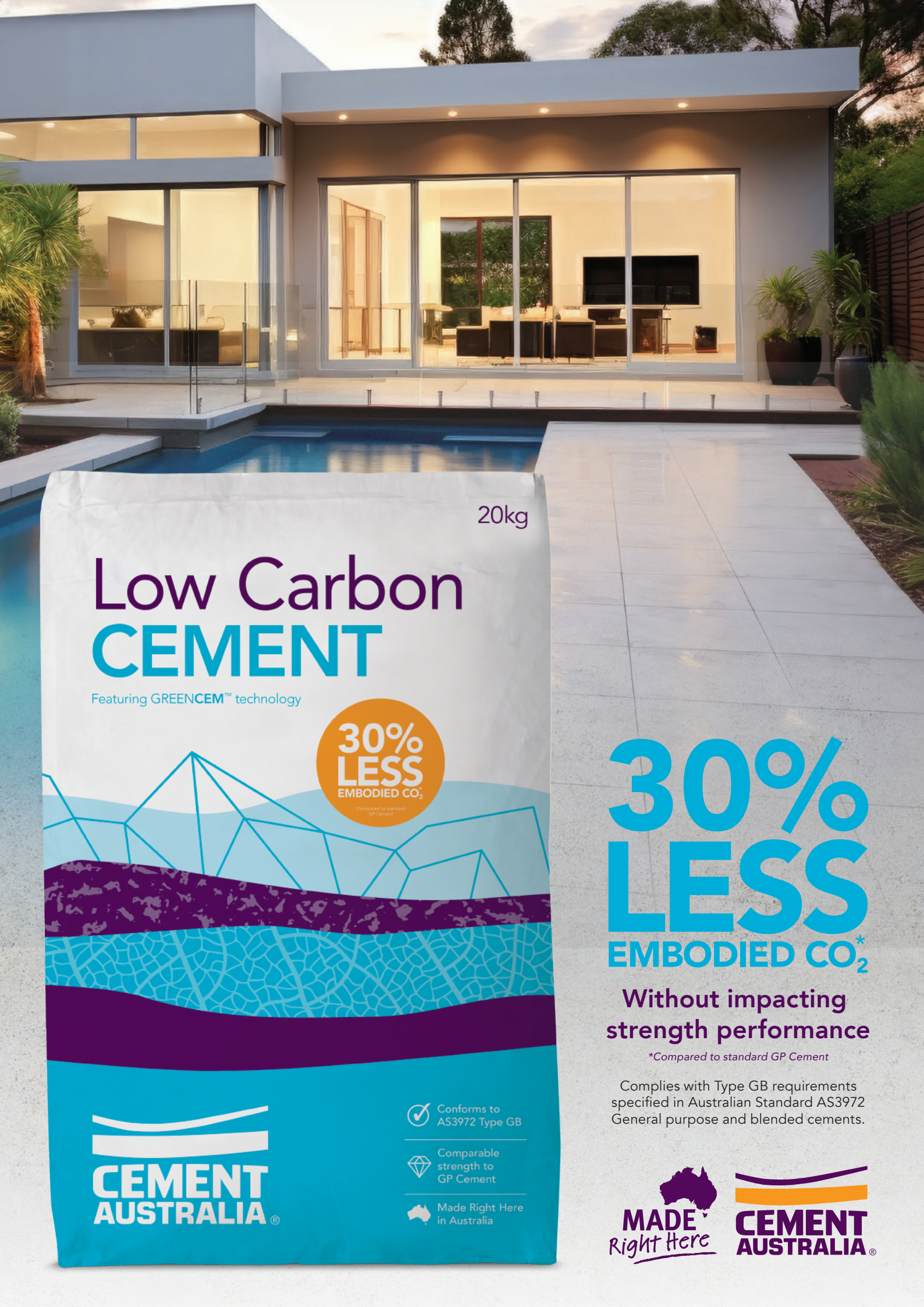


30% LESS EMBODIED CO_2*

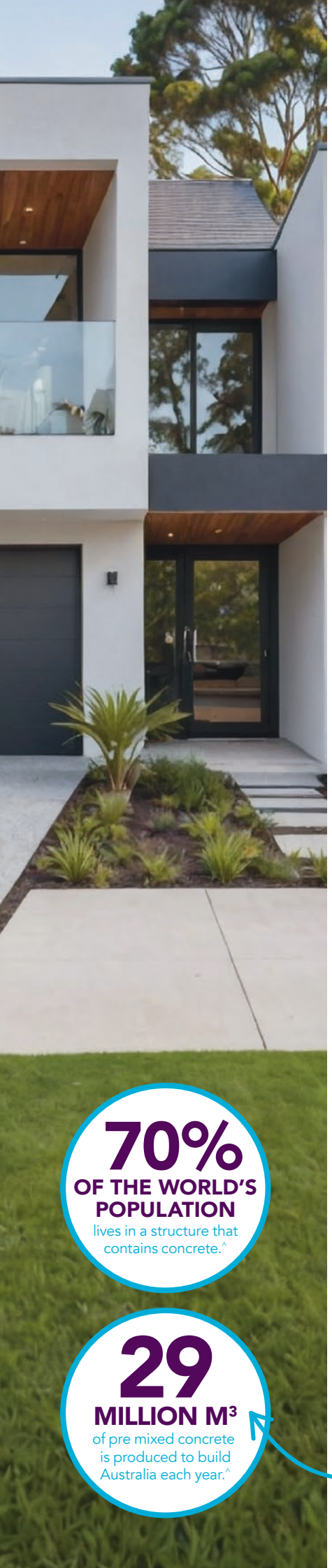
Without impacting strength performance

**Compared to standard GP Cement*

Complies with Type GB requirements specified in Australian Standard AS3972 General purpose and blended cements.

MADE Right Here

CEMENT AUSTRALIA®



70%
OF THE WORLD'S POPULATION
lives in a structure that contains concrete.^

29
MILLION M³
of pre mixed concrete is produced to build Australia each year.^

Cement Australia's Low Carbon Cement, featuring GREENCEM™ technology, is ideal for a range of construction applications as a direct replacement to standard General Purpose (GP) Cement.

Low carbon cement provides comparable strength capabilities to General Purpose (GP) Cement, with additional benefits such as lower permeability, enhanced durability, and reduced efflorescence.

All with 30% less embodied CO_2.

Cement Australia's Low Carbon Cement is the ideal choice in a wide variety of both domestic and commercial projects including:

- Construction such as concrete slabs, driveways and footpaths
- Structural concrete such as pre-stressed slabs, columns and tilt-up walls
- Pavers, blocks, panels and pipes
- Mining applications
- Major engineering / civil projects requiring high quality and consistency
