



OIL & GAS

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INDUSTRIAL FLOORING

MINING



SEAMLESS SOLUTIONS FOR OVER 40 YEARS

VERTICAL MARKETS

info@specialty-products.com » WWW.SPECIALTY-PRODUCTS.COM

SPECIALTY PRODUCTS, INC.



Specialty Products, Inc. is widely recognized as a global market leader and innovator in manufacturing polyurea elastomeric coatings, polyurethane foam systems, and plural-component application equipment. SPI's products are manufactured under a stringent quality assurance program. SPI offers year-round 24/7 technical support, backed by a dedicated staff with over 230 years of collective industry experience. For over 4 decades, our customers have relied on SPI's industry leading products and unmatched technical support. We invite you to experience the SPI service difference!

Specialty Products, Inc. (SPI) is a pioneer and leading innovator in the polyurea protective coatings industry. SPI's corporate philosophy and passion focuses on continuing to raise the industry bar with cutting edge solutions.

SPI's advanced polyurea products are the next evolution of protective coatings. These ultra high-strength, elastomeric, polyurea coatings simply outperform epoxy, polyurethane, and other hybrid products.

SPI POLYUREA ADVANTAGES

- » Stronger, more durable, longer service life for increased ROI
- » Excellent resistance to many chemicals and hydrocarbons
- » Higher elongation, greater flexibility and won't crack or peel like epoxy. Able to withstand substrate expansion and contraction caused by harsh annual weather cycles
- » High build - apply to any thickness in one application
- » Fast-set - rapid cure, return to service within hours, not days
- » Hydrophobic - relatively unaffected by cool surfaces during the application process
- » Apply in wider-range of temperatures (below 0° to >100° F)
- » Contains 100% solids, no VOCs, solvents or ozone depleting ingredients



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OIL & GAS INDUSTRY



The world needs energy, and the Oil and Gas Industry plays a critical role in meeting energy demands and driving the global economy. The processes involved in producing oil and gas are highly complex and capital-intensive. Government regulations also require secondary containment enclosures capable of protecting the environment from accidental spills. Oil and gas companies need reliable solutions that will protect the environment and critical infrastructure.

Modern polymer chemistry has evolved with the invention of SPI's PTU™ polyurea, the next generation of chemical-resistant coatings. PTU™ is a durable, seamless, flexible coating that is resistant to many petroleum-based chemicals, hydrocarbons, and other caustic substances. Pipes, pipelines, tanks, and equipment are expensive to replace and SPI's protective coating solutions will substantially extend their service life at a fraction of the replacement costs.

OIL AND GAS INDUSTRY APPLICATIONS

- » Interior and exterior protection of steel and concrete tanks
- » Above- and below-ground pipe and tank encapsulation
- » Secondary containment liners for spill protection
- » Evaporation pit and earthen containment liners
- » Non-skid and corrosion resistant flooring, walls, and roofs

FEATURED INDUSTRY SOLUTIONS

PTU™

PTU™ is a new generation of high-performance polyurea coating and is the result of six years of development and field testing. This chemical-resistant coating provides high-ductility, allowing it to move with expanding and contracting surfaces. PTU™ can be sprayed to any thickness in one application and returned to service in a matter of hours.

Polyshield HT-100F™

Polyshield HT-100F™ is a fast-set, high-performance, spray-applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost-effective flexible, tough, resilient monolithic membrane with water and chemical resistance. Polyshield HT-100F™ is an excellent choice of elastomer to topcoat geo-textile fabrics for primary or secondary containment.

