

HIA GREENSMART Custom Built Home

CATEGORY DEFINITION

An individual house, which has been uniquely designed and built on contract specifically for the site and according to the requirements and brief of a client. Where the home is built for staff, friends, a family member or is the builder's own home, the contract price must represent the complete cost to build an identical home (including builders margins), which is the price offered to the home buying public.

JUDGING CRITERIA

Environmental Design, Features and Construction (max score 55)

- Energy efficiency – Use of energy saving technologies through design and construction innovation, both internally and externally e.g. lighting, power, hot water, alternative energy sources, automated heating & cooling systems designed to reduce energy consumption, exceeds state regulation of energy rating of the building envelope, includes passive solar design, use of thermal massing or lightweight construction materials to suit climatic location, energy efficient lighting, appliances, fittings and hot water systems etc.
- Water efficiency – Use of water saving technologies through design and construction innovation, both internally and externally e.g. water efficient appliances, water reuse, water tanks, greywater systems, water efficient irrigation and landscaping, designed to reduce the use of potable water etc.
- Resource efficiency – application of material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- Application of site management techniques during construction – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.
- Protection of indoor air quality – Use of low-allergen or non-toxic materials within the building e.g. paints, glues, varnishes, floor coverings, manufactured wood products, appropriate natural ventilation.
- Material selection – e.g. consideration of the life cycle impacts of key building materials and elements, use of locally manufactured materials, materials with recycled content or readily recycled etc.

Innovation (max score 15)

- Incorporation of innovative construction techniques, e.g. utilising modular concepts, maximising resource efficiencies, use of space/s within the home.
- Use of technologies through design and construction innovation, that monitor resource use and environmental performance.
- Cost of new technologies with identifiable operational energy, water or resource savings and ability for broader application.

Visual Appeal (max score 10)

- External street appearance and suitability of response to site constraints (e.g. slope, vegetation).

Liveability and Cost Effectiveness (max score 20)

- Overall environmental sustainability performance (e.g. thermal comfort, water efficiency, energy efficiency, resource efficiency) and practicality of design and operation of the home.
- Cost effectiveness – (i.e. Cost per sq. metre)

Total

HIA GREENSMART Display / Project Home

CATEGORY DEFINITION

An individual house currently on display to the public and intended for reproduction as displayed or with standard variations to suit the client’s needs. A project home is an individual house based on a display home or sales brochure for a repeatable design, which has been tailored to suit the needs of the client and the site. This includes manufactured homes formed of pre-built major elements and then assembled on site.

Display homes must be open for display within a 24 month period prior to and including the close of entries date, and at the time of judging.

JUDGING CRITERIA

Environmental Design, Features and Construction (max score 55)

- Energy efficiency – Use of energy saving technologies through design and construction innovation, both internally and externally e.g. lighting, power, hot water, alternative energy sources, automated heating & cooling systems designed to reduce energy consumption, exceeds state regulation of energy rating of the building envelope, includes passive solar design, use of thermal massing or lightweight construction materials to suit climatic location, energy efficient lighting, appliances, fittings and hot water systems etc.
- Water efficiency – Use of water saving technologies through design and construction innovation, both internally and externally e.g. water efficient appliances, water reuse, water tanks, greywater systems, water efficient irrigation and landscaping, designed to reduce the use of potable water etc.
- Resource efficiency – application of material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- Application of site management techniques during construction – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.
- Protection of indoor air quality – Use of low-allergen or non-toxic materials within the building e.g. paints, glues, varnishes, floor coverings, manufactured wood products, appropriate natural ventilation.
- Material selection – e.g. consideration of the life cycle impacts of key building materials and elements, use of locally manufactured materials, materials with recycled content or readily recycled etc.

Innovation (max score 15)

- Incorporation of innovative construction techniques, e.g. utilising modular concepts, maximising resource efficiencies, use of space/s within the home.
- Use of technologies through design and construction innovation, that monitor resource use and environmental performance.
- Cost of new technologies with identifiable operational energy, water or resource savings and ability for broader application.

Visual Appeal (max score 10)

- External street appearance and suitability of response to site constraints (e.g. slope, vegetation).

Liveability and Cost Effectiveness (max score 20)

- Overall environmental sustainability performance (e.g. thermal comfort, water efficiency, energy efficiency, resource efficiency) and practicality of design and operation of the home.
- Cost effectiveness – (i.e. Cost per sq. metre).

Total

HIA GREENSMART Renovation / Addition Project

CATEGORY DEFINITION

An extension or renovation involving structural building work to an existing individual house or other residential building. To renovate and upgrade a group of apartments, villas, townhouses, etc or to convert a non-residential building into a residential building. Builders entering this category must be responsible for the total renovation.

