

NatHERS Certificate

New Dwelling

4.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA005a_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 4.5 Stars
Conditioned Area 146.99 m²
Unconditioned Area 11.79 m²
Adjusted Cooling 45.2 MJ/m²
Adjusted Heating 73.6 MJ/m²
Adjusted Total 118.8 MJ/m²

Dwelling Address

DP Number
Unit Number Main
Lot Number 108
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768

Signed by the Assessor..........Date.....09 / 03 / 2015.....



*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA005a Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 147.0 m²
 Unconditioned Area 11.8 m²
 Total Floor Area 158.8 m²
 Total Glazed Area 34.5 m²
 Total External Solid door Area 3.3 m²
 Glass to Floor Area 21.7 %
 Gross External Wall Area 243.9 m²
 Net External Wall Area 206.1 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 34.5 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 162.8 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 43.3 m² Weatherboard Cavity Panel Bulk, Reflective One Side, Anti-glare Other R 1.5

Internal Wall
 104.8 m² Cavity Panel 70mm gap No Insulation

External Floor
 67.0 m² Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor
 10.3 m² Suspended Timber Floor Carpet 10mm No Insulation

External Ceiling
 77.4 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 89.5 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 77.4 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



NatHERS Certificate

New Dwelling

3.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA005b_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 3.5 Stars
Conditioned Area 60.92 m²
Unconditioned Area 51.07 m²
Adjusted Cooling 86.0 MJ/m²
Adjusted Heating 74.9 MJ/m²
Adjusted Total 160.9 MJ/m²

Dwelling Address

DP Number
Unit Number Secondary
Lot Number 108
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....09 03 2015.....

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All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA005b Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 60.9 m²
 Unconditioned Area 51.1 m²
 Total Floor Area 112.0 m²
 Total Glazed Area 11.9 m²
 Total External Solid door Area 20.6 m²
 Glass to Floor Area 10.6 %
 Gross External Wall Area 172.4 m²
 Net External Wall Area 139.9 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 11.9 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 20.1 m² Weatherboard Cavity Panel Bulk, Reflective One Side, Anti-glare Other R 1.5
 60.5 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 59.3 m² Fibro Cavity Panel 70mm gap Foil, Reflective One Side, Anti-glare Other

Internal Wall
 15.7 m² Cavity Panel 70mm gap Bulk Insulation R 2.0
 13.0 m² Cavity Panel 70mm gap Bulk Insulation R 1.5
 24.4 m² Cavity Panel 70mm gap No Insulation

External Floor
 8.1 m² Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor R
 1.5 m² Suspended Timber Floor Carpet 10mm No Insulation
 47.8 m² Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 0.5
 1.2 m² Suspended Timber Floor Ceramic Tiles 8mm No Insulation

External Ceiling
 58.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 24.8 m² Timber Above Plasterboard No Insulation
 31.0 m² Timber Above Plasterboard Bulk Insulation R 2.5

Roof (Horizontal area)
 58.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



NatHERS Certificate

New Dwelling

5.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA006a_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 5.5 Stars
Conditioned Area 163.87 m²
Unconditioned Area 4.93 m²
Adjusted Cooling 37.6 MJ/m²
Adjusted Heating 52.5 MJ/m²
Adjusted Total 90.1 MJ/m²

Dwelling Address

DP Number
Unit Number Main
Lot Number 111
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768

Signed by the Assessor..........Date.....09 / 03 / 2015.....



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All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA006a Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 163.9 m²
 Unconditioned Area 4.9 m²
 Total Floor Area 168.8 m²
 Total Glazed Area 35.7 m²
 Total External Solid door Area 2.0 m²
 Glass to Floor Area 21.1 %
 Gross External Wall Area 196.9 m²
 Net External Wall Area 159.1 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 35.7 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 119.7 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0
 39.4 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5

Internal Wall
 112.7 m² Cavity Panel 70mm gap No Insulation

External Floor
 85.7 m² Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor
 1.9 m² Suspended Timber Floor Carpet 10mm No Insulation

External Ceiling
 87.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 85.7 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 87.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



