

CASE STUDY

Water Vessel: 4.4 Tons of Weight Savings

SYNDECK™ REDIDECK™ WITH MARINE DECK COVERINGS

The Challenge

The UK Navy which operates vessels all around the world, has a Royal Fleet Auxiliary (RFA) vessel that was experiencing interior flooring issues within their galley. The RFA vessel had water ingress causing delamination of the current flooring system which consisted of cement (screed). Our customer, ERS Marine, contacted SynDeck™ asking us to assist in providing an underlayment system that is durable, lightweight, seamless, waterproof, and offers good corrosion protection.

The Solution

Needing to abide by certifications of approvals from UK Def. Stan. on fire-resistance, seamless, lightweight, and chemical resistance the SynDeck™ commercial team decided to present to our customer a hybrid system that consisted of RediDeck™ with ERS Marine SAFE-T-DECK™. Our RediDeck™ system (SS1222 Bond Coat + SS1290FC Ultra Lightweight Underlayment + SS1259 Super Sealer) had a topcoat of 8mm of SAFE-T-DECK™ making it a highly effective, yet decorative heavy-duty, slip-resistant floor finish. The two systems combined weight savings were 27.18kg per m² (5.56lbs per ft²) with total weight savings of 4 tonnes (4.4 tons) and achieved a slip-resistance value of R13. This hybrid system is expected to bring higher durability because of its superior chemical resistance and outstanding mechanical properties.

The Product

SynDeck™ RediDeck™ system is an easy to apply system designed for direct to metal interior deck applications. This is a 100% solids, sealed underlayment system that provides waterproofing properties. This system serves as a base for various other SynDeck™ systems, as well as carpets, tile, and other coatings that can be bonded on top of it.

The Benefits

- Corrosion risk is mitigated which extends the life of the steel deck
- Slopes to drains have improved water removal
- Seamless, waterproof, durable and slip resistant finish
- Excellent chemical resistance provides durability
- High weight savings

Process and Equipment

PRODUCT TITLE	PRODUCT INFORMATION
Owner of Vessel	UK Navy
Operator of Vessel	UK Navy
Vessel Type	Fleet support (RFA)
Vessel Builder	Haarland & Wolff, Belfast, UK
Location/Territory	Camell Laird shipyard, Liverpool, UK
Area on Vessel	Galleys/Serveries
Products Used - System Name	SynDeck™ RediDeck™ with Marine Deck Coverings and ERS Marine SAFE-T-DECK™
Brushed/Troweled/Sprayed	Bond Coat was brushed, underlayment was troweled, sealer was laid with a squeegee and ERS Marine SAFE-T-DECK™ was troweled
Days to Complete	2+ weeks. Complete deck removal and replacement
Number of People to Complete Project	8
Floor Substrate	Steel

Customer Testimonial



"The SynDeck™ marine systems offer the highest quality and ease of use for approved resin deck coverings, the ultra-lightweight systems not only provide weight savings for the client but easy application for the installation team. The technical support from EPMAR is unrivalled."

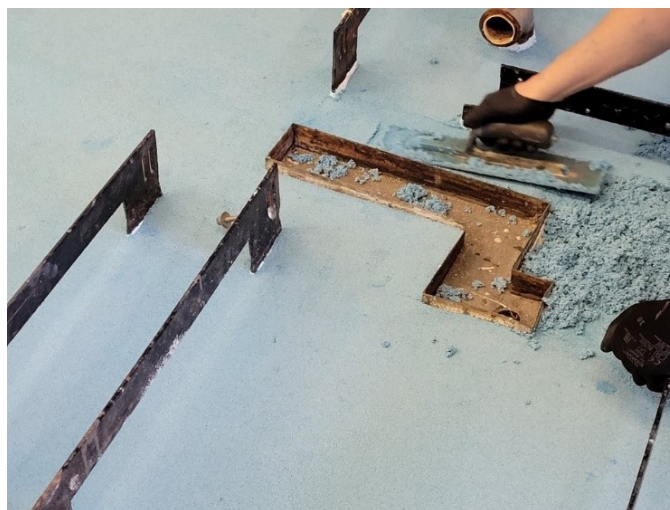
- Marine Sales and Logistics Manager



Failed Cement within Galley/Servery



Floor Penetration



SS1290FC Laying in Critical Area



Return in service using RediDeck™ with ERS Marine SAFE-T-DECK™