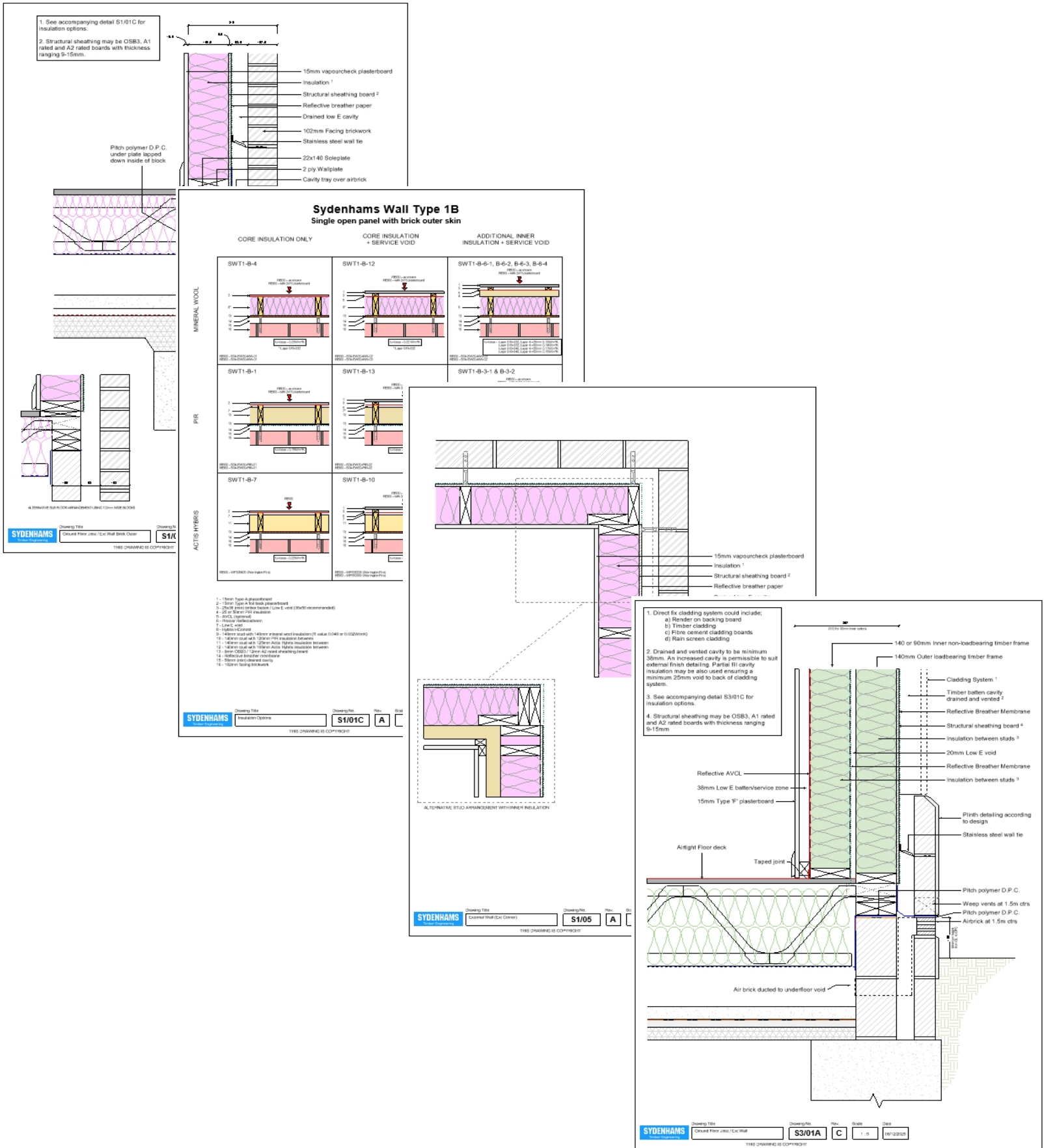


SYDENHAMS

Timber Engineering

Approved Wall Systems

V1.1 - June 2026



				140mm Mineral Wool (040)	140mm Mineral Wool (032)	120mm PIR	140mm Actis Hybris	125mm Actis Hybris	105mm Actis Hybris	90mm Actis Hybris	140mm Hemp	90mm Hemp	140mm Steicoflex 036	90mm Steicoflex 036	25mm PIR	50mm PIR	Actis Hcontrol	Service Batten	REI30 (In to out)	REI60 (In to out)
Ref	U-value (W/m²K)	Inner Leaf	Outer Leaf	Core Insulation										Inner Insulation				Fire Rating		
Type 1A																				
SWT1-A-1	0.18	140 Stud	Block			✓									✓			✗	✓	✓
SWT1-A-3-1	0.13	140 Stud	Block			✓									✓			✓	✓	✓
SWT1-A-3-2	0.12	140 Stud	Block			✓										✓		✓	✓	✓
SWT1-A-4	0.22	140 Stud	Block		✓													✗	✓	✓
SWT1-A-6-1	0.16	140 Stud	Block		✓										✓			✓	✓	✓
SWT1-A-6-2	0.13	140 Stud	Block		✓											✓		✓	✓	✓
SWT1-A-6-3	0.14	140 Stud	Block	✓											✓			✓	✓	✓
SWT1-A-6-4	0.17	140 Stud	Block	✓												✓		✓	✓	✓
SWT1-A-7	0.22	140 Stud	Block					✓										✗	✓	✗
SWT1-A-10	0.19	140 Stud	Block					✓										✓	✓	✓
SWT1-A-11	0.16	140 Stud	Block						✓								✓	✓	✓	✗
SWT1-A-12	0.21	140 Stud	Block		✓													✓	✓	✓
SWT1-A-13	0.16	140 Stud	Block			✓												✓	✓	✓
Type 1B																				
SWT1-B-1	0.18	140 Stud	Brick			✓									✓			✗	✓	✓
SWT1-B-3-1	0.14	140 Stud	Brick			✓										✓		✓	✓	✓
SWT1-B-3-2	0.12	140 Stud	Brick			✓											✓	✓	✓	✓
SWT1-B-4	0.23	140 Stud	Brick		✓													✗	✓	✓
SWT1-B-6-1	0.16	140 Stud	Brick		✓										✓			✓	✓	✓