Project Certification Number	1007487042
Certification Date	12/03/2015
Assessor Name	Brad Hoad
Assessor Number	20731
Assessor Company	Thermal Performance
Assessor Signature	

Client Details	Thatcher Homes
Project Address	Lot 111 Thornton Drive THORNTON NSW 2750

Software	BERS Professional v4.2.110811/A (BERS Professional)	Climate Zone	28
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Class 1 Dwelling Thermal Performance Specifications

Dwelling Number	Certificate Number	Floor Area		Simulated Loads (area adjusted MJ/m ² /y)		NatHERS	Rated with Downlights
		Conditioned	Unconditioned	Heating	Cooling	Star Rating	
1	1007487059	163.9	4.9	52.5	37.6	5.5/10	No
2	1007487067	48.3	45.6	65.3	58.3	4.5/10	No



NatHERS Rated 5.5/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 1 Thornton Drive

ADDRESS

Site Lot 111

THORNTON

NSW

2750

1007487059

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

52.5 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

37.6 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

90.1 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

163.9 m²

FLOOR AREA - CONDITIONED

4.9 m²

FLOOR AREA - UNCONDITIONED

168.8 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.



NatHERS Rated
4.5/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 2 Thornton Drive

ADDRESS

Site Lot 111

THORNTON

NSW

2750

1007487067

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

65.3 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

58.3 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

123.6 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

48.3 m²

FLOOR AREA - CONDITIONED

45.6 m²

FLOOR AREA - UNCONDITIONED

93.9 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

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NatHERS Certificate

New Dwelling

4.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA006b_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 4.5 Stars
Conditioned Area 48.24 m²
Unconditioned Area 45.62 m²
Adjusted Cooling 58.3 MJ/m²
Adjusted Heating 65.3 MJ/m²
Adjusted Total 123.6 MJ/m²

Dwelling Address

DP Number
Unit Number Secondary
Lot Number 111
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768

Signed by the Assessor..........Date.....09 / 03 / 2015.....



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Building Element Details

Project THA006b Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary

Conditioned Area	48.2 m ²
Unconditioned Area	45.6 m ²
Total Floor Area	93.9 m ²
Total Glazed Area	12.6 m ²
Total External Solid door Area	15.2 m ²
Glass to Floor Area	13.4 %
Gross External Wall Area	141.8 m ²
Net External Wall Area	113.9 m ²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 12.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 20.6 m² Fibro Cavity Panel 70mm gap Foil, Reflective One Side, Anti-glare Other
 36.7 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0
 24.0 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 32.6 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 2.0

Internal Wall
 18.4 m² Cavity Panel 70mm gap Bulk Insulation R 1.5
 32.4 m² Cavity Panel 70mm gap No Insulation

External Floor
 41.5 m² Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 0.5
 6.8 m² Concrete Slab on Ground 80/20 Carpet 10mm/Ceramic Bulk Insulation in Contact with Floor R 0.5

External Ceiling
 48.3 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 41.5 m² Timber Above Plasterboard Bulk Insulation R 2.5
 6.8 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 48.3 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



NatHERS Certificate

New Dwelling

4.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA007a_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 4.5 Stars
Conditioned Area 110.87 m²
Unconditioned Area 6.46 m²
Adjusted Cooling 49.5 MJ/m²
Adjusted Heating 73.3 MJ/m²
Adjusted Total 122.9 MJ/m²

Dwelling Address

DP Number
Unit Number Main
Lot Number 114
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....09 / 03 / 2015.....

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All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA007a Run 1
PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary

Conditioned Area	110.9 m ²
Unconditioned Area	6.5 m ²
Total Floor Area	117.3 m ²
Total Glazed Area	31.2 m ²
Total External Solid door Area	2.0 m ²
Glass to Floor Area	26.6 %
Gross External Wall Area	178.7 m ²
Net External Wall Area	145.5 m ²

PLEASE NOTE

This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & sealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window

8.6 m ²	GGG-05-013a	Generics	Uval 4.70	SHGC 0.63
	Glass	Single Glazed	Low E Clear	
	Frame	Aluminium		
22.6 m ²	GGG-05-001a	Generics	Uval 6.57	SHGC 0.74
	Glass	Single Glazed	Clear	
	Frame	Aluminium		

