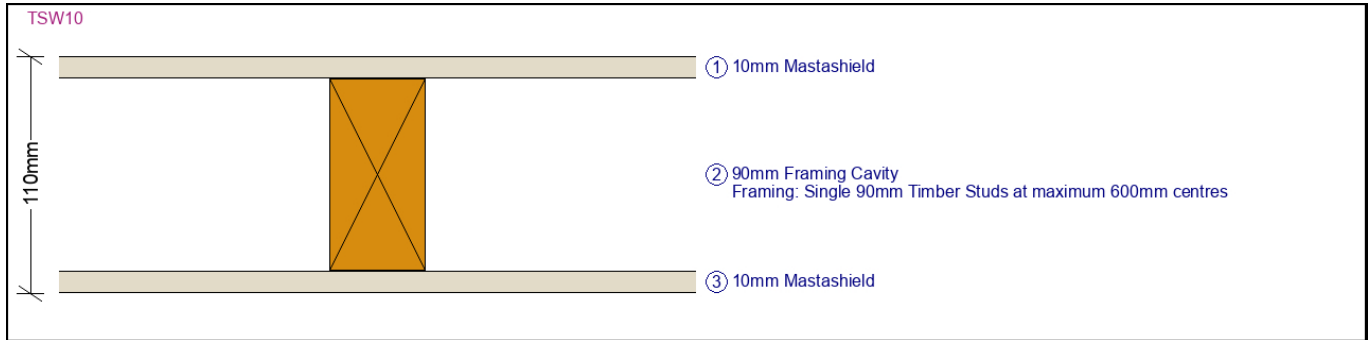
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	18
System Reference	Partition Wall NCC-C1a-LB-A4
System Code	TSW10
Comments	Typical internal partition wall



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Airborne R_w : 34 Airborne $R_w + C_{tr}$: 25 Impact Sound Resistant: No Total Thickness (mm): 110 Insulation Pathway Total R-Value (m ² .K/W): 0.44 Estimated Total Weight (kg/m ²): 17.4	Side 1 Lining: 10mm Mastashield Cavity: 90mm Framing Cavity Framing : Single 90mm Timber Studs at maximum 600mm centres Side 2 Lining: 10mm Mastashield

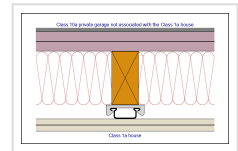
System Notes

1. Acoustic Report: Day Design 3094-45 (Based on Siniat System TSW10.L1C4)
2. Acoustic ratings valid for studs at 600mm centres
3. 10mm Mastashield can be substituted with 10mm Watershield in wet areas
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

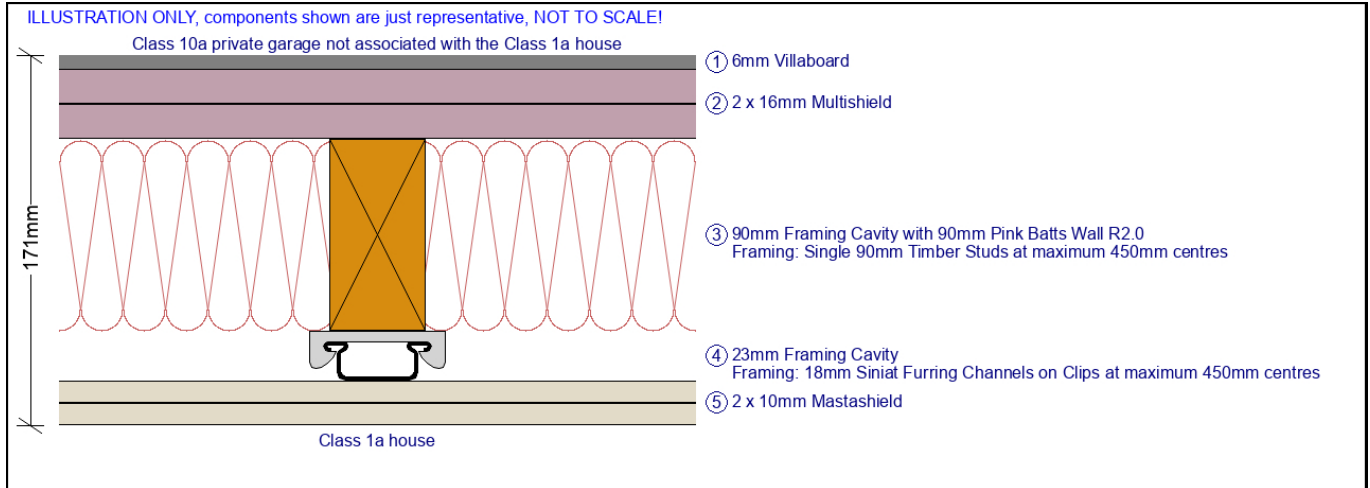
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	19
System Reference	Separating Wall NCC-C1a-C10a-LB-1
Comments	Wall separating Class 1a building from Class 10a private garage not associated with the Class 1a building



