

# NDIA SDA Pricing Review 2022-23

Technical Report - Benchmark Construction Costs

**Reliance Restricted**

18 May 2023

The EY logo consists of the letters 'EY' in a bold, dark blue, sans-serif font. A yellow triangle is positioned to the right of the 'Y', pointing towards the top right corner of the logo.

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Our conclusions are based, in part, on the assumptions stated and on information from both publicly available information and other sources used during the course of the engagement. The modelled outcomes are contingent on the collection of assumptions as agreed with NDIA and no consideration of other market events, announcements or other changing circumstances are reflected in this Report. Neither Ernst & Young nor any member or employee thereof undertakes responsibility in any way whatsoever to any person in respect of errors in this Report arising from incorrect information provided by the NDIA or other information sources used.

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# 1 Executive Summary

# Purpose and Approach

## Purpose

Ernst & Young (“EY”) has been engaged by the National Disability Insurance Agency (“NDIA”) to assist in undertaking technical research and analysis to support the Specialist Disability Accommodation (“SDA”) Pricing Review. This report will examine construction costs as a key input to assist the NDIA in developing new SDA benchmark prices. Further information on the SDA Pricing Review can be found on the NDIS website ([hyperlink NDIS website](#)).

## Approach

The 2023-24 benchmark construction costs are based on reference designs (developed by Kennedy Associates Architects, “KAA”), for each individual SDA Building Type, SDA Design Category and bed configuration inherent to the SDA Pricing Model. SDA Reference designs were informed by the SDA Design Standard 2019 (Design Standards), Building Code of Australia and Australian Standards. Where these standards do not provide specifications on key design aspects, a set of overarching design assumptions were developed based on reasonable inclusions informed by actual projects undertaken by KAA in the market. The reference designs were reviewed and confirmed with the National Disability Insurance Agency (NDIA) in Q4 2022.

The architectural SDA reference designs have been independently costed by Quantity Surveyor (QS) MBMpl Pty Ltd (“MBM”) inclusive of all construction costs, preliminaries, builders margin, professional fees and contingency costs. Key assumptions have been provided below, with all assumptions detailed within the report. All assumptions were developed in collaboration with the NDIA, KAA and MBM and then agreed to by the NDIA.

- ▶ All costings assume the construction of a Class 3 building, being in-line or beyond the specifications of the Design Standard, Building Code of Australia (BCA) and Australian Standards. In 2019 the BCA amended the definition Class 3 to include facilities for people with a disability which are not Class 9 buildings, resulting in many building certifiers now classing SDA as Class 3. Despite the Design Standards not requiring Class 3, SDA providers are facing increasing pressure to build to Class 3 in order to meet certification requirements.
- ▶ All costs contained within this report are exclusive of GST.
- ▶ All costs contained within this report are inclusive of 15% contingency, to reflect the estimates being based on reference designs without site specifications being known. MBM advised contingency ranges from 5% to 15% and that adopting within this range is reasonable.
- ▶ Costs for communal areas (within apartments, villas/townhouse duplex’s) have been incorporated into the benchmark costs.

# Findings

This report outlines the key findings on the estimated construction costs for SDA which are summarised below:

1. The construction cost estimates as at 1 July 2023 are provided in Table 1. The construction cost estimates are inclusive of all construction elements, preliminaries, builders margin, professional fees and a contingency of 15%, however they exclude the cost for fire sprinklers and GST.
2. GST applies to all construction cost items and unless an exception applies GST is not recoverable in full. Therefore if no exemption was applicable, the Benchmark Estimated Construction Costs would increase by 10% across all Build Types and Design Categories.

**Table 1: The 2023-24 Benchmark Estimated Construction Costs (Excluding GST, Including Contingency)**

Dwelling type	Beds	Basic	Improved liveability		Fully accessible		Robust		High physical support	
			No OOA	With OOA	No OOA	With OOA	No OOA	With OOA	No OOA	With OOA
Apartment	1	\$651,864	\$705,931	N/A <sup>1</sup>	\$734,887	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$800,519	N/A <sup>1</sup>
	2 (1 Resident)	\$687,290	\$749,812	N/A <sup>1</sup>	\$770,499	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$838,156	N/A <sup>1</sup>
	2 (2 Resident)	\$687,290	\$752,055	N/A <sup>1</sup>	\$771,634	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$840,237	N/A <sup>1</sup>
	3	\$758,863	\$828,367	N/A <sup>1</sup>	\$858,250	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$932,712	N/A <sup>1</sup>
Villa/ Townhouse/ Duplex	1	\$326,808	\$376,056	\$399,050	\$408,444	\$433,419	\$412,370	\$458,238	\$471,870	\$500,723
	2	\$386,016	\$434,575	\$491,077	\$480,611	\$543,099	\$518,694	\$567,776	\$542,811	\$613,386
	3	\$488,449	\$546,943	\$618,046	\$624,082	\$705,213	\$661,599	\$735,167	\$703,554	\$780,944
House	2	\$591,677	\$884,272	\$1,011,799	\$907,589	\$1,029,712	\$1,019,290	\$1,138,384	\$1,125,606	\$1,259,204
	3	\$633,579	\$984,241	\$1,073,254	\$1,002,524	\$1,102,100	\$1,080,832	\$1,199,220	\$1,233,172	\$1,336,822
Group home	4	\$803,755	\$1,127,314	\$1,211,535	\$1,159,182	\$1,241,686	\$1,254,237	\$1,356,427	\$1,389,401	\$1,492,068
	5	\$822,567	\$1,237,268	\$1,311,742	\$1,288,020	\$1,403,250	\$1,402,234	\$1,448,110	\$1,526,716	\$1,615,587

**Source:** MBM Cost Estimate Report, 2023

1. A construction cost has not been assessed for apartments with Onsite Overnight Assistance (“OOA”), as OOA is provided through a separate apartment and the SDA Pricing Model calculates this. While the construction cost has not been generated, a price will be set for apartments with OOA.
2. No cost for Robust apartments has been assessed, as there is no allowance for these within the SDA Pricing Arrangements.

# 2

## Introduction

# Background, Scope and Limitations

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## Background

EY has been engaged by the NDIA to assist in undertaking technical research and analysis to support the SDA Pricing Review. This report will examine construction costs as a key input to assist the NDIA in developing new SDA benchmark prices.

## Scope

Benchmark construction costs form a key assumption within the SDA Pricing Model in determining SDA funding by the NDIA for new build SDA properties. The model makes an allowance for the expected construction cost that an SDA owner/investor would be required to spend to develop a compliant SDA dwelling.

This report presents the findings from research and analysis on national benchmark construction costs for SDA in response to the below report scope provided by the NDIA.

1. Develop benchmark estimates of the construction cost in 2023-24 in an agreed benchmark Region (excluding the cost of land) for each of the allowable combinations of Building Type and SDA Design Category (“Design Category”) that are funded as SDA by the NDIS. The benchmark estimate of construction costs will be informed by reference designs provided by an architect and costed by a quantity surveyor.
2. Consider and estimate the potential implications for construction costs that would flow from different GST treatments.

## Limitations

Based on the scope of work and the information available to us we have performed a like-for-like comparison. To enable this, certain assumptions have also been made. This Report is limited in time and scope, other more detailed reviews or investigations may identify additional issues or considerations than this Report has noted. The results of this work are limited by the availability and quality of data. The results of this work and procedures performed do not constitute an audit, a review or other form of assurance in accordance with any generally accepted auditing, review or other assurance standards, and accordingly EY does not express any form of assurance.

Our findings are based, in part, on the assumptions stated and on information from both publicly available information and other sources used during the course of the engagement. The modelled outcomes (where applicable) are contingent on the assumptions as agreed with the NDIA and no consideration of other market events, announcements or other changing circumstances are reflected in this Report. Neither Ernst & Young nor any member or employee thereof undertakes responsibility in any way whatsoever to any person in respect of errors in this Report arising from incorrect information provided by the NDIA and other information sources used.

# Consortium Partners

EY undertook this work in collaboration with our consortium partners Kennedy Associates Architect (KAA) and MBM Quantity Surveyors (MBM). They bring a depth of experience in SDA design and costing projects through their work across feasibility studies and valuations for both Government and private sector clients.

The role of KAA was to bring expertise on the SDA regulatory requirements and real life SDA project examples to develop the SDA reference designs for each project configuration. KAA focus on the provision of social, affordable and disability housing and have experience working with NSW Land and Housing Corporation, NSW Family and Community Services and Health Infrastructure previously. Additionally KAA was a contributor to the development of the SDA Design Standards, therefore have an in-depth understanding of the requirements.

