



protective coatings  
and resin flooring

# API USA PRODUCT SPECIFICATIONS

## RESINOUS DECK COATINGS AND COVERINGS

### API USA (Part of RPM International):

API USA manufactures and installs resinous (epoxy and polyurethane) systems designed for the Marine and Offshore markets. Our products are manufactured in the United States (ISO 9001) and conform to the Jones Act for installations performed in the U.S. All of our products are IMO / RINA and USGA certified. API USA offers its products as a turnkey application, and API USA holds the warranty. The following specifications are proven systems with a long track record of success in the Cruise, Commercial, Mega Yacht and Military markets.

### INTRODUCTION:

This document is designed to present specifications for the products and systems offered by API USA. The specifications include the following information for each system:

- System Components and Descriptions
- List of Marine and Offshore Applications
- Application Cycle
- Schematic side view of the system
- Options available for each system

### TABLE OF CONTENTS:

- 1) Flexisecurit/Flexilit Anti-Skid System (Exterior Non-Skid and Interior Technical Spaces)
- 2) Flexisecurit/Flexilit Flake System (Interior and Exterior Decorative System)
- 3) Decoro System with "Rubber Chips" (Interior and Exterior Decorative System)
- 4) Decoro Syntheteak System (Synthetic option to Teak Wood Finishes)
- 5) Galley System (Polyurethane for maximum Thermal Shock and Organic Acid Resistance)
- 6) Surface Preparation Standards
- 7) Warranty Statement
- 8) Required Certifications and Installer Requirements
- 9) General Application Requirements.
- 10) Minimum Application Conditions

**Note: Product Data Sheets and SDS, for each product specified, will accompany this document.  
All SDS conform to GHS that was enacted June 1<sup>st</sup> of 2015.**

api usa, inc.  
protective coating  
and resin flooring

15801 nw 15<sup>th</sup> ave  
miami gardens,  
florida - 33169

tel. 786 565 9932  
fax. 786 657 3691  
info@apiusa.org  
www.apiusa.org

subject to be  
supervised and  
coordinated by  
RPM International.

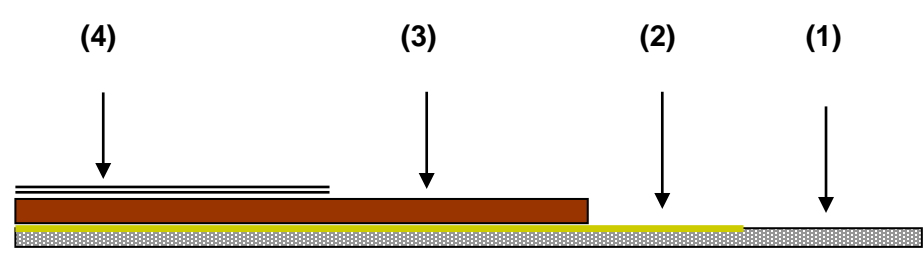
**1. FLEXISECURIT/FLEXILIT ANTI-SKID SYSTEM:** Two component, trowel-applied epoxy based flooring system that is typically applied directly to metal, followed by the application of a two component, polyurethane non-skid topcoat (1-2 coats). The system is designed for both interior and exterior applications. Multiple degrees of texture are available. Consult an API USA representative for the proper recommendation.

**MARINE APPLICATIONS:**

- |              |               |                                  |
|--------------|---------------|----------------------------------|
| Roof Decks   | Weather Decks | Platforms and Planking           |
| Open Decks   | Ferries       | Technical Spaces                 |
| Engine Rooms | Storage Areas | *Any area that requires non-skid |

**APPLICATION CYCLE:**

1. Surface preparation of metallic / wood SUBSTRATE (see section #6).
2. Application of PRIMER CINQUE wash primer (for Stainless Steel and Aluminum substrates only).
3. Application of 3-4 mm of FLEXISECURIT ER (trowel-applied epoxy base coat).  
Sanding of the FLEXISECURIT ER to create a bond with the finished flooring.
4. Application of FLEXILIT topcoat (roller-applied polyurethane topcoat with varying textures).



**OPTIONS:**

Non-Skid Options (by degree of texture):

- Flexilit Liscio – No texture, coating only
- Flexilit SN - Light texture, texture premixed into the product
- Flexilit Anitskid – Medium texture (most popular for non-skid), texture premixed in the product
- Flexilit C – Heavy texture, texture broadcast into the product
- Custom Texture – Consult an API USA representative

**See Flexilit Product Data Sheet for more details.**

The system can be applied with or without the Base Coat, depending on the appearance required. Thickness of Base Coat shall vary depending on specification requirements.

