

CARE AND MAINTENANCE

Overview

SynDeck™ epoxy based interior decking systems comprise of high performance, abrasion resistance, and corrosion resistant coatings that are 0 g/L VOC and <50g/L VOC. These systems are typically used in interior decking spaces, passageways, wet spaces, living quarters, cabins, sick bays, and galleys. SynDeck™ systems have excellent adhesion, are user friendly, and cure to a resilient gloss or matte finish depending on which topcoat is chosen. They are also low odor and offer good slip resistance. SynDeck™ seamless resin systems will not generate dust. However, dust and dirt may settle on the surface from other external sources. Keeping the SynDeck™ flooring system clean and maintained will provide a longer lifespan and optimized slip resistance. Below is a general guide on how to care for and maintain a SynDeck™ flooring system.

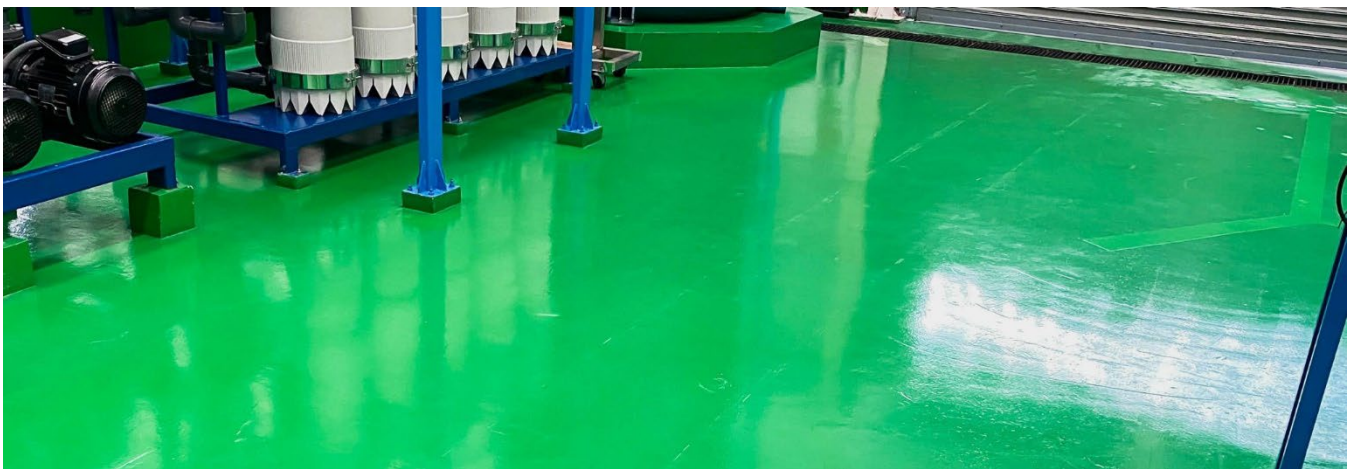
Prevention

Dust, dirt, and debris can act as abrasive materials when left on the flooring surface. Constant foot traffic, wheel traffic, or other forms of contact in combination with dirt and debris can act like sandpaper to create scratches, gouging, and dulling.

- Remove dirt, dust, and debris on a frequent basis.
- Avoid dragging or sliding heavy equipment across the floor.
- Avoid dropping heavy or sharp objects.
- Avoid using strong or harsh chemicals to clean the floor.

General Guidelines



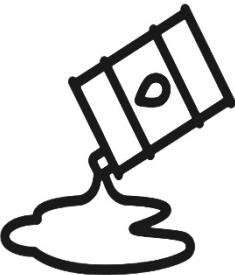
- High performance resin flooring systems normally take 5-7 days to achieve a full chemical cure and properties depending upon the environment temperature.
- Do not wash any SynDeck™ resin systems for at least 72 hours after the final topcoat has been applied. Avoid using water and any cleaning chemicals during this period.
- Approved cleaners can be used after the resin system has been allowed to cure for at least 3 days (72 hours) and should be used in conjunction with any local authority agreements and waste management requirements.



SKILL BUILDER

Maintenance

SynDeck™ High performance resin flooring systems normally take 5 to 7 days to achieve full chemical resistance and development of properties depending upon the environment temperature. Below is a general guideline for cleaning and maintenance of a typical SynDeck™ epoxy flooring system.

