outline

- What are NatHERS – Thermal Comfort Assessments?
- Using Accredited Assessors
- Sketch Design Review
- Providing correct information to assessor
- Going beyond compliance
- Optimising outcomes
- Construction – ensuring compliance
- Questions

dhw

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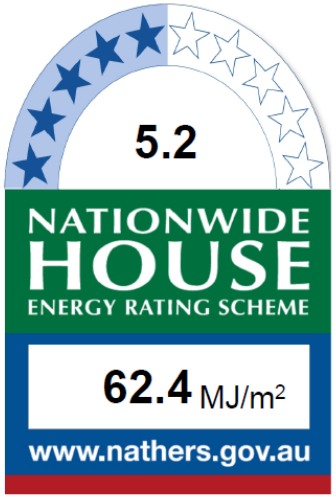
Thermal Comfort Assessments

- *NatHERS – National Home Energy Rating Scheme administered by Federal government – www.nathers.gov.au*
- *Implemented through State legislation - which varies*
- *Implemented in NSW through BASIX - https://www.planningportal.nsw.gov.au/basix*
- *The Current National minimum standard is 6 star*
- *7 star proposed from 2022 onwards*

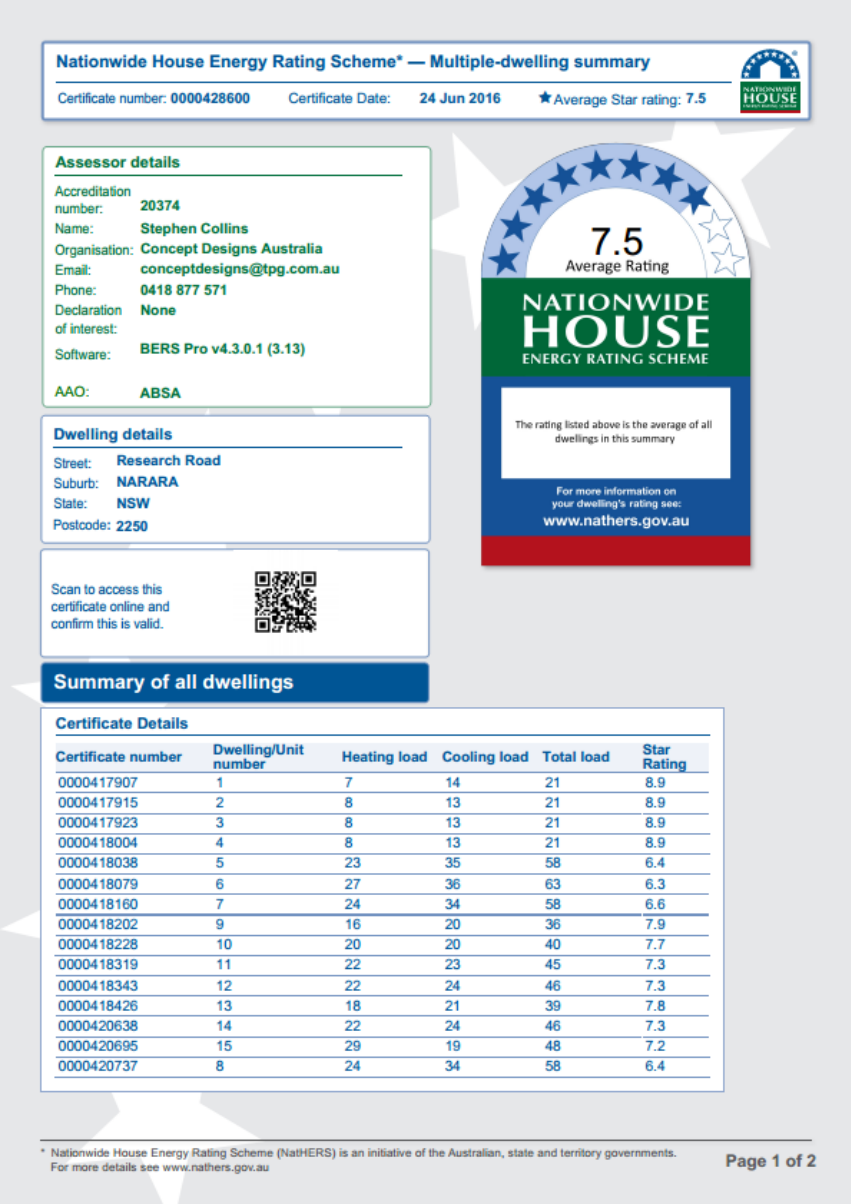


Certificate no.:	0004189759-01
Assessor Name:	Mr. Checker
Accreditation no.:	20300
Certificate date:	11 Sep 2019
Dwelling Address:	