Polyshield HT™

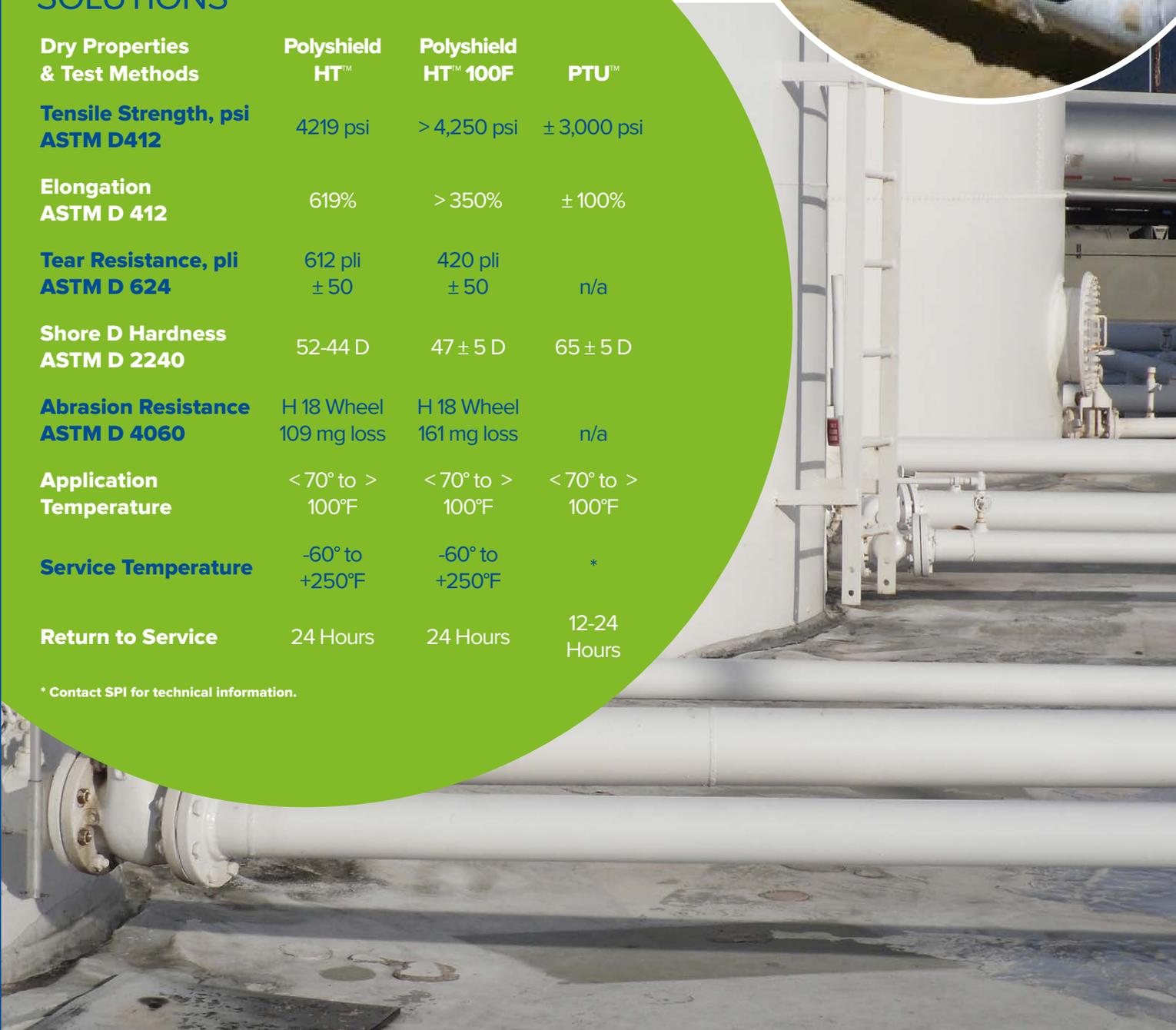
Polyshield HT™ is the work-horse of the polyurea protective coating industry. Millions of square feet of this product have been successfully applied worldwide. This advanced coating combines high elongation and tensile strength properties to form a tough, flexible, resilient monolithic membrane with water and chemical resistance.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.

FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Polyshield HT™	Polyshield HT™ 100F	PTU™
Tensile Strength, psi ASTM D412	4219 psi	> 4,250 psi	± 3,000 psi
Elongation ASTM D 412	619%	> 350%	± 100%
Tear Resistance, pli ASTM D 624	612 pli ± 50	420 pli ± 50	n/a
Shore D Hardness ASTM D 2240	52-44 D	47 ± 5 D	65 ± 5 D
Abrasion Resistance ASTM D 4060	H 18 Wheel 109 mg loss	H 18 Wheel 161 mg loss	n/a
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-60° to +250°F	-60° to +250°F	*
Return to Service	24 Hours	24 Hours	12-24 Hours

* Contact SPI for technical information.



MARINE & BOAT INDUSTRY



Exposure to nature's harsh and unforgiving marine elements (salt water, moisture, air, and extreme temperature) will inevitably corrode and degrade both onshore and offshore infrastructure, vessels, and equipment. Rust, abrasive wear and tear, and slippery surfaces present significant challenges for maintaining safety and protecting your valuable investments.

SPI's high-performance polyurea products provide the ultimate protection for the Marine and Boat industry. These innovative polyurea coatings create a tough barrier that protect a variety of surfaces (metals, wood, concrete, fiberglass, floatation foam). Polyurea is an industrial strength polymer coating that creates an airtight, impermeable seal that locks out the marine elements.

MARINE & BOAT INDUSTRY SOLUTIONS

- » **Port, shipyard, and marina corrosion protection**
- » **Chemical-resistant lining for storage tanks, pipes and cargo areas**
- » **Boat hull impact and abrasion protection**
- » **Non-slip or non-skid deck or floor coating**
- » **Corrosion, abrasion wear and tear protection in cargo handling areas**
- » **Encapsulation of dock floats**
- » **Aquaculture tank lining**
- » **Marine animal enclosure and training tank lining**
- » **Coat or restore coating of pilings above and below water**

FEATURED INDUSTRY SOLUTIONS

K5™

K5™ is an ultra high-strength, high-elongation polyurea, originally developed as a resilient blast resistant polymer. Soon after, it was discovered that K5™ is exceptionally resistant to abrasion, compared to other spray applied coatings. K5™ can be sprayed on to virtually any surface configuration, at any thickness. Therefore, it can be selectively applied to high wear areas.

HT 100F™

Polyshield HT-100F™ is a fast-set, high-performance, spray-applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost-effective flexible, tough, resilient monolithic membrane with water and chemical resistance. Polyshield HT-100F™ is an excellent choice of elastomer to topcoat geo-textile fabrics for primary or secondary containment.

Polyshield HT SL™

Polyshield HT SL™ is a fast-set, high-performance, spray-applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost-effective flexible, tough, resilient monolithic membrane with water and chemical resistance.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Polyshield HT™ SL	Polyshield HT™ 100F	K5™
Tensile Strength, psi ASTM D412	± 4,400 psi	> 4,250 psi	± 5,500 psi
Elongation ASTM D 412	± 400%	> 350%	± 300%
Tear Resistance, pli ASTM D 624	430 pli ± 50	420 pli ± 50	690 pli avg.
Shore D Hardness ASTM D 2240	45 ± 5 D	47 ± 5 D	57 ± 5 D
Abrasion Resistance ASTM D 4060	H 18 Wheel 92 mg loss	H 18 Wheel 161 mg loss	H 18 Wheel 33 mg loss
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-60° to + 250°F	-60° to +250°F	-40° to +200°F
Return to Service	24 Hours	24 Hours	24 Hours



WATER MANAGEMENT INDUSTRY



Water has become the most precious resource on the planet. Potable water is water that is fit for consumption by humans and other animals. An abundant, reliable supply of high-quality, potable water is a critical component of the health and economic well-being of any community. The agriculture industry also needs access to water to grow and harvest the food that feeds the world.

Deteriorating, leaking infrastructure (tanks, pipes, canals) lose billions of gallons of usable water every year. This wastes a valuable resource, potentially exposing a good water source to contaminants, and reduces billable revenue for water management agencies.