KAA's key personnel hold the below qualifications and memberships:

- ▶ NSW Architects Registration Board Registration
- ▶ Building Design Practitioners Registration
- ▶ Member of the Australian Institute of Architects
- ▶ Member of the Association of Consulting Architects
- ▶ Member of the Australasian Housing Institute
- ▶ Associate Member of the Association of Access Consultant Australia

The role of MBM was to produce cost estimates in line with KAA's specifications and test these costs for consistency against similar products in the market. MBM have experience working with NSW Land and Housing Corporation, Homes Victoria, Urbangrowth NSW and various community housing providers and have a deep appreciation for compiling estimates and the construction industry.

MBMs key personnel hold the below qualifications and memberships:

- ▶ Bachelor of Science – Quantity Surveying
- ▶ Masters in Facilities Management
- ▶ Member of Chartered Institute of Building
- ▶ Member of the Australian Facility Management Association
- ▶ Foundations of Directorship Certificate AICD
- ▶ Certificate of Achievement in Utility Benchmarking and Performance Monitoring

The approach in undertaking the benchmark construction cost research is detailed below.

### 1. Historic Assumptions

- ▶ Identified historic assumptions utilised within the historic SDA Pricing Model to inform construction costs, detailed specifications and room sizes.
- ▶ Developed a detailed understanding of the historic methodology and the application of the assumptions within the historic SDA Pricing Model.

### 2. Collect and Process Data

- ▶ Considered the SDA Design Standard to provide the base level data to inform the reference designs.
- ▶ Aligned building class per Australian Building Codes Board and the 2019 BCA amendment.
- ▶ Investigated further regulations which may impact SDA design and construction.
- ▶ Developed cost data based on relevant national datasets (Rawlinson) and the Quantity Surveyor's actual build cost repository.

### 3. Analyse Data and Outline Key Findings

- ▶ KAA developed SDA reference designs by:
  - ▶ Updating design assumptions into base specifications for the 96 project configurations.

- ▶ Comparing design data from KAA against prevailing design standards and real life examples for best practice SDA.
- ▶ MBM developed cost ranges for SDA designs by producing cost estimates for the agreed specifications. Tested costs for consistency against similar and comparable products.
- ▶ Outlined GST treatment for construction costs by:
  - ▶ Defining the GST treatments relating to the development of SDA.
  - ▶ Commenting on any material GST considerations that may influence an SDA investment decision by NDIA and consider the extent that state based property investor taxes (e.g. the recent land tax rule in Qld) are likely to impact on investor returns.

# 3 Analysis - Reference designs

# SDA Configurations and Design Compliance

The SDA Benchmark Pricing model is based on five Design Categories and four Building Types, which form a matrix of the SDA configurations available to participants which are required to be priced by the NDIA.

Reference designs for each of the SDA configurations established by the NDIA were developed by Kennedy and Associates Architects (KAA). This was to ensure a reasonable SDA design was used to inform the construction costing to reflect an appropriate cost estimate to develop SDA. This does not account for specifications over and above the Design Standard minimum requirements, as SDA pricing is based on the actual cost a provider would incur to develop to the standard.

Full reference designs were developed to ensure costing accounted for functioning SDA housing for participants rather than estimating room, dwelling and property sizes.

All reference designs are compliant with the below required legislation:

- ▶ Specialist Disability Accommodation Design Standard “Design Standard” (2019)
- ▶ Building Code of Australia (BCA)
- ▶ Australian Standard
  - ▶ AS 1428.1 Design for access and mobility
  - ▶ AS/NZS 1428.4.1 Design for access and mobility
  - ▶ AS/NZS 2890.6 Parking facilities
  - ▶ AS 1735 Lifts, escalators and moving walks

# Building Type Classifications

In the Building Code of Australia (BCA), the National Construction Code (NCC) classifies buildings according to their primary use. Building classification is determined by the building surveyor, building certifier, PCA or equivalent state-based authority. Classification is a process for understanding risk in a building (or part of a building) according to its use. Where it is unclear which classification should apply, the approval authority has the discretion to decide.

The SDA Price Guide and SDA Rules established by NDIA set out what the typical classification is for each of the SDA Build Types. In 2019 the BCA classifications were amended with a number of significant changes that affected the Classes of buildings, including the introduction of the term residential care buildings. Since this amendment, there has been commentary that the typical classifications under the SDA Price Guide may no longer be consistent with what approval authorities are assessing SDA dwellings as.

Residential care building means a Class 3 building which is a place of residence where 10% or more of persons who reside there need physical assistance in conducting their daily activities and to evacuate the building during an emergency (including any aged care building or residential aged care building) but does not include a hospital.

This has resulted in many building certifiers now classing SDA as Class 3, as SDA participants are likely to have extreme functional impairment. As such, our assumption is that all SDA build types have the potential to fall under the BCA Class 3 residential care building classification.

Therefore the new Benchmark Construction Costs include the costs associated with an SDA dwelling being Class 3.

The historic assumptions were predominately based on SDA being classified as Class 1a and 1b, or Class 2 for Apartments.

In general terms Class 3 residential construction costs are higher on a per dwelling basis than Class 1a, 1b and 2 as a result of the additional provisions required to be compliant. Examples of these additional costs include changes in access requirements, fire safety implications, AS 1428.1 compliance and consultant fees above what is required for a Class 1 or 2 residential building.

A summary of the NCC Class definitions most relevant to SDA are provided in Table 2.

**Table 2: NCC Classification Summary Definitions**

Class 1a	Single dwelling being a detached house or one group of attached dwellings being a town house or row house.
Class 1b	Boarding house, guest house, hostel or the like with a total area of all floors not exceeding 300 SQM, and where not more than 12 people reside, and it is not located above or below another dwelling or another Class of building other than a private garage.
Class 2	Multi-unit residential building, or apartments where people live above or below each other or may also be single storey attached residential with a common space below.
Class 3	Residential building other than a Class 1 or 2 building, which is for the accommodation of unrelated people. Class 3 buildings may also be 'care-type' facilities such as accommodation buildings for children, the elderly, or people with disability, which are not Class 9 buildings.
Class 9	Buildings of a public nature including hospitals, health-care buildings or buildings where residents have various care needs.

Source: Australian Building Codes Board, 2022

## Overarching Design Assumptions

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Where the Design Standard does not provide specifications on key design aspects, a set of Overarching Design Assumptions were developed to ensure a uniform and transparent approach across all configurations. The below assumptions were developed in collaboration with EY, KAA and the NDIA based on reasonable inclusions and evidence from actual project examples undertaken by KAA in the market.

- ▶ All building types fall under the BCA Class 3 residential care building classification.
- ▶ Where the requirements of the Design Standard and BCA differ, the higher compliance standard has been adopted.
- ▶ Four and five bedroom group homes will have two living areas (one big and one smaller).
- ▶ No ensuites for participants but no more than two residents to share a common bathroom.
- ▶ Houses and Group Homes to include an office and will contain space for common services in addition to space for a desk. Apartments and Villas / Townhouse / Duplex do not include an office.
- ▶ Garage car parking is to be provided.
- ▶ Laundry is provided as a room rather than a cupboard accessed via a hallway when there are more than two residents.
- ▶ Kitchens to be reduced proportionally as number of bedrooms decrease noting that there will be a practical minimum based upon compliance with the SDA Design Standard.
- ▶ Covered outdoor area to be provided adjacent to rear living area.
- ▶ Victorian planning controls are the most comparable with other States as advised by KAA therefore reference designs have been based on these. It is acknowledged that planning controls vary between States and local councils. The reference designs are for cost estimation purposes only and may not comply in all regions.
- ▶ Robust villas require provision for two forms of egress (other design categories would only require one) from every villa for staff safety.
- ▶ No reference design or separate cost has been assessed for the 2 bedroom, 1 resident Basic apartment, as there is no difference in any of the requirements for Basic that would impact the design or cost. The Design Standard for Basic requires change to bedroom size. For input into the Pricing Model, the same cost has been adopted for both the 1 resident and 2 resident Basic apartment.

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- ▶ The robust villas reference design layout avoids corridors to reduce places for entrapment. Access is via open air walkways that are not enclosed, while other design categories would have internal corridor access which allows for a more compact built form.
  - ▶ Robust villas require private open space to all villas to be observable from the common areas, whereas all other design categories can have open space within the side setback which reduces the land area required.
  - ▶ Participant storage has been allowed for within the laundry room and at the rear of the garage.
  - ▶ All rooms are accessible including office and OOA.
  - ▶ Apartment, villa, townhouse and duplex detailed estimates need to include the cost of communal facilities to satisfy planning controls as they do not exist in isolation. Communal facilities include but are not limited to common areas, support areas (fire stairs, bin rooms, plant areas, lobbies), pathways, fencing, external works and landscaping.