SWT1-B-6-2	0.14	140 Stud	Brick		✓											✓		✓	✓	✓
SWT1-B-6-3	0.17	140 Stud	Brick	✓											✓			✓	✓	✓
SWT1-B-6-4	0.15	140 Stud	Brick	✓												✓		✓	✓	✓
SWT1-B-7	0.22	140 Stud	Brick					✓										✗	✓	✗
SWT1-B-10	0.19	140 Stud	Brick					✓										✓	✓	✓
SWT1-B-11	0.16	140 Stud	Brick						✓								✓	✓	✓	✗
SWT1-B-12	0.22	140 Stud	Brick		✓													✓	✓	✓
SWT1-B-13	0.17	140 Stud	Brick			✓												✓	✓	✓
Type 2																				
SWT2-1	0.20	140 Stud	Cladding			✓									✓			✗	✓	✓
SWT2-3-1	0.15	140 Stud	Cladding			✓									✓			✓	✓	✓
SWT2-3-2	0.13	140 Stud	Cladding			✓										✓		✓	✓	✓
SWT2-4	0.26	140 Stud	Cladding		✓													✗	✓	✓
SWT2-6-1	0.18	140 Stud	Cladding		✓										✓			✓	✓	✓
SWT2-6-2	0.15	140 Stud	Cladding		✓											✓		✓	✓	✓
SWT2-6-3	0.19	140 Stud	Cladding	✓											✓			✓	✓	✓
SWT2-6-4	0.16	140 Stud	Cladding	✓												✓		✓	✓	✓
SWT2-7	0.26	140 Stud	Cladding					✓										✗	✓	✗
SWT2-10	0.22	140 Stud	Cladding					✓										✓	✓	✓
SWT2-11	0.18	140 Stud	Cladding						✓								✓	✓	✓	✗
SWT2-12	0.22	140 Stud	Cladding		✓													✓	✓	✓
SWT2-13	0.18	140 Stud	Cladding			✓												✓	✓	✓
Type 3 (Twin Wall)																				
SWT3-1	0.13	140/140 Stud	Cladding								✓	✓						✓	✓	✓
SWT3-5	0.16	140/90 Stud	Cladding								✓	✓						✓	✓	✓
SWT3-3	0.12	140/140 Stud	Cladding										✓					✓	✓	✓
SWT3-7	0.14	140/90 Stud	Cladding										✓	✓				✓	✓	✓
SWT3-4	0.12	140/140 Stud	Cladding				✓			✓								✓	✓	✓
SWT3-6	0.14	140/90 Stud	Cladding				✓			✓								✓	✓	✓