12 Your Street
Mytown NSW
2888

www.nathers.gov.au

NatHERS Certificate



Nationwide House Energy Rating Scheme* — Multiple-dwelling summary

Certificate number: 0000428600 Certificate Date: 24 Jun 2016 ★Average Star rating: 7.5

Assessor details

Accreditation number:	20374
Name:	Stephen Collins
Organisation:	Concept Designs Australia
Email:	conceptdesigns@tpg.com.au
Phone:	0418 877 571
Declaration of interest:	None
Software:	BERS Pro v4.3.0.1 (3.13)
AAO:	ABSA

7.5
Average Rating
NATIONWIDE HOUSE ENERGY RATING SCHEME
The rating listed above is the average of all dwellings in this summary
For more information on your dwelling's rating see:
www.nathers.gov.au

Dwelling details

Street:	Research Road
Suburb:	NARARA
State:	NSW
Postcode:	2250

Scan to access this certificate online and confirm this is valid.

Summary of all dwellings

Certificate Details

Certificate number	Dwelling/Unit number	Heating load	Cooling load	Total load	Star Rating
0000417907	1	7	14	21	8.9
0000417915	2	8	13	21	8.9
0000417923	3	8	13	21	8.9
0000418004	4	8	13	21	8.9
0000418038	5	23	35	58	6.4
0000418079	6	27	36	63	6.3
0000418160	7	24	34	58	6.6
0000418202	9	16	20	36	7.9
0000418228	10	20	20	40	7.7
0000418319	11	22	23	45	7.3
0000418343	12	22	24	46	7.3
0000418426	13	18	21	39	7.8
0000420638	14	22	24	46	7.3
0000420695	15	29	19	48	7.2
0000420737	8	24	34	58	6.4

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

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- *Generated on web portal as permanent record*
- *Describes construction that has been rated*
- *Can be modified before or during construction if things change*
- *Drawings need to be stamped by assessor*
- *In NSW, assessors are audited*

Accredited Assessor

- *3 accrediting organisations*
  ABSA
  https://www.absa.net.au/find-an-assessor

  BDAV - http://bdav.org.au/find

  HERA - https://hera.asn.au/

- ***Brief assessor properly***
  - are you going beyond compliance?
  - are you more concerned with heating in winter or cooling in summer?

- ***Checklist** – all materials, colours, windows, lights, survey*
- ***Designer**– involve early in the process*
- ***Final Certification***
- ***Later revisions** – extra charges?*