# Modular Approach Assumptions

KAA implemented a modular approach when developing the reference designs to ensure consistency across all configurations where applicable. This also allowed for ease of comparison between designs, to isolate and understand the impact of each change in specifications. Two examples of this include:

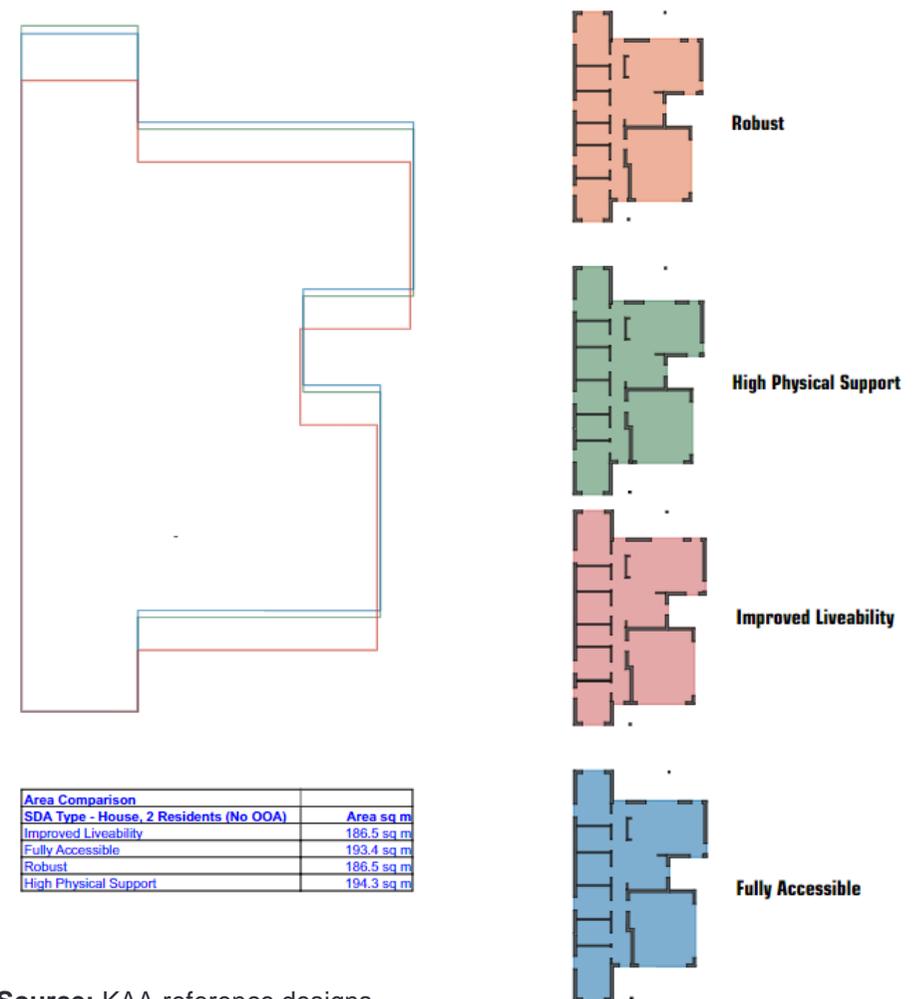
1. Design category change: FA & HPS have the same base spatial requirements for rooms but HPS has an additional requirement for doorways to be 50mm wider for additional accessibility. Therefore, within the same building typology the only change in floorplan is the additional door width, resulting in similar GFA's.
2. Bedroom change: With each additional bedroom the GFA does not increase proportionally as communal area requirements remain similar i.e. only one office needed regardless of number of participants.

As a result, the reference designs are easy to interpret as they all follow the same spatial principles and all changes between designs are easily identifiable.

Figure 1 provides an example of the modular approach for each Design Category on the two resident house Build Type.

We note that fixtures, fittings and equipment (FF&E) has been considered separately to the designs. As such, even though IL and Robust have the same building layout and GFA there is still a cost differential from the FF&E requirements.

**Figure 1: Modular Approach Example - Two Resident House Design Category Floorplan Comparison**



Source: KAA reference designs

# Layout Assumptions

The reference design for each configuration comprises of two layouts; the building layout and the access layout. The building layout shows the base architectural design including dimensions, item labels and room type. The access layout uses the same architectural design, but indicates the spatial zones which have spatial accessibility requirements under the Design Standard, BCA Class 3 and Australian Standard.

The reference designs also include a GFA table and legend.

The reference designs have been developed as a tool to determine benchmark construction costs only. They do not indicate 'best practice' SDA design or the NDIA's recommended SDA layouts.

Figure 2 shows an extract of the two layouts for the reference design of a 2 resident Improved Liveability house.

**Figure 2: Reference Design Example: Improved Liveability 2 Resident House**



Source: KAA reference designs

# Modular Approach Assumptions

## Dwellings per Parcel of Land Assumption

Where multiple dwellings share land (apartment, villa, townhouse and duplex) the total number of dwellings per single parcel of land requires an assumption for detailed cost estimate purposes. The scale and density of projects will impact both the overall cost of communal facilities and the apportionment of these costs.

Where reasonable and agreed by NDIA, amendments have not been made to the historic density assumption to allow for like-to-like comparison. The only revision was to decrease the number of Robust villas on a parcel of land from 5 to 3, due to the nature of Robust participant needs. KAA supported this, noting that the market typically provides Robust dwellings in smaller clusters to assist with the egress and access requirements.

The adopted assumption does not indicate the NDIA's preference for scale of dwellings on shared parcels of land but was developed to account for a reasonable allowance for shared facilities. Table 3 summaries the adopted assumptions.

**Table 3: Assumed Dwellings per Parcel of Land by Build Type**

Build Type	SDA Residents	Assumption
Apartment	1, 2 and 3	40 apartments
Villa/ Townhouse/ Duplex	1	3 dwellings for Robust, 5 for all other Design Categories
	2	2 dwellings
	3	
House	2 and 3	1 detached house
Group home	4 and 5	

## Communal Dwelling Assumptions

No reference design was developed for the overall site and communal areas for those dwellings sharing parcels of land. The following assumptions were made to inform the detailed cost estimates for these dwellings:

- ▶ No allowance has been made for internal roads between villas.
- ▶ 85% efficiency ratio for apartments i.e. 15% of development to communal facilities.
- ▶ Standard quality and finishes.
- ▶ Apartments being low – medium density of 4 storeys.
- ▶ Villas not to share a roof with adjoining villas, connected by paths only.

MBM have estimated communal costs through benchmarking due to the absence of a reference design to measure and cost in detail. When estimating the communal costs, MBM have spread them through each of the relevant elements within the detailed estimate on a benchmark percentage basis. Percentages have been taken from Rawlinson's Construction Handbook 2022 and then cross referenced against MBM's own cost database.

## Gross Floor Areas Assumptions

The reference designs by KAA provide detail on the measurements of each floorplan layout, and detail where the design meets the SDA Design Standards, Australian Standards and BCA Accessibility standards. KAA ensured the GFA was compliant with these standards and performed a reasonableness check against actual SDA projects they have been involved in designing within the market for both Government and private sector clients. Detail is provided on the individual room dimensions, GFA (measured from the inside face of the external walls), and total enclosed floor area including external walls, balconies and garages where appropriate.

KAA also provided advice on the land area required for Houses and Group Homes. Please refer to the Land Costs Technical Report for more information. Table 4 summarises the internal GFA as per the reference designs developed by KAA.

**Table 4: Reference Design Internal GFA Summary (SQM)**

Dwelling type	Beds	Basic	Improved liveability		Fully accessible		Robust		High Physical Support	
			No OOA	With OOA	No OOA	With OOA	No OOA	With OOA	No OOA	With OOA
Apartment	1	51	58	N/A <sup>1</sup>	61	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	61	N/A <sup>1</sup>
	2 (1 Resident)	72	77	N/A <sup>1</sup>	81	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	81	N/A <sup>1</sup>
	2 (2 Resident)	72	78	N/A <sup>1</sup>	84	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	84	N/A <sup>1</sup>
	3	97	113	N/A <sup>1</sup>	116	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	116	N/A <sup>1</sup>
Villa/ Townhouse/ Duplex	1	51	57	N/A <sup>2</sup>	60	N/A <sup>2</sup>	57	N/A <sup>2</sup>	60	N/A <sup>2</sup>
	2	71	76	N/A <sup>2</sup>	82	N/A <sup>2</sup>	76	N/A <sup>2</sup>	82	N/A <sup>2</sup>
	3	96	109	N/A <sup>2</sup>	116	N/A <sup>2</sup>	109	N/A <sup>2</sup>	116	N/A <sup>2</sup>
House	2	94	128	152	135	160	129	151	135	161
	3	103	145	167	154	177	145	167	156	179
Group home	4	148	183	205	196	219	183	205	197	220
	5	154	208	227	228	251	208	226	229	251

**Source:** KAA reference designs, 2022

1. OOA in apartments is provided through a separate apartment and the SDA Pricing Model calculates this. No reference design has been developed for villas with OOA, however MBM has priced this based on the OOA in the house reference designs.
2. No reference design for Robust apartments has been developed, as there is no allowance for these within the SDA Pricing Arrangements.

