Geoscape

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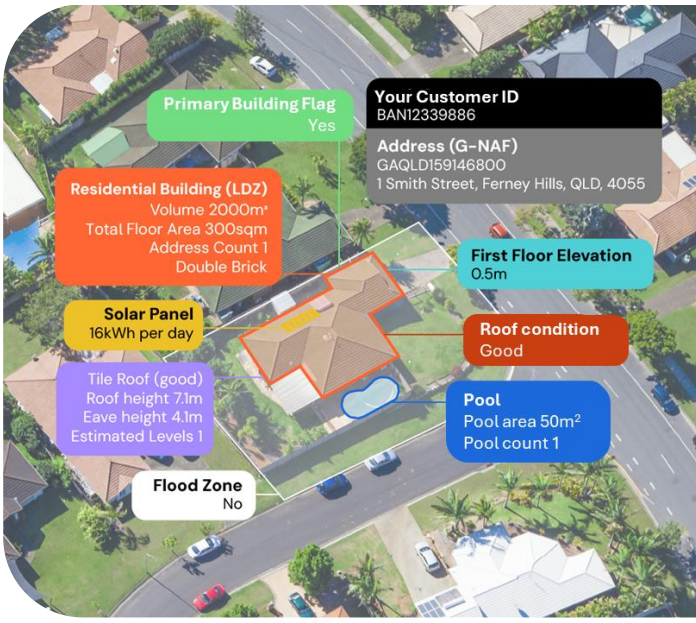
National Buildings

Everything you need to know.

We're excited to introduce version 4 of our **National Buildings** dataset, launching in **March 2026**! This update unlocks richer insights and new capabilities for your organisation. In this infosheet, you'll find everything you need to take advantage of these improvements — plus a personalised guide to help you smoothly navigate any changes.



National Buildings release date is March 2026

What's New

Since 2016, National Buildings has evolved from satellite imagery to aerial capture, delivering high-quality, consistent data.

This version of National Buildings is a major step forward. In this release, you can expect:

- **Introduction of "Insight Packs"** – modular add-ons that let you layer insights onto the base table.
- **Refreshed rural building capture** – with a revised process to ensure annual updates.
- **More frequent updates in urban areas** – keeping pace with rapid development.

Designed for tomorrow

National Buildings is designed to keep you ahead. This update gives you more flexibility, deeper insights, and a data model ready for the future.

Here's what's driving this release:

- **Richer insights** – The new release includes a range of additional insights that many of you have asked for.
- **Future-ready** – The updated data model is designed to more easily integrate emerging technologies and new insight layers.
- **Flexible** – A modular approach that allows you to seamlessly add targeted insights to your base Buildings product, tailored to your use cases.

If you have any questions or concerns, please don't hesitate to reach out — we're here to help.

https://geoscape.com.au/support/

Buildings 4.0 Data Model (*NEW*)

National Buildings - Base

buildings

🔑	**building_pid**	**varchar(15)**
	date_created	date
	date_modified	date
	date_first_captured	date
	date_last_captured	date
	capture_resolution	varchar(6)
	capture_method	varchar(20)
FK	**locality_pid**	**varchar(15)**
	locality_name	varchar(50)
FK	**lga_pid**	**varchar(15)**
	lga_name	varchar(75)
	mesh_block_code	varchar(11)
	sa1_code	varchar(11)
	state	varchar(3)
	building_use	varchar(30)
	building_use_source	varchar(75)
	address_count	number(5)
	primary_building_flag	varchar(3)
	ground_elevation	number(7,2)
	ground_elevation_resolution	varchar(5)
	building_area	number(10,2)
	total_floor_area	number(10,2)
	number_vertices	number(5)
	centroid_longitude	number (12,9)
	centroid_latitude	number (12,9)
	geometry	PolygonZ