Sketch Design Review

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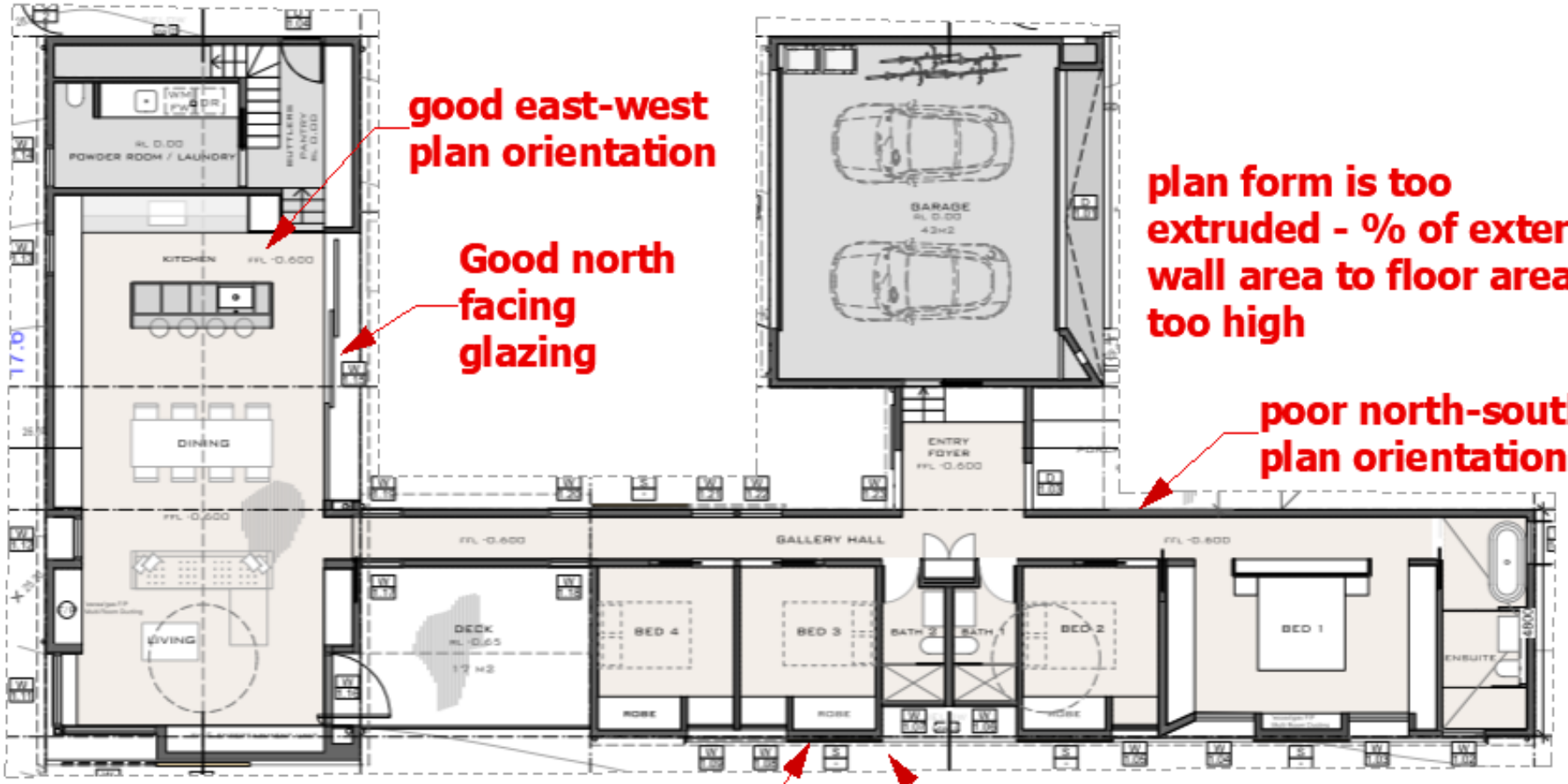