- Specialty formulations such as adhesives, renders, mortars and grouts

Blended cement is the way to an environmentally sustainable construction industry

The Australian cement and concrete sector has worked hard to reduce industry CO_2 emissions.

Cement Australia already uses Supplementary Cementitious Materials (SCMs), alternative fuels, and improved transportation methods, to reduce our use of fossil fuels in the manufacturing and distribution process.

Fly Ash and/or slag has been limited to low levels of cement replacement due to the impacts on concrete strength performance... until now.

Cement Australia's Low Carbon Cement: Is it the new GP?

Cement Australia's innovative GREENCEM™ technology enables us to replace the GP cement ingredient with fly ash and/or slag in higher quanties than previously possible, without compromising the resulting concrete's strength development.

In achieving comparable strength to our General Purpose (GP) Cement in both concrete and mortar, our Low Carbon Cement can be confidently used in place of our General Purpose (GP) Cement, whilst having a lower environmental impact.

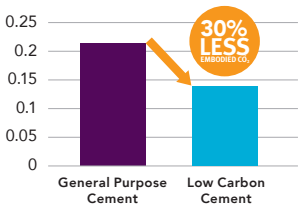
Made Right Here in Australia

Cement Australia's Low Carbon Cement is locally manufactured using high quality ingredients and is tested for Australian conditions.

