



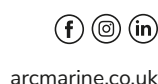
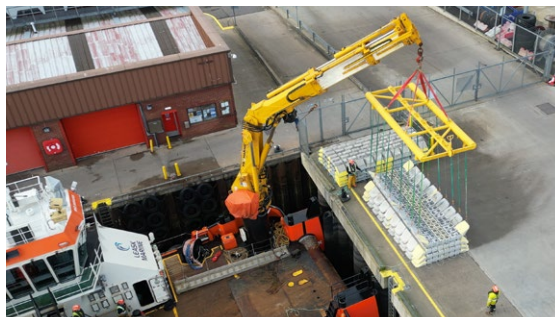
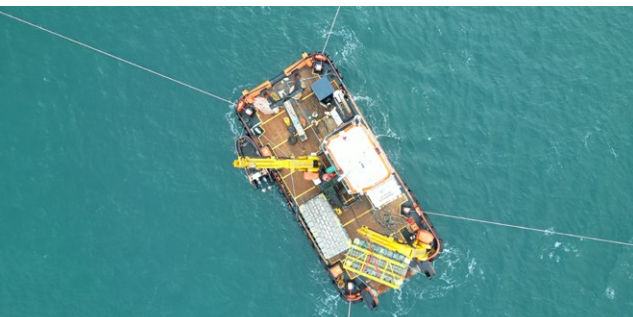
Reef mats

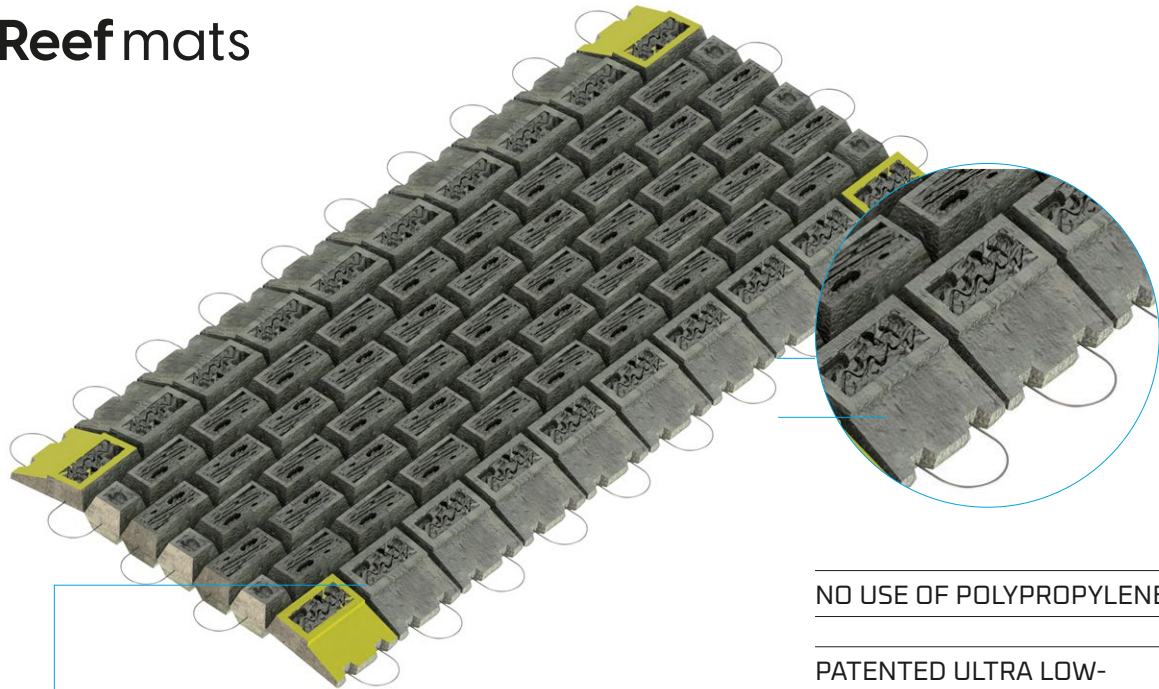
REDUCE TOTAL COST OF OWNERSHIP WITH NATURE-INCLUSIVE DESIGN

WHILST PROTECTING YOUR INFRASTRUCTURE

Reef mats help developers and asset owners turn marine infrastructure into optimised ecosystems while materially reducing long-term project risk and cost.