SPI offers a solution to these problems with high-performance, elastomeric polyurea coatings. These high-elongation coatings can bridge over cracks to provide a watertight seal, remaining flexible enough to move with the substrate expansion and contraction during extreme annual weather cycles.

WATER MANAGEMENT SOLUTIONS

- » **Potable Water containment (ANSI - NSF 61 approved)**
- » **Irrigation canal and aqueduct lining and repair**
- » **Water treatment and food processing facilities**
- » **Bottling and canning facilities**
- » **Water retention or decorative ponds**

FEATURED INDUSTRY SOLUTIONS

Watersafe® UB

SPI's Watersafe® UB potable water coating is in compliance with the test passing requirements of NSF / ANSI Standard 61 Section 5 (2011). This advanced protective coating was successfully tested by an ANSI nationally accredited lab, and is approved for direct contact with potable water. Watersafe® UB adheres to many polymeric substrates both new and aged, typically without the use of primers or extensive surface preparation. It is a fast-setting, rapid curing, 100% solids, flexible aromatic, two component spray polyurea that can be applied to a variety of substrates including suitably prepared concrete and metal surfaces.

ElastaFlex™ III

ElastaFlex™ III is a third generation pure polyurea waterproofing elastomer. This economical polymer exhibits high tensile strength and very high elongation (>900%), to bridge stress cracks in concrete and other substrates. It contains no tar, asphalt, or VOCs. It can be walked on in minutes and is usually back-filled in less than one hour.

Polyshield HT™ 100F UB

HT™ 100F UB is a high tensile, high elongation, high build, fast-set, elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray-applied polyureas, HT™ 100F UB has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation. It provides a cost effective, flexible, tough, resilient monolithic membrane with water and chemical resistance.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Watersafe® UB	Elasta Flex™ III	HT™ 100F UB
Tensile Strength, psi ASTM D412	± 3,100 psi	± 2,600 psi	> 3,900 psi
Elongation ASTM D 412	550% ± 50%	± 930%	> 325%
Tear Resistance, pli ASTM D 624	450 pli	350 pli ± 50	370 pli ± 50
Shore Hardness A & D ASTM D 2240	45 ± 5 D	35 ± 5 D	50 ± 5 D
Abrasion Resistance ASTM D 4060	CS 17 Wheel 6.0 mg. loss	n/a	n/a
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-40° to 248°F	-60° to +200°F	-50° to +200°F
Return to Service	24 Hours	48 Hours	24 Hours



WASTE WATER INDUSTRY



Expanding global development has led to a steady increase on the demand and capacity of wastewater infrastructure. However, a significant share of the globally produced effluents is still discharged into rivers and streams without prior treatment. This adds to the importance of large wastewater treatment plants for protecting public health, surface and ground water, to ensure a sustainable water supply. Properly treating and containing sewage presents a continual challenge. Wastewater sewage produces hydrogen sulfide gas that breaks down and deteriorates concrete surfaces. This can lead to potential spills and increased maintenance costs.

Specialty Products' high-performance polyurea coatings provide superior protection for the Wastewater Industry. These durable elastomeric coatings form an impermeable barrier that is resistant to hydrogen sulfide gas, water, and many chemicals. SPI's polyurea coatings help to protect the environment and dramatically extend the service life of wastewater infrastructure.

WASTE WATER INDUSTRY APPLICATIONS

- » **Protection of sewage digesters and clarifying tanks**
- » **Tunnel and sewer manhole preservation and restoration**
- » **Protection of above- and below-ground pipes**
- » **Secondary containment liners for spill protection**
- » **Non-skid and corrosion-resistant flooring, walls, and roofs**

FEATURED INDUSTRY SOLUTIONS

Polyshield HT™ 100F UB

HT™ 100F UB is a high tensile, high elongation, high build, fast-set, elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray-applied polyureas, HT™ 100F UB has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation. It provides a cost effective, flexible, tough, resilient monolithic membrane with water and chemical resistance.