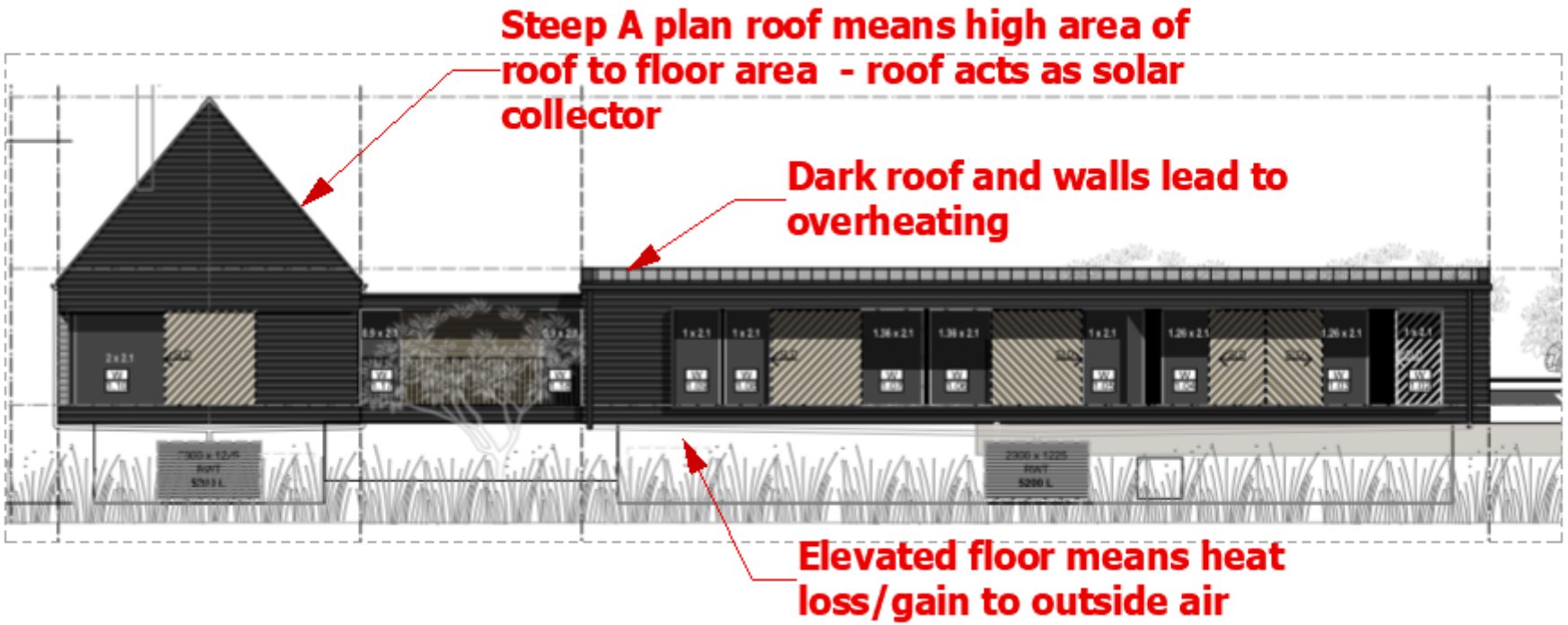
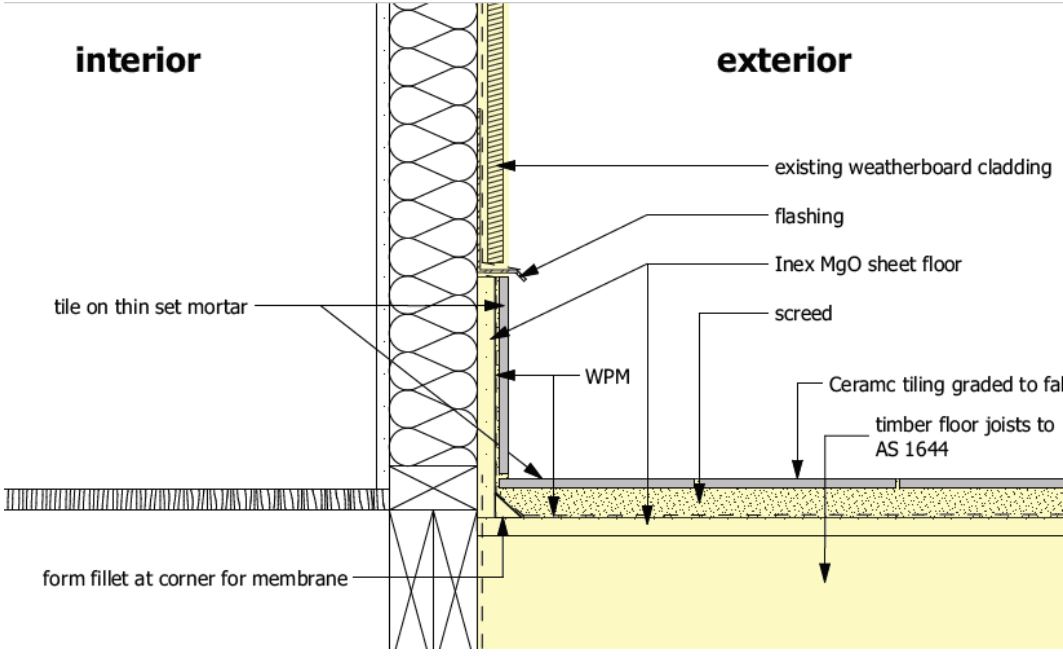


