

# 88-90 The Pinnacle WORONGARY Queensland 4213

Size: 313.12m2 Lot: 8792m2 Levels: 1 Bedrooms: 4 Bathrooms: 4 Decks: 6 Living: 2 Car: 4

The brief was to design a timeless forever that enhanced the relaxed lifestyle of the Gold Coast Hinterland and proximity to the coastline. A 6 star NatHERS energy rating as a result of smart solar passive design, the house captures gentle sea breezes and warm natural sunrays all year long. Constructed, slab on ground, zero VOC sealed and finished with beautiful 220mm Oak floors with E1 formaldehyde content the sustainable attributes of the home start from the ground up. Crafted Marble benchtops, shaker style cabinetry, locally sourced rustic timber beams, feature glass floors and dramatic high ceilings mean style is not compromised in the pursuit of environmentally minded excellence. Actively in depth consultation with the client, sourcing material from local suppliers and using local tradesmen meant the building phase, as well as the finished product, were as carbon-friendly as possible.



## Ceiling Lining

**Product:** Ceilings 10mm span plasterboard. **Supplier:** Knauf Plastamasta **Notes:** Plasterboard is 100% recyclable and can be fully diverted from landfill. If disassembled and free from contaminants such as fasteners, nails/screws and wall coverings, the gypsum component of plasterboard waste can be recycled back into production process. It can also be recycled for agricultural use and the paper liner can be recycled into bulk paper products. Knauf has a list of recommended waste recycling facilities.

## Roofing

**Product:** Colourbond Custom Orb in Surfemist **Supplier:** BlueScope **Notes:** Light 'Surfmist' colour has low heat absorbency.

**Product:** Rain Chains **Supplier:** Rain Chains **Notes:** Selected for aesthetics and half round aluminum gutter adaptor, gutter debris and Leaf blocker. Large sumps were placed under rain chain to ensure maximum water catchment.

## Roof Insulation

**Product:** 55mm Permastop foil back blanket R1.3 to the underside of the roof sheet. Gold Batts R3 to ceilings including garage and raked area. **Supplier:** Bradford **Notes:** Gold Batts chosen for performance, cost, only approved insulation of the National Asthma Council of Australia and having the best fire rating.

## External Cladding

**Product:** Scyon Linea 180mm & EasyLap Fibre Cement Cladding **Supplier:** James Hardie **Notes:** Manufactured in Brisbane. It is the only Australian Fibre Cement manufacturer with GECA (Good Environmental Choice Australia). The majority of the home uses the Linea cladding system, an advanced lightweight cement composite that has highly durable performance ratings, being the thickest weatherboard available. It is resistant to damage from termites, rot, fire, shrinking, swelling and cracking of paint, but easy to install just like timber systems. Overall its integrity & appearance last longer than timber, so there's a maintenance benefit and it is 100% recyclable at the end of its lifespan.

**Product:** Stone Work **Supplier:** Neo Rox

**Product:** Block work **Supplier:** Williams Brick Centre Chinderah

**Product:** NRG Greenboard **Supplier:** Coastal Building Installations **Notes:** Comprising of 98% air and 2% polystyrene the product is highly efficient, light weight, fire retardant, free of toxic CFC's and HCFC's, has high thermal properties and can be recycled at the end its lifetime or waste during construction. R value of 2.44.

### Wall Insulation

As with roof insulation, Bradford Gold Batts R2 was used in all external walls and the garage divider walls. **Supplier:** Bradford **Notes:** Gold Batts chosen for performance, cost, being the only approved insulation of the National Asthma Council of Australia and having the best fire rating.

### Interior Walls

**Product:** 10mm plasterboard **Supplier:** Knauf Plastamasta **Notes:** See Ceiling Lining Notes

**Product:** Untreated timber frame **Supplier:** Langs Timer, Yatala **Notes:** Waste timber from frames can be recycled as green waste.

### Flooring

**Product:** 220mm Oak Flooring – Oak Trends Havana **Supplier:** Harvey Norman **Notes:** With E1 formaldehyde content and a 20 year surface warranty and lifetime structural guarantee the perfect combination of elegance, resilience and peace of mind. The concrete slab was sealed with zero VOC Mapei.

**Product:** Carpet **Supplier:** Harvey Norman **Notes:** Selected for warmth, durability and beauty. SmartStrand Forever Clean is the only carpet with permanent built-in stain and soil protection that won't wear or wash off and includes a lifetime full stain, soil and pet stain protection warranty. Partly made of renewable plant based materials, SmartStrand Forever Clean carpet is even environmentally conscious.

**Product:** Tiles **Supplier:** Beaumont Tiles Tweed Heads **Notes:** Selected for cost effectiveness and provides a classic look.





### Flooring Continued'

**Product:** 130mm x 19mm Blackbutt External Decking and F27 Structural members **Supplier:** Greenmount Timbers **Notes:** Local, Native and seasoned Australian Hardwoods with full chain of Custody certification meeting Australian Forestry Standard AS4707-2006. Complies to BAL 29.

### Lighting

**Product:** Dedicated LED down lights **Supplier:** Sunny Wave Lighting **Notes:** Very low power draw, can be dimmed for ambiance. Lights do not require insulation to be cut for installation, minimising thermal break and roof ceiling penetrations.

### Solar Power

**Product:** 15kW Seraphim 260w Panels and Fronius Symo 3 Phase Inverter and Solar Net Metre **Supplier:** Eco Sustainable House & Coastal Energy Solutions **Notes:** High quality product with exception after market service and warranties. Certified in accordance with ISO 9001 for over 20 years and is a pioneer of quality in solar sector.