JUDGING CRITERIA

Environmental Design, Features and Construction (max score 55)

- Energy efficiency – Use of energy saving technologies through design and construction innovation, both internally and externally e.g. lighting, power, hot water, alternative energy sources, automated heating & cooling systems designed to reduce energy consumption, exceeds state regulation of energy rating of the building envelope, includes passive solar design, use of thermal massing or lightweight construction materials to suit climatic location, energy efficient lighting, appliances, fittings and hot water systems etc.
- Water efficiency – Use of water saving technologies through design and construction innovation, both internally and externally e.g. water efficient appliances, water reuse, water tanks, greywater systems, water efficient irrigation and landscaping, designed to reduce the use of potable water etc.
- Resource efficiency – application of material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- Application of site management techniques during construction – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.
- Protection of indoor air quality – Use of low-allergen or non-toxic materials within the building e.g. paints, glues, varnishes, floor coverings, manufactured wood products, appropriate natural ventilation.
- Material selection – e.g. consideration of the life cycle impacts of key building materials and elements, use of locally manufactured materials, materials with recycled content or readily recycled etc.

Innovation (max score 15)

- Incorporation of innovative construction techniques, e.g. utilising modular concepts, maximising resource efficiencies, use of space/s within the home.
- Use of technologies through design and construction innovation, that monitor resource use and environmental performance.
- Cost of new technologies with identifiable operational energy, water or resource savings and ability for broader application.

Visual Appeal (max score 10)

- External street appearance and suitability of response to site constraints (e.g. slope, vegetation).

Liveability and Cost Effectiveness (max score 20)

- Overall environmental sustainability performance (e.g. thermal comfort, water efficiency, energy efficiency, resource efficiency) and practicality of design and operation of the home.
- Cost effectiveness – (i.e. Cost per sq. metre).

Total

HIA GREENSMART Multi Dwelling Development

CATEGORY DEFINITION

This award recognises multiple dwelling residential projects. These projects typically include developments known as dual occupancy (two dwellings on a single allotment), villas (one storey), townhouses (two-three storey) and terrace housing, whether attached or detached, as well as residential apartment buildings of two or more storeys, not including car parking, and containing at least two self-contained dwellings. These projects must be classified as Class 1a, 2 or 3 buildings under the Building Code of Australia.

JUDGING CRITERIA

Environmental Design, Features and Construction (max score 60)

- Energy efficiency project – project designed incorporating passive design principles to optimise solar orientation for the majority of dwellings, including natural light for living areas, minimizing solar absorption on east and west elevations and appropriately manage northern elevation through limited glazing, glazing treatment or installation of eaves/shading devices. Project has been designed with windows and openings that can capture prevailing breezes and assist in desired air circulation. Appropriate use of thermal mass or lightweight depending on climate zone.
- Energy consumption has been reduced via the installation of efficient fixtures and fittings, insulation included in internal walls, inclusion of alternative energy sources. Artificial heating and cooling should meet maximum energy efficiency rating that is currently available on the market.
- Water efficiency – Use of water saving technologies through design and construction innovation, both internally and externally e.g. water efficient appliances, water reuse, water tanks, greywater systems, water efficient irrigation and landscaping, designed to reduce the use of potable water etc.
- Resource efficiency – application of material selection including use of recycled building materials, reduction in materials sent to landfill, use of prefabricated materials, etc.
- Application of site management techniques during construction – e.g. storm water and erosion control, minimising site disturbance, innovative construction techniques, noise control and vegetation protection etc.
- Protection of indoor air quality – Use of low-allergen or non-toxic materials within the building e.g. paints, glues, varnishes, floor coverings, manufactured wood products, appropriate natural ventilation.
- Material selection – e.g. consideration of the life cycle impacts of key building materials and elements, use of locally manufactured materials, materials with recycled content or readily recycled etc.

Innovation (max score 15)

- Incorporation of innovative construction techniques, e.g. utilising modular concepts, maximising resource efficiencies, use of space/s within the home.
- Use of technologies through design and construction innovation, that monitor resource use and environmental performance.
- Cost of new technologies with identifiable operational energy, water or resource savings and ability for broader application.

Visual Appeal (max score 10)

- External appearance.
- Suitability of response to site constraints including provision of useable open space and inclusion of planting, (e.g. slope, vegetation)

Liveability and Cost Effectiveness (max score 15)

- Overall environmental sustainability performance (e.g. thermal comfort, water efficiency, energy efficiency, resource efficiency) and practicality of design and operation of the home.
- Cost effectiveness – (i.e. Cost per sq. metre).