Sketch Design Review



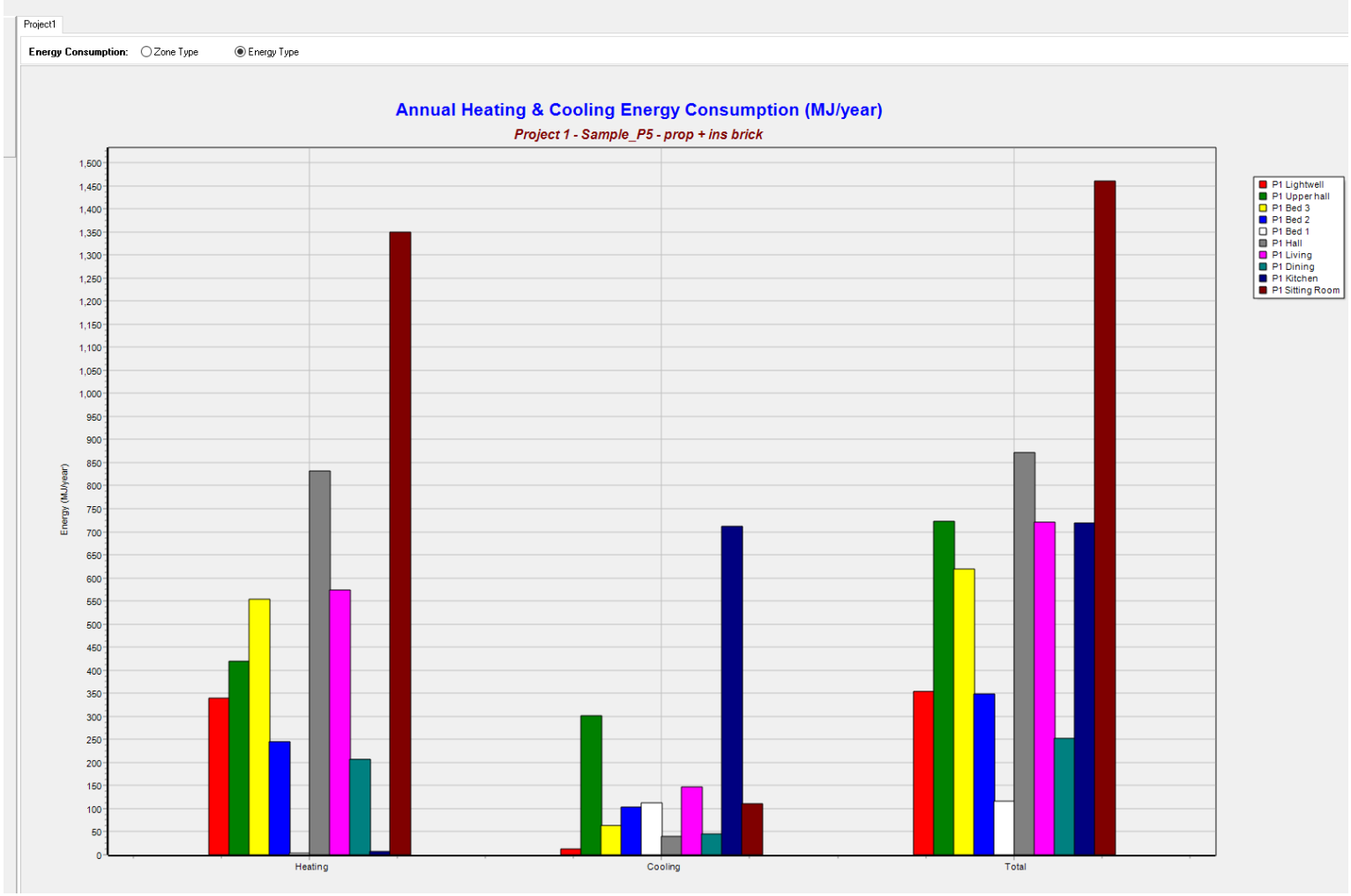
Correct Information

- *Provide details of wall, floor and roof materials*
- *Include all layers including air gaps, linings and proposed insulation*
- *Colours of roofs and walls*
- *Survey – true north, overshadowing*
- *Windows – frame and glazing options*
- *Floor finishes*
- *Exhaust fans, downlights*
- *Once model is set up then any of the above can be altered to see the impact*



Going beyond compliance

- *How to improve performance*
- *Identify zones that overheat or are too cold*



Going beyond compliance

IF TOO COLD IN WINTER:

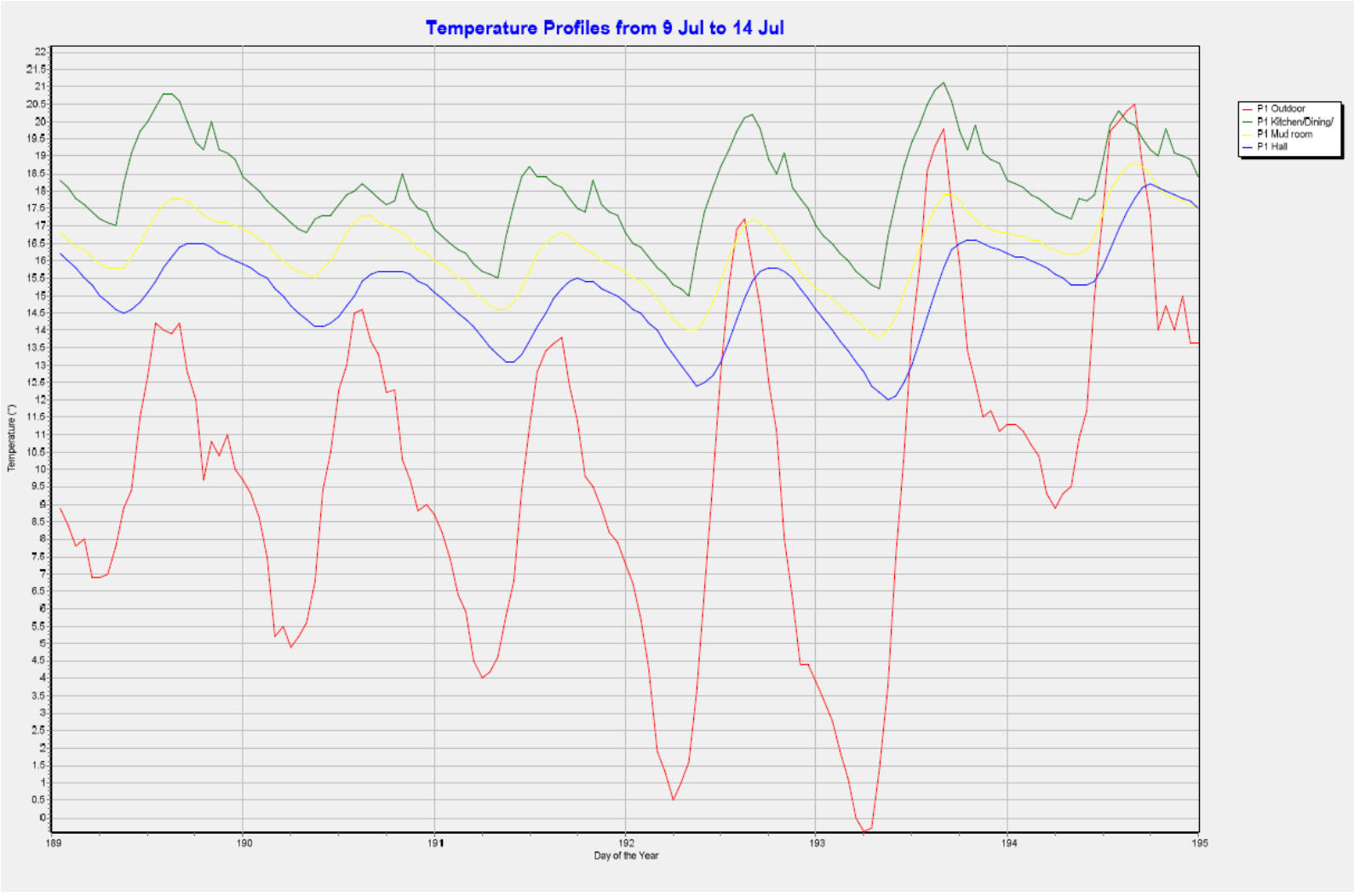
- *Increase insulation levels*
- *More north glazing*
- *Try different window frames – timber rather than aluminium*
- *Try different glazing options - double glazing*
- *Reduce thermal mass*
- *Darker external colours*

IF TOO HOT IN SUMMER:

- *Add external shading*
- *Reduce east and west glazing*
- *Increase ventilation*
- *Try different glazing options - low solar gain Low E glass*
- *Add thermal mass*
- *Possibly reduce insulation levels*
- *Lighter external colours*