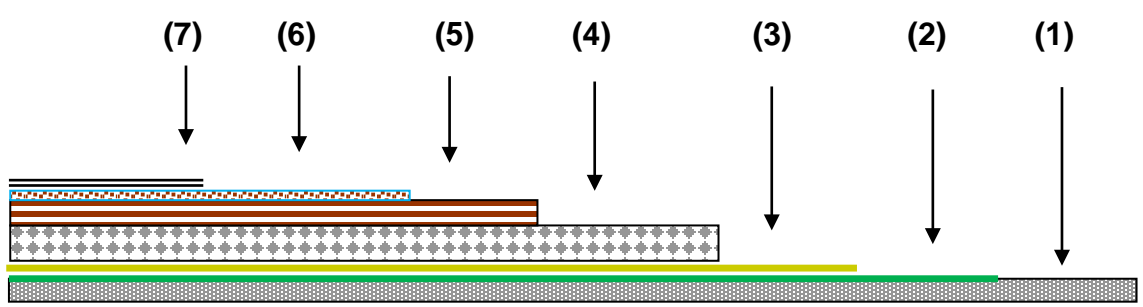
**2. FLEXISECURIT/FLEXILIT FLAKE SYSTEM:** Two component, trowel-applied epoxy based flooring system that is typically applied directly to metal incorporating a decorative flake broadcast that is sealed with a two component, polyurethane clear topcoat (1-2 coats). The system is designed for both interior and exterior applications. Various flake color options are available.

**MARINE APPLICATIONS:**

- |                      |                |   |
|----------------------|----------------|---|
| Mess / Dining Areas  | Open Decks     | *Any area where Slip Resistance, High Build and Decorative system are required. Refer to areas in #1. |
| Hallways / Corridors | Interior Areas |   |
| Heads and Showers    | Exterior Areas |   |

**APPLICATION CYCLE:**

1. Surface preparation of metallic / wood SUBSTRATE (see section #6).
2. Application of PRIMER CINQUE wash primer (for Stainless Steel and Aluminum substrates only).
3. Application of PRIMER PER METALLI (roller-applied bonding primer) – *Optional*
4. Application of 8-10 mm of ALLEGGERITO SOTTOFONDO (underlayment) – *Optional*  
Sanding of the SOTTOFONDO to create a bond with the finished flooring.
5. Application of 3-4 mm of FLEXISECURIT ER.
6. Colored FLAKE broadcast into the wet surface of the FLEXISECURIT ER.
7. Application of FLEXILIT HR (clear, roller-applied polyurethane topcoat).



**OPTIONS:**

Underlayment (pictured above) for leveling and building floor thickness. Primer Per Metalli required.

**See Alleggerito Sottofondo / Primer per Metalli Product Data Sheets for more details.**

Thickness of Base Coat shall vary depending on specification requirements.

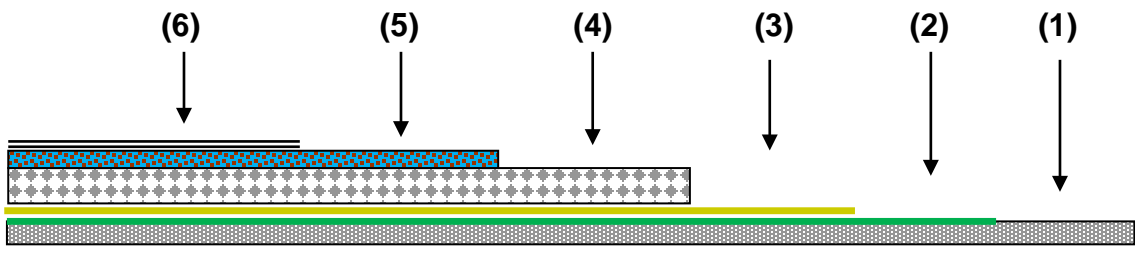
**3. DECORO SYSTEM:** Two component, trowel-applied polyurethane deck covering designed as a high performance alternative to tile and rubber deck coverings. The system is available in two formulations, the first with standard hardness and a second, softer version designed for areas where children are present. Both formulations are designed for both exterior and interior applications. The system has a wide color range and combination of rubber chips that can be incorporated for a decorative appearance.