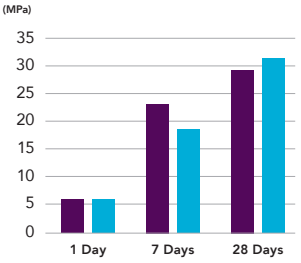
Key Benefits

- Comparable strength performance to General Purpose Cement
- Reduced efflorescence
- Lower drying shrinkage and creep
- Enhanced durability
- Improved resistance to sulfate attack and chloride penetration
- Reduced potential for Alkali Aggregate Reactions (ASR)
- Improved cleaning upon project completion

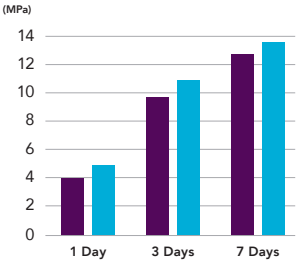
Embodied CO_2 of 25MPa Concrete



CONCRETE - Strength Development



MORTAR - Strength Development



General Purpose Cement Low Carbon Cement

The graphs depict testing results conducted using Gladstone GP in accordance with the relevant Australian Standards test methods, at a NATA registered laboratory. Strength development results are indicative only and affected by a number of factors such as the physical and chemical properties, water to cement ratio, admixtures, curing and environmental conditions.

*If Cement Australia's Low Carbon Cement was used, the embodied CO_2 saved would be the same as the amount of CO_2 sequestered by **2,234,651 acres of forest in a single year**§ (almost the same area as Melbourne!)*

Product Comparison

	General Purpose (GP) Cement	Low Carbon Cement
Complies to Australian Standards AS3972 General purpose and blended cements		
Type GP	✓	
Type GB		✓
7 Day Mortar Strength	12MPa	**13MPa**
28 Day Concrete Strength	29MPa	**31MPa**
Made Right Here in Australia	✓	✓
Available in Bulk	✓	✓
Compatible with admixtures	✓	✓
Complies with SR		✓
Complies with SL		✓
Improved workability and pumpability		✓
Reduced water demand		✓
Created to help achieve Net Zero 2050		✓
EPD Available		✓

3.8 TONNES

*That's the same amount of CO_2 sequestered by **4.2 acres of forest in a single year**[§] (a little smaller than the playing field at the MCG!)*

OF EMBODIED CO_2 CAN BE SAVED ACROSS AN AVERAGE NEW HOME BUILD[#]

by using **Cement Australia Low Carbon Cement** instead of GP Cement

3,300kg[#] **SAVED from CONCRETE**

500kg[#] **SAVED** from **MORTAR**

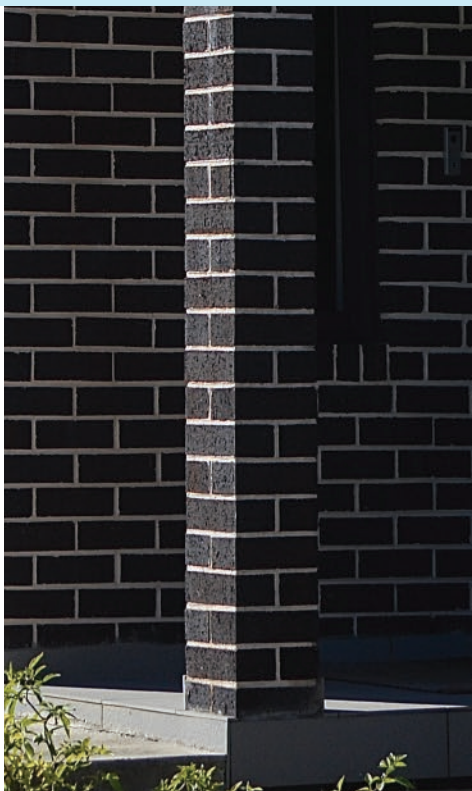
30% LESS EMBODIED CO_2*

Suggested Mix Ratios

(BY VOLUME)	Cement	Sand	Aggregate	20kg Bags per m³
Concrete				
Improve Water Tightness High Strength	1	1.5	3	17
Paths and Driveways	1	2	3	16
Foundations, Footings	1	3	3	13
Mortar				
General Purpose	1	4	-	15
Enhanced workability	1	6 + 1 hydrated lime	-	8
Render	1	3	-	20

Note: This information is a guide only, specific advice for your project should be obtained for the materials you are using.

Keep your same mix design - Cement Australia's Low Carbon Cement is designed to use the same ratios as GP Cement



How to Use

STEP 1 Combine cement, clean aggregate and sand in correct proportion in a non-porous vessel. Large jobs require a concrete mixer.

STEP 2 Add drinkable water gradually and mix thoroughly. Use enough water to make a workable mix. Excess water ruins good concrete.