External Wall

45.2 m ²	Fibro Cavity Panel	70mm gap to neighbour	Bulk Insulation R 2.0
57.3 m ²	Fibro Cavity Panel	70mm gap	Bulk, Reflective One Side, Anti-glare Other R 1.5
43.0 m ²	Fibro Cavity Panel	70mm gap	Bulk, Reflective One Side, Anti-glare Other R 2.0

Internal Wall

83.7 m ²	Cavity Panel	70mm gap	No Insulation
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External Floor

26.3 m ²	Concrete Slab on Ground	Carpet 10mm	Bulk Insulation in Contact with Floor R 0.5
30.1 m ²	Concrete Slab on Ground	Ceramic Tiles 8mm	Bulk Insulation in Contact with Floor R 0.5
11.1 m ²	Suspended Timber Floor	Carpet 10mm	No Insulation

External Ceiling

67.5 m ²	Plasterboard	Bulk Insulation R3.0	Unventilated roofspace
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Internal Floor/Ceiling

54.2 m ²	Timber Above Plasterboard	No Insulation
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Roof (Horizontal area)

67.5 m ²	Corrugated Iron	Foil, Gap Above, Reflective Side Down, Anti-glare Up	2° slope	Skillion roof
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Project Certification Number	1007487075
Certification Date	12/03/2015
Assessor Name	Brad Hoad
Assessor Number	20731
Assessor Company	Thermal Performance
Assessor Signature	

Client Details	Thatcher Homes
Project Address	Lot 114 Thornton Drive THORNTON NSW 2750

Software	BERS Professional v4.2.110811/A (BERS Professional)	Climate Zone	28
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Class 1 Dwelling Thermal Performance Specifications

Dwelling Number	Certificate Number	Floor Area		Simulated Loads (area adjusted MJ/m ² /y)		NatHERS	Rated with Downlights
		Conditioned	Unconditioned	Heating	Cooling	Star Rating	
1	1007487083	109.5	6.5	88.9	47.7	4.0/10	No
2	1007487091	35.6	33.0	77.6	88.1	3.5/10	No



NatHERS Rated 4.0/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 1 Thornton Drive

ADDRESS

Site Lot 114

THORNTON

NSW

2750

1007487083

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

88.9 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

47.7 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

136.6 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

109.5 m²

FLOOR AREA - CONDITIONED

6.5 m²

FLOOR AREA - UNCONDITIONED

116.0 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.



NatHERS Rated 3.5/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

1007487091

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

77.6 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

88.1 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

165.7 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

35.6 m²

FLOOR AREA - CONDITIONED

33.0 m²

FLOOR AREA - UNCONDITIONED

68.6 m²

FLOOR AREA - TOTAL

Thatcher Homes

ISSUED TO

Unit 2 Thornton Drive

ADDRESS

Site Lot 114

THORNTON

NSW

2750

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

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NatHERS Certificate

New Dwelling

3.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA007b_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 3.5 Stars
Conditioned Area 35.58 m²
Unconditioned Area 33.00 m²
Adjusted Cooling 87.1 MJ/m²
Adjusted Heating 72.1 MJ/m²
Adjusted Total 159.2 MJ/m²

Dwelling Address

DP Number
Unit Number Secondary
Lot Number 114
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

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Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

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Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....09 / 03 / 2015.....

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Building Element Details

Project THA007b Run 1
PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary

Conditioned Area	35.6 m ²
Unconditioned Area	33.0 m ²
Total Floor Area	68.6 m ²
Total Glazed Area	7.6 m ²
Total External Solid door Area	13.2 m ²
Glass to Floor Area	11.0 %
Gross External Wall Area	122.4 m ²
Net External Wall Area	101.6 m ²

PLEASE NOTE

This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & sealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window

7.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
Glass Single Glazed Clear
Frame Aluminium

External Wall

35.6 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0
3.1 m² Fibro Cavity Panel 70mm gap Foil, Reflective One Side, Anti-glare Other
31.7 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
31.3 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 2.0

Internal Wall

14.6 m² Cavity Panel 70mm gap Bulk Insulation R 1.5
25.2 m² Cavity Panel 70mm gap No Insulation