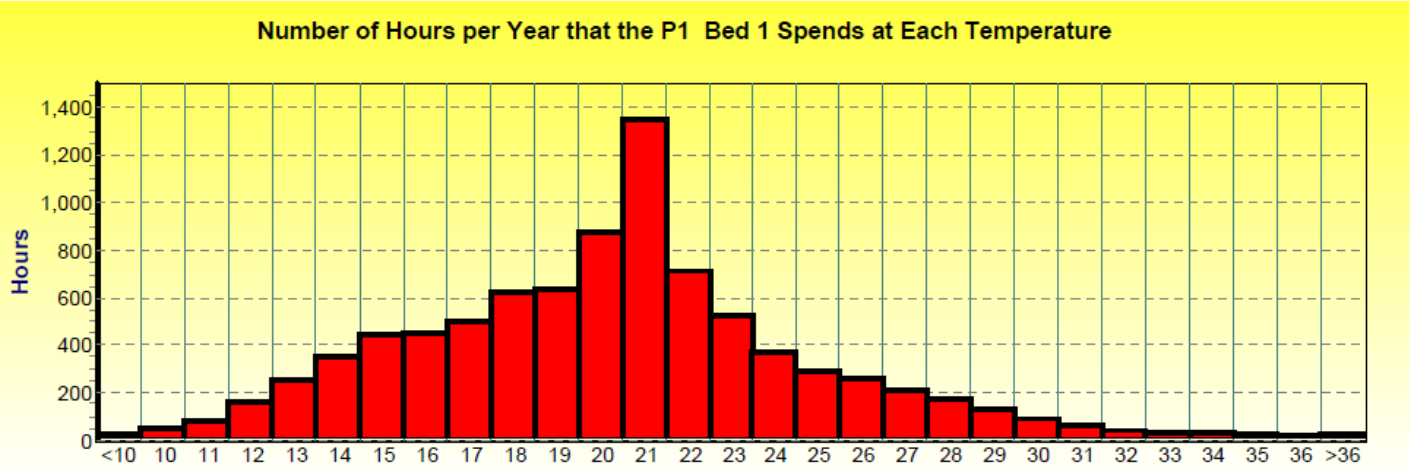
Optimising Performance

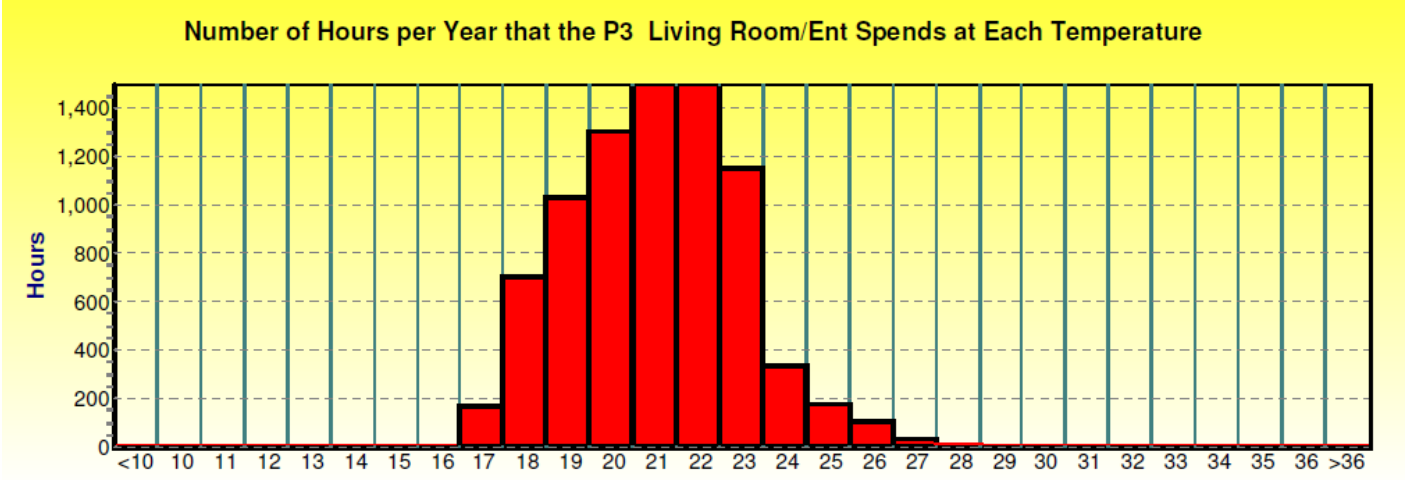
- *Obtain data from assessor*
- *Graphs can show predicted temperatures in any room*



Optimising Performance

- *Graphs can show temperature range for whole year*
- *Optimum comfort range is between 18 – 26 deg*





Construction

- Ensure NatHERS certificate is in Building Contract
- Ensure plans clearly specify insulation, window performance values, correct materials and sealing of joints
- Ensure that these are all properly priced before signing contract and avoid builder's substituting with their standard products
- Does builder use a specialist insulation installer?
- What is their process for joint & gap sealing?
- Double check spec of windows before fabrication
- Engage designer to inspect installation of insulation prior to lining
- Consider doing a blower door test

Questions?