**MARINE APPLICATIONS:**

- |                       |                                |  |
|-----------------------|--------------------------------|--|
| Water Parks           | Passenger & Crew Areas         | *Any area that would use Tile, Composite, Rubber or Laminate |
| Beach Areas           | Sport Courts & Fitness Centers |  |
| Passageways & Lobbies | Interior & Exterior Decks      |  |

**APPLICATION CYCLE:**

1. Surface preparation of metallic / wood SUBSTRATE (see section #6).
2. Application of PRIMER CINQUE wash primer (for Stainless Steel and Aluminum substrates only).
3. Application of PRIMER PER METALLI (roller-applied bonding primer).
4. Application of 8-10 mm of ALLEGGERITO SOTTOFONDO (underlayment).  
Sanding of the SOTTOFONDO to create a bond with the finished flooring.
5. Application of 4-6 mm of decorative coat DECORO with optional rubber chip broadcast.  
Sanding of the FLEXIGEL DECORO to create a bond with the finished flooring.
6. Application of API SEALER for added protection. (SPORT FLOOR option available).



**OPTIONS:**

Available in a wide variety of colors and chip colors to meet design requirements. Type of Clear Sealer will be determined by use and application. Consult an API USA representative for specific recommendation of type and number of coats. Sport Floor option for Fitness and Sports Areas – Comes in Pigmented and Clear versions.

**See Decoro / Flexilit Decoro Transparente / Sport Floor Product Data Sheets for more details.**

**4. DECORO SYNTHETEK SYSTEM:** Two component, trowel-applied polyurethane deck covering designed as a high performance alternative to traditional Teak. Grooves are cut into the system to create the effect of traditional Teak. The watertight, easy to clean system is designed for both interior and exterior applications. Synthetek is available in a variety of colors and texture options for slip resistance.

**MARINE APPLICATIONS:**

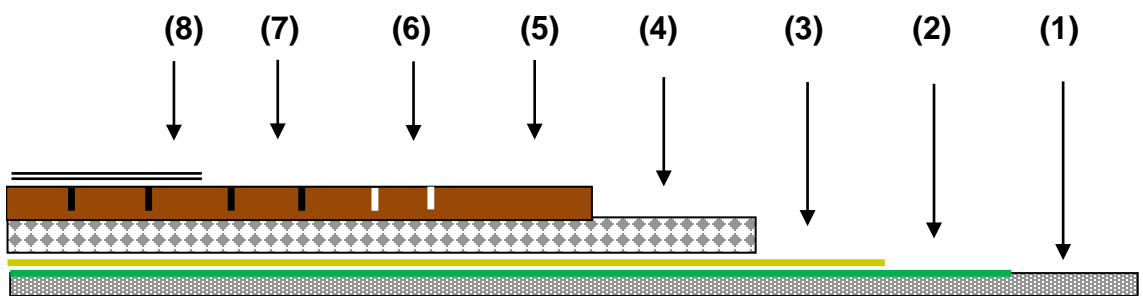
Open Decks  
Flag Areas  
Interior Spaces

Yacht Decking  
Tender Garages  
Public Spaces

\* Any areas where teak decking would otherwise be installed. Prefab panels can be fabricated.

**APPLICATION CYCLE:**

1. Surface preparation of metallic / wood SUBSTRATE (see section #6).
2. Application of PRIMER CINQUE wash primer (for Stainless Steel and Aluminum substrates only).
3. Application of PRIMER PER METALLI (roller-applied bonding primer).
4. Application of 8-10 mm of ALLEGERITO SOTTOFONDO (underlayment).
5. Application of 4-6 mm of decorative coat DECORO SYNTHETEK.
6. Creation of the GROOVES by router and saw (teak or other design patterns can be specified).
7. Application of DECORO SOFT BLACK (poured to the surface thickness).  
Sanding to an anti-skid grade C system (for slip resistance properties).
8. Application of one coat of API SEALER.



**OPTIONS:**

Prefabricated panels can be manufactured to meet specific area requirements. Consult an API USA representative for details.

Application of either Black or White grooves is available.

Available in 5 colors (consult an API USA representative for details and color samples):

- Synthetek
- Honey
- Hermitage
- Aged Teak
- Walnut

**See Decoro Synthetek Product Data Sheet for more Details.**

**5. GALLEY SYSTEM:** This system is designed as a high performance, seamless, easy to maintain alternative to tile in Galley applications. The system has various polyurethane underlayments that can be applied to the existing adjacent thickness. The system is designed to withstand Thermal Shock and aggressive Organic Acid attack. The system has a proven track record in the Marine Market.