External Floor

29.2 m² Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 0.5
6.5 m² Concrete Slab on Ground 80/20 Carpet 10mm/Ceramic Bulk Insulation in Contact with Floor R 0.5

External Ceiling

35.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling

29.2 m² Timber Above Plasterboard Bulk Insulation R 2.5
6.5 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)

35.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof

NatHERS Certificate

New Dwelling

4.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA008a_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 4.5 Stars
Conditioned Area 110.87 m²
Unconditioned Area 6.46 m²
Adjusted Cooling 43.3 MJ/m²
Adjusted Heating 73.8 MJ/m²
Adjusted Total 117.1 MJ/m²

Dwelling Address

DP Number
Unit Number Main
Lot Number 118
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....08 / 03 / 2015.....

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA008a Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 110.9 m²
 Unconditioned Area 6.5 m²
 Total Floor Area 117.3 m²
 Total Glazed Area 31.2 m²
 Total External Solid door Area 2.0 m²
 Glass to Floor Area 26.6 %
 Gross External Wall Area 178.7 m²
 Net External Wall Area 145.5 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & sealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 8.6 m² GGG-05-013a Generics Uval 4.70 SHGC 0.63
 Glass Single Glazed Low E Clear
 Frame Aluminium
 22.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 45.2 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 2.0
 57.3 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 43.0 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0

Internal Wall
 83.7 m² Cavity Panel 70mm gap No Insulation

External Floor
 56.3 m² Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor R 0.5
 11.1 m² Suspended Timber Floor Carpet 10mm No Insulation

External Ceiling
 67.5 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 54.2 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 67.5 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



Project Certification Number	1007487109
Certification Date	12/03/2015
Assessor Name	Brad Hoad
Assessor Number	20731
Assessor Company	Thermal Performance
Assessor Signature	

Client Details	Thatcher Homes
Project Address	Lot 118 Thornton Drive THORNTON NSW 2750

Software	BERS Professional v4.2.110811/A (BERS Professional)	Climate Zone	28
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Class 1 Dwelling Thermal Performance Specifications

Dwelling Number	Certificate Number	Floor Area		Simulated Loads (area adjusted MJ/m ² /y)		NatHERS Star Rating	Rated with Downlights
		Conditioned	Unconditioned	Heating	Cooling		
1	1007487117	109.5	6.5	89.1	48.4	4.0/10	No
2	1007487125	35.6	33.0	77.7	88.0	3.5/10	No



NatHERS Rated 4.0/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 1 Thornton Drive

ADDRESS

Site Lot 118

THORNTON

NSW

2750

1007487117

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

89.1 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

48.4 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

137.5 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

109.5 m²

FLOOR AREA - CONDITIONED

6.5 m²

FLOOR AREA - UNCONDITIONED

116.0 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.



NatHERS Rated 3.5/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 2 Thornton Drive

ADDRESS

Site Lot 118

THORNTON

NSW

2750

1007487125

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

77.7 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

88.0 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

165.7 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

35.6 m²

FLOOR AREA - CONDITIONED

33.0 m²

FLOOR AREA - UNCONDITIONED

68.6 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.

NatHERS Certificate

New Dwelling

3.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA008b_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 3.5 Stars
Conditioned Area 35.58 m²
Unconditioned Area 33.00 m²
Adjusted Cooling 87.3 MJ/m²
Adjusted Heating 72.7 MJ/m²
Adjusted Total 160.0 MJ/m²

Dwelling Address

DP Number
Unit Number Secondary
Lot Number 118
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....08 / 03 / 2015.....