Legend

- Spatial Table
- Aspatial Table

building_address

🔑	**building_address_pid**	**varchar(15)**
FK	building_pid	varchar(15)
FK	address_pid	varchar(15)
FK	address_detail_pid	varchar(15)
	date_created	date
	date_modified	date
	address	varchar(150)
	state	varchar(3)
	relationship_confidence	number(3)
	primary_building	varchar(3)
	primary_building_confidence	number(3)

building_cadastre

🔑	**building_cadastre_pid**	**varchar(15)**
FK	building_pid	varchar(15)
FK	cadastre_pid	varchar(15)
	date_created	date
	date_modified	date
	state	varchar(3)
	relationship_confidence	number(3)

building_property

🔑	**building_property_pid**	**varchar(15)**
FK	building_pid	varchar(15)
FK	property_pid	varchar(15)
	date_created	date
	date_modified	date
	state	varchar(3)
	relationship_confidence	number(3)

The format of date fields may change, depending on your data format. Unless your format specifies otherwise, all date fields will be in yyyy-mm-dd format by default, as aligned with ISO standards.

We'll provide sample data aligned with the new data model to support your preparation and help ensure a smooth transition.

Buildings 4.0 Data Model (*NEW*)

National Buildings – Insight Packs*

GENERAL

building_roof

building_pid	**varchar(15)**
date_created	date
date_modified	date
roof_colour	varchar(7)
roof_shape	varchar(7)
primary_roof_material	varchar(20)
roof_slope	number(4,2)
tree_overhang	varchar(3)
state	varchar(3)

GENERAL

building_solar

building_pid	**varchar(15)**
date_created	date
date_modified	date
date_last_captured	date
capture_resolution	number(3,1)
capture_method	varchar(20)
solar_flag	varchar(3)
solar_area	number(10,2)
daily_estimated_power	number(10,2)
state	varchar(3)

GENERAL

building_height

building_pid	**varchar(15)**
date_created	date
date_modified	date
roof_height	number(7,2)
eave_height	number(7,2)
building_volume	number(10,2)
estimated_floors	number(3)
state	varchar(3)

GENERAL

address_pool

	address_pid	**varchar(15)**
FK	address_detail_pid	varchar(15)
	date_created	date
	date_modified	date
	address	varchar(150)
	date_last_captured	date
	capture_resolution	number(3,1)
	capture_method	varchar(20)
	pool_flag	varchar(3)
	pool_count	number(2)
	pool_area	number(10,2)
	state	varchar(3)

Legend

- Spatial Table
- Aspatial Table

What are Insight Packs?

An "Insight Pack" is a conceptual bundling of additional insight that can be seamlessly added onto the base building feature. They're designed to provide specific knowledge about a particular topic/theme for an industry or use-case. They will be available in PSV format.

GENERAL

Off-the-shelf. Full national coverage. Mature.

ON DEMAND

Advanced insights. Require real-time processing.

BETA

Experimental or newly developed offerings.

We'll provide sample data aligned with the new data model to support your preparation and help ensure a smooth transition.

Buildings 3.0 Data Model (*CURRENT*)

Geoscape Buildings

building_property

🔑	**building_pid**	**varchar(15)**
🔑	**property_pid**	**varchar(15)**
	date_created	date
	date_modified	date
	relationship_confidence	number(3)

building_cad

🔑	**building_pid**	**varchar(15)**
🔑	**cadastre_pid**	**varchar(15)**
	date_created	date
	date_modified	date
	relationship_confidence	number(3)

building_address

🔑	**building_pid**	**varchar(15)**
🔑	**address_pid**	**varchar(15)**
	address_detail_pid	varchar(15)
	address	varchar(150)
	date_created	date
	date_modified	date
	relationship_confidence	number(3)
	is_residential	varchar(3)

Legend

- Spatial Table
- Aspatial Table

buildings

🔑	**building_pid**	**varchar(15)**
	date_created	date
	date_modified	date
	capture_date	date
	building_review_date	date
	building_source	varchar(30)
	quality_class	varchar(20)
FK	**locality_pid**	**varchar(15)**
	state	varchar(3)
	address_count	number(5)
	swimming_pool_adjacent	varchar(3)
	swimming_pool_review_date	date
	solar_panel	varchar(3)
	solar_panel_review_date	date
	planning_zone	varchar(30)
	roof_height	number(7,2)
	eave_height	number(7,2)
	ground_elevation	number(7,2)
	ground_elevation_source	varchar(4)
	primary_roof_material	varchar(20)
	roof_type	varchar(30)
	roof_colour	varchar(7)
FK	**mesh_block_code**	**varchar(11)**
	number_vertices	number(5)
	area	number(10,2)
	volume	number(10,2)
	geometry_quality	varchar(30)
	centroid_longitude	number(9,6)
	centroid_latitude	number(9,6)
	estimated_levels	varchar(3)
	roof_shape	varchar(7)
	tree_overhang	varchar(3)
	roof_slope	number(4,2)
	geometry	PolygonZ

Attribute Mapping - Base

You will continue to receive the main buildings table, but some attributes will be removed, renamed, moved or new.