Polyshield HT™ 100F

Polyshield HT™ 100F is the work-horse of the polyurea protective coating industry. Millions of square feet of this product have been successfully applied worldwide. This advanced coating combines high elongation and tensile strength properties to form a tough, flexible, resilient monolithic membrane with water and chemical resistance.

PTU™

PTU™ is a new generation of high-performance polyurea coating and is the result of six years of development and field testing. This chemical-resistant coating provides high-ductility, allowing it to move with expanding and contracting surfaces. PTU™ can be sprayed to any thickness in one application and returned to service in a matter of hours.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	HT™ 100F UB	Polyshield HT™ 100F	PTU™
Tensile Strength, psi ASTM D412	> 3,900 psi	> 4,250 psi	± 3,000 psi
Elongation ASTM D 412	> 325%	> 350%	± 100%
Tear Resistance, pli ASTM D 624	370 pli ± 50	420 pli ± 50	n/a
Shore D Hardness ASTM D 2240	50 ± 5	47 ± 5 D	65 ± 5 D
Abrasion Resistance ASTM D 4060	H 18 Wheel 147 mg loss	H 18 Wheel 161 mg loss	n/a
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-50° to +200°F	-60° to +250°F	*
Return to Service	24 Hours	24 Hours	12 -24 Hours

* Contact SPI for technical information.



WATER PROOFING INDUSTRY



Each year, corrosion and water damage effects every corner of the globe. Annual damage costs run in the hundreds of billions of dollars. Studies show the total annual estimated direct cost of corrosion in just the U.S. is a staggering \$276 Billion, approximately 3.1% of the nation's Gross Domestic Product (U.S. Federal Highway Administration & NACE International). The good news is much of this damage is preventable.

Industrial waterproofing provides critical protection to facilities and structures that are vulnerable to the natural threat of intense water damage, flooding, or corrosion. SPI's advanced polyurea coatings protect a variety of construction materials (various metals, concrete, wood, glass, polyurethane foam, geo-textile fabric, and more). These durable elastomeric coatings form an impermeable barrier that is resistant to corrosion, water, and many chemicals. Investing in the right coating technology will greatly extend your investment's service life at a fraction of the replacement cost.

WATERPROOFING & CORROSION PROTECTION SOLUTIONS

- » **Protecting metal structures, bridges, storage tanks, & pipes**
- » **Coating equipment, casted parts, molds, or intricate pieces**
- » **Waterproofing roofs, foundations, decks, and walkways**
- » **Waterproofing and protecting polyurethane and EPS foam**
- » **Water retention or decorative ponds**

FEATURED INDUSTRY SOLUTIONS

HT™ 100F UB

HT™ 100F UB is a high tensile, high elongation, high build, fast-set, elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray-applied polyureas, HT™ 100F UB has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation. It provides a cost effective, flexible, tough, resilient monolithic membrane with water & chemical resistance.

Polyshield HT™ SL

Polyshield HT-SL™ is a fast-set, high-performance, spray-applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost-effective flexible, tough, resilient monolithic membrane with water and chemical resistance.

ElastaFlex™ III

ElastaFlex™ III is a third generation pure polyurea waterproofing elastomer. This economical polymer exhibits high tensile strength and very high elongation (>900%), to bridge stress cracks in concrete and other substrates. It contains no tar, asphalt, or VOCs. It can be walked on in minutes and is usually back-filled in less than one hour. ElastaFlex™ III is an excellent choice of elastomer to topcoat geo-textile fabrics for primary or secondary containment.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	ElastaFlex™ III	Polyshield HT™ SL	HT™ 100F UB
Tensile Strength, psi ASTM D412	± 2,600 psi	± 4,400 psi	> 3,900 psi
Elongation ASTM D 412	± 930%	± 400%	> 325%
Tear Resistance, pli ASTM D 624	350 pli ± 50	430 pli ± 50	370 pli ± 50
Shore D Hardness ASTM D 2240	35 ± 5 D	45 ± 5 D	50 ± 5 D
Abrasion Resistance ASTM D 4060	n/a	H 18 Wheel 92 mg loss	n/a
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-60° to +200°F	-60° to +250°F	-50° to +200°F
Return to Service	48 Hours	24 Hours	24 Hours