### Paint

**Product:** Rockcote Non Toxic Zero VOC internal paint & Rockcote Armour Plus & Dulux Weathershield exterior paint **Supplier:** Eco Sustainable House **Notes:** Certified as environmentally preferable by Good Environmental Choice Australia backed by 15 year warranty. Premium quality paints, 100% acrylic, low maintenance, resists stain, mould, dirt, mildew and fungi, Low odour means paint today occupy today, Non Toxic means free of dangerous chemical and solvents including formaldehyde, glycol ethers, phthalates and crystalline quartz silica good for occupants and trades personal.

**Product:** Natural Stain for decking **Supplier:** Intergrain **Notes:** Emit substantially less VOCs without compromising on performance. Intergrain are a member of the Green Building Council of Australia.

### Landscape

**Product:** Plants **Supplier:** Local nurseries **Notes:** Native and sub-tropical plants chosen to reduce water usage and ensure plants thrive in their environment.

### Windows, Skylights and Seals

**Product:** Aluminium Windows and Doors **Supplier:** Suburban Windows **Notes:** Smart position of fixed and open able windows and doors for natural light and cross flow. BAL compliant screens installed to meet bushfire requirements

**Product:** Weather seals **Supplier:** Gainsborough **Notes:** used to protect against draughts, weather and heat/ cooling loads.

**Product:** Velux Skylights **Supplier:** Eco Sustainable House **Notes:** Selected for Thermal properties with double glazing, excellent warranties and to assist cross flow ventilation and expelling stale hot air.

### Appliances:

**Products:** Bosch Dishwasher (4 Star Energy and 5 Star WELS), Ilve Oven, Ilve Gas Cooktop, Ilve Undermount Rangehood, Ilve Refrigerator **Supplier:** Havey Norman Commercial **Notes:** Chosen for function and reduced energy output.

### Drainage/Permeable Areas

**Product:** Atlantis Corp 52mm Gravel Cell **Supplier:** Eco Sustainable House **Notes:** Created attractive, durable and permeable hardstand areas around Garage, rainwater tanks and effluent. Simple and rigid installation, high load bearing, made from 100% recycled materials and cost effective as opposed to bitumen or concrete systems.

### Earthworks

**Notes:** All trees cleared and soil removed as part of earth and site works for a level construction pad remained on site and were used to fill low areas. All trees were mulched and used in landscaping and for the effluent system.

### NatHERS

**Notes:** Achieved a 6 Star thermal NatHERS performance rating and complies and exceeds with BASIX requirements

### Cradle to Grave and Sustainable Material selection

**Notes:** The design incorporates building materials which reduce the energy consumed for transportation to site as all products from local manufacturers between Brisbane and Northern Rivers. The majority of the products were 100% recyclable or a product made using recycled content. The smaller percentage of products that weren't recycled, we have stewardship agreements in place with our suppliers so that any off cuts or 'rubbish' from the site is taken returned and recycled in which ever form the company wishes, generally into another product. This encourages the industry to consider the cradle to the grave/cradle approach and really see how carefully selecting products and having a strong and trusting relationship with your suppliers can impact the environment.

### Heating and Cooling Systems

**Product:** Intercept ceiling fans **Supplier:** Hunter Pacific **Notes:** The house is designed to achieve a comfortable temperature year round and zoned through the separation of living and service areas. The mechanical cooling is through the use of fans, located in all bedrooms and the living.

**Product:** Daikin 16kW Air Conditioning Unit **Supplier:** JB Air

**Notes:** The house is designed to achieve a comfortable temperature year round and zoned through the separation of living and service areas, however as per the clients request air conditioning was installed to the main living area and bedrooms which will run off the Solar System.

### Tap Ware

**Product:** Abey Tapware **Supplier:** Harvey Norman Commercial

**Notes:** Abey selected for its attractive finish, competitive price and excellent WELS ratings. Abey tap ware have a 6 star WELS, Abey showers have a 3 Star WELS. Abey also have a 15 & 7 Year Warranty.

### Toilets

**Product:** Urbane Clean flush **Supplier:** Caroma **Notes:** Caroma Clean Flush technology offers the ultimate flushing performance and a hygienic whole bowl clean with its rimless design allowing larger water surface area for improved cleaning. 4 Star WELS rating.

### Rainwater Tanks

**Product:** 2 x 22000 Litre semi in ground concrete water tanks **Supplier:** Taylex **Notes:** Tap for external use for watering vegetation and landscape. This water tank will also supply toilets, laundries and pool with an alternative water supply. All roof water dealt with on site through rainwater tank capture, meaning zero run off to the surrounding properties or streets.

### Solar Hot Water

**Product:** 2 x 315 Litre Evacuated Tube Solar Electric boosted hot water system **Supplier:** Eco Sustainable House **Notes:** Passively track the sun for more hours of the day to provide greater solar collection. The evacuated tube collectors are highly efficient, lightweight and low maintenance. They can withstand hail and frost and the mounting frames are rated to withstand cyclonic winds. Up to 15 Year warranty. 37 Renewable Energy Certificates which is equal to the most efficient systems on the market and will reduce your greenhouse gas emissions.

### Plumbing Gas

**Notes:** Gas connection supplied to both internal and external cookers

### Plumbing Effluent Sewer Treatment System

**Product:** Taylex Poly ABS 22500 Litre System including blower, air diffuser and Davey irrigation pump **Supplier:** **Notes:** Woodchip on site was used





