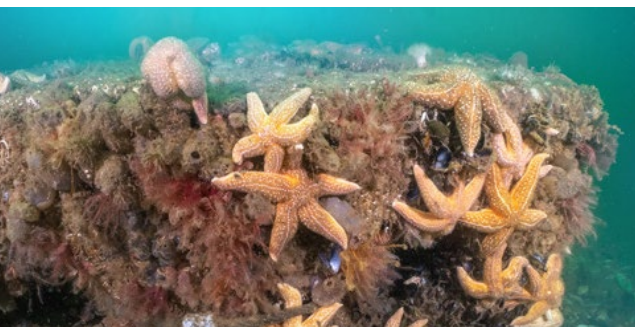




WORLD'S LEADING ULTRA LOW-CARBON NATURE INCLUSIVE DESIGN REEF SOLUTION

Reef cubes® - A new era for nature inclusive design and marine habitat creation for subtidal and inter-tidal environments. Featuring unique ultra low-carbon and plastic-free properties for habitat rejuvenation, subsea scour protection, fisheries enhancement and coastal defence solutions.

Designed and produced by ARC marine® using its proprietary Marine crete construction, 98% recycled materials, zero plastics and developed using targeted Nature Inclusive Design (NID) principles. Reef cubes® can reduce CO₂ levels by 50-100kg p.tonne and are designed to increase specific marine life populations and local biodiversity levels.



THE MOST ECOLOGICAL AND TECHNOLOGICALLY ADVANCED REEF AVAILABLE



SCIENTIFICALLY BACKED AND
LOCATION SPECIFIC NATURE-
INCLUSIVE DESIGN (NID)
TEXTURED FINISH

ULTRA LOW-CARBON

98% RECYCLED MATERIALS
AND ZERO PLASTICS

STRENGTHS OF 15-60 MPa
WITH A DENSITY OF 2,350kg/m³

AN INTRODUCTION

ARC stands for Accelerating Reef Creation – a principle brought to life through the innovative design of the Reef cubes®, developed through continuous research and development since 2015.

With a unique 3D textured finish, each Reef cube® is engineered with nature-inclusive design at its core. The design is fully customisable based on deployment location, target species, and sea state conditions.

Passageway diameters can also be tailored to suit specific species requirements.

Beyond its ecological benefits, the Reef cube® serves as an effective and environmentally friendly solution for scour protection around offshore wind turbines, cables, CPS, jacket legs, pipelines and any other subsea infrastructure exposed to impact or scour.

Localised manufacturing near deployment sites minimises both timeframes and the CO₂ footprint typically associated with traditional rock transport.

Our in-house team of engineering and marine scientists collaborate closely with clients to ensure the design meets project-specific requirements, always with a strong focus on biodiversity net gain - creating thriving habitats and supporting marine life across global waters.

Reef cubes® – the most advanced, multi-purpose, and effective reef solution available.

FEATURES AND BENEFITS

Nature Inclusive Design -

Fully customised textured finish to target growth of local marine species and increase biodiversity levels. Designed in accordance with PAS1401:2025

Eco-engineering -

Ultra low-carbon and plastic free

Global application -

Available in a variety of sizes and all made in country using locally sourced raw materials to keep carbon footprint to a minimum

Lifespan -

Due to its Marine crete construction, Reef cubes® are more impermeable and resistant to salt water and chemical erosion than standard Ordinary Portland Cement - thus increasing lifespan and durability over competitors concrete products

Multi use -

Reef rejuvenation, habitat creation, scour protection, mooring blocks, Eco-tourism - with no decommissioning required

Peer reviewed -

Currently peer reviewed by 3 x external sources, with a further 2 more yet to be published

Intertidal and subtidal uses -

Reef cubes® from the RC1500 upwards feature an intricate rock pool features in both the top and sides of the cube design. This makes them an ideal solution in intertidal regions which allows pools of water to remain on the cube to host and shelter small marine life, even when the tide has gone out and the cube is fully exposed

REEF CUBES® SPECIFICATIONS

Available in multiple sizes:

From 15cm side - 2m side

For specific product sizes see table below

Top surfaces:

Nature Inclusive Design /
Optional subtidal rock pools

Strength:

15-60 MPa

Density:

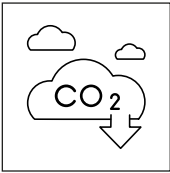
2,350 kg/m³

Emissions:

Ultra low-carbon

Materials:

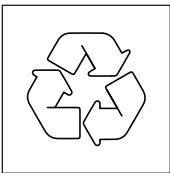
98% Recycled and meets
EU leachate testing standards



ULTRA LOW-CARBON - Manufactured using ARC marine's patented materials, an ultra low-carbon alternative to Ordinary Portland Cement, significantly reducing embodied carbon compared to conventional concrete.



PLASTIC FREE - Containing absolutely zero plastics to make it as pollutant free as possible.



98% RECYCLED MATERIALS - Produced using locally sourced recycled materials we are able to provide a minimum 91% carbon saving before adding our further carbon reducing Marine crete solution.

REEF CUBES® WEIGHTS & DIMENSIONS - Length/Width/Height (mm)

	RC150	RC350	RC500	RC750	RC1000	RC1500	RC2000
Size (mm)	155 x 155 x 160	350 x 350 x 350	468 x 468 x 500	720 x 720 x 750	1,000 x 1,000 x 1,000	1,500 x 1,500 x 1,520	2,000 x 2,000 x 2,220 est.
Weight (kg)	8kg	79kg	150kg	470kg	1090kg	5306kg	11500kg

TRUSTED BY



RWE



10+ YEARS OF ACCELERATING
REEF CREATION THROUGH
NATURE-INCLUSIVE DESIGN.

FEATURED IN



AWARDS