**MARINE APPLICATIONS:**

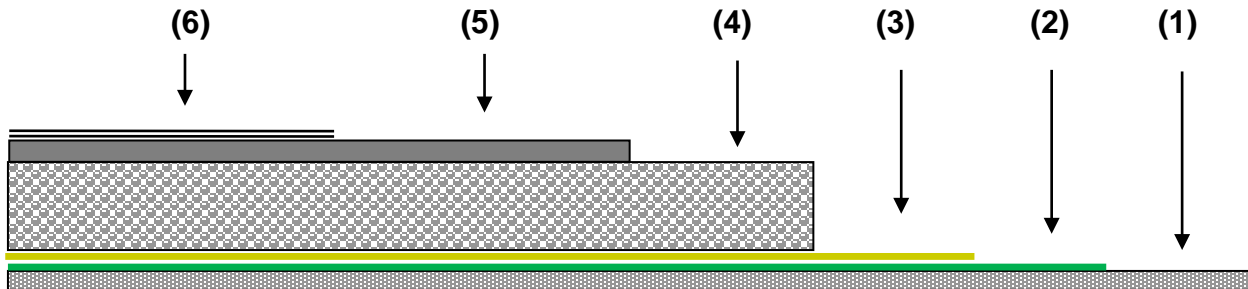
Galleys  
Sculleries  
Dish and Pot Wash

Food Storage  
Coolers  
Food Preparation

Serving Lines  
Fry Lines  
\*All food prep and storage areas

**APPLICATION CYCLE:**

1. Surface preparation of metallic / wood SUBSTRATE (see section #6).
2. Application of PRIMER CINQUE wash primer (for Stainless Steel and Aluminum substrates only).
3. Application of PRIMER PER METALLI (roller-applied bonding primer).
4. Application of 8-50 mm of FLEXIPLAST LT or ALLEGGERITO SOTTOFONDO (underlayment).
5. Application of 4-5 mm of decorative coat FLEXISECURIT ER (trowel-applied, epoxy base coat). Sanding of the FLEXISECURIT ER to create a bond with the finished flooring.
5. Application of FLEXILIT topcoat (roller-applied polyurethane topcoat with varying textures).



**OPTIONS:**

Cove Base with 1" radius shall be applied where required.  
Differing thicknesses of IMO approved underlayments up to 50mm (tile and sand bed replacement).  
Various Flexilit texture options as required.  
Application of a SEALANT at steel to decking interface to prevent moisture penetration.

**See Flexiplast HT / Sottofondo / Flexisecurit / Flexilit Product Data Sheets for more details.**



## **6. SURFACE PREPATATION STANDARDS:**

Refer to the appropriate API Product Data Sheet for preparation details, or contact an API USA representative. All substrates must be clean, dry and free of contaminants. Also, an anchor profile is recommended.

## **7. WARRANTY STATEMENT:**

API USA will warrant the materials and workmanship for a period of 1 year from final completion of the installation. For material sales only, API USA will warrant the materials form defect only and not for the application / installation of the materials.

## **8. REQUIRED CERTIFICATIONS AND INSTALLER REQUIREMENTS:**

All of API USA products are IMO / RINA approved along with USCG Module B Number. API USA products are manufactures in the United States to ISO 9001 Standards. The Installation Team shall have a minimum of five (5) years of experience installing similar systems.

## **9. GENERAL APPLICATION REQUIREMENTS:**

1. Availability of the area for our application only.
2. API Flooring System will follow the existing contour of the floor unless otherwise stated.
3. Suitable weather protections to respect minimum application conditions.
4. Adverse weather and strong wind can stop the application and influence the appearance of the deck. In case API will be asked by the Owner to continue the application notwithstanding the adverse weather conditions, API will not be responsible of the final result of the application.
5. Obstacles, coaming, steps and any material above the steel shall be reduced to the thickness of the resin floor required.
6. Electrical power at work site.
7. Disposal of empty cans, trash, and debris.
8. All necessary organization with local authorities to allow the work.
9. As work produces dust, equipment sensitive to dust must be protected.

## **10. RECOMMENDED APPLICATION CONDITIONS:**

1. Dry surface.
2. Minimum ambient and surface temp. = 10°C (50°F). Maximum temp. = 35°C (95°F)
3. Maximum relative humidity = 85%
4. Substrate temperature should be at least 3°C (5°F) above the dew point.

Should you need further details, please contact Don Sampson, General Manager, and API USA  
Phone: 609-504-7859      Email: dsampson@stonhard.com

**End of Section**