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from the non-associated private garage side FRL with contribution of internal wall lining: 90/90/90 FRL without contribution of internal wall lining: 60/60/60 Airborne R_w : 60 Airborne $R_w + C_{tr}$: 50 Impact Sound Resistant: No Total Thickness (mm): 171.00 Insulation Pathway Total R-Value (m ² .K/W): 2.480 Estimated Total Weight (kg/m ²): 55.97	Side 1: 2 x 16mm Multishield plus 6mm Villaboard Cavity 1: 90mm Framing Cavity Framing : Single Timber Studs at maximum 450mm centres Insulation : 90mm Pink Batts Wall R2.0 Cavity 2: 23mm Framing Cavity Framing : Furring Channels on Clips at maximum 450mm centres Side 2: 2 x 10mm Mastashield

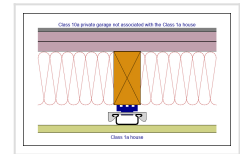
System Notes

1. Fire Report: FAR3348
2. For FRL 90/90/90, use approved fire rated penetration details in the non-fire rated internal lining
3. Acoustic Report: Insul v9 prediction
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

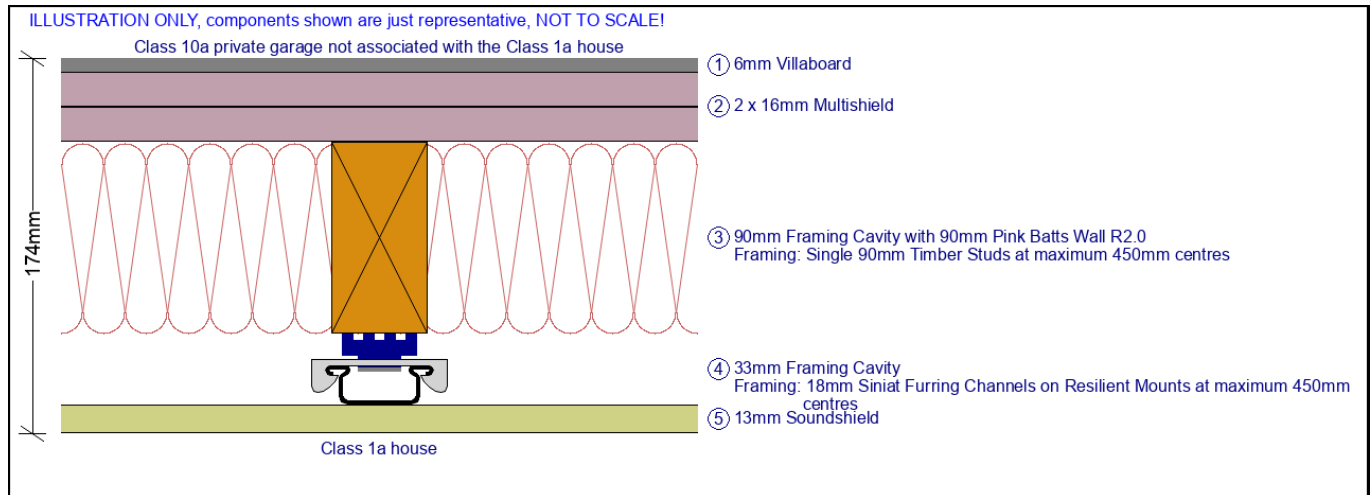
Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

System No.	20
System Reference	Separating Wall NCC-C1a-C10a-LB-2
Comments	Wall separating Class 1a building from Class 10a private garage not associated with the Class 1a building



System Illustration



System Details

It is the responsibility of project certifier to determine if below specified products and performances are suitable for the intended application. System properties like FRL, R_w , $R_w + C_{tr}$, etc. printed anywhere other than inside the 'Properties' column are not verified by Siniat.

Properties	Composition
Fire Protection: Rated from the non-associated private garage side FRL with contribution of internal wall lining: 90/90/90 FRL without contribution of internal wall lining: 60/60/60 Airborne R_w : 61 Airborne $R_w + C_{tr}$: 51 Impact Sound Resistant: Yes Total Thickness (mm): 174.00 Insulation Pathway Total R-Value (m ² .K/W): 2.440 Estimated Total Weight (kg/m ²): 55.37	Side 1: 2 x 16mm Multishield plus 6mm Villaboard Cavity 1: 90mm Framing Cavity Framing : Single Timber Studs at maximum 450mm centres Insulation : 90mm Pink Batts Wall R2.0 Cavity 2: 33mm Framing Cavity Framing : Furring Channels on Resilient Mounts at maximum 450mm centres Side 2: 13mm Soundshield

System Notes

1. Fire Report: FAR3348
2. For FRL 90/90/90, use approved fire rated penetration details in the non-fire rated internal lining
3. Acoustic Report: Insul v9 prediction
4. The Insulation Pathway Total R-Value is an estimate only, valid for summer heat flow (mean temperature of 23°C), and calculated without taking into account the thermal bridging effects of framing components.
5. The total weight is an estimate only, valid for the components drawn in the illustration, and does not take into account the weight of the structural (load-bearing) framing components.
6. Refer to latest published Siniat Technical Manual for installation instructions and construction details.

Framing Details

For internal steel walls and ceilings, refer to the framing tables in the Blueprint. For external steel walls and ceilings, please contact Siniat Engineering Services.

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End of Proposal