Case Study 1 Design For Place* Acacia house in Adelaide

Project details:

2 bedroom, 2 bathroom home, located in Adelaide.

123m² floor area (excluding carport).



Construction details:

Floor	100mm concrete slab with 375mm waffle pod Finishes: Burnished concrete to living areas, carpet to bedrooms, ceramic tiles to wet areas
Ceiling	10mm plasterboard on timber framing with R5.0 batt insulation
Roof	Metal sheet roofing on timber battens with R1.5 reflective foil laminate 1000mm eave overhang
Walls	External: Lightweight cladding on battens, reflective foil membrane (vapour permeable if appropriate), timber frame, R2.5 batt insulation, 10mm plasterboard Internal: 10mm plasterboard on timber framing with R2.5 batt insulation
Windows	Double glazed, thermally broken aluminium frame
Ceiling fans	1400mm diameter fans. 1 in each bedroom, 1 in the dining area, 1 in the front living area.

Weather strips to all windows and sliding doors. Seals and weather-strips to hinged external doors. Sealed exhaust fans to bathroom, powder room and kitchen rangehood.

NatHERS star rating: 6 stars

Change windows to **double glazed**, **low emissivity glass**, **uPVC**¹ frame and improve the rating to achieve:





¹ uPVC window frames have similar insulating properties to timber frames.

Case Study 2 Design For Place^{*} Acacia house in Darwin

Project details:

2 bedroom, 2 bathroom home, located in Darwin.

123m² floor area (excluding carport).



Construction details:

Floor plan $Z \bigotimes$

Floor	100mm concrete slab on ground Finishes: Burnished concrete to living areas, ceramic tiles to bedrooms and wet areas	
Ceiling	10mm plasterboard on timber framing with R5.0 batt insulation	
Roof	Metal sheet roofing on timber battens with R1.5 reflective foil laminate 1000mm eave overhang	
Walls	External: concrete blocks with stud wall, wall wrap, R2.0 batt insulation, 10mm plasterboard Internal: 10mm plasterboard on timber framing with R2.5 batt insulation	
Windows	Single glazed, low emissivity glass, aluminium frame	
Ceiling fans	1400mm diameter fans. 1 in each bedroom, 1 in the dining area, 1 in the front living area.	
Weather string to all windows and sliding doors. Seals and weather-string to hinged external doors. Sealed		

Weather strips to all windows and sliding doors. Seals and weather-strips to hinged external doors. Sealed exhaust fans to bathroom, powder room and kitchen rangehood.

NatHERS star rating: 6 stars

Change windows to **double glazed**, **low emissivity glass**, **thermally broken alluminium frame** and improve the rating to achieve:

7 stars





Case Study 3 Design For Place* Acacia house in <u>Canberra</u>

Project details:

2 bedroom, 2 bathroom home, located in Canberra.

123m² floor area (excluding carport).



Construction details:

Floor plan $z \bigcirc$

Floor	100mm concrete slab on ground with R1.8 under slab insulation Finishes: Burnished concrete to living areas, carpet to bedrooms, ceramic tiles to wet areas
Ceiling	10mm plasterboard on timber framing with R5.0 batt insulation
Roof	Metal sheet roofing on timber battens with R1.5 reflective foil laminate 600mm eave overhang
Walls	External: Lightweight cladding on battens, reflective foil membrane (vapour permeable if appropriate), timber frame, R2.5 batt insulation, 10mm plasterboard Internal: 10mm plasterboard on timber framing with R2.5 batt insulation
Windows	Double glazed, uPVC ¹ frame
Ceiling fans	1400mm diameter fans. 1 in each bedroom, 1 in the dining area, 1 in the front living area.

Weather strips to all windows and sliding doors. Seals and weather-strips to hinged external doors. Sealed exhaust fans to bathroom, powder room and kitchen rangehood.

NatHERS star rating: 7 stars

Change windows to **double glazed**, **low emissivity glass**, **uPVC**¹ frame and improve the rating to achieve:





¹ uPVC window frames have similar insulating properties to timber frames.

Case Study 4 Design For Place* Acacia house in Perth

Project details:

2 bedroom, 2 bathroom home, located in Perth.

123m² floor area (excluding carport).



Construction details:



Weather strips to all windows and sliding doors. Seals and weather-strips to hinged external doors. Sealed exhaust fans to bathroom, powder room and kitchen rangehood.

NatHERS star rating: 7 stars

Change windows to **double glazed**, **low emissivity glass**, **uPVC**¹ frame and improve the rating to achieve:

8 stars



¹ uPVC window frames have similar insulating properties to timber frames.