



Top tips for building for 7 Stars

What's changed?

The 2022 National Construction Code (NCC) will require all new Australian houses and apartments to meet a minimum energy efficiency rating of 7 stars under the Nationwide House Energy Rating Scheme (NatHERS). Equivalent increases exist for other NCC compliance pathways: Deemed-to-Satisfy elemental provisions; and the Reference Building Verification Method. There will be allowances for 6 and 6.5 star houses with a compliant outdoor living area in NCC climate zones 1 and 2. See Section S42C2 of Volume Two for more details, <https://ncc.abcb.gov.au>.

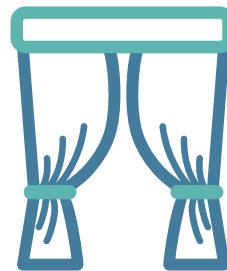
Getting your dwelling to 7 stars

Building for 7 stars doesn't have to be costly or complicated. Simple design features and material choices make a big difference to energy efficiency and the rating outcome.

1 Get your NatHERS assessor involved early: The most important first step is to get your NatHERS assessor involved early in the design process. NatHERS accredited assessors are extensively trained to improve ratings and providing options to get to 7 stars and beyond. Find a NatHERS accredited assessor here. www.nathers.gov.au/owners-and-builders/home-energy-star-ratings.

2 Orientation is key: Build for the local climate, allowing shade and solar access as appropriate for tropical/temperate/cool climates. Repositioning a house plan on the block can make a world of difference to its performance. See <https://www.yourhome.gov.au/passive-design/orientation>

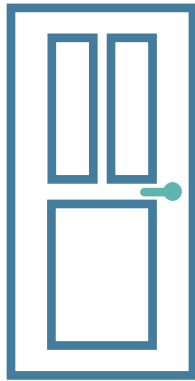
3 Improve the glazing: The cost of double and triple glazing has reduced considerably in recent years and there are thousands of options now available. NatHERS includes both default and custom window options. Choosing defaults will usually result in a lower rating, so switching to a custom window where all the specifications are known allows for greater flexibility. Window sizing, placement and shading are also important considerations and should suit the climate. See <https://www.yourhome.gov.au/passive-design/glazing> to find out more.



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Increase zoning:

By including more internal doors in the design, mechanical heating and cooling estimates in NatHERS can be applied more accurately. Places to include doors may be at the end of corridors, the bottom of stairs or to close off occasionally used rooms, like media and rumpus rooms.



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Insulate more: Depending on the climate, ratings may be improved by increasing the R value of wall, floor and ceiling insulation or extending insulation to new areas e.g. slab edge, underneath the slab, the garage wall and internal walls (especially to unconditioned zones, like laundries and bathrooms). Care must be taken to not increase condensation risk. For more information, see www.yourhome.gov.au/passive-design/insulation, www.yourhome.gov.au/passive-design/condensation and www.abcb.gov.au/sites/default/files/resources/2022/Handbook-condensation-in-buildings-2019.pdf

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Plan for fans: Specifying ceiling fans in all rooms will not only improve your NatHERS rating but the homeowners' comfort.

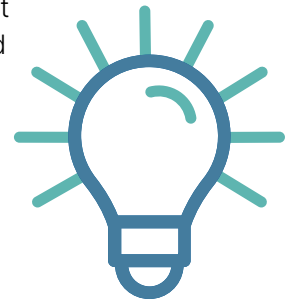


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Check your colours: Rating improvements can usually be achieved by lightening external roof and wall colours for all but NCC climate zone 8 (Alpine). If your software is able to do it, adjusting window frame colours can also make a surprising difference. Talk to your clients about their choices early.

8

Look at lighting: NatHERS rewards homes with fewer ceiling penetrations with higher ratings. Consider whether your design can delete downlights that aren't IC4 rated, roof windows and skylights and replace these with other lighting options that allow for continuous ceiling insulation.

**Find out more**

Your Home provides free house plans and case studies that meet 7 stars available at www.YourHome.gov.au