Sydenhams Wall Type 1B

Single open panel with brick outer skin

CORE INSULATION ONLY

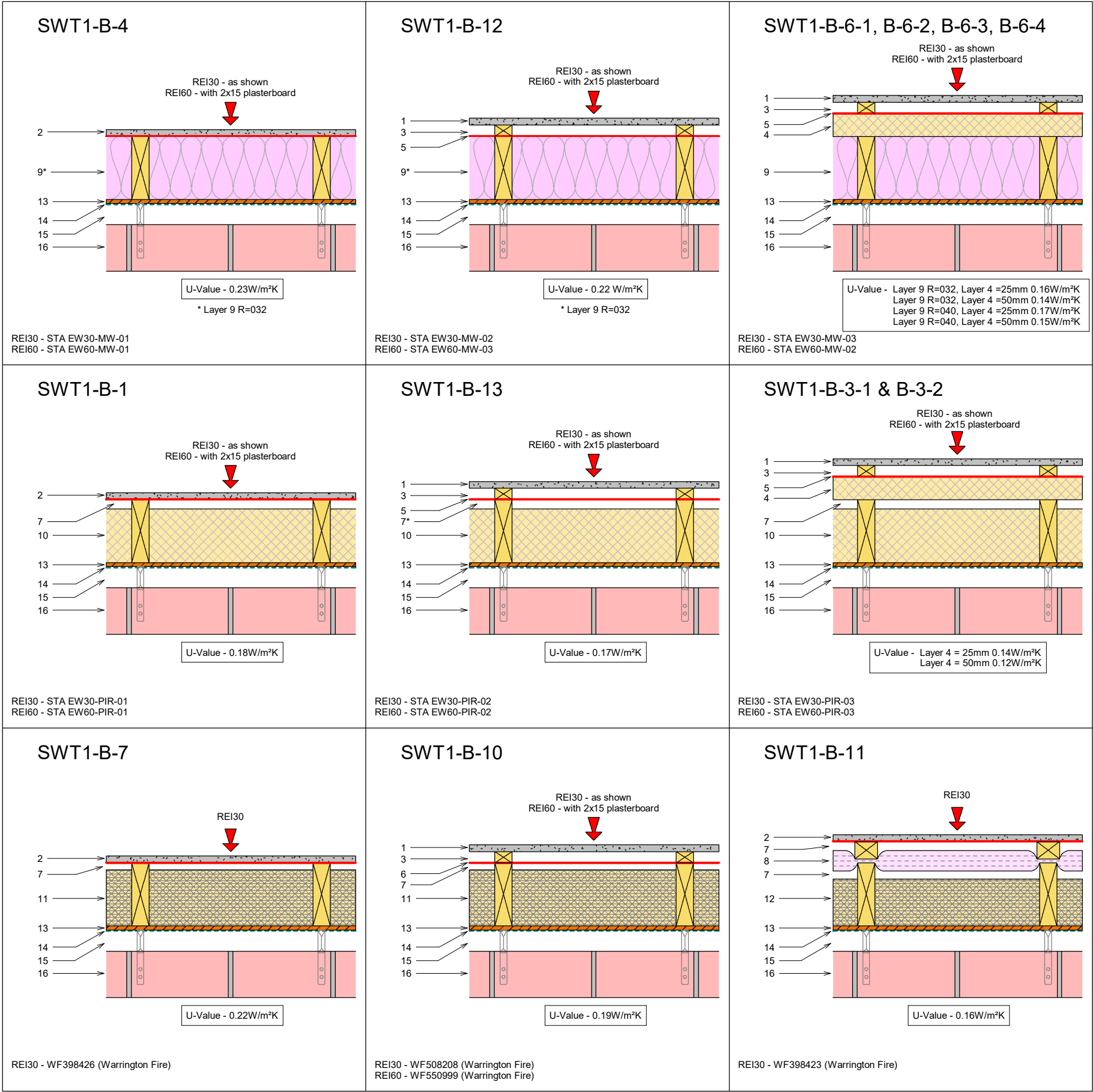
CORE INSULATION
+ SERVICE VOID

ADDITIONAL INNER
INSULATION + SERVICE VOID

MINERAL WOOL

PIR

ACTIS HYBRIS



- 1 - 15mm Type A plasterboard
- 2 - 15mm Type A foil back plasterboard
- 3 - 25x38 (min) timber batten / Low E void (38x50 recommended)
- 4 - 25 or 50mm PIR insulation
- 5 - AVCL (optional)
- 6 - Proctor Reflectatherm
- 7 - Low E void
- 8 - Hybris HControl
- 9 - 140mm stud with 140mm mineral wool insulation (R value 0.040 or 0.032W/mK)
- 10 - 140mm stud with 120mm PIR insulation between
- 11 - 140mm stud with 125mm Actis Hybris insulation between
- 12 - 140mm stud with 105mm Actis Hybris insulation between
- 13 - 9mm OSB3 / 12mm A2 rated sheathing board
- 14 - Reflective breather membrane
- 15 - 50mm (min) drained cavity
- 16 - 102mm facing brickwork

