

# Energy Efficiency Design Card

## Hamptons Melbourne

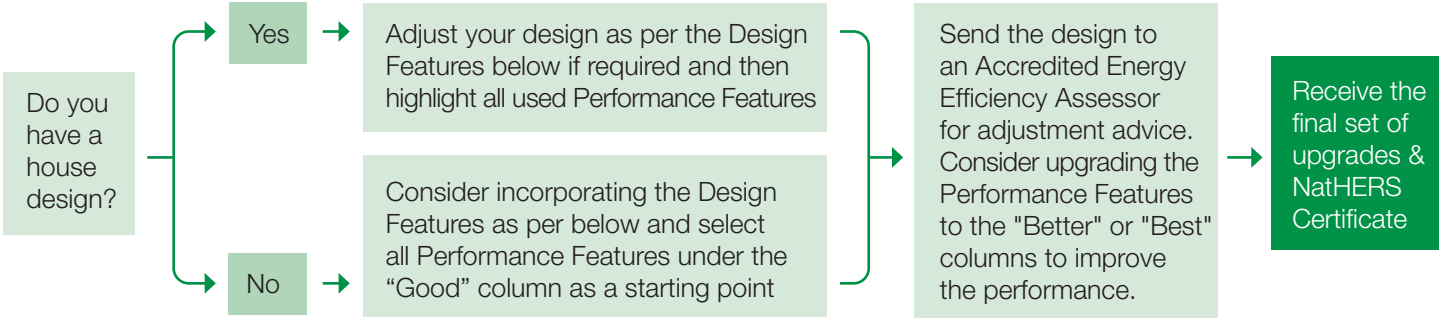
Climate Zone 6 | Mild Temperate

September 2023

The purpose of this Design Card is to aid the creative process of designing a dwelling, ensuring that the chosen direction aligns with both aesthetic and performance goals. Please keep in mind that the listed "Design Features" are key considerations, but they do not include all aspects that can be required to achieve the desired design look.

Additionally, the "Performance Features" provide a summary of features that can be incorporated into the design to achieve the desired thermal performance, such as a 6 or 7-star rating. However, these features are meant to serve as initial guidance in the design process. It is essential to subsequently have an Accredited Energy Efficiency Assessor review the design to determine its suitability.

### How to use the Design Card



### Design Features

This style has been built for over 200 years, and it has evolved from small, ‘beach shacks’ and farmlet houses to the grander homes you see today. The attraction is the neutral colour palette, light and spacious living areas, natural textures, high ceilings and detail throughout, with a major focus on the kitchen.



Hamptons

#### Gabled Roof

A gabled roof design is where two roof panels are pitched to meet in the centre of a building. Steeply pitched roofs work well in coastal areas exposed to high wind and heavy rain to stop water ingress.

#### Horizontal Profiles

It's all about having a timber look and the feel of craftsmanship. This can be achieved with modern, durable fibre cement weatherboards, such as Linea™ Weatherboard.

#### Contrasting Trims

Much of the Hamptons curb appeal comes from the interplay between the muted colour of the horizontal lines and the contrast created by crisp white trims and architectural features.

#### Verandahs

The Hamptons style encourages outdoor entertaining. Front verandas make your home welcoming, or a more private rear veranda encourage indoor outdoor living.

Recommended Hardie™ Products



Linea™ Weatherboard



Hardie™ Oblique™ Cladding



Stria™ Cladding

**Note:** This card is designed to fit an A3 page if printed. Please consider the environment before printing.

### Performance Features

MELBOURNE	GOOD	BETTER	BEST
Windows Glass	Clear	Low-e clear glass	High SHGC Low-e glass
Window Frame	Aluminium Standard Single Glazing	Aluminium Standard Double Glazing	Thermally-broken/uPVC Double Glazing
Orientation <sup>1</sup>	E, SE, S, SW & W	NW & NE	N
Openability <sup>2</sup>	None	Include full openability on north/south windows	Include full openability on all windows
Shading	Remove window shrouds	Reduce awnings	Reduce eaves/soffits (Max: 450mm)
External Wall R-Value <sup>34</sup>	R2.0	R2.5	R2.7
Suspended Floor Insulation	R2.0	R3.0	R4.0
Slab Insulation	Raft Slab	Waffle Pod 225/85 (310 mm)	Waffle Pod 300/85 (385 mm)
Ceiling Insulation	R4.0	R5.0	R6.0
Wall Cavities	Reduce wall cavities on all facades	Reduce wall cavities on east/west facades	Include wall cavities on all external walls
Ventilation <sup>5</sup>	Include ceiling fans in living areas	Include ceiling fans in bedrooms	Include ceiling fans in bedrooms and living areas
Reflectivity	None	Include non-reflective sarking	Include reflective sarking
Colour	Light tones	Medium tones	Dark tones

<sup>1</sup> Orientation refers to the main location of windows in relation to the path of the sun.

<sup>2</sup> On double storey dwelling only, installing fall protection screens on the upper storey windows enables the use of windows with full openability, increasing cross-flow ventilation and potentially reducing the cooling loads and proving a better thermal performance.

<sup>3</sup> Inclusion of internal walls insulation on the garage area can act as a barrier to the external environment, potentially improving the energy rating.

<sup>4</sup> External Wall Insulation refers to the overall R-Value of the wall as a system.

<sup>5</sup> Inclusion of ceiling fans and ventilation on mild to cool temperate climates will have minimal effect on the thermal performance of the dwelling.

<sup>6</sup> Thermal mass can slow down the rate at which the dwelling warms up and cools down and must be used strategically to moderate internal temperatures. Thermal mass can be found on different elements of the dwelling, such as concrete slabs, tiled finished floors or walls, among others.

### External Walls

The following wall systems have been assessed in accordance with AS/NZS 4859:2018 “Thermal Insulation Materials for Buildings. Part 1: General Criteria and Technical Provision, and Part 2: Design” and provide an R-Value as required on the Performance Features Table.

GOOD

Min. 8.5mm Hardie™ Cladding

Hardie™ Weather Barrier

R2.5 Wall Batts

90x45mm Timber Frame

10mm Standard Plasterboard

**R-Value**

Summer: 2.26

Winter: 2.37

BETTER

Min. 8.5mm Hardie™ Cladding

Hardie™ Weather Barrier

R2.5 Wall Batts

90x45mm Timber Frame

70x35mm Timber Battens

10mm Standard Plasterboard

**R-Value**

Summer: 2.69

Winter: 2.84

BEST

Min. 8.5mm Hardie™ Cladding

Hardie™ Weather Barrier

R2.7 Wall Batts

90x45mm Timber Frame

70x35mm Timber Battens

10mm Standard Plasterboard

**R-Value**

Summer: 2.83

Winter: 2.97