STEP 3 Use product immediately after mixing. Keep concrete moist for 7 days for best results.

Mix Design

The proportioning of constituent materials in a concrete or mortar mix is a complicated matter which can be influenced by many factors. We recommend that trials be conducted with the available materials.

The mix designs shown in this document are based on Cement Australia's own testing and product trials to achieve maximum compressive strength results.

Workability/Setting Times

Concrete produced with Low Carbon cement may require less water to achieve a specified level of workability when compared to concrete produced with a Type GP cement.

Setting times are a guide only and are dependent on other ingredients in the concrete/mortar mix, and ambient conditions at the time of the project.

Handling and Limitations

Where specific properties such as rapid setting or high early strength are required a more specialised cement should be considered.

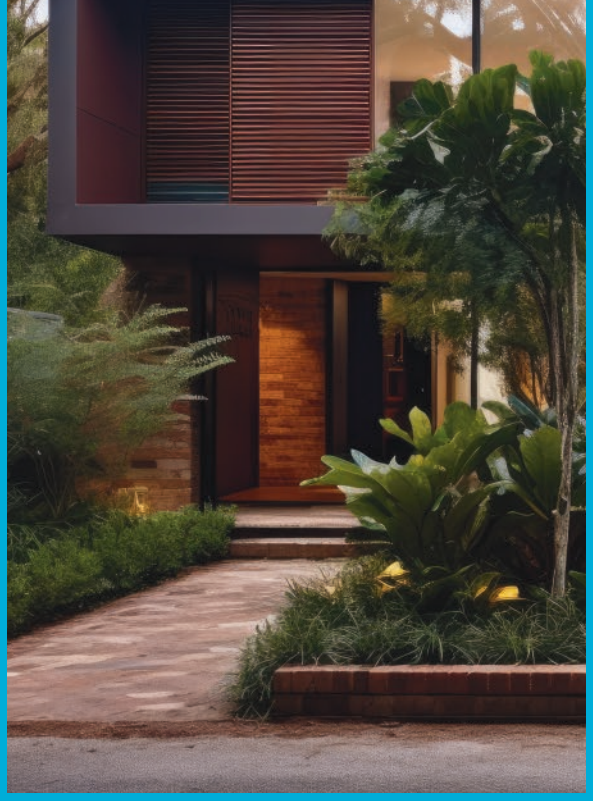
The 'shelf life' of cement products is dependent on the storage conditions.

It is necessary for bagged cement to be stored in dry conditions and protected from rain, dew or any other moisture source.

Bagged cement that has hardened or is lumpy as a result of exposure to moisture should not be used.

Cement products are highly alkaline materials and are significantly affected by exposure to water.

To view all product limitations, storage & handling tips please visit **cementaustralia.com.au**



Cement Australia works closely with our customers to ensure they have the information they need, when they need it.

Technical Support

Our Australian technical support team are available via phone during business hours and will happily direct any enquiry you to the appropriate technical or customer management team member.

Customer Management Team

As a Cement Australia customer, you have a dedicated Customer Management Representative who can assist you with ordering product, liaising with our research and product development team.

Website

Product and Safety Data Sheets, product FAQs, How To guides and videos, product calculators and stockist information are all easily located on our mobile responsive website.

^ (Source: CBP_Infographic.pdf located at *https://www.ccaa.com.au/CCAA/CCAA/Public_Content/INDUSTRY/Concrete/Concrete_Overview.aspx* accessed March 2024.

Based on an average new single storey residential build requiring 53m^3 of concrete (Source: CBP_Infographic.pdf located at *https://www.ccaa.com.au/CCAA/CCAA/Public_Content/INDUSTRY/Concrete/Concrete_Overview.aspx* accessed March 2024) equalling a saving of 3.8T CO2 when using Low Carbon Cement instead of General Purpose Cement with 250kg/m^3 cementious material for concrete, and with sufficient M4 Mortar ratio required for 10,000 standard house bricks.

§ Source: *https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator* accessed March 2024

Item Code 18211
Cement Australia
Low Carbon
Cement 20kg

9 311808 182111

Certified System
Quality
ISO 9001
SAI GLOBAL

MADE Right Here

CEMENT AUSTRALIA®