ARC marine enables critical infrastructure to become biodiverse by integrating Nature-Inclusive Design (NID) as standard. Reef mats are low carbon, plastic-free subsea protection system for cables and pipelines that deliver robust asset protection while increasing regulatory confidence, environmental performance and financial advantage across the asset lifecycle.





NO USE OF POLYPROPYLENE ROPE

PATENTED ULTRA LOW-CARBON CONCRETE

NATURE-INCLUSIVE DESIGN
AS STANDARD

MADE WITH ZERO PLASTICS,
INCLUDING THE PAINT



REDUCING DECOMMISSIONING COST FROM DAY ONE

Offshore energy developers face increasing pressure to secure environmental consent while controlling long-term financial exposure. For most subsea protection systems, the greatest liability does not occur at installation but decades later at decommissioning. Reef mats are engineered to change that equation.

By embedding Nature-Inclusive Design (NID) into subsea protection, Reef mats improve environmental outcomes and strengthens regulatory confidence.

At end of asset life, Reef mats meet decommissioning in situ requirements and can remain on the seabed.

Reef mats remove major recovery costs, avoiding seabed disturbance and converting long-term decommissioning liability into a permanent environmental benefit.

	Concrete mattress	Reef mats
CAPEX	✓	
OPEX		✓
DECEX		✓
Total cost of ownership		✓

ENGINEERED FOR OFFSHORE

PROVEN ASSET PROTECTION PERFORMANCE

Impact tested - To conform with: 'Recommended Practice DNV-RP-F107 - Risk Assessment of Pipeline Protection'.

Stability tested - Assessed in-line with standard industry practice using 'DNV-RP-F109 - On-bottom stability design of submarine pipelines, cables and umbilicals'.

Eco-engineering - The only ultra low-carbon and plastic free subsea cable and pipeline protection available.

DESIGNED FOR STANDARD OFFSHORE INSTALLATION

Conventional installation - Reef mats use existing industry standard installation frames (available to hire from ARC marine).

Industry standard - Reef mats are designed to align with industry standard sizes, handling and installation practices.

Operational compatibility - Integrates with standard offshore equipment and workflows with no requirement for specialist vessels or non-standard handling procedures.

BUILT FOR LONG-TERM PROJECT SECURITY

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

Over-trawlable design - Angled steel rope and tapered edges to minimise snagging risk.

Corrosion management - Optional cathodic protection available where required.

REEF MATS SPECIFICATIONS

Dimensions:

6m x 3m (Nominal)

Thickness:

150mm/300mm/450mm

Top surfaces:

Nature Inclusive Design / Fair Face

Strength:

30> MPa available

Density:

2,400 kg/m³

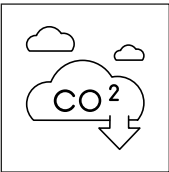
Emissions:

Ultra low-carbon

Materials:

Meets EU leachate testing standards

SUSTAINABILITY AND CONSENT PERFORMANCE

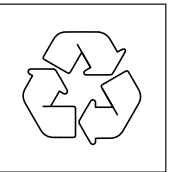


ULTRA LOW-CARBON - Manufactured using ARC marine's patented materials, an ultra low-carbon alternative to Ordinary Portland Cement, significantly reducing embodied carbon compared to conventional concrete mattresses.



PLASTIC FREE - Contains absolutely zero plastics, including all coatings and finishes.

Each Reef mat eliminates an average of 140 metres of polypropylene rope that would otherwise be placed on the seabed.



98% RECYCLED MATERIALS - Manufactured using locally sourced recycled materials.

TRUSTED BY



RWE



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

FEATURED IN



AWARDS