WATER FEATURES INDUSTRY



WATER FEATURES

Decorative water feature and pond enthusiasts have long looked for a waterproofing solution that is eco-friendly, non toxic, and will extend the service life of their investment. Older technologies involved using sheet goods with potential leaking seams, or thin rigid-coatings that would crack and fail from harsh weather cycles. These solutions are not effective and end up increasing maintenance and water replacement costs.

SPI's pure polyurea coatings create a durable, seamless, waterproof liner. These advanced, eco-friendly coatings contain zero VOCs and are safe for marine life and plants. The product's high tensile-strength properties allow for placement of rocks, gravel or other decorative features, and are less susceptible to damage compared to sheet good liners. In addition, the coating's elastomeric properties make them flexible enough to move with substrate expansion and contraction during harsh weather cycles.

WATER FEATURE APPLICATIONS

- » **Large fountain ponds**
- » **Municipal fountains and decorative displays**
- » **Decorative Koi ponds**
- » **Natural swimming ponds**
- » **Retention and evaporation ponds**
- » **Water park and recreation facilities**

FEATURED INDUSTRY SOLUTIONS

ElastaFlex™ HP

ElastaFlex™ HP is a high-performance, spray-applied, plural component, pure polyurea elastomer exhibiting very high elongation. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides an extremely flexible, resilient, tough, monolithic membrane with water and chemical resistance.

Ultra Bond™ 100

Ultra Bond™ 100 is a high tensile, high elongation, high build, fast-set elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray applied polyureas, Ultra Bond™ 100 has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation.

Polyshield HT™ SL

Polyshield HT™ SL is a fast-set, high-performance, spray applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost effective flexible, tough, resilient monolithic membrane with water and chemical resistance.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Polyshield HT™ SL	Ultra Bond™ 100	ElastaFlex™ HP
Tensile Strength, psi ASTM D412	± 4,400 psi	± 3,000 psi	± 3,800 psi
Elongation ASTM D 412	± 400%	± 450%	± 700%
Tear Resistance, pli ASTM D 624	430 pli ± 50	380 pli ± 50	370 pli ± 50
Shore Hardness A & D ASTM D 2240	45 ± 5 D	42 ± 5 D	27 ± 5 D
Abrasion Resistance ASTM D 4060	H 18 Wheel 92 mg. loss	n/a	H 18 Wheel 110 mg. loss
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-60° to +250°F	-50° to +200°F	-60° to +200°F
Return to Service	24 Hours	24 Hours	24 Hours



FOOD & AGRICULTURE INDUSTRY



The multi-billion dollar Food and Agriculture Industry plays a vital role in feeding the world's population. The infrastructure needed to take the raw food from the farm to your dinner table ensuring it's safe to eat requires a significant investment. In the U.S., the FDA and Food and Agriculture Industry work closely together to mitigate this public health threat. Unfortunately, cleaning processes don't always stop food contamination, as bacteria can find its way into nooks and the smallest of quarters. Expensive processing equipment can also be prematurely worn down from accelerated corrosion and abrasion damage due to repeated cleaning and everyday wear and tear. The Food and Agriculture Industry needs a reliable coating solution to protect and extend the service life of their investment.

SPI's polyurea protective coatings are FDA – 21 CFR 175.300 (c)/ (d) certified for direct food contact. These fast-set elastomers create a high strength, waterproof, flexible, seamless membrane that protects concrete, wood, metal, and many other surfaces. They provide a durable surface that can withstand repeated power washing and are resistant to many sanitizing chemicals.