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA008b Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 35.6 m²
 Unconditioned Area 33.0 m²
 Total Floor Area 68.6 m²
 Total Glazed Area 7.6 m²
 Total External Solid door Area 13.2 m²
 Glass to Floor Area 11.0 %
 Gross External Wall Area 122.4 m²
 Net External Wall Area 101.6 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & sealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 7.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 35.6 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0
 3.1 m² Fibro Cavity Panel 70mm gap Foil, Reflective One Side, Anti-glare Other
 31.7 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 31.3 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 2.0

Internal Wall
 14.6 m² Cavity Panel 70mm gap Bulk Insulation R 1.5
 25.2 m² Cavity Panel 70mm gap No Insulation

External Floor
 29.2 m² Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 0.5
 6.5 m² Concrete Slab on Ground 60/40 Carpet 10mm/Ceramic Bulk Insulation in Contact with Floor R 0.5

External Ceiling
 35.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 29.2 m² Timber Above Plasterboard Bulk Insulation R 2.5
 6.5 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 35.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



NatHERS Certificate

New Dwelling

5.0 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA009a_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 5.0 Stars
Conditioned Area 140.12 m²
Unconditioned Area 4.50 m²
Adjusted Cooling 37.1 MJ/m²
Adjusted Heating 67.0 MJ/m²
Adjusted Total 104.1 MJ/m²

Dwelling Address

DP Number
Unit Number Main
Lot Number 121
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....12 / 03 / 2015.....

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA009a Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 140.1 m²
 Unconditioned Area 4.5 m²
 Total Floor Area 144.6 m²
 Total Glazed Area 30.6 m²
 Total External Solid door Area 2.0 m²
 Glass to Floor Area 21.2 %
 Gross External Wall Area 193.0 m²
 Net External Wall Area 160.3 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 30.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 50.6 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 109.7 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0

Internal Wall
 104.8 m² Cavity Panel 70mm gap No Insulation

External Floor
 69.3 m² Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor
 10.3 m² Suspended Timber Floor Carpet 10mm No Insulation

External Ceiling
 79.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 67.7 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 79.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof



Project Certification Number	1007487133
Certification Date	12/03/2015
Assessor Name	Brad Hoad
Assessor Number	20731
Assessor Company	Thermal Performance
Assessor Signature	

Client Details	Thatcher Homes
Project Address	Lot 121 Thornton Drive THORNTON NSW 2750

Software	BERS Professional v4.2.110811/A (BERS Professional)	Climate Zone	28
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Class 1 Dwelling Thermal Performance Specifications

Dwelling Number	Certificate Number	Floor Area		Simulated Loads (area adjusted MJ/m ² /y)		NatHERS	Rated with Downlights
		Conditioned	Unconditioned	Heating	Cooling	Star Rating	
1	1007487141	140.1	4.5	67.0	37.1	5.0/10	No
2	1007487158	35.6	33.0	77.6	88.1	3.5/10	No



NatHERS Rated 5.0/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

Thatcher Homes

ISSUED TO

Unit 1 Thornton Drive

ADDRESS

Site Lot 121

THORNTON

NSW

2750

1007487141

CERTIFICATION NUMBER

12/03/2015

DATE

28

CLIMATE ZONE

BERS Professional - v4.2.110811/A (BERS Professional)

SOFTWARE

67.0 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - HEATING

37.1 MJ/m² pa

SIMULATED ENERGY CONSUMPTION - COOLING

104.1 MJ/m² pa

TOTAL SIMULATED ENERGY CONSUMPTION

140.1 m²

FLOOR AREA - CONDITIONED

4.5 m²

FLOOR AREA - UNCONDITIONED

144.6 m²

FLOOR AREA - TOTAL

Brad Hoad

ASSESSOR NAME

20731

ASSESSOR NUMBER

Thermal Performance

COMPANY

ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.



NatHERS Rated
3.5/10 STARS*

*www.nathers.gov.au



BUILDING ENERGY EFFICIENCY CERTIFICATE

1007487158
 CERTIFICATION NUMBER
 12/03/2015
 DATE
 28
 CLIMATE ZONE
 BERS Professional - v4.2.110811/A (BERS Professional)
 SOFTWARE
 77.6 MJ/m² pa
 SIMULATED ENERGY CONSUMPTION - HEATING
 88.1 MJ/m² pa
 SIMULATED ENERGY CONSUMPTION - COOLING
 165.7 MJ/m² pa
 TOTAL SIMULATED ENERGY CONSUMPTION
 35.6 m²
 FLOOR AREA - CONDITIONED
 33.0 m²
 FLOOR AREA - UNCONDITIONED
 68.6 m²
 FLOOR AREA - TOTAL

Thatcher Homes
 ISSUED TO
 Unit 2 Thornton Drive
 ADDRESS
 Site Lot 121
 THORNTON
 NSW
 2750

Brad Hoad
 ASSESSOR NAME
 20731
 ASSESSOR NUMBER
 Thermal Performance
 COMPANY


 ASSESSOR SIGNATURE

Issued by a BUILDING THERMAL PERFORMANCE ASSESSOR accredited by the Association of Building Sustainability Assessors to provide NatHERS house energy ratings.