3.0 Attribute	buildings	Type of Change
building_pid	building_pid	No change
date_created	date_created *	No change
date_modified	date_modified *	No change
capture_date	date_first_captured *	Renamed
building_review_date	date_last_captured *	Renamed
	capture_resolution	New
	capture_method	New
building_source		Removed
quality_class		Removed
locality_pid	locality_pid	No change
	locality_name	New
	lga_pid	New
	lga_name	New
mesh_block_code	mesh_block_code	No change
	sa1_code	New
state	state	No change
	building_use	New
	building_use_source	New
swimming_pool_adjacent		Moved
swimming_pool_review_date		Moved
solar_panel		Moved
solar_panel_review_date		Moved
planning_zone		Removed
address_count	address_count	No change
	primary_building_flag	New
roof_height		Moved
eave_height		Moved
ground_elevation	ground_elevation	No change
ground_elevation_source	ground_elevation_resolution	Renamed
primary_roof_material		Moved
roof_type		Removed
roof_colour		Moved
area	building_area	Renamed
volume		Moved
	total_floor_area	New
number_vertices	number_vertices	No change
geometry_quality		Removed
centroid_longitude	centroid_longitude	Data format changed
centroid_latitude	centroid_latitude	Data format changed
estimated_levels		Moved
tree_overhang		Moved
geometry	geometry	No change

*The format of date fields may change, depending on your data format. Unless your format specifies otherwise, all date fields will be in yyyy-mm-dd format by default, as aligned with ISO standards.

Attribute Mapping - Base

You will continue to receive the three building linkage tables, but some attributes will be new, renamed or removed.

building_address

3.0 Attribute	building_address	Type of Change
	building_address_pid	New
building_pid	building_pid	No change
address_pid	address_pid	No change
address_detail_pid	address_detail_pid	No change
date_created	date_created *	No change
date_modified	date_modified *	No change
address	address	No change
	state	New
relationship_confidence	relationship_confidence	No change
is_residential		Removed
	primary_building	New
	primary_building_confidence	New

building_property

3.0 Attribute	building_property	Type of Change
	building_property_pid	New
building_pid	building_pid	No change
property_pid	property_pid	No change
date_created	date_created *	No change
date_modified	date_modified *	No change
	state	New
relationship_confidence	relationship_confidence	No change

Note: The name of this table is changing. It is called **building_cad** in Version 3.0

building_cadastre

3.0 Attribute	building_cadastre	Type of Change
	building_cadastre_pid	New
building_pid	building_pid	No change
cad_pid	cadastre_pid	Renamed
date_created	date_created *	No change
date_modified	date_modified *	No change
	state	New
relationship_confidence	relationship_confidence	No change

*The format of date fields may change, depending on your data format. Unless your format specifies otherwise, all date fields will be in yyyy-mm-dd format by default, as aligned with ISO standards.

Attribute Mapping – Insight Packs

You will continue to receive heights and roof insights, but under the new model they are delivered in separate Insights Pack tables. The new model follows a more normalised (modular) structure, so these additional tables will need to be ingested alongside the core data.

building_height

3.0 Attribute	3.0 Table this comes from		Type of Change
building_pid	*buildings*	building_pid	No change
date_created		date_created *	New
date_modified		date_modified *	New
roof_height	*buildings*	roof_height	No change
eave_height	*buildings*	eave_height	No change
volume	*buildings*	building_volume	Renamed
estimated_levels	*buildings*	estimated_floors	Renamed
state	*buildings*	state	No change

building_roof

3.0 Attribute	3.0 Table this comes from		Type of Change
building_pid	*buildings*	building_pid	No change
date_created		date_created *	New
date_modified		date_modified *	New
roof_colour	*buildings*	roof_colour	No change
roof_shape	*buildings*	roof_shape	No change
primary_roof_material	*buildings*	primary_roof_material	No change
roof_slope	*buildings*	roof_slope	No change
tree_overhang	*buildings*	tree_overhang	No change
State	*buildings*	state	No change

*The format of date fields may change, depending on your data format. Unless your format specifies otherwise, all date fields will be in yyyy-mm-dd format by default, as aligned with ISO standards.

