

OUR HISTORY

Real World Epoxies (RWE) have formulated, supplied and applied specialist flooring and maintenance solutions to the RAN since 2001.

With a successful track record established in that time - without ever having a warranty claim - Defence Floors has been created to take our services to the next level. All the processes, equipment, hands-on knowledge and experience gained over the years has been packaged together with the clear goal of catering for the demands of Defence work.

We strongly believe no one is better equipped to successfully manage the flooring needs of Defence.







WHAT WE DO

At Defence Floors, we focus **solely** on the best flooring systems for Defence.

Defence Floors offer easy-to-use patching systems

In-service repairs need to be completed quickly and easily. We offer easy-to-use, fully-contained repair kits for in-fills, non-slip finishes and passageways.

Defence Floors offer full supply and apply service

Navy vessels aren't ordinary flooring applications. You need specialist flooring teams that know the ships and know what it takes to get great results - meticulous, adaptable and compliant.

Defence Floors offer ongoing maintenance

We want Defence to get the most out of their flooring investment. By conducting ongoing maintenance we make sure the floors perform as well and last as long as possible.



WHY CHOOSE DEFENCE FLOORS?

- 1. We *formulate* and *manufacture* a range of epoxy floors aimed at harsh environments.
- 2. We have extensive experience *managing flooring installation* onboard navy ships with our full supply and apply services.
- 3. We have provided *modular flooring solutions* across the various fleet classes.
- 4. We have the ongoing ability to formulate *customised products* using proven raw materials to address problematic areas.
- 5. We offer **solventless**, **chemically resistant**, **moisture tolerant** floors with proven performance in a wide range of applications.
- 6. We offer **modular features** in the form of sound deadening, falls to drains, coving and levels of non-slip that can be adjusted to suit flooring requirements.





PROBLEMS WE SOLVE

- **1. Moisture tolerance** our floors aren't affected by high levels of humidity or moisture, even withstanding mishaps such as flooding only hours after application.
- **2. Chemical resistance** our floors have demonstrated resistance to hot oil from deep fryers and waste collected in the secondary containment of ovens.
- **3. Solventless** our floors contain no solvents, which means there's no fire risk, no ventilation requirements and no impact on nearby crew or other trades.
- **4. Non-hazmat** our products aren't classified as dangerous goods and can be airfreighted anywhere in the world.
- **5. Manufacturer's warranty** with our supply and apply service, the buck stops with one company. No finger pointing or blame game. If there's a problem, we fix it!

CASE HISTORY - HMAS DARWIN GALLEY

The specialist wet-space system developed by Defence Floors uses JAXXON industrial epoxies to create a non-slip floor designed to last in the harshest environments.

For a side-by-side trial with the traditional flooring option it was installed in the galley and scullery onboard HMAS Darwin, with a particular focus on performance in the aggressive areas underneath the deep fryer and within the oven secondary containment.

After 18 months of service the results were excellent. The floor had no signs of cracking or chemical breakdown and it was deemed to have out-performed the other flooring system. In response, the client gained enough confidence in the system to continue rolling it out across other wet spaces onboard the FFG class of vessels.

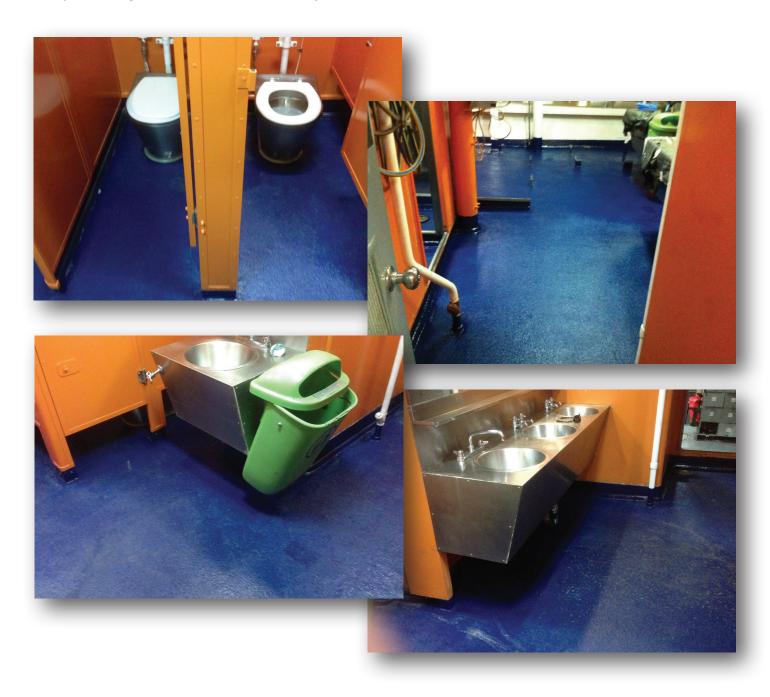


CASE HISTORY - HMAS DARWIN & NEWCASTLE SANITARY SPACES

Following the successful trial in the galley and scullery, the Defence Floors wet-space flooring system was specified for use in the sanitary spaces onboard HMAS Darwin and Newcastle.

Containing toilets, showers and change areas, these spaces are constantly wet and can be challenging for some flooring systems. Not only is a consistent level of durable non-slip required over the floor, but work is often completed in high humidity, which can lead to defects such as amine blushing that leaves a floor sticky and more likely to suffer a range of performance issues.

As JAXXON products are completely moisture tolerant, the flooring application was able to proceed in the prevailing conditions without delay or use of de-humidifiers.



CASE HISTORY - HMAS DARWIN GALLEY HOT WORKS REPAIR

With corrosion suspected inside the vessel foundations, various sections of the steel deck were cut out for repairs, including some of the wet-space flooring system installed in the galley. After the works were completed, the JAXXON products were applied once again to restore the original floor and ensure moisture was unable to migrate through the cut interface.

A couple of notable observations were made during application. Firstly, as is often the case during installation, water was dripping onto the freshly applied product from two leaky valves. If the JAXXON products weren't moisture tolerant this would've caused delays to the project. Secondly, the floor patch was installed while further hot works were being performed in surrounding areas of the ship. The solventless nature of JAXXON products meant there were no flammability concerns and, once again, delays were avoided.



CASE HISTORIES - CAFE FLOORS

RWE is the approved supplier and applicator of the milspec-approved Phoenix flooring system - a decorative, hard-wearing floor applied (with sound dampening) in the Junior Sailor Cafes on all the FFG class vessels. While some of these ships have been de-commissioned, there are floors still in service, including HMAS Darwin, which was done back in 2002. Over the years patching has been conducted around the perimeter following hot work repairs, but the floor itself is still in remarkable condition considering the traffic it's received for nearly 13 years.



OTHER WORKS

In addition to these examples, RWE has supplied epoxy floorings, coatings and adhesives for all classes of vessels and the naval bases dating back to 2001. This includes non-slip flooring, fuel and water tank repairs, sound deadening paint and specialist clearance diver adhesives.