NatHERS Certificate

New Dwelling

3.5 Stars

Simulation Software

Software Name BERS Pro 4.2
Software Version Release 110811/A
Engine Version CHENATH V2.13

Simulation Details

Project Name THA009b_1
Date 8/03/2015
Location PENRITH PC 2750
Climate file climat28.TXT
Adjusted Star Rating 3.5 Stars
Conditioned Area 35.58 m²
Unconditioned Area 33.00 m²
Adjusted Cooling 87.4 MJ/m²
Adjusted Heating 81.0 MJ/m²
Adjusted Total 168.4 MJ/m²

Dwelling Address

DP Number
Unit Number Secondary
Lot Number 121
House Number
Street Name Thornton Drive
Development Name
Suburb THORTON NSW 2750

Client Details

Name Paul Jumikis - Thatcher Homes
Phone (02) 9357-2641 Fax
Email paul@thatcherhomes.com.au
Postal Address 109 Plamer Street WOOLLOOMOOLOO NSW 2011
Street Details 109 Plamer Street WOOLLOOMOOLOO NSW 2011

Assessor Details

Name Brad Hoad
Phone 0458-221-211 Fax (02) 9629-3072
Email brad@thermalperformance.com.au
Postal Address 12 Livorno Grove GLENWOOD NSW 2768
Street Details 12 Livorno Grove GLENWOOD NSW 2768



Signed by the Assessor..........Date.....12 / 03 / 2015.....

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project THA009b Run 1
 PENRITH PC 2750 Lat -33.80 Long 150.70 Climate File climat28.TXT

Summary
 Conditioned Area 35.6 m²
 Unconditioned Area 33.0 m²
 Total Floor Area 68.6 m²
 Total Glazed Area 7.6 m²
 Total External Solid door Area 13.2 m²
 Glass to Floor Area 11.0 %
 Gross External Wall Area 122.4 m²
 Net External Wall Area 101.6 m²

PLEASE NOTE
 This simulation has been carried out with sealed recessed fluro/LED downlights to living areas & unsealed exhaust fans to wet areas with surface mounted lighting to the remainder. The ceiling insulation specified is R3.0, please ignore the R values indicated below, this is a proxy making allowance for the clearances required for the correct installation of the recessed down lights and ceiling insulation

Window
 7.6 m² GGG-05-001a Generics Uval 6.57 SHGC 0.74
 Glass Single Glazed Clear
 Frame Aluminium

External Wall
 35.6 m² Fibro Cavity Panel 70mm gap to neighbour Bulk Insulation R 2.0
 3.1 m² Fibro Cavity Panel 70mm gap Foil, Reflective One Side, Anti-glare Other
 31.7 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 1.5
 31.3 m² Fibro Cavity Panel 70mm gap Bulk, Reflective One Side, Anti-glare Other R 2.0

Internal Wall
 14.6 m² Cavity Panel 70mm gap Bulk Insulation R 1.5
 25.2 m² Cavity Panel 70mm gap No Insulation

External Floor
 29.2 m² Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 0.5
 6.5 m² Concrete Slab on Ground 80/20 Carpet 10mm/Ceramic Bulk Insulation in Contact with Floor R 0.5

External Ceiling
 35.6 m² Plasterboard Bulk Insulation R3.0 Unventilated roofspace

Internal Floor/Ceiling
 29.2 m² Timber Above Plasterboard Bulk Insulation R 2.5
 6.5 m² Timber Above Plasterboard No Insulation

Roof (Horizontal area)
 35.6 m² Corrugated Iron Foil, Gap Above, Reflective Side Down, Anti-glare Up 2° slope Skillion roof