Attribute Mapping – Insight Packs

You will continue to receive solar and pool insights, but under the new model they are delivered in separate Insights Pack tables. The new model follows a more normalised (modular) structure, so these additional tables will need to be ingested alongside the core data.

3.0 Attribute	3.0 Table this comes from	building_solar	Type of Change
building_pid	*buildings*	building_pid	No change
date_created		date_created *	New
date_modified		date_modified *	New
solar_panel_review_date	*buildings*	date_last_captured *	Renamed
		capture_resolution *	New
		capture_method	New
solar_panel	*buildings*	solar_flag	Renamed
		solar_area	New
		daily_estimated_power	New
state	*buildings*	state	No change

Pools are now linked to an address instead of each building. This gives a more accurate view and better supports address-based use cases. You can still connect pools back to buildings if needed using the linkage tables.

3.0 Attribute	3.0 Table this comes from	address_pool	Type of Change
address_pid		address_pid	New
address_detail_pid		address_detail_pid	New
date_created		date_created *	New
date_modified		date_modified *	New
address		address	New
swimming_pool_review_date		pool_review_date *	New
		capture_resolution	New
		capture_method	New
		pool_flag	New
		pool_count	New
		pool_area	New
		state	New

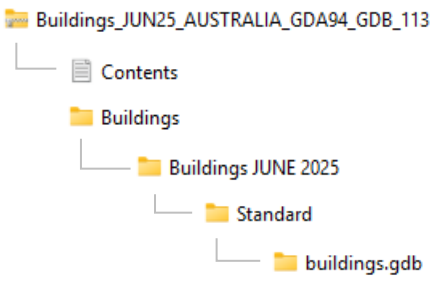
*The format of date fields may change, depending on your data format. Unless your format specifies otherwise, all date fields will be in yyyy-mm-dd format by default, as aligned with ISO standards.

Changes to Packaging

Buildings 3.0 (*CURRENT*)

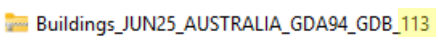
Folder Structure

Currently, the dataset comes in a nested folder structure inside a zip file. To access your data, you have to drill down through several layers of folders.



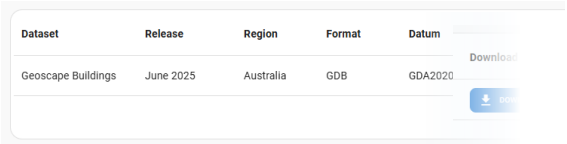
Versioning

In the current product, version numbers are compact and can be interpreted in different ways (e.g. interpreting '1121' as major/minor/ increment could be 1.1.21 or 11.2.1 or 1.12.1).



Modular Downloads in Hub

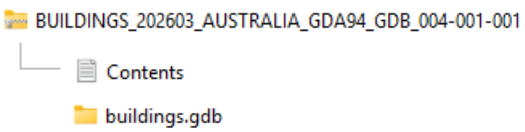
Currently, the dataset is delivered as a single combined download, with base data and all insights bundled together in one file.



Buildings 4.0 (*NEW*)

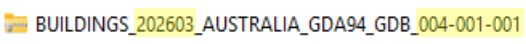
Folder Structure

In the new version, the data will be packaged in a flat structure. The zip file will contain the data files directly (no nested folders).



Versioning

Clearer versioning format (MAJOR–MINOR–EXTRACT) and more easily sorted release naming (March 2026 represented as 202603).



Modular Downloads in Hub

The Base dataset and each Insight Pack will be downloaded separately. This modular approach gives you more flexibility to choose the data you need.