	After coating system has cured for at least 72 hours, but has not reached full cure	After coating system has reached full chemical and physical properties cure
SWEEP 	Sweep floor with brooms, dust mops, or power sweepers that have soft bristle brushes. When using mechanically powered sweeping equipment make sure not to keep device idling in one position.	Sweep floor with brooms, dust mops, or power sweepers that have soft bristle brushes. When using mechanically powered sweeping equipment make sure not to keep device idling in one position.
WASH / MOP 	Wash floor by using a mop with warm water only- <u>no soap or chemicals</u> . Ensure that the area has dried after mopping. Use of space heaters or fans will help accelerate the drying process.	Wash floor by using a mop with warm water and soap. If desired, use one of the approved floor cleaners in conjunction with warm water mopping. Ensure that the area has dried after mopping. Use of space heaters or fans will help accelerate the drying process.
SPILLS 	Immediately clean splashed or spilled items with a soft rag or sponge. Take care to avoid spreading the spill to a larger area by dabbing on the spill and allowing it to soak. Follow up by cleaning the area with <u>warm water only</u> . Some chemicals may dull, stain, or soften the flooring system and repair may be desired.	Immediately clean splashed or spilled items with a soft rag or sponge. Take care to avoid spreading the spill to a larger area by dabbing on the spill and allowing it to soak. Follow up by cleaning the area with warm water and soap. Some chemicals may dull, stain, or soften the flooring system and repair may be desired.



When using a high speed floor buffer, do not keep the running floor buffer in an idle location for an extended period of time. Use softer bristle brush attachments for general light duty cleaning. Approved soft bristle brush types include bassine, tampico, and polypropylene. Avoid stiff nylon and wire brushes.

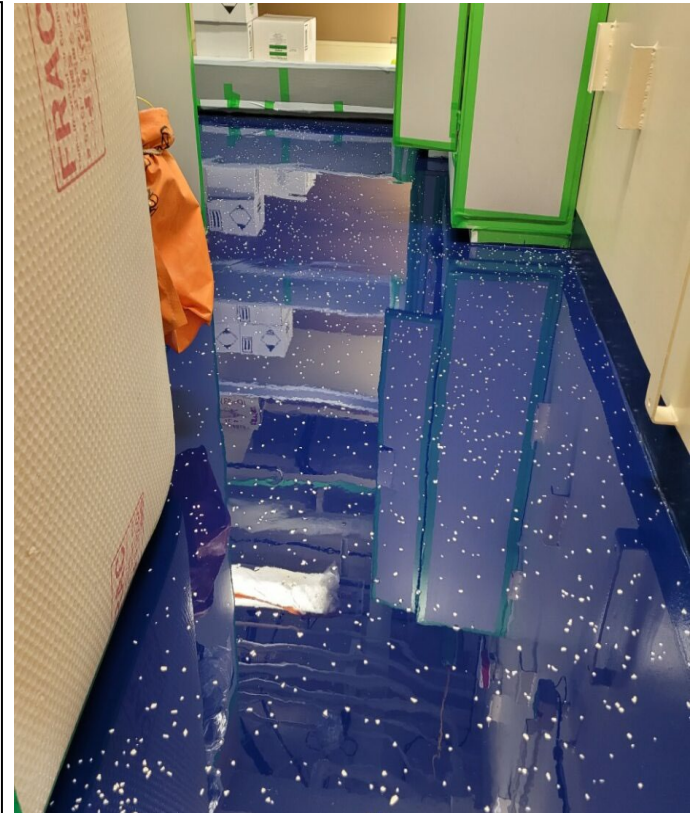
SKILL BUILDER

Approved Cleaners

SynDeck™ interior decking systems are tested for chemical resistance, cleanability, and long term performance. We only recommend using approved, tested, and environmentally acceptable cleaning chemicals to clean SynDeck™ products. The following list consists of cleaning products that were tested with a modified version of ASTM D543 “Resistance of Plastic Material to Chemical Reagents” over various SynDeck™ topcoats. The test included 20 scrubs in a back-and-forth direction after the chemicals were allowed to sit for 1 minute as well as for 2 hours. Avoid using strong acidic and/or strong caustic solutions. The following SynDeck™ topcoats were tested and approved with the listed detergents:

- Epoxy:
 - SS5000 IMO Epoxy
 - SS5300 Navy Epoxy
 - SS5400 Marine Epoxy
 - SS2590-71 IMO UVR Epoxy
- Urethane:
 - SS2450F Waterbase Urethane Matte

- Kemiko® Neutra Clean™ Cleaner and Degreaser (diluted 1:1 up to 1:10 with water)
- ERS NDC (Navy Deck Cleaner), produced in accordance to UK Def. Stan. requirements
- Clorox® Disinfecting Purpose Cleaner Spray
- Formula 409® Multi-Surface Cleaner Spray
- ZEP® All-Purpose Cleaner & Degreaser Spray
- Simple Green® All-Purpose Cleaner spray (diluted 1:1 up to 1:10 with water)
- Pine-Sol® (diluted 1:10 up to 1:20 with water)
- Lysol® Advanced Deep Clean Spray
- Fantastik® Disinfectant Multi-Purpose Cleaner
- Mr. Clean® Clean Freak Deep Cleaning Mist
- Scrubbing Bubbles® Bathroom Grime Fighter Foam



DAMAGE AND REPAIR

We understand that there may be times and situations where our SynDeck™ coatings and/or systems become damaged. Below will outline some of the more common types of damage along with guidelines on how to fix the damaged area. For specific or unique situations, we recommend that you reach out to a SynDeck™ technical representative.

Scratches & Scuffs



Superficial scratches and scuffs can happen for many reasons including (but not limited to) dragging objects, sliding objects, or moving objects that make contact with the topcoat of the flooring system. Examine damaged area by feeling for the depth of the scratch or scuff with your fingernail.

- If the scratch does not catch your fingernail, then it is considered a superficial scratch that can be repaired via buffing with the use of a floor buffer and polishing compound. Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.
- If the scratch catches your fingernail, it is considered a heavy scratch.
 - Scuff the damaged area and 1 - 2 inches (2.5 - 5.0 cm) outside of the damaged area. Be sure to feather the area so that it creates a transition for the new coating.
 - Clean the area and remove any grease, oils, dust, or debris.
 - Mix enough of the same topcoat used to cover the immediate area, the sanded portion outside of the area, and slightly outside of that area.
 - Follow manufacturer's mixing and application instructions and allow the product to reach a full cure.
 - To blend the repaired area with the existing coating, sand the high spots with 400 - 800 grit sandpaper. Then gradually increase to 1200, 1500, 2000, and 2500 grit wet-sand.
 - Use a high speed buffer with corresponding "cutting" pad and compound, and finish off with "polishing" pad and compound.
 - Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.

Stains & Discoloring



Superficial stains and discoloring may occur from chemical spills and/or product transfer onto a SynDeck™ resin system. For these circumstances, examine the area to see if it is a superficial stain, or a stain that has penetrated deep within the system.

- A superficial stain that has reduced the gloss can be repaired via buffing with the use of a floor buffer and polishing compound. Additional floor protection can be performed by using a maintenance wax on surface of the SynDeck™ topcoat.
- If the stain has penetrated underneath the SynDeck™ topcoat, it is considered a deep stain.
 - Scuff the damaged area and 1 - 2 inches (2.5 - 5.0 cm) outside of the damaged area. Be sure to feather the area so that it creates a transition for the new coating.
 - Clean the area and remove any grease, oils, dust, or debris.
 - Mix enough of the same topcoat used to cover the immediate area, the sanded portion outside of the area, and slightly outside of that area.
 - Follow manufacturer's mixing and application instructions and allow the product to reach a full-cure.
 - To blend the repaired area with the existing coating, sand the high spots with 400 - 800 grit sandpaper. Then gradually increase to 1200, 1500, 2000, and 2500 grit wet-sand.
 - Use a high speed buffer with corresponding "cutting" pad and compound, and finish off with "polishing" pad and compound.
 - Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.

Impact Damage



Impact damage can occur when sharp or heavy objects are dropped on the flooring. There are also different types of impact damages including the type that damages only a coating to a substrate, damage of coating to underlayment (but underlayment adhesion to substrate is still intact), and impact damage of an entirely underlayment system with the substrate. Below are steps to take when there has been impact damage that created cracks or delamination for these various types of situations.

- Inspect damaged area for adhesion loss. Determine where the adhesion loss is located and remove delaminated material from immediate area. If this is damage to an entire system, the damaged area must be removed all the way down to the substrate.
- Scuff the removed damaged area and 1 - 2 inches (2.5 - 5.0 cm) outside of the damaged area. Be sure to fair and feather the area so that it creates a transition for the new coating or system. The degree of surface profiling is dependent on the depth of the adhesion loss.
- Clean the area and remove any grease, oils, dust, or debris.
- Mix enough of the same coating/system products used to cover the immediate area, the sanded portion outside of the area, and slightly outside of that area.
- Follow manufacturer's mixing and application instructions and allow the product to reach a full-cure.
- To blend the repaired area with the existing coating, sand the high spots with 400 - 800 grit sandpaper. Then gradually increase to 1200, 1500, 2000, and 2500 grit wet-sand.
- Use a high speed buffer with corresponding "cutting" pad and compound, and finish off with "polishing" pad and compound.
- Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.

Adhesion Loss



Adhesion loss between products can occur over time due to various reasons. Common situations that create adhesion loss include, but are not limited to:

- Applying coatings outside of the recoat window without proper surface preparation
- Poor or inadequate surface preparation such as not enough profiling or failure to remove dust after profiling
- Contaminants such as oils, greases, and water between two products
- Incompatibility between different products

When adhesion loss is found:

- Inspect damaged area of adhesion loss. Determine where the adhesion loss is located and remove delaminated material from immediate area. If this is damage to an entire system, the damaged area must be removed all the way down to the substrate.
- Scuff the removed damaged area and 1 - 2 inches (2.5 - 5.0 cm) outside of the damaged area. Be sure to fair and feather the area so that it creates a transition for the new coating or system. The degree of surface profiling is dependent on the depth of the adhesion loss.
- Clean the area and remove any grease, oils, dust, or debris.
- Mix enough of the same coating/system products used to cover the immediate area, the sanded portion outside of the area, and slightly outside of that area.
- Follow manufacturer's mixing and application instructions and allow the product to reach a full-cure.
- To blend the repaired area with the existing coating, sand the high spots with 400 - 800 grit sandpaper. Then gradually increase to 1200, 1500, 2000, and 2500 grit wet-sand.
- Use a high speed buffer with corresponding "cutting" pad and compound, and finish off with "polishing" pad and compound.
- Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.

Cracks



Ships often experience harsh environmental conditions such as large swells, high winds, and extreme temperature fluctuations. These types of conditions typically result in ship movements such as roll, pitch, yaw, and flex. During these situations, a deck can twist and flex to a point where the deck will create a crack. These cracks need to be addressed as soon as possible to prevent water intrusion and eventual deck failure.

- Inspect damaged area to determine the depth of the crack. In most situations, a visual crack typically means that the entire system has cracked from the underlayment up to the topcoat.
- Scuff the topcoat along the cracked area and 1 - 2 inches (2.5 - 5.0 cm) outside of the cracked area with 80-120 grit sand paper. Be sure to fair and feather the area so that it creates a transition for the new coating.
- Clean the area and remove any grease, oils, dust, or debris.
- Mix enough clear topcoat used to cover the immediate area, the sanded portion outside of the area, and slightly outside of that area.
- Follow manufacturer's mixing and application instructions and allow the product to reach a full-cure.
- To blend the repaired area with the existing coating, sand the high spots with 400 - 800 grit sandpaper. Then gradually increase to 1200, 1500, 2000, and 2500 grit wet-sand.
- Use a high speed buffer with corresponding "cutting" pad and compound, and finish off with "polishing" pad and compound.
- Additional floor protection can be performed by using a maintenance wax on the surface of the SynDeck™ topcoat.
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Unique and Specific Situations

This care and maintenance sheet is created to address more common situations. For unique and specific situations, please feel free to contact and send your SynDeck representative any paint chips and/or photos from any failure for further examination / failure analysis.