FOOD & AGRICULTURE INDUSTRY SOLUTIONS

- » **Protect surfaces in food processing plants and facilities**
- » **Food and beverage interior storage tank linings**
- » **Food transportation liner for semi-truck trailers and railroad cars**
- » **Non-slip surface for floors, walkways, and loading areas**

FEATURED INDUSTRY SOLUTIONS

Ultra Bond™ HT FC

Ultra Bond™ HT FC is a high tensile, high elongation, high build, fast set, elastomer, that is compliant with FDA 21 CFR 175 300 (c) / (d) high temperature, heat-sterilized, non-acid aqueous food contact, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray applied Polyureas, Ultra Bond™ HT FC has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface prep.

Polyshield HT™ Slow FC

Polyshield HT™ Slow FC is a state-of-the-art, high performance, sprayed, plural-component, pure polyurea elastomer, that is compliant with FDA 21 CFR 175 300 (c) / (d) high temperature, heat-sterilized, non-acid aqueous food contact. This system is based on amine-terminated polyether resins, amine chain extenders and prepolymers. It provides a flexible, tough, resilient monolithic membrane with water and chemical resistance.

Polyshield HT™ 100F

Polyshield HT™ 100F is a fast-set, high-performance, spray-applied, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a cost-effective flexible, tough, resilient monolithic membrane with water and chemical resistance. Polyshield HT™ 100F is an excellent choice of elastomer to topcoat geo-textile fabrics for primary or secondary containment.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Ultra Bond™ HT FC	Polyshield HT™ Slow FC	Polyshield HT™ 100F
Tensile Strength, psi ASTM D412	± 4,200 psi	± 3,966 psi	> 4,250 psi
Elongation ASTM D 412	± 380%	± 526%	> 350%
Tear Resistance, pli ASTM D 624	500 pli ± 50	457 pli ± 50	420 pli ± 50
Shore Hardness A & D ASTM D 2240	50 ± 5 D	42 ± 5 D	47 ± 5 D
Abrasion Resistance ASTM D 4060	H 18 Wheel 36 mg. loss	H 18 Wheel 36 mg. loss	H 18 Wheel 161 mg loss
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-60° to +250°F	-60° to +250°F	-60° to +250°F
Return to Service	24 Hours	24 Hours	24 Hours



INDUSTRIAL FLOORING INDUSTRY



Industrial floors, loading zones, parking garages and other high traffic areas are constantly exposed to heavy wear and tear. Forklifts, vehicles, equipment, foot-traffic, everyday operating conditions, even spills of chemicals or other substances can prematurely damage floor surfaces. Slippery surfaces or damaged floors with uneven areas can also create potential fall hazards. Repairing or replacing existing floors can be expensive and create costly operational downtime.

SPI's elastomeric protective coating solutions provide a tough, impermeable, seamless barrier that extends the floor's service life at a fraction of the replacement cost. These ultra high-strength, flexible coatings are able to move with substrate expansion and contraction. They provide a durable surface that is abrasion resistant and able to withstand repeated power washing and cleaning. Non-skid or slip resistant surfaces can also be achieved to help minimize fall or trip hazards. The fast-set or rapid curing properties of the coating allow for a quick return to service.

INDUSTRIAL FLOORING SOLUTIONS

- » **Warehouse and manufacturing facility protective floor coating**
- » **Food and agriculture, medical, veterinarian, & clean room floors**
- » **Protecting floor surfaces in loading areas & forklift zones**
- » **Concrete joint fill or crack repair**
- » **Non-skid or slip resistant floor coating**

FEATURED INDUSTRY SOLUTIONS

K5™

K5™ is an ultra high-strength, high-elongation polyurea, originally developed as a resilient blast resistant polymer. Soon after, it was discovered that K5™ is exceptionally resistant to abrasion, compared to other spray applied coatings. K5™ can be sprayed on to virtually any surface configuration, at any thickness. Therefore, it can be selectively applied to high wear areas.