# Gross Floor Area Market Comparison

To support the GFA assumptions developed by KAA, we have considered New Build SDA market research. The benchmarked sample of SDA assets comprised of 14 SDA New Build dwellings situated nationally and containing a mixture of Apartments, Villas, Houses and Group Homes designed to either Fully Accessible or High Physical Support.

Table 6 summaries the internal GFA of the sample SDA assets assessed to provide a reference point to real market floorplans. Each of the benchmark sample GFA's are smaller than KAA's reference designs, demonstrating that the floorplan GFA's adopted by KAA are reasonable.

**Table 6: SDA Benchmark Sample**

Dwelling	Dwelling Type	Design Category	Beds	Internal GFA
SDA 1	Apartment	HPS	1 Bed	54 sqm
SDA 2	Apartment	FA	1 Bed	60 sqm
SDA 3	Apartment	FA	1 Bed	57 sqm
SDA 4	Apartment	FA	2 Bed	72 sqm
SDA 5	Apartment	FA	2 Bed	70 sqm
SDA 6	Apartment	HPS	2 Bed	77 sqm
SDA 7	Apartment	HPS	2 Bed	73 sqm
SDA 8	Apartment	HPS	2 Bed	65 sqm
SDA 9	Apartment	FA	3 Bed	114 sqm
SDA 10	Apartment	HPS	3 Bed	115 sqm
SDA 11	Villa	FA	1 Bed	60 sqm
SDA 12	House	FA	2 Bed	130 sqm
SDA 13	House	FA	3 Bed	152 sqm
SDA 14	Group Home	FA	4 Bed	256 sqm

**Source:** EY Market Research

# 4 Analysis - Construction Cost Estimates

# Construction Cost Overview

The base estimate construction costs have been developed using detailed, itemised cost estimates. To assist in understanding what has been considered within the cost estimate and how the Design Category and build type impact the cost, the base cost has been separated into the following categories:

- ▶ Hard Costs – Base construction and specialist construction elements, as per the reference design from KAA and estimated by MBM.
- ▶ Soft Costs – Base professional fees, builders margin, preliminaries and specialist professional fees, estimated by MBM.
- ▶ Contingency – Consideration for unexpected costs arising during the development.
- ▶ Taxes – GST, as per the GST treatment section.

The benchmark estimated construction costs provided are inclusive of all hard costs, soft costs and contingency. We have provided commentary on development risk and GST treatment for the NDIA’s consideration.

## Quantity Surveyor ‘Hard Cost’ Overarching Assumptions

MBM have measured and priced in detail the reference designs prepared by KAA for all dwelling types. Where the design does not specify build requirements MBM have considered allowances in line with the SDA Design Standards in order to provide complete estimates for each design. Building methodology, finished and specifications are assumed based on similar SDA projects.

All detailed estimates are escalated to 1 July 2023.

A full list of inclusions and exclusions are provided within Annexure B and the detailed cost summaries are included in MBM’s Report as an accompanying attachment. MBM’s overarching assumptions and building methodologies applied are summarised as follows:

- ▶ Site access is unrestricted.
- ▶ Easy connection to services at or near the site boundaries.
- ▶ A straightforward construction process with no significant delays. Houses, Villas and Group Homes are considered to be brick veneer construction including landscaping.
- ▶ Apartments are priced as typical concrete construction buildings.
- ▶ Each Build Type has been priced as per the Dwellings per Parcel of Land assumption.

Table 7 shows each of the construction elements that MBM measured and priced within their capital cost estimates.

**Table 7: Construction Elements**

Construction Element's within Detailed Cost Estimates		
Site Preparation	Wall Finishes	Fire Services
Substructure	Floor Finishes	Electrical Services
Roof	Ceiling Finishes	External Works
External Walls	Joinery	Columns (Apartment only)
Internal Walls	FFE	Upper Floors (Apartment only)
Windows	Appliances	Stairs (Apartment only)
External Doors	Hydraulic Services	Lifts (Apartment only)
Internal Doors	Gas Services	Mechanical Services

**Source:** MBM Cost Estimate Report, 2023

## Variance Across Design Categories

Following the development of the base building construction estimates, MBM have referred to the NDIS Specialist Disability Accommodation Design Standard document to make allowance for the various requirements under each of the four SDA Design Categories, being Improved Liveability, Fully Accessible, Robust and High Physical Support.

The reference designs by KAA do not capture the specific construction requirements across the dwelling types as they are floor plans, therefore MBM have adjusted item descriptions and rates to capture the various differences between the Design Categories. The main variances in construction methodology and materials include:

- ▶ Windows are priced as double glazed with laminated glazing for Fully Accessible, Robust and High Physical Support.
- ▶ All glazing to apartment developments is considered to be laminated and double glazed regardless of the SDA Design Category of the individual apartment, as it would be more cost efficient to glaze the full apartment building with the same specification as opposed to different specifications for different units.
- ▶ Motorised roller blinds included in the High Physical Support dwellings.
- ▶ Solid core doors to all Design Categories with high grade hardware for Fully Accessible, Robust and High Physical Support.
- ▶ Additional stud framing, noggings and impact resistant plasterboard included to Robust and High Physical Support.
- ▶ Tiling to wet area walls for Basic and Improved Liveability dwellings with wall vinyl for Fully Accessible, Robust and High Physical Support.
- ▶ Commercial carpet allowed for Fully Accessible, Robust and High Physical Support.
- ▶ Robust/impact resistant joinery included to all Design Categories except for Basic.
- ▶ High grade fittings and appliances are included for Fully Accessible, Robust and High Physical Support.
- ▶ Ducted cooling included to Robust and High Physical Support.
- ▶ High grade electrical included for Robust and High Physical Support with emergency power provided to the High Physical Support units.
- ▶ Nurse call included to High Physical Support types.
- ▶ Monitored smoke alarms for Robust and High Physical Support.

## Quantity Surveyor Common Area Approach

Reference designs were only provided by KAA for individual apartments and villas, no reference design was provided for the overall development layout. MBM estimates therefore aim to consider the most typical layouts for residential apartment developments and clustered villas.

The costs for common areas, back of house support areas (bin rooms, plant areas, lobbies, etc) and other shared spaces within an apartment building have been spread through the construction elements for each Apartment on a percentage basis. Percentages have been taken from Rawlinsons Construction Handbook and cross referenced against MBM's own database of compatible projects to ensure the application of the percentages benchmark against 'real', current construction costs in the Australian market. An efficiency rate of 85% has been applied to apartment developments, meaning that 15% of the building envelope is required for communal facilities.

Rates for the pricing of the villas consider the advised clustering in line with the Dwellings per Parcel of Land Assumption. Communal costs (pathways, fencing, external works ect) have been spread through the construction elements for each Villa on a percentage basis.

### Shared OOA

No overall reference design was provided by KAA for villas which shared an OOA. MBM made allowance for a shared OOA per each 'cluster' of villas and the cost for this is spread throughout the construction elements. The costing considers the most typical layouts that are adopted for shared villa sites.

### 'Soft Cost' Overarching Assumptions

MBM have adopted the below soft costs based on similar projects within their cost database.

- ▶ Preliminaries have been added at 14% for houses, 12% for villas & 20% for apartments.
- ▶ Builders margin has been added at 4% for all Build Types.
- ▶ Professional fees 11% has been added for all Build Types.

SDA developments often require specialist consult input including BCA, engineering and access assessments, and in some cases hazmat and geotechnical reports. The standard allowance of 11% for professional fees is considered sufficient by MBM to cover this, as the percentage is being calculated off the higher detailed estimate to construct SDA.

# Contingency

The base level costs provided by MBM are exclusive of contingency. Contingency is required to consider the unexpected costs which may occur during the construction process. Reasons that unexpected costs may occur include:

- ▶ Unknown site specific costs as the cost estimates include general assumptions regarding site conditions.
- ▶ Weather causing delays to program.
- ▶ Unexpected contamination.
- ▶ Fluctuating material and labour prices.
- ▶ Design factors, heightened as the reference designs are not final project designs.

Development risk has also been considered within the contingency allowance as it needs to be considered at construction phase for the specific site and project. This is the short term risk that a developer takes on to deliver a project, and is separate to builders margin.