Total

HIA GREENSMART Residential Land Development

CATEGORY DEFINITION

This award recognises residential land development/subdivisions. The development must demonstrate minimal environmental impact as well as environmental, social and economic gains through its design, construction and development and will ideally create more than twenty lots.

JUDGING CRITERIA

Environmental Design, Features and Planning – Subdivision (max score 40)

- Residential Developments that optimise solar orientation for the majority of lots/dwellings having regard for site topography and constraints.
- Infrastructure that facilitates the utilisation of non potable water resources (e.g. rainwater, stormwater, recycled water) for external and internal uses.
- Integrate with and respond to site specific opportunities or constraints (e.g. retention and enhancement of native flora, protection of fauna habitat and heritage features and creation of wetlands).
- Design to optimise opportunities for walking, cycling and use of public transport within the development and connections to adjoining areas.
- Provide a diversity of housing product through a mix of lot sizes and/or dwelling types.

Environmental Design, Features and Construction – Dwellings (max score 30)

- Energy efficiency – e.g. energy rating of building envelopes and performance of buildings, selection of efficient fixtures and appliances alternative energy sources, (e.g. photovoltaic systems, wind power, cogeneration facilities, etc.)
- Water efficiency – e.g. efficient usage through appliances or fixtures within individual buildings or dwellings or communal facilities and areas (parks), etc.
- Promotion of waste management techniques and resource recovery to residential builders to maximise recovery and recycling of materials and minimise general waste on site.

Management of Civil Works (max score 20)

- Implementation of site management techniques designed to control soil erosion during construction and until the site becomes stabilised by retaining soil on the site and minimising site disturbance.
- Resource efficiency – e.g. material selection including use of recycled building or construction materials, reduction in materials sent to landfill during construction, use of prefabricated materials, etc.
- Inclusion of energy management techniques (e.g. solar powered street lighting or amenities).
- Protection of natural features within the development site e.g. waterways, native vegetation and suitability of response to site constraints (e.g. slope, aspect, vegetation).

Liveability and Visual Appeal (max score 10)

- Connectivity of the project with surrounding environment and infrastructure e.g. linkages of open space and vegetation.
- Integration with or provision for community centres, schools, shopping precincts and business centres.
- Use of programs or provision of facilities to establish and maintain community interaction and sense of neighbourhood.
- External appearance and suitability of response to site constraints (e.g. slope, vegetation).

Total

HIA GREENSMART Professional

CATEGORY DEFINITION

This award will be presented to the GreenSmart Professional who best demonstrates the successful application of the GreenSmart approach in a residential building and design capacity within the industry.

Submissions should include relevant business documentation and specific examples of how GreenSmart principles have been put into practice. The GreenSmart Professional must have completed the two day GreenSmart course.

JUDGING CRITERIA

Approach to Sustainable Residential Design, Building or Professional Service (max score 40)

- Outline of the individuals philosophy on environmentally responsible building and how this has influenced the direction of your business.
- Demonstration of entrant's effectiveness in creating or leading change in the housing industry.
- Demonstration of how entrant is expanding their knowledge and keeping up-to-date with changing trends.

Application of GreenSmart Principles (max score 20)

- Current evidence of building the GreenSmart way or providing a service that incorporates GreenSmart principles in the residential building industry.

Incorporation of sustainable practices into your business (max score 10)

- Outline of how environmental issues have been incorporated into the planning and decision making processes for the business operations.

Innovation and Promotion (max score 30)

- Outline of how the business philosophy is communicated to customers.
- List of the principles, practices or products that entrant can see using in the future to build the GreenSmart way and why.
- Outline of how entrant sees the housing industry continuing to adapt to a changing environment?

Total

HIA GREENSMART Product

CATEGORY DEFINITION

This award recognises a product that is integral to the construction or operation of a home that can either: reduce operational water or energy use in the home; or provide healthy living environments for occupants; or contain recycled content from waste material or sourced from renewable materials.

Your entry must describe your company's role in the manufacturing of this product and bringing the product to market. If you do not manufacture the product, but are a distributor, you need written consent from the manufacturer stating they agree to you submitting the product in the HIA GreenSmart Awards. In this instance the manufacturer will not be a joint entrant unless stated in the joint entrant field on the entry. All entrants must be HIA members.

JUDGING CRITERIA

Specified and proven environmental benefits (max score 30)

- Details of environmental benefits & application of the product in residential building design or construction e.g. reduced consumption of natural resources in operation, improved performance or environmental impact, or reduced consumption of resources in manufacturer and finished product.

