



Performance Coatings & Finishes

Amerthane® 487

Elastomeric polyurethane

Product Data

- Versatile, high-solids, high-build elastomeric coating
- Outstanding abrasion, direct and reverse impact resistance
- Tough, flexible and tear resistant
- Meets environmental VOC requirements
- Good chemical and corrosion resistance
- Excellent slip and release properties

Typical Uses

Railcar hopper linings – coal, ore, fertilizer, salt, plastic pellets.

Power industry – grizzly hoppers, dust and fly ash handling, hoppers, bins, chutes.

Marine – cargo holds, decks.

Mining – conveyors, grinding and size reduction equipment, storage silos.

Wastewater treatment – concrete basins, clarifiers, pond liners.

Outstanding Characteristics

Amerthane 487 provides long-term, cost-effective protection for steel, aluminum, galvanizing and concrete used to handle, convey, transport or store abrasive and corrosive materials. The single coat (8 to 30 mils dry film thickness) direct-to-metal or concrete provides cost effective protection.

Amerthane 487 has high elongation and is flexible; resists cracking from thermal expansion, contraction and structural motion. Excellent for bridging cracks in concrete. Amerlock® 400/Amerthane 487 system can be used over power-tool cleaned, rusted steel.

Chemical Resistance Guide

Environment	Splash and Spillage	Fumes and Weather	Immersion
Acidic	E	E	L
Alkaline	E	E	L
Salt solutions			
Acidic	E	E	F
Neutral	E	E	E
Alkaline	E	E	F
Seawater	E	E	E
Fresh water	E	E	E
Solvents	E	E	NR
Petroleum products	E	E	L

F=Fair G=Good E=Excellent NR=Not recommended L=Limited

This table is only a guide to show typical resistance of Amerthane 487. Amerthane 487 is only recommended for immersion service over concrete. (See Systems table). Contact your Ameron representative for your particular corrosion protection needs.

Physical Data

Finish	Semigloss	
Color	Pale blue, cream	
Components	2	
Curing mechanism	Solvent release and chemical reaction	
Volume solids (ASTM D2697 modified)	68% ± 3%	
Dry film thickness per coat	8 to 30 mils (200 to 750 microns)	
Coats	1-2	
Theoretical coverage	ft ² /gal	m ² /L
1 mil (25 microns)	1091	26.8
20 mils (500 microns)	54.5	1.3
VOC	lb/gal	g/L
487 mixed	2.3	276
487 mixed/thinned	2.7	323
Temperature resistance (Dry)	°F	°C
continuous	200	93
intermittent	250	121
Flash point (SETA)	°F	°C
cure	101	38
resin	86	30
mixed	89	32
Amercoat 923	102	39
Amercoat 12	2	-17

Application Data

Applied over	Primed or prepared steel, or concrete. Primed aluminum or galvanizing.		
Primer	Amerlock 400 or Amercoat 385		
Method	Airless spray		
Mixing ratio (by volume)	4 parts cure to 1 part resin		
Pot life (hours)	°F/°C		
	90/32	70/21	50/10
487	3/4	1 1/4	2
Environmental Conditions	°F		°C
air and surface	40 to 120		4 to 50
Relative humidity	15 to 95%		
Surface temperature must be at least 5°F (3°C) above dew point to prevent condensation.			
Thinner	Amercoat 923		
Cleaner	Amercoat 12		

Typical Mechanical Properties at 70°F

	<u>3</u>	<u>30days</u>
Shore A hardness (ASTM D2240)	62	90
Tensile strength (ASTM D412)	307	3500psi
Elongation (ASTM D412)	70	500%
Die C tear (ASTM D624)		350pi
Split tear (ASTM D1938)		150pi
Impact resistance (ASTM D2794) direct or reverse		160+ in-lbs
Abrasion resistance (ASTM D4060) 1 kg load/1000 cycles CS17 Wheel		weight loss 0

Typical Systems Using Amerthane 487

Type of Service (mils)	Substrate	Primer ¹		Amerthane 487		
			DFT Coating	No. of (mils)	DFT coats	Total/DFT (mils)
Atmospheric	Steel	None	—	1	20	20
	Concrete ²	None	—	1	20	20
	Galvanizing and	Amerlock 400 or	5	1	20	25
	aluminum	Amercoat 385	5	1	20	25
Water immersion	Concrete	Amerlock 400	5	2	20	45
Flooring	Concrete	Amerlock 400	5	1-2	20	25-45
Severe abrasion	Steel or concrete	Amerlock 400	5	2-4	20	45-85

¹Topcoat with Amerthane 487 within 7 days after application of primer.

²Use Nu-Klad® 114A or 965 to fill voids.

Application Data Summary

See Application Instructions for complete information on surface preparation, environmental conditions, application procedures and equipment. To obtain maximum performance, apply as recommended. Adhere to all safety precautions during storage, handling, application and drying periods.

Safety Precautions

Read component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

Shipping Data

Packaging units	1 gal	5 gal
cure	0.8 gal in 1-gal can	4 gal in 5-gal can
resin	0.2 gal in 1-qt can	1 gal in 1-gal can

Shipping weight (approx)	lbs	kg
1-gal unit	9.4	4.3
5-gal unit	48.3	21.9

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
resin and cure 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities. See application instructions for complete information and safety precautions.

The mixed product is nonphotochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

Drying time (ASTM D1640)

@ 30 mils DFT (hours)

	90/32	°F/°C 70/21	50/10
487 touch through	1 6	2 10	4 36

Recoat time

487 minimum	3	6	9
maximum (days)*	3	7	14

Before service (days)

severe abrasion	6	14	30
mild abrasion	3	7	14
water immersion	3	7	14

Optimum physical properties — 30 —

*Roughen surface if maximum recoat time is exceeded.

This product is for professional use only. Not for residential use.

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