Polyshield HT™ 100F

Polyshield HT™ 100F is the work-horse of the polyurea protective coating industry. Millions of square feet of this product have been successfully applied worldwide. This advanced coating combines high elongation and tensile strength properties to form a tough, flexible, resilient monolithic membrane with water and chemical resistance.

Polyshield HT™ Traffic Coat

Polyshield HT™ Slow is a state-of-the-art, high-performance, sprayed, plural-component, pure polyurea elastomer. This system is based on amine-terminated polyether resins, amine chain extenders, and prepolymers. It provides a flexible, tough, resilient monolithic membrane with water and chemical resistance. Extended tack time to allow deep surface penetration and adding non-skid aggregates into the coating.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	Polyshield HT™ Traffic Coat	Polyshield HT™ 100F	K5™
Tensile Strength, psi ASTM D412	± 3,900 psi	> 4,250 psi	± 5,500 psi
Elongation ASTM D 412	± 600%	> 350%	± 300%
Tear Resistance, pli ASTM D 624	400 pli ± 50	420 pli ± 50	690 pli Avg.
Shore D Hardness ASTM D 2240	50 ± 5 D	47 ± 5 D	57 ± 5 D
Abrasion Resistance ASTM D 4060	n/a	H 18 Wheel 161 mg. loss	H 18 Wheel 33 mg. loss
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	-50° to +200°F	-60° to +250°F	-40° to +200°F
Return to Service	24 Hours	24 Hours	24 Hours



MINING INDUSTRY



The mining environment takes a tremendous toll on infrastructure and equipment. Extreme temperatures, moisture, dust, air, and the tough process of extracting precious resources, create a perfect atmosphere for corrosion and abrasion damage. This eventually impedes the efficiency of equipment, reduces the integrity of structures, minimizes productivity, and increases maintenance costs.

Originally developed as blast mitigating polymers for a U.S. Government entity, SPI discovered that the next generation of polyurea offers the highest level of abrasion and impact protection. Specialty Products' advanced, industrial strength polyurea coatings create an impermeable, airtight, abrasion and impact-resistant barrier that provides tenacious protection from the harsh mining environment.

MINING INDUSTRY APPLICATIONS

- » **Metal walls, floors and roof decks**
- » **Steel structures, I-beams, tanks, stairs**
- » **Sludge processing/slurry tanks, clarifiers and pipelines**
- » **Silos, chutes, hoppers, classifier and shaker screens**
- » **Roller and belt protection**
- » **Truck and equipment bed liners**
- » **Evaporation pit and earthen containment liners**

FEATURED INDUSTRY SOLUTIONS

K5™

K5™ is an ultra high-strength, high-elongation polyurea, originally developed as a resilient blast resistant polymer. Soon after, it was discovered that K5™ is exceptionally resistant to abrasion, compared to other spray applied coatings. K5™ can be sprayed on to virtually any surface configuration, at any thickness. Therefore, it can be selectively applied to high wear areas.

HT™ 100F UB

HT™ 100F UB is a high tensile, high elongation, high build, fast-set, elastomer, specifically formulated to provide a tenacious bond to certain thermoset plastic surfaces. Unlike most spray-applied polyureas, HT™ 100F UB has the unique advantage of adhering to many polymeric substrates, both new and aged, typically without the use of primers or extensive surface preparation. It provides a cost effective, flexible, tough, resilient monolithic membrane with water and chemical resistance.

PTU™

PTU™ is a new generation of high-performance polyurea coating and is the result of six years of development and field testing. This chemical resistant coating provides high-ductility, allowing it to move with expanding and contracting surfaces. PTU™ can be sprayed to any thickness in one application and returned to service in a matter of hours.

Specialty Products has over 40 unique polyurea elastomer coatings with a wide range of physical properties to meet your specific project requirements. SPI only produces 100% solids, pure polyurea coatings that contain no VOCs, solvents, or harmful ozone depleting ingredients. Our knowledgeable team of industry experts will work closely with you from your project's design phase to the end, providing reliable coating solutions and 365-day, 24/7 technical support.



FEATURED INDