

# Carbon Footprint C

# Concrete

Date 28/07/2025 Scope Cradle to Gate

# Mix Design Requested

# Equivalent Tarmac CEM I Mix Design

| Concrete Grade                      | C25/30  | Concrete Grade                      | C25/30  |
|-------------------------------------|---|-------------------------------------|---|
| Cement Classification               | CIIIB   | Cement Classification               | CEM I   |
| Total Material                      | <b>42</b> m <sup>3</sup>                        | Total Material                      | <b>42</b> m <sup>3</sup>                        |
| GCB Carbon Benchmark<br>Rating      | 1.4   | GCB Carbon benchmark<br>Rating      | 1.4   |
| Carbon Footprint per m <sup>3</sup> | <b>116.3</b> kgCO <sub>2</sub> e/m <sup>3</sup> | Carbon Footprint per m <sup>3</sup> | <b>218.4</b> kgCO <sub>2</sub> e/m <sup>3</sup> |
| Total Carbon Footprint              | <b>4,885</b> kgCO <sub>2</sub> e                | Total Carbon Footprint              | <b>9,173</b> kgCO <sub>2</sub> e                |

Compared to Tarmac **CEM I** equivalent 47% 120 4,288 kgCO2e Equivalent Tarmac CEM I Mix Design Mix Design Requested



Contact the sustainability team to learn more at sustainability@tarmac.com



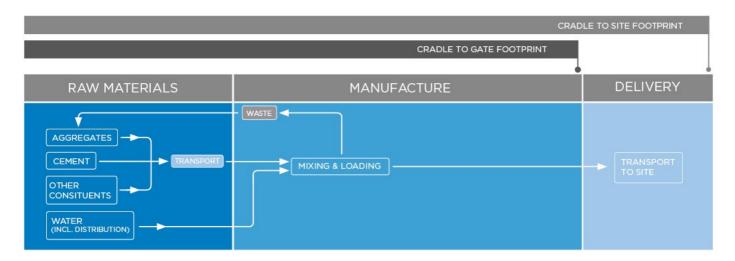


# Carbon Footprint

# Technical data sheet



# How Your Product Carbon Footprint Is Calculated

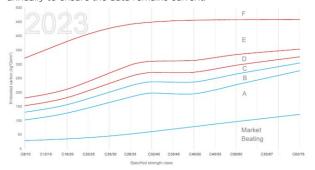


# CALCULATION METHODOLOGY

The protocol used by the Tarmac Carbon Footprint Calculator tool is in accordance with BSI PAS 2050:2011 'Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' methodology and the industry standard methodology for asphalt, the Asphalt Pavement Embodied Carbon Tool asPECT v3.0. Total greenhouse gas contributions are expressed as carbon dioxide equivalents (CO2e). This indicative footprint has been created using average data across all Tarmac readymix concrete plants and average mix recipes for each product. The scope of the footprint is 'Cradle-to-Gate' for ex-works footprints and includes greenhouse gas emissions associated with the extraction and processing of raw constituent materials, their transport to the manufacturing plant and the manufacturing of the finished product. The greenhouse gas emissions data used is from annual energy performance for Tarmac mineral extraction and manufacturing operations, and information provided by Tarmac's suppliers. Where supplier specific information is unavailable, relevant information is sourced from trade bodies or the Inventory of Carbon and Energy (ICE) database (Hammond & Jones, November 2019). All other greenhouse gas conversion factors are taken from the relevant year's 'UK Government conversion factors for Company Reporting'. All scopes are included.

### GCB Carbon Benchmark Rating

The GCB Carbon Benchmark Rating was created as part of the GCB Low Carbon Concrete Routemap to enable consumers to define "Low Carbon Concrete" in the context of the mixes available in the current market. The benchmark uses concrete carbon data from the previous year to set rating bands from A++ to G (pictured) and is updated annually to ensure the data remains current.



### NOTES:

- The benchmark ratings are based on embodied carbon of normal weight concrete mixes used recently in the LIK
- Performance requirements may make it impractical to achieve some ratings for a particular application
   Achieving a rating of A, A+ or A++ through use of a high proportion of CEBS with an associated requirement to significantly increase the total binder content (kg/m3) may not be an effective method o
- Opportunities for reducing the carbon rating may typically be achieved by adjusting type and & of SCM, requirements for early strength gain, consistence, environment (e.g. by use of protective barrier layers) minimum enement content (kg/m3) W/c ratio, use of admixtures, types and grading of aggregates, age at which the specified strength must be achieved, sources of constituents.

For more information on the GCB Low Carbon Concrete Routemap click here.

### DISCLAIMER

Whilst every effort has been made to adhere to the requirements of PAS 2050 in producing this calculation, Tarmac cannot guarantee conformance to the specification. The views of an independent auditor should be sought where this is required. The carbon footprint information should only be compared with information prepared on a like-for-like basis. Comparisons made between different suppliers' carbon footprints will be very difficult due to difference in scope and boundaries.

For more information, please contact the sustainability department at sustainability@tarmac.com

REINVENT
THE WAY
OUR WORLD
IS BUILT