



TECHNICAL DATA SHEET – POLYSPEC® 8K

Revised: 3/2022

DESCRIPTION

PolySpec 8K A-60 IMO (International Maritime Organization) Deck Top Insulation is a trowel-applied cementitious compound containing lightweight aggregate particles, with built-in insulation and fire resistance properties. PolySpec 8K meets the requirements of the United States Coast Guard for an A-60 deck at 1.35" (34 mm) and conforms to parts 1 and 3 of the IMO FTP (Fire Test Procedure) Code. This product provides an outstanding combination of thermal insulation and fire protection qualities PolySpec 8K is an excellent underlayment for most finished deck covering systems.

US Coast Guard Approval Number: 164.105/12/0

TYPICAL APPLICATION

GRIP BOND SYSTEM	408 Emulsion and AC Compo @ 3/32" (2mm) thickness
BODY COAT	PolySpec® 8K @ 1.35" (34mm) thickness

PERFORMANCE DATA

INDENTION (I.A.W.M IL-D - 23134)	0.2% of recommended thickness no cracking or detachment
IMPACT RESISTANCE (I.A.W. MIL-D - 23134)	0.08" Permanent indent, no chipping, cracking or detachment
WATER ABSORPTION (I.A.W. MIL - D - 23134)	<7.0%
FIRE RESISTANCE (IMO RES.MSC.61 (67), IMO FP 44/18)	Non-Combustible
FIRE RATING (IMO RES . A.754 (18))	A - 60
COMPRESSIVE STRENGTH (ASTM C - 579)	2,500 psi (175kg/cm ²)
ADHESIVE S TRENNGTH (I.A.W. MIL-D-23134)	190 psi (13.4 kg/cm ²)
WEIGHT	(9.2kg/m ² @1cm) thickness

BENEFITS

- Levels and smooths uneven decks
- Fast cure – 48 hours
- High compressive strength
- Spark proof
- Easily repairable
- Light weight insulation

RECOMMENDED USES

- Decks and floors exposed to wide variations in temperature
- Oil tankers over bulk fuel tanks
- Insulate the living quarters of offshore rigs
- Shipboard applications over mechanical spaces

GENERIC DESCRIPTION: A-60 rated Cementitious Underlayment

PACKAGING/COVERAGE: Bonding System

408 Emulsion

5 – Gallon (18.9L) Unit / 300ft² (27.9m²)

AC Compo

40lb (18.1kg) Bag / 50 ft² (4.6m²)

PolySpec® 8K Body Coat

8K Compo 26 lb (11.8kg) Bag / 4.8ft² (.44m²)
@ 1.35 in (34mm) thickness

POLYSPEC® 8K

A-60 IMO DECK TOP INSULATION

STORAGE & INSTALLATION

STORAGE ENVIRONMENT	Dry area
APPLICATION TEMPERATURE, AMBIENT	50-95°F (4-35°C)
APPLICATION TEMPERATURE, SUBSTRATE	5°F (2°C) above dew point
WORKING TIME @ 77°F (25°C)	20 minutes
SHELF LIFE	12 months
FOOT TRAFFIC, @ 77°F (25°C)	12 hours
FULL SERVICE, @ 77°F (25°C)	48 hours
OVERCOAT WINDOW	Minimum 48 hrs - Maximum unlimited

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 (18-26°C) 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

- Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
- Confirm product performance in specific chemical environment prior to use.
- Prepare substrate according to "Surface Preparation" portion of this document.
- 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.
- Water temperature will affect cure time.** Cool water will help extend working time in hot environments.
- Only mix as much as you can apply in 20 minutes.
- DO NOT ADD ADDITIONAL WATER TO THIN ABOVE RECOMMENDED AMOUNT.**

SURFACE PREPARATION

STEEL: For steel surfaces, a "Near White Metal" ultra high-pressure wash or abrasive blast with anchor profile of 2–4 mils in accordance with Steel Structures Painting Council Specification SP-10 or NACE No. 2 is required. Recommended an Epoxy Primer after surface preparation is complete, allow to cure.

PRECAUTIONS

- Do NOT attempt to reactivate PolySpec 8K once it starts to set.
- When applying PolySpec 8K in spaces exposed to wet environments, be certain to install an ITW Polymers Sealants North America, Inc. approved membrane and a seamless finish deck coating to keep water from coming in contact with the 8K after cure. The system can withstand intermittent wetting. Avoid high exposure to water, such as in wet spaces or exterior installations.

INSTALLATION STEPS

- The GRIP Bonding system:** One 40 lbs. bag of AC Compo should be mixed with 1 gallon (3.8L) of 408 Emulsion. It is suggested that about .5 gallon (1.9L) of the emulsion be poured into the mixing container (20 gal., (60L) with the powder being added to the liquid. A mechanical drill mixer is recommended. The balance of the emulsion should then be added and the resulting mix should be flat troweled tight to the deck leaving a coarse, open surface and making certain that it is not excessively thick. Immediately after troweling, a coarse, stiff bristle broom should be passed over the surface to provide furrows that produce the proper surface texture. This material should be allowed to dry for 12 hours (or overnight) at 77°F (25°C) before applying the PolySpec 8K body coat.
- The PolySpec 8K Bodycoat:** Mix material in an area that is sheltered from wind. The dry components are lightweight and can easily be dispersed into the air during mixing. It is recommended that an appropriate dust mask be worn by personnel involved in the handling and mixing of the materials. A three cubic foot mechanical mortar mixer or mortar box is recommended for mixing. In both cases add the water to the 8K Compo according to formulated ratio of one 26 lb bag of 8K Compo with 1 gallon (3.8L) of tap water. (Do not use salt water) Remove the thoroughly mixed PolySpec 8K from the mixing unit and spread onto the prepared deck with a flat trowel, pushing the mix well into the surface to ensure a proper bond.
- Let the PolySpec 8K take its initial set before doing additional work. The approximate time is 30 minutes at 77°F (25°C). High temperatures reduce this time and lower temperatures increase it. The surface is then flat troweled to a level smooth plane.
NOTE: Allow the 8K decking system to cure for 48 hours before a recommended Polyspec finished decking material is installed over surface.
- Equipment can be cleaned with water. Do not let material harden on equipment, as it will be most difficult to remove.

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