The rate of contingency considered relates to the risk profile of a project. Contingency benchmarks typically range from 5% to 15% for development projects in the SDA market. MBM have advised a contingency ranging from 5% to 15% is reasonable, given the level of design used for the detailed cost estimates.

Based on the specialised nature of this asset class and the base costs forming a benchmark without considering site specifications there is likely a high level of risk associated with these projects. Additionally, it is reasonable to adopt the high end of contingency benchmarks as development risk has also been included.

For estimation purposes we have applied a contingency of 15% which has been incorporated within all Benchmark Estimated Construction Costs. The NDIA may adopt a contingency within the range of 5% to 15%.

# GST Treatment

GST incurred on construction and ongoing costs is only recoverable to the extent the relevant acquisition is incurred for a 'creditable purpose'.

Acquisitions are not creditable to the extent that they relate to making supplies that would be *input taxed*. It is noted that where an entity is a foreign entity, it would still be required to register for GST in Australia in order to recover GST on acquisitions it makes to the extent an entitlement to recover GST exists.

In relation to acquisitions that are incurred by an entity that intends to develop and own SDA we note the following:

- ▶ Under the A New Tax System (Goods and Services Tax) Act 1999 ("the GST Act"), the supply of real property that is by way of lease, hire or licence is, prima facie, treated as input taxed where the property is residential premises to be used predominantly for residential accommodation.
- ▶ The sale of residential premises is also input taxed unless the residential premises are 'commercial residential premises' or 'new' residential premises.

The requirements noted above mean that if the SDA is residential premises it will ordinarily be input taxed. Ordinarily, the physical characteristics of SDA suggest the residential premises requirements should be satisfied, although it is recommended to ensure that the relevant premises have not been altered in such a way that the premises are not used predominately for residential accommodation (for example, the primary purpose is care).

Any GST incurred on constructions, development and ongoing maintenance costs will be unrecoverable in full. As such if GST is included, the total benchmark estimated construction cost would increase by 10%. This position is reflected in Table 8.

**Table 8: GST Recovery on SDA Property**

Construction Cost Item	GST Recovery?
Consultants	No
Trade Services	No
Construction Materials (bricks, tiles, doors etc)	No
FF&E (towel rails, blinds)	No
Appliances (oven, washing machine)	No
Utilities and Services	No

**Source:** EY Research, 2022

However, consideration should be given to whether the following exceptions may apply for an entity, which could, in limited circumstances enable the recovery of GST incurred on acquisitions.

## 1. Certain disability support services provided to NDIS participants

An exception to the above input taxed treatment may apply where the provision of SDA satisfies the GST-free requirements where it is a supply of disability support to NDIS participants. For the accommodation to be treated as GST-free the following requirements under section 38.38 of the GST Act must be satisfied:

*(a) is a supply to a participant (within the meaning of the National Disability Insurance Scheme Act 2013) for whom a participant's plan is in effect under section 37 of that Act; and*

*(b) is a supply of one or more of the reasonable and necessary supports specified in the statement included, under subsection 33(2) of that Act, in the participant's plan; and*

*(c) is made under a written agreement, between the supplier and the participant or another person, that:*

*(a) identifies the participant; and*

*(b) states that the supply is a supply of one or more of the reasonable and necessary supports specified in the statement included, under subsection 33(2) of that Act, in the participant's plan; and*

*(d) is of a kind that the Disability Services Minister has determined in writing.*

A GST-free supply of accommodation to NDIS participants also does not attract GST, but unlike a supply of input taxed residential premises, any GST incurred on costs relating to a GST-free supply is recoverable.

Importantly, the GST-free treatment will only apply if the accommodation is provided in accordance with these rules. In particular, the accommodation must be provided directly to the NDIS participant, SDA must be included as a reasonable and necessary support in the NDIS participant's plan and an appropriate written agreement must be entered into with the NDIS participant.

In our experience, many structures entered into by investors looking to develop and own SDA often involve an initial lease to an endorsed NDIS operator (rather than a lease directly to an NDIS participant), which would not generally satisfy the GST-free requirements.

## **2. Premises is not to be used predominantly for residential accommodation**

As stated above, a supply of residential premises will be input taxed where it is to be used predominantly for residential accommodation. It is noted that premises that display physical characteristics evidencing their suitability and capability to provide residential accommodation are residential premises. Premises that do not display these physical characteristics would not be residential premises, even if the premises are actually occupied as a residence.

In limited circumstances, SDA may be sufficiently modified such that the physical characteristics of the premises indicate their suitability for residential accommodation is secondary to the premises' prevailing function – such as the provision of care.

If this exception was to apply, the provision of the residential premises would not be treated as input taxed and there would be scope for the recovery of GST on costs incurred in the supply of the premises.

## **3. Supply is made by a Not For Profit**

Lastly, section 38-250 of the GST Act allows for supplies of accommodation made by an endorsed charity, a gift-deductible entity, or a government school that are provided at or below 75% of market value or cost to the supplier to also be treated as GST-free (rather than input taxed).

This may apply in limited circumstances, and would enable the recovery of GST on costs incurred in the supply of premises, however SDA prices are generally above general residential market value rather than below.

# Benchmark Construction Costs

The construction cost estimates as at 1 July 2023 have been provided in Table 9. These are inclusive of all construction elements (except fire sprinklers), soft costs and contingency of 15%.

While our findings show that GST is not necessarily recoverable for SDA developments we have excluded GST from the estimated construction cost. GST applies to all construction cost items and unless an exception applies GST is not recoverable in full. Therefore if no exemption was applicable, the Benchmark Estimated Construction Costs would increase by 10% across all Build Types and Design Categories.

**Table 9: 2023-24 Benchmark Estimated Construction Costs (Excluding GST Including Contingency)**

Dwelling type	Beds	Basic	Improved liveability		Fully accessible		Robust		High physical support	
			No OOA	With OOA	No OOA	With OOA	No OOA	With OOA	No OOA	With OOA
Apartment	1	\$651,864	\$705,931	N/A <sup>1</sup>	\$734,887	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$800,519	N/A <sup>1</sup>
	2 (1 Resident)	\$687,290	\$749,812	N/A <sup>1</sup>	\$770,499	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$838,156	N/A <sup>1</sup>
	2 (2 Resident)	\$687,290	\$752,055	N/A <sup>1</sup>	\$771,634	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$840,237	N/A <sup>1</sup>
	3	\$758,863	\$828,367	N/A <sup>1</sup>	\$858,250	N/A <sup>1</sup>	N/A <sup>2</sup>	N/A <sup>2</sup>	\$932,712	N/A <sup>1</sup>
Villa/ Townhouse/ Duplex	1	\$326,808	\$376,056	\$399,050	\$408,444	\$433,419	\$412,370	\$458,238	\$471,870	\$500,723
	2	\$386,016	\$434,575	\$491,077	\$480,611	\$543,099	\$518,694	\$567,776	\$542,811	\$613,386
	3	\$488,449	\$546,943	\$618,046	\$624,082	\$705,213	\$661,599	\$735,167	\$703,554	\$780,944
House	2	\$591,677	\$884,272	\$1,011,799	\$907,589	\$1,029,712	\$1,019,290	\$1,138,384	\$1,125,606	\$1,259,204
	3	\$633,579	\$984,241	\$1,073,254	\$1,002,524	\$1,102,100	\$1,080,832	\$1,199,220	\$1,233,172	\$1,336,822
Group home	4	\$803,755	\$1,127,314	\$1,211,535	\$1,159,182	\$1,241,686	\$1,254,237	\$1,356,427	\$1,389,401	\$1,492,068
	5	\$822,567	\$1,237,268	\$1,311,742	\$1,288,020	\$1,403,250	\$1,402,234	\$1,448,110	\$1,526,716	\$1,615,587

Source: MBM Cost Estimate Report, 2023

1. A construction cost has not been assessed for apartments with OOA, as OOA is provided through a separate apartment and the SDA Pricing Model calculates this. While the construction cost has not been generated, a price will be set for apartments with OOA.
2. No cost for Robust apartments has been assessed, as there is no allowance for these within the SDA Pricing Arrangements.

# Cost Uplift by Design Category

Tables 10 and 11 illustrate the cost build up between each Design Category based on the estimated benchmark construction costs. Improved Liveability and Robust have been grouped together, as well as Fully Accessible and High Physical Support due to similarities in GFA and Design Standard requirements. Therefore the Improved Liveability amount shown is the uplift relative to Basic, and Robust amount shown is the uplift relative to Improved Liveability. Similarly, the Fully Accessible amount shown is the uplift relative to Basic, and High Physical Support amount shown is the uplift relative to Fully Accessible. An example of the uplift for a 2 bed house has been provided on the following page.

There is a material increase in estimated costs to account for the additional Design Standard requirements for each.

**Table 10 and 11: Uplift in Benchmark Estimated Construction Cost Relative to Basic by Design Category (Excluding GST, Including Contingency)**

Dwelling type	Bed	Basic	IL	Robust	Dwelling type	Bed	Basic	FA	HPS
			No OOA	No OOA				No OOA	No OOA
Apartment	1	\$651,864	\$54,067	N/A <sup>1</sup>	Apartment	1	\$651,864	\$83,023	\$65,632
	2 (2 resident)	\$687,290	\$64,765	N/A <sup>1</sup>		2 (2 resident)	\$687,290	\$84,344	\$68,603
	3	\$758,863	\$69,504	N/A <sup>1</sup>		3	\$758,863	\$99,387	\$74,462
Villa/ Townhouse/ Duplex	1	\$326,808	\$49,248	\$36,314	Villa/ Townhouse / Duplex	1	\$326,808	\$81,636	\$63,426
	2	\$386,016	\$48,559	\$84,119		2	\$386,016	\$94,595	\$62,201
	3	\$488,449	\$58,495	\$114,656		3	\$488,449	\$135,633	\$79,472
House	2	\$591,677	\$292,595	\$135,017	House	2	\$591,677	\$315,912	\$218,017
	3	\$633,579	\$350,662	\$96,591		3	\$633,579	\$368,944	\$230,648
Group home	4	\$803,755	\$323,559	\$126,923	Group home	4	\$803,755	\$355,427	\$230,219
	5	\$822,567	\$414,701	\$164,966		5	\$822,567	\$465,453	\$238,696

Source: EY analysis, 2023

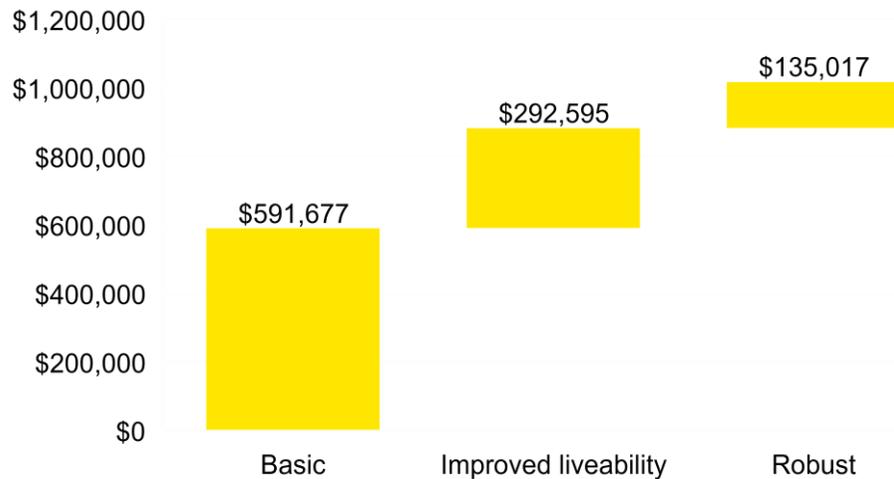
1. No cost for Robust apartments has been assessed, as there is no allowance for these within the SDA Pricing Arrangements.

Figures 3 and 4 demonstrate the estimated cost build up for a 2 Bedroom House as an example of the additional cost estimated to develop each Design Category. In line with the previous page, for comparison purposes Improved Liveability and Robust have been assessed together while Fully Accessible and High Physical Support has been assessed as a separate group.

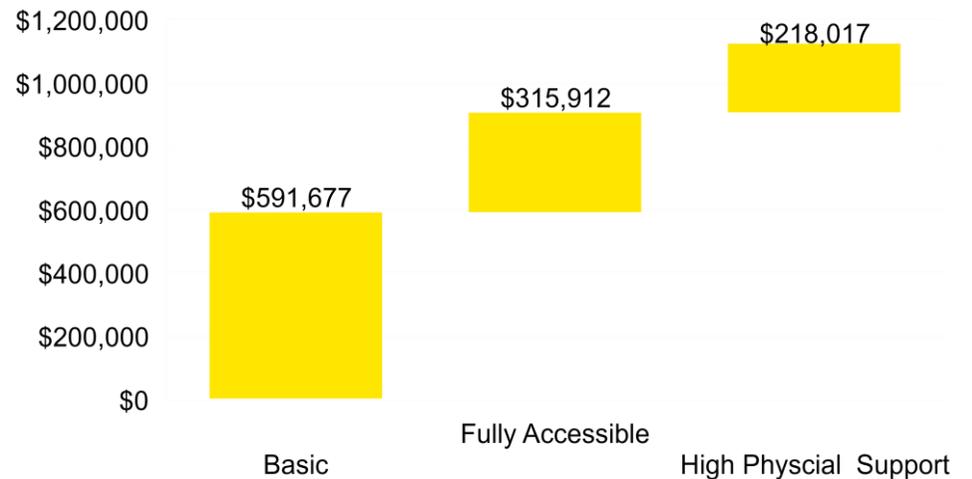
In particular, this highlights the estimated cost increase by Design Category is driven by differences in construction materials, GFA, FF&E, joinery and other SDA specific requirements.

A similar comparison on a rate per SQM basis has been assessed. A detailed breakdown of this is outlined in Annexure C.

**Figure 3: 2 Bedroom House Example Estimated Cost Build Up (IL and Robust)**



**Figure 4: 2 Bedroom House Example Estimated Cost Build Up (FA and HPS)**



Source: EY analysis, 2023

# 5 Appendices

## Annexure A: Glossary

Term	Meaning
AS	Australian Standard
BCA	Building Code of Australia
<b>Building Type</b>	The Design Category as per the SDA Framework - Apartment, Duplex/Villa/Townhouse, House or Group Home
Apartment	Self-contained units that are part of a larger residential building
Duplex, Villa, Townhouse	Separate but semi-attached properties within a single land title or strata titled area. This also includes stand-alone villas or granny-flats
House	Detached low-rise buildings with garden or courtyard areas with fewer than 4 bedrooms
Group Home	Houses that have 4 or 5 bedrooms
<b>Class 1a building</b>	Single dwelling being a detached house or one group of attached dwellings being a town house or row house
<b>Class 1b building</b>	Boarding house, guest house, hostel or the like with a total area of all floors not exceeding 300 SQM, and where not more than 12 people reside, and it is not located above or below another dwelling or another Class of building other than a private garage
<b>Class 2 building</b>	A building containing 2 or more sole-occupancy units each being a separate dwelling
<b>Class 3 building</b>	<p>A residential building, other than a building of Class 1 or 2, which is a common place of long term or transient living for a number of unrelated persons, including–</p> <ul style="list-style-type: none"> <li>(a) a boarding house, guest house, hostel, lodging house or backpackers accommodation; or</li> <li>(b) a residential part of a hotel or motel; or</li> <li>(c) a residential part of a school; or</li> <li>(d) accommodation for the aged, children or people with disabilities<sup>1</sup></li> <li>(e) a residential part of a health care building which accommodates members of staff; or</li> <li>(f) a residential part of a detention centre.</li> </ul> <p>1. Class 3 residential care buildings accommodating the aged, children or people with disability are required to have automatic fire sprinklers as a consequence of amendments to the DtS Provisions of NCC 2019 and are therefore not within the scope of this analysis</p>
CPI	Consumer Price Index

Term	Meaning
<b>Design Category</b>	The Design Category as per the SDA Framework - Basic, Improved Liveability, Fully Accessible, Robust or High Physical Support
Basic	Housing without specialised design features but with other important SDA characteristics (e.g. location, privacy, shared supports)
Improved Liveability (IL)	Housing that has been designed to improve 'Liveability' by incorporating a reasonable level of physical access and enhanced provision for people with sensory, intellectual or cognitive impairment
Fully Accessible (FA)	Housing that has been designed to incorporate a high level of physical access provision for people with significant physical impairment
Robust	Housing that has been designed to incorporate a high level of physical access provision and be very resilient, reducing the likelihood of reactive maintenance and reducing the risk to the participant and the community
High Physical Support (HPS)	Housing that has been designed to incorporate a high level of physical access provision for people with significant physical impairment and requiring very high levels of support
<b>Design Standards</b>	Specialist Disability Accommodation Design Standard 2019
<b>Enrolled Dwelling</b>	A dwelling enrolled under section 26 of the NDIS (Specialist Disability Accommodation) Rules 2020 to provide SDA
<b>FF&amp;E</b>	Fixtures, fittings and equipment
<b>Fire Sprinkler Allowance</b>	Mechanism which increases the Base Price for dwellings which has a compliant fire sprinkler system
<b>GFA</b>	Gross floor area
<b>GST</b>	Goods and Services Tax
<b>Historic Model</b>	2016 SDA Pricing Model developed by NDIA.
<b>KAA</b>	Kennedy and Associates Architects, the engaged architects for the technical reports
<b>MBM</b>	Engaged QS MBMpl for technical reports
<b>NCC</b>	National Construction Code
<b>NDIA</b>	National Disability Insurance Agency

Term	Meaning
<b>NDIS</b>	National Disability Insurance Scheme
<b>OOA</b>	On-site Overnight Assistance
<b>QS</b>	Quantity Surveyor
<b>SDA</b>	Specialist Disability Accommodation
<b>SDA Type</b>	The SDA type under the SDA Framework - Existing, Legacy, New Build or New Build (refurbished)
New Build	An SDA dwelling that was built (has a certificate of occupancy dated) after 1 April 2016 and meets all of the requirements under the SDA Rules and NDIS Price Guide
Existing	Dwellings built before 1 April 2016 that were used as disability related supported accommodation under a previous State, Territory or Commonwealth scheme. Existing dwellings must substantially comply with the requirements of a new build, and must meet the maximum resident requirement (5 residents or less)
Legacy	Existing dwellings that do not meet the maximum resident requirement of 5 residents or less. Over time, the NDIA will stop making SDA payments towards Legacy dwellings
New Build (refurbished)	A dwelling that was built before 1 April 2016 but has been significantly refurbished since and now meets all of the requirements for a new build in the SDA Rules and NDIS Price Guide. In order to qualify for as a New Build (refurbished) providers must spend a minimum amount. These minimum amounts are specified per dwelling type in the SDA Price Guide
<b>SQM</b>	Square meter area measurement

## Annexure B – QS Inclusions/Exclusions

A full list of inclusions and exclusions considered by MBM within the detailed cost estimates is outlined below. The detailed cost summaries are included in MBM's Report as an accompanying attachment.

### Inclusions

- ▶ Site access is unrestricted.
- ▶ Easy connection to services at or near the site boundaries.
- ▶ A straightforward construction process with no significant delays or complexities.

### Building Methodology Assumptions

Houses and Group Homes are generally considered to be single storey brick veneer construction including landscaping.

Apartments are priced as typical concrete construction buildings and based on a unit mix of 40 units in total, the specific layout of these is unknown and the costing aims to consider the most typical layouts and mixes for residential developments.

Villas are assumed to be a similar construction methodology to the houses however are priced in clusters of certain mixes as agreed with the NDIA in line with the assumptions outlined on Page 23.

### Exclusions

- ▶ Authority fees
- ▶ GST
- ▶ Extending, upgrading or amplification of authority infrastructure
- ▶ Removal or treatment of any contamination or hazardous materials other than allowances made
- ▶ Structural works other than the allowances made within the estimate
- ▶ Legal fees
- ▶ Delay costs
- ▶ Loose furniture such as electric baths, beds, chairs and mattresses
- ▶ Dilapidation reports
- ▶ Latent conditions
- ▶ Council requirements
- ▶ Out of hours works
- ▶ Works outside the property boundary
- ▶ Extraordinary site specifics
- ▶ Flood proofing
- ▶ Demolition
- ▶ OSD tank
- ▶ Any cost impacts related to Covid-19 or other pandemic effects

# Annexure C - Benchmark Construction Costs Rate per SQM

We have assessed MBM's detailed estimates on a rate per SQM to show the relationship between Build Type, configuration and Design Category. When comparing total estimated benchmark costs, it can be difficult to interpret what is driving the cost differential but isolating costs to a rate per SQM is another measure to demonstrate the proportional change.

The rate per SQM measure is used as a secondary representation of costs, as the differences in GFA across Design Categories can be dilutive. This is as when dwellings have a larger footprint the majority of the additional area comes from lower cost elements (garages, covered outdoor space and bedrooms etc) rather than higher cost elements (bathrooms and joinery).

The rates per SQM have been prepared for analysis purposes only, and should not be relied upon by themselves. These rates apply directly to the specific reference designs and cannot be extrapolated out.

Table 12 summaries the cost estimate on a rate per SQM across each configuration. These have been calculated using the QS definition of GFA which includes external built areas such as garages and verandas.

The following estimated costs ranges were observed by Build Type, varying between Design Category and bedroom configuration:

- ▶ Apartment: \$6,837 to \$12,316 per SQM.
- ▶ Villa/ Townhouse/ Duplex: \$4,481 to \$6,939 per SQM.
- ▶ House: \$4,587 to \$5,685 per SQM.
- ▶ Group Home: \$4,240 to \$5,265 per SQM.

**Table 12: 2023-24 Benchmark Estimated Construction Costs (Exc. GST, Including Contingency) Rate per SQM**

Dwelling Type	Bed	Basic	IL	FA	R	HPS
			No OOA	No OOA	No OOA	No OOA
Apartment	1	\$10,864	\$11,205	\$11,306	N/A <sup>1</sup>	\$12,316
	2 (1 Resident)	\$8,700	\$9,034	\$8,856	N/A <sup>1</sup>	\$9,634
	2 (2 Resident)	\$8,700	\$8,848	\$8,574	N/A <sup>1</sup>	\$9,336
	3	\$6,837	\$6,961	\$7,093	N/A <sup>1</sup>	\$7,645
Villa/ Townhouse / Duplex	1	\$5,106	\$5,876	\$6,007	\$6,443	\$6,939
	2	\$4,541	\$5,174	\$5,400	\$6,175	\$6,099
	3	\$4,481	\$4,756	\$4,993	\$5,753	\$5,628
House	2	\$4,587	\$4,729	\$4,607	\$5,422	\$5,685
	3	\$4,591	\$4,778	\$4,663	\$5,272	\$5,657
Group home	4	\$4,490	\$4,421	\$4,391	\$4,957	\$5,223
	5	\$4,240	\$4,467	\$4,337	\$5,026	\$5,265

**Source:** MBM Cost Estimate Report, 2023

1. No cost for Robust apartments has been assessed, as there is no allowance for these within the SDA Pricing Arrangements.

Tables 13 and 14 illustrate the estimated cost uplift between each Design Category. Improved Liveability and Robust have been grouped together, as well as Fully Accessible and High Physical Support due to similarities in GFA and Design Standard requirements. Generally there is a material increase in costs per SQM to account for the additional Design Standard requirements for each. On average:

- ▶ Improved Liveability costs 26% more than Basic per SQM.
- ▶ Robust costs 17% more than Improved Liveability per SQM.
- ▶ Fully Accessible costs 33% more than Basic per SQM.
- ▶ High Physical Support costs 21% more than Fully Accessible per SQM.

The following page provides an explanation for the three instances where the estimated cost per SQM is lower despite the Design Category being higher.

**Table 13 and 14: Uplift in Rate per SQM by Design Category (Excluding GST, Including Contingency)**

Build Type	Bed	Basic	IL	Robust	Build Type	Bed	Basic	FA	HPS
Apartment	1	\$10,864	\$341	N/A	Apartment	1	\$10,864	\$442	\$1,010
	2 (2 resident)	\$8,700	\$148	N/A		2 (2 resident)	\$8,700	-\$126	\$762
	3	\$6,837	\$124	N/A		3	\$6,837	\$256	\$552
Villa/ Townhouse / Duplex	1	\$5,106	\$769	\$567	Villa/ Townhouse/ Duplex	1	\$5,106	\$900	\$933
	2	\$4,541	\$632	\$1,001		2	\$4,541	\$859	\$699
	3	\$4,481	\$275	\$997		3	\$4,481	\$511	\$636
House	2	\$4,587	\$142	\$693	House	2	\$4,587	\$20	\$1,078
	3	\$4,591	\$187	\$494		3	\$4,591	\$72	\$994
Group home	4	\$4,490	-\$69	\$537	Group home	4	\$4,490	-\$99	\$832
	5	\$4,240	\$227	\$559		5	\$4,240	\$97	\$928

Source: EY Analysis

1. No cost for Robust apartments has been assessed, as there is no allowance for these within the SDA Pricing Arrangements.