Innovation and new technology (max score 15)

- Application of new technology or design innovation to develop the product or in the actual product.
- Practicality of installation and application of the product, including ability to be readily applied in any residential building.

Cost effectiveness (max score 15)

- Purchase price – comparison to other available products.
- Details of the cost benefits for installation, construction or maintenance.
- Operational savings to the building occupants e.g. water savings or energy savings.

Standard of finish/presentation (max score 10)

- Standard of finish/presentation of product to the consumers.

Origins of Product Manufacture (max score 10)

- Details of the company's (entrant) role in bringing the product into the Australian market.
- Details of the location of manufacture of the product and related transportation/processes required to bring the product to market.

Promotion (max score 20)

- Marketing approach to builders or consumers through promotional material demonstrating the environmental benefits, cost savings, improved performance and any other benefits of the product.
- Proven benefits and advantages of the product to home owners over comparable products.

Total

HIA GREENSMART Sustainable Home

CATEGORY DEFINITION

This award is presented to the housing project (single or multi dwelling) that best incorporates cost-effective environmental performance and operational principles to its design and construction.

JUDGING CRITERIA

Energy Efficiency & Energy Management (max score 25)

- Exceeds state regulation of energy rating of the building envelope (more than 6 stars / Energy 40 for BASIX).
- Dwelling orientated to take advantage of natural lighting, passive solar access & prevailing breezes.
- Effective use of eaves and external shading (e.g. pergolas, canopies, awnings and vegetation).
- Effective use of thermally efficient windows frames and energy efficient glazing.
- Where installed are artificial heating / cooling systems efficient – Min 4 Star.
- Use of Energy Efficient Lighting (minimum 80% of fixtures).

Water Efficiency & Water Management (max score 25)

- Utilisation of non-potable water resources (e.g. rainwater, stormwater, recycled water) for external and/or internal uses.
- Use of water efficient fittings and fixtures within the home to reduce consumption of portable water.
 - Toilets – Min 4 Star WELS rating.
 - Showerheads – Min 4 Star WELS rating.
 - Tapware – Min 4 Star WELS rating.
- Use of water efficient irrigation in landscaping (e.g. sub surface or drip irrigation systems).
- Use of predominantly indigenous or drought tolerant plants in landscaping.

Resource Efficiency (max score 5)

- Material selection incorporating recycled building or construction materials.
- Use of waste management techniques to maximise resource recovery and recycling of materials and general waste on site.

Protection of Indoor Air Quality (max score 5)

- Use of low-allergen or non-toxic materials within the building. E.g. paints, glues, varnishes, floor coverings, manufactured wood products with low VOC content.

Innovation (max score 20)

- Design or construction addresses any unique site conditions.
- Innovative use of building materials/finishes.
- Use of new technology (building or features) e.g. energy management systems / meters, alternative energy sources (Solar PV, Battery).
- High performance hot water system (5 star).

Visual Appeal (max score 10)

- External appearance and suitability of response to site constraints (e.g. slope, vegetation).

Liveability and Cost Effectiveness (max score 10)

- Overall environmental sustainability performance (e.g. thermal comfort, water efficiency, energy efficiency, resource efficiency) and practicality of design and operation of the home.
- Cost effectiveness (i.e. Cost per sq. metre).

Total

HIA GREENSMART Energy Efficiency

CATEGORY DEFINITION

This award is presented to the housing project (single or multi dwelling) that best incorporates cost-effective energy efficient design and operational principles.

JUDGING CRITERIA

Passive solar design features (max score 30)

- Solar orientation and cross ventilation.
- Windows location, size and treatment, type of glazing.
- Use of eaves and external shading e.g. pergolas, canopies, awnings and vegetation.
- Other features (e.g. use of thermal mass, room zoning etc).

Energy Rating (max score 10)

- Performance of the energy rating of a building envelope beyond minimum regulation.

Energy Saving Materials & Fittings (max score 30)

- Use of energy efficient appliances and fittings (including lighting).
- Use of energy efficient hot water system.
- Use of renewable energy sources e.g. PV systems, etc.
- Use of insulation appropriate to climate.
- Colour/reflectivity of roof appropriate to climate zone.

Liveability (max score 15)

- Overall environmental performance (e.g. thermal comfort, practicality of design layout).

Innovation (max score 15)

- The use of new technology in the design, construction and operation of the building, including the cost effectiveness and practicality of innovative practices and the ability to replicate this innovation in other housing projects.

Total