Sydenhams Wall Type 1A

Single open panel with block and render outer skin

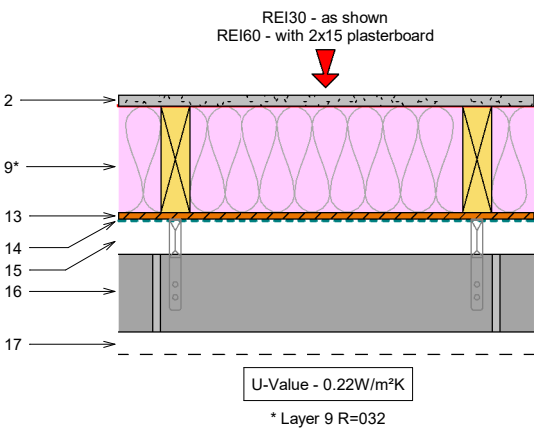
CORE INSULATION ONLY

CORE INSULATION
+ SERVICE VOID

ADDITIONAL PIR INNER
INSULATION + SERVICE VOID

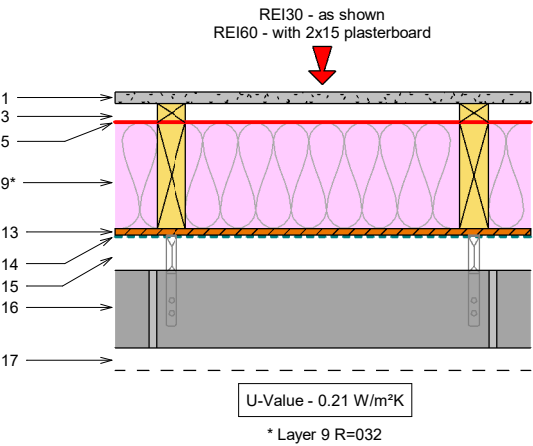
MINERAL WOOL

SWT1-A-4



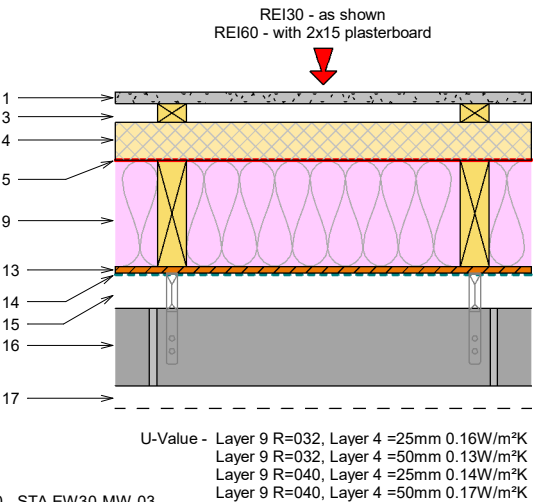
REI30 - STA EW30-MW-01
REI60 - STA EW60-MW-01

SWT1-A-12



REI30 - STA EW30-MW-02
REI60 - STA EW60-MW-03

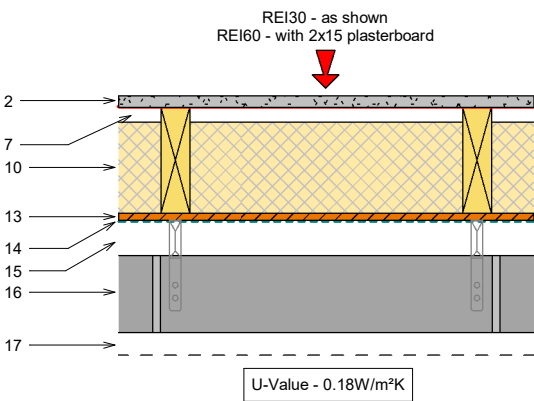
SWT1-A-6-1, A-6-2, A-6-3, A-6-4



REI30 - STA EW30-MW-03
REI60 - STA EW60-MW-02

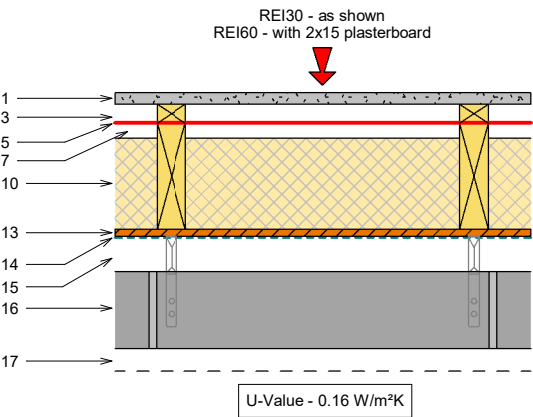
PIR

SWT1-A-1



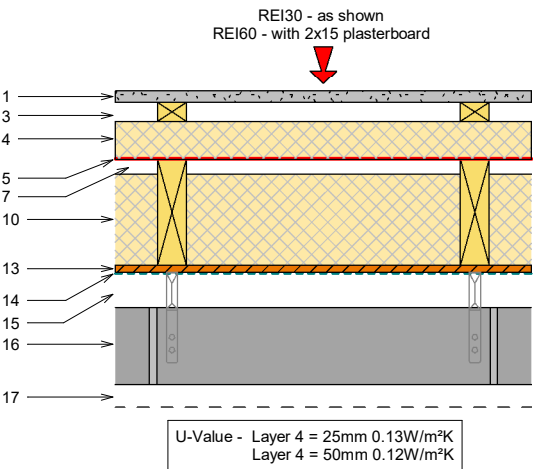
REI30 - STA EW30-PIR-01
REI60 - STA EW60-PIR-01

SWT1-A-13



REI30 - STA EW30-PIR-02
REI60 - STA EW60-PIR-02

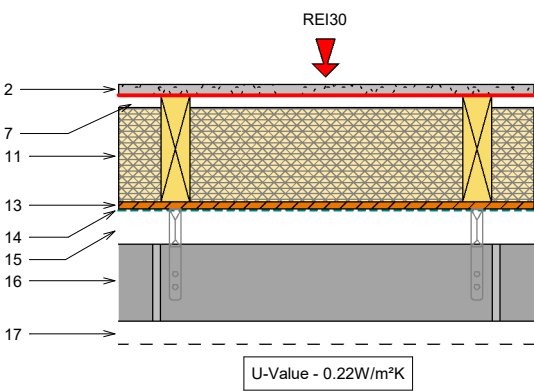
SWT1-A-3-1 & A-3-2



REI30 - STA EW30-PIR-03
REI60 - STA EW60-PIR-03

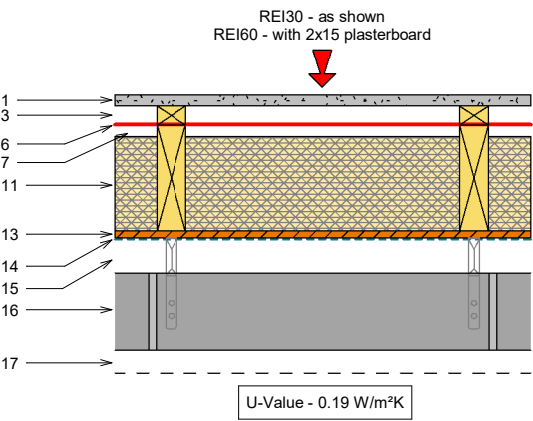
ACTIS HYBRIS

SWT1-A-7



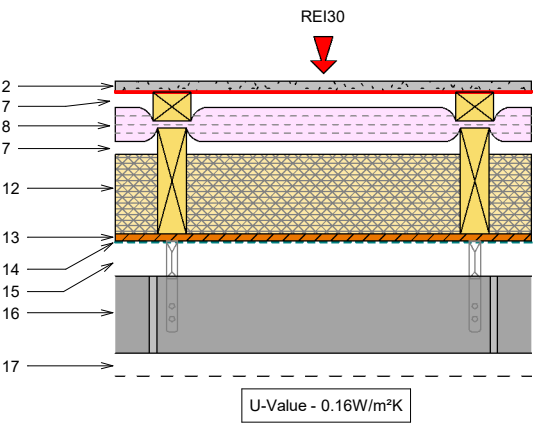
REI30 - WF398426 (Warrington Fire)

SWT1-A-10



REI30 - WF508208 (Warrington Fire)
REI60 - WF550999 (Warrington Fire)

SWT1-A-11



REI30 - WF398423 (Warrington Fire)

- 1 - 15mm Type A plasterboard
- 2 - 15mm Type A foil back plasterboard
- 3 - 25x38 (min) timber batten / Low E void (38x50 recommended)
- 4 - 25 or 50mm PIR insulation
- 5 - AVCL (optional)
- 6 - Proctor Reflectatherm
- 7 - Low E void
- 8 - Hybris HControl
- 9 - 140mm stud with 140mm mineral wool insulation (R value 0.040 or 0.032W/mK)
- 10 - 140mm stud with 120mm PIR insulation between
- 11 - 140mm stud with 125mm Actis Hybris insulation between
- 12 - 140mm stud with 105mm Actis Hybris insulation between
- 13 - 9mm OSB3 / 12mm A2 rated sheathing board
- 14 - Reflective breather membrane
- 15 - 50mm (min) drained cavity
- 16 - 100mm concrete blockwork
- 17 - Render or Cladding system

Sydenhams Wall Type 2

Single open panel with direct fix cladding

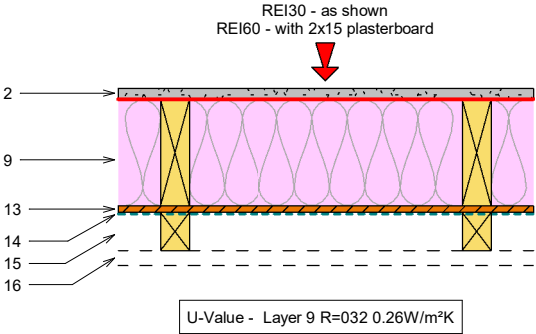
CORE INSULATION ONLY

CORE INSULATION
+ SERVICE VOID

ADDITIONAL PIR INNER
INSULATION + SERVICE VOID

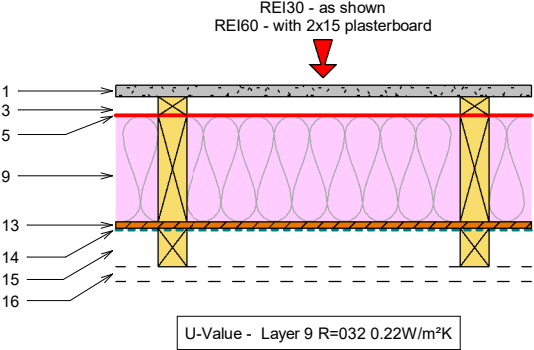
MINERAL WOOL

SWT2-4



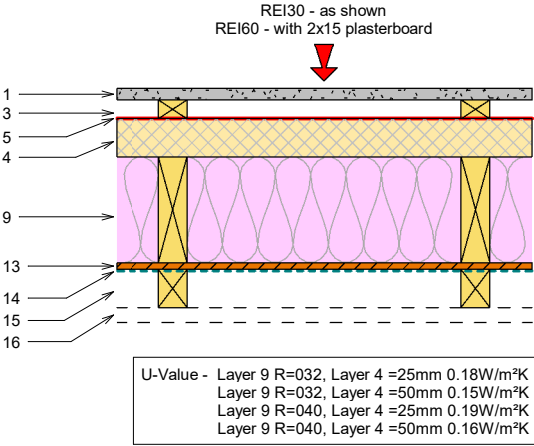
REI30 - STA EW30-MW-01
REI60 - STA EW60-MW-01

SWT2-12



REI30 - STA EW30-MW-02
REI60 - STA EW60-MW-03

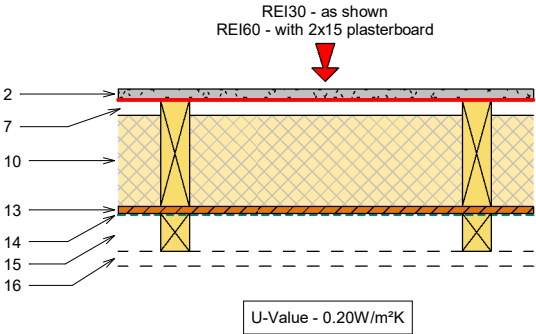
SWT2-6-1, 6-2, 6-3, 6-4



REI30 - STA EW30-MW-03
REI60 - STA EW60-MW-02

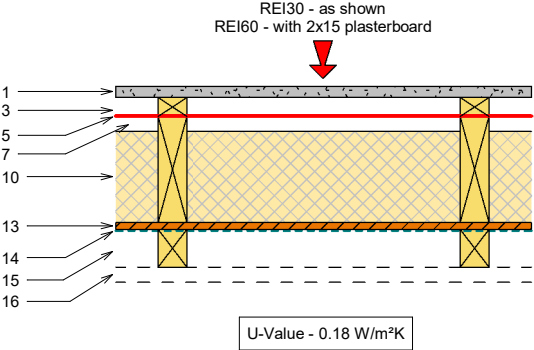
PIR

SWT2-1



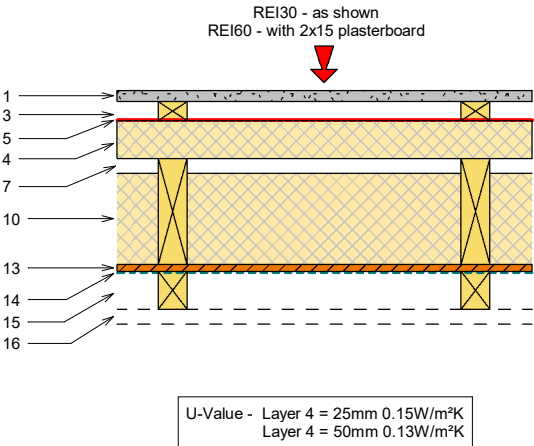
REI30 - STA EW30-PIR-01
REI60 - STA EW60-PIR-01

SWT2-13



REI30 - STA EW30-PIR-02
REI60 - STA EW60-PIR-02

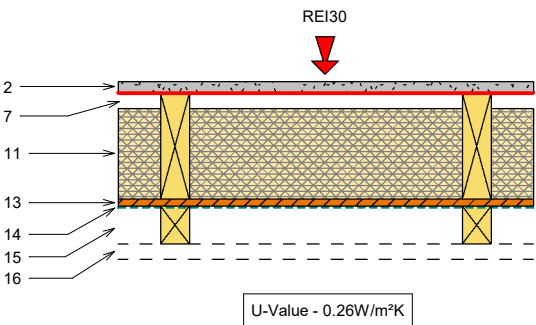
SWT2-3-1 & 2-3-2



REI30 - STA EW30-PIR-03
REI60 - STA EW60-PIR-03

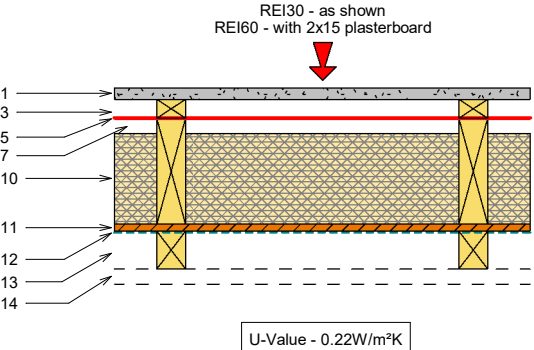
ACTIS HYBRIS

SWT2-7



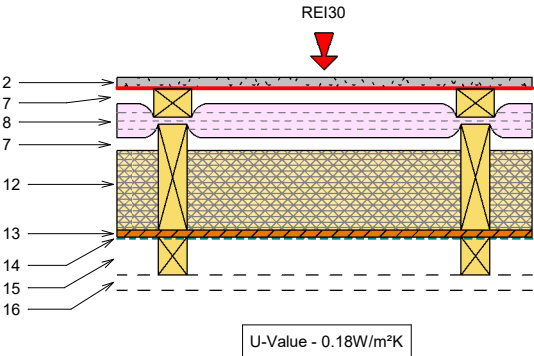
REI30 - WF398426 (Warrington Fire)

SWT2-10



REI30 - WF508208 (Warrington Fire)
REI60 - WF550999 (Warrington Fire)

SWT2-11



REI30 - WF398423 (Warrington Fire)

- 1 - 15mm Type A plasterboard
- 2 - 15mm Type A foil back plasterboard
- 3 - 25x38 (min) timber batten / Low E void (38x50 recommended)
- 4 - 25 or 50mm PIR insulation
- 5 - AVCL (optional)
- 6 - Proctor Reflectatherm
- 7 - Low E void
- 8 - Hybris HControl
- 9 - 140mm stud with 140mm mineral wool insulation (R value 0.040 or 0.032W/mK)
- 10 - 140mm stud with 120mm PIR insulation between
- 11 - 140mm stud with 125mm Actis Hybris insulation between
- 12 - 140mm stud with 105mm Actis Hybris insulation between
- 13 - 9mm OSB3 / 12mm A2 rated sheathing board
- 14 - Reflective breather membrane
- 15 - Batten / drained cavity (min 38mm)
- 16 - Render or Cladding system

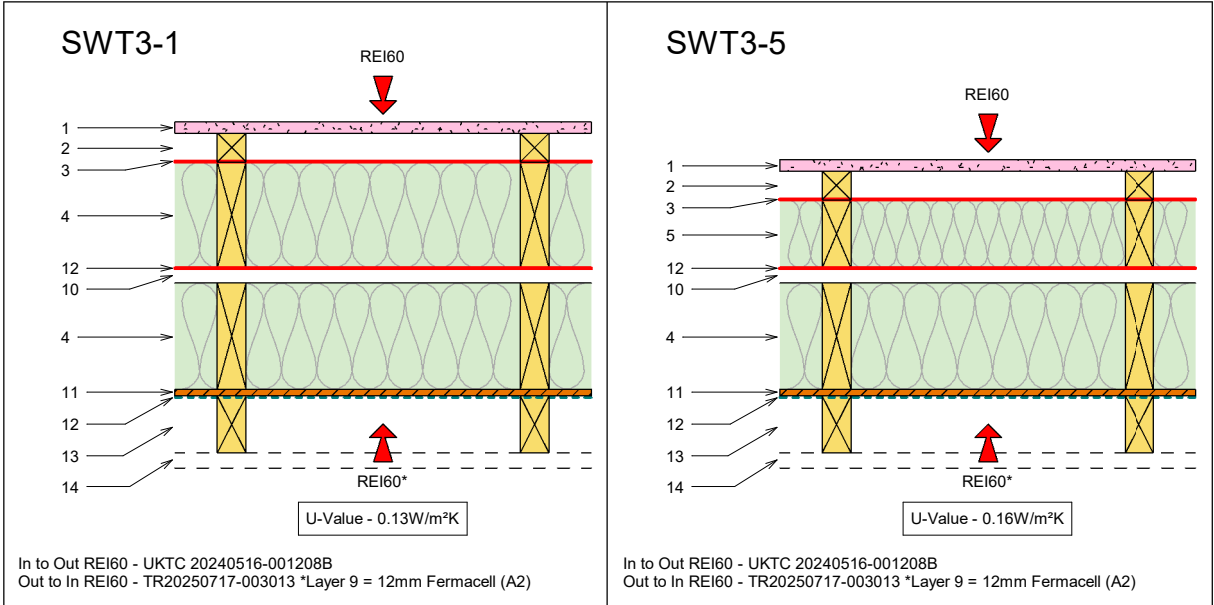
Sydenhams Wall Type 3

Twin Wall with Direct Fix Cladding Systems

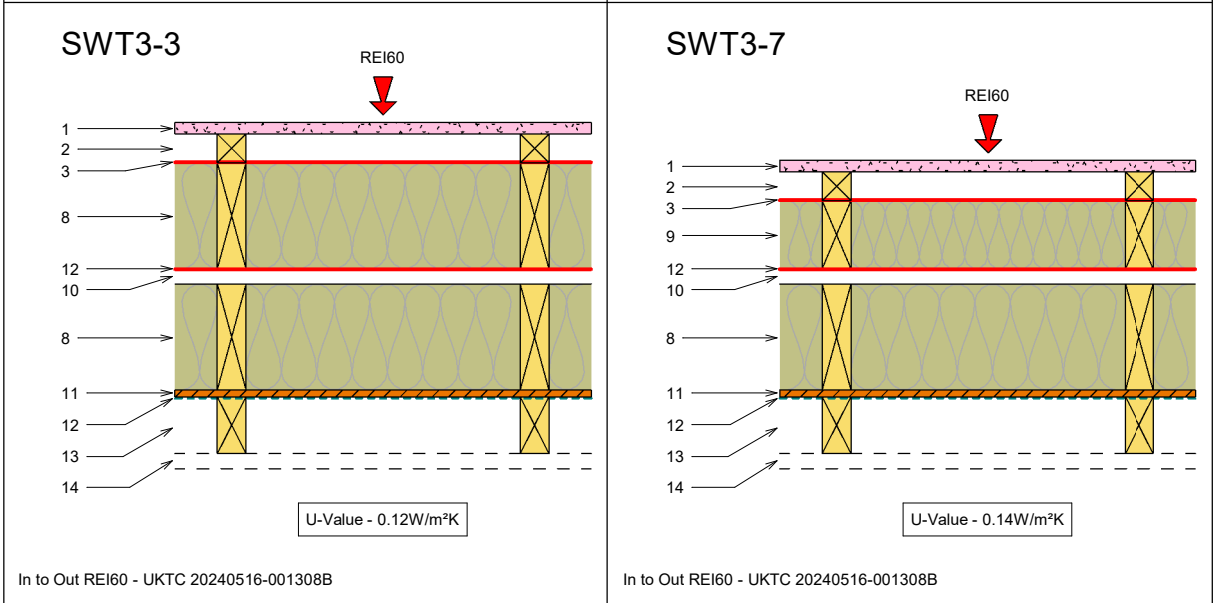
140mm OUTER & INNER

140mm OUTER
90mm INNER

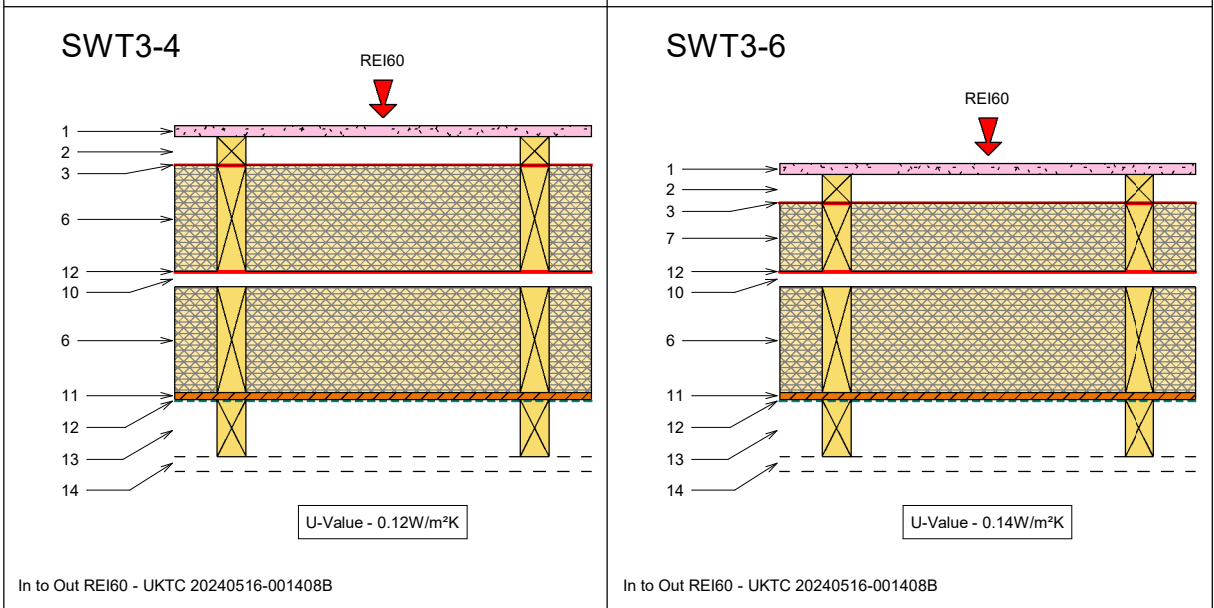
HEMP



STEICO WOOD FIBRE



ACTIS HYBRIS



- 1 - 15mm Type F plasterboard
- 2 - 38x38 timber batten / Low E void
- 3 - Proctor Reflectatherm (AVCL)
- 4 - 140mm Hemp Insulation
- 5 - 90mm Hemp Insulation
- 6 - 140mm Hybris Insulation
- 7 - 90mm Hybris Insulation
- 8 - 140mm Steicoflex 036
- 9 - 90mm Steicoflex 036
- 10 - Low E void
- 11 - 9mm OSB3 / 12mm A2 rated sheathing board
- 12 - Reflective breather membrane
- 13 - Batten / drained cavity (min 38mm)
- 14 - Render or Cladding system