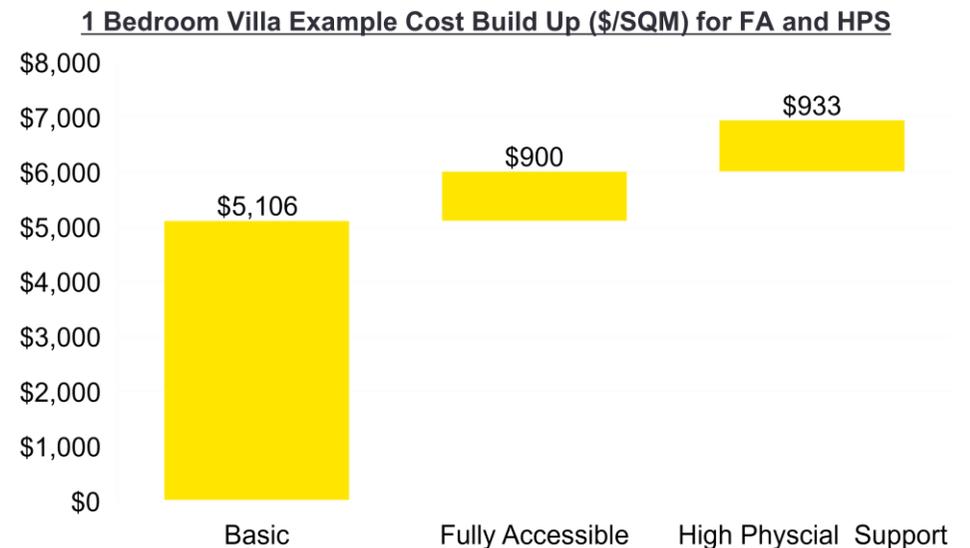
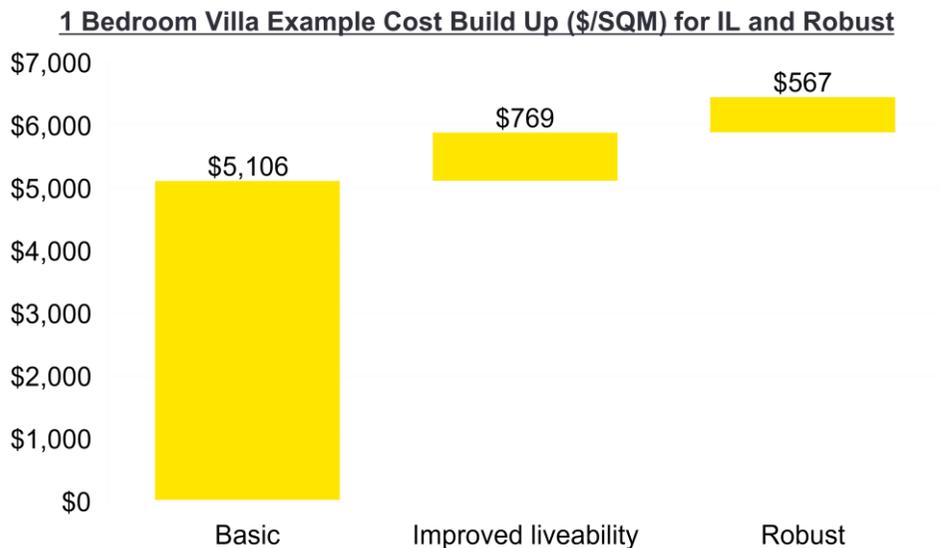
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As outlined on page 37, differences in GFA can be dilutive to the cost per SQM rates and this is where negative changes in the rate per SQM may occur. On the previous page there are three instances where the cost per SQM is lower despite the Design Category being higher. We have interrogated the reference designs and detailed cost estimates and can provide the following reasoning:

- ▶ The 4 bed Improved Liveability group home (255 SQM) is \$69 less than the equivalent Basic dwelling (179 SQM) on a rate per SQM. This is due to the majority of the additional area coming from elements with a lower cost base and diluting the rate per SQM. The Improved Liveability reference design has a double garage and additional covered outdoor space while the Basic only has a single garage. This is reasonable as the Improved Liveability benchmark estimated construction cost is \$323,559 higher than the Basic.
- ▶ 4 bed Fully Accessible group home (264 SQM) is \$99 less than the equivalent Basic dwelling (179 SQM) on a rate per SQM. This is due to the majority of the additional area coming from elements with a lower cost base and diluting the rate per sqm. The Fully Accessible reference design has a double garage and additional covered outdoor space while the Basic only has a single garage. This is reasonable as the Fully Accessible benchmark estimated construction cost is \$355,427 higher than the Basic.
- ▶ 2 bed Fully Accessible apartment (90sqm) is \$126 less than the equivalent Basic dwelling (79 SQM) on a rate per SQM. This is due to the additional area coming from increased room sizing for access, rather than higher cost elements. This is reasonable as the Fully Accessible benchmark estimated construction cost is \$84,344 higher than the Basic.

The graphs below demonstrate the estimated cost build up for a 1 bedroom villa as an example of the additional cost per SQM required for each Design Category. In line with page 31, for comparison purposes Improved Liveability and Robust have been assessed together while Fully Accessible and High Physical Support has been assessed as a separate group.

Fully Accessible and High Physical support have the same GFA, therefore are the most comparable on a rate per SQM. Using the below example, the Fully Accessible 1 bedroom villa and High Physical Support equivalent dwelling are both 68 SQM (including external areas) therefore the full estimated cost uplift of \$933 is attributed to the additional specifications required rather than any difference in area. Additional specifications include but are not limited to thermostatic mixing valves, higher grade appliances and emergency power provisions.



Source: EY analysis, 2023

## Annexure D – SDA Reference Designs

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Kennedy Associate Architect's reference designs have been provided in an accompanying report.

## Annexure E - Detailed Cost Estimates

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MBM's detailed cost estimates have been provided in an accompanying report.

## Annexure F - Historic Methodology and Assumptions

Under the Specialist Disability Accommodation Pricing and Payments Framework, benchmark prices for SDA are based on an efficient provider and representative across all configurations of dwelling stock. The SDA Pricing Model considers the base cost to build a new SDA dwelling within the benchmark region of metropolitan Melbourne, which factors in the building type, number of bedrooms and design category.

These dwellings are required to meet both the Design Standards (updated 25 October 2019) and Building Code of Australia. The methodology used to determine the building costs in the historic Model was for an architect to provide base specifications for a quantity surveyor to price.

Table 15 outlines the construction cost assumptions adopted within the historic SDA Pricing Model.

**Table 15: 2016-17 Construction Costs used in Historic Model**

Dwelling type	Beds	Basic	Improved liveability		Fully accessible		Robust			High Physical Support	
			No OOA	With OOA	No OOA	With OOA	No OOA	With OOA	+1 Room	No OOA	With OOA
Apartment	1	374,283	380,330	N/A	574,959	N/A	N/A	N/A	N/A	838,715	N/A
	2	461,796	469,202	N/A	716,527	N/A	N/A	N/A	N/A	1,060,239	N/A
	3	590,865	600,448	N/A	928,588	N/A	N/A	N/A	N/A	1,406,490	N/A
Villa/ Townhouse/ Duplex	1	218,052	222,357	254,890	334,942	369,184	402,669	445,260	481,082	519,682	564,743
	2	278,868	284,505	315,454	420,954	453,528	509,654	549,877	583,706	668,640	711,092
	3	364,623	371,798	402,033	552,033	583,853	674,227	713,371	746,293	890,075	931,343
House	2	304,493	308,593	339,541	445,554	478,128	545,529	585,752	619,581	705,540	747,992
	3	383,073	425,098	458,981	625,833	661,484	755,715	798,970	835,354	1,070,988	1,120,945
Group home	4	574,790	586,065	620,164	830,719	866,596	992,352	1,035,595	1,071,970	1,367,945	1,417,556
	5	625,268	636,543	669,757	917,417	952,367	1,094,956	1,136,948	1,172,270	1,523,852	1,571,895

**Source:** Historic SDA Model, NDIA 2016

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The following historic cost assumptions were made to inform the study:

- ▶ Compliance with Design Standard (2019) features and specifications for each Design Category
- ▶ Prices based on benchmark region of Metropolitan Melbourne
- ▶ Prices adjusted by CPI annually
- ▶ Costs reflect the minimum requirements for New Builds under each design category
- ▶ Prices consider requirements to meet the Building Code of Australia classifications
- ▶ Room sizes were based on Liveable Housing Australian standards
- ▶ Priced as at 31 March 2016 and escalated by CPI for one year to provide 2016/17 pricing
- ▶ Prices do not assume the provider is a charity or not-for-profit, and so will not be discounted to assume any related tax concessions.
- ▶ Total number of dwellings per parcel of land being:
  - ▶ 40 apartments
  - ▶ 5 one bedroom villas or townhouses
  - ▶ Groups of 2 duplex's
  - ▶ Single detached houses
- ▶ BCA Classifications were specified as:
  - ▶ Apartments: Class 2
  - ▶ Villa/ Townhouse/ Duplex: Class 1(a)(i) or Class 1(a)(ii) or Class 3
  - ▶ House: Class 1(a)(i) or Class 1(b)(i) or Class 3
  - ▶ Group Home: Class 1(b)(i) or Class 3.

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