



TECHNICAL DATA SHEET – POLYSPEC® IMO CLAD

Revised: 4/2018

DESCRIPTION

PolySpec® IMO CLAD Epoxy Underlayment is a 100% solids, two-component, trowel applied epoxy mortar system. This product incorporates a fire resistant epoxy resin with properly graded silica aggregates to provide an easy to apply, functional underlayment. It may be used when a deck requires a change in contour or grade, and is specially formulated to provide a sound surface beneath ceramic tile, epoxy terrazzo and other polymeric decking materials. PolySpec® IMO CLAD is approved under the requirements outlined in Parts 2 and 6, Annex 1 of the IMO FTP Code.

TYPICAL APPLICATION

PRIMER	IMO Sealer @ 5–7 mils w/ Non-Skid Grit #1 (light broadcast)
BODY COAT	IMO CLAD Kit @ up to 1/2" thickness
OPTIONAL	PolySpec® IMO-Approved Primary Deck Covering

PERFORMANCE DATA

WEIGHT@ 1/4" (MIL-D-3135)	2.4 lb/ft ²
COMPRESSIVE STRENGTH (ASTM C-307)	5000 psi
FIRE RESISTANCE (IMO RES.A.687(17))	Not readily ignitable
SMOKE & TOXICITY (IMO RES.MSC.61(67)) PART 2	Passed
ADHESIVE STRENGTH (MIL-D-3135)	500 psi
VOLUME SOLIDS	100%

BENEFITS

- Moisture resistant, non-porous surface; long-term protection against moisture intrusion
- Fast application, minimal downtime
- Low odor, 100% solids: safe for environment, installers, and occupants
- Tenacious bond to substrate
- Excellent compressive strength
- Resists wear from tough traffic and adverse conditions
- Meets the requirements outlined by IMO, ABS, and other classification societies

RECOMMENDED USES

- Underlayment for ceramic tile, epoxy terrazzo, vinyl, polymeric decking materials and virtually any other covering
- Wet & dry spaces in all marine and shipboard applications, especially those prone to flexing
- Approved for deck leveling or fairing
- For projects requiring integrated cove base application

APPROVALS:

IMO FTP Code, Annex 1, Parts 2 & 6 for Safety of Life at Sea (IMO/SOLAS); classified as primary deck covering; certified to 1/2" thickness

STANDARD COLORS: Mustard

PACKAGING / COVERAGE

IMO Sealer .75- Gallon Unit / 250 sq. ft
(Non-Skid Grit #1 sold separately)
IMO CLAD Kit 6-Gallon Unit / 24 sq. ft (1/4")
12 sq. ft (1/2")

POLYSPEC® IMO CLAD

EPOXY UNDERLAYMENT, IMO APPROVED

STORAGE & INSTALLATION

STORAGE ENVIRONMENT	Dry area, indoors: 18-27°C / 65-80°F
APPLICATION TEMPERATURE, AMBIENT (IDEAL)	16-24°C / 60-75°F
APPLICATION TEMPERATURE, SUBSTRATE	Minimum 50°C / 5°F above dew point
SHELF LIFE	1 year
POT LIFE	45 minutes

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

1. This product should not be installed at temperatures less than 50°F (10°C) or higher than 95°F (35°C).
2. Do not thin with solvents unless advised to do so by ITW Polymers Sealants North America, Inc.
3. Confirm product performance in specific chemical environment prior to use.
4. Prepare substrate according to "Surface Preparation" portion of this document.
5. Always use protective clothing, gloves and goggles during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Safety Data Sheet for detailed safety precautions.
6. For industrial/commercial use. Installation by trained personnel only.

SURFACE PREPARATION

This product can be applied to the following substrate(s) that have been prepared according to PolySpec Surface Preparation Guidelines:

STEEL: Existing deck covering shall be totally removed. It is imperative that, before installation begins, all surfaces to which PolySpec decking product(s) will be applied - including deck, bulkheads, pipes, protrusions, etc. - are cleaned of all foreign matter such as dirt, dust, plaster, cement, paint, oil, grease, wax, rust, scale, moisture, concrete curing compounds or release agents, and other contamination.

- Metal surfaces must be cleaned until bright metal is exposed.
- Surface preparation should include vertical surfaces three inches up from the deck.
- Surface preparation shall be by the methods most feasible, such as grinding, abrasive vacuum blasting, sanding, or using a needle gun or other appropriate hand tool(s) to clean the deck.
- Remove all dust and other loose material so that adhesion is assured.

If existing substrate or deck covering cannot be removed, material must be cleaned and inspected for soundness prior to installing PolySpec product. If PolySpec product is to be installed over an existing system, it is imperative that the coating be thoroughly sanded, cleaned and wiped with isopropyl alcohol before installation of the PolySpec decking product(s). Urethane topcoats must be completely removed to ensure adhesion of the system.

Refer to PolySpec Guidelines for Subfloor Preparation for additional details.

INSTALLATION STEPS

1. **PRIMER/BOND COAT APPLICATION:** Mix IMO Sealer for approximately 1–2 minutes using a mechanical jiffy-type mixer. Scrape the sides of the pail to ensure the entire product has been properly mixed. Apply one 5–7 mil coat with brush, short nap roller or squeegee to all surfaces where PolySpec IMO CLAD is to be applied. Avoid puddles. Lightly broadcast 20/40-mesh silica aggregate (PolySpec Non-Skid Grit #1) into the IMO Sealer while it is still wet. After IMO Sealer coat has cured, wipe surface with isopropyl alcohol, and proceed to Step Two. If preferred it is acceptable to trowel body coat into a wet or tacky bond coat.

2. **BODY COAT APPLICATION:** Thoroughly mix Component A Resin of the IMO Body Coat together with Component B Hardener for approximately 1–2 minutes using a jiffy-type mixing blade. Scrape the sides of the pail to ensure the entire product has been properly mixed. Pour catalyzed liquid into a concrete or mortar mixer. Pour complete pail (50 pounds) of provided aggregate into mixer, and mix for approximately 2 minutes, until all particles are wet.

NOTE: If concrete or mortar mixer is not available, plunge mixer (blade available through ITW Polymers Sealants North America, Inc. may be used as an alternate means of mixing.

NOTE: All components must be used promptly once the curing agent has been added to the resin to avoid having material set up in the container. Apply one coat of IMO CLAD using standard cement finishing tools. Use low angle lighting to help show trowel marks so that they can be troweled out. Hand trowel to a compact, level and smooth finish. Maintain 1/4" to 1/2" thickness.

NOTE: To help "slick" the trowel, if necessary, lightly spray or wipe the trowel with isopropyl alcohol.

NOTE: This product is IMO approved to a nominal overall thickness of 1/2". Allow the material to cure for a minimum of 16 hours, or until hard. Knock off any burrs with the edge of a steel trowel. Sweep floor clean.

NOTE: When used as an underlayment, no seal coat is required.

3. Wash tools and equipment with isopropyl alcohol (IPA) saturated rags. Tools that have hardened material on them will require soaking in stripper to remove. For best results, clean tools and equipment with MEK or xylene. Always wear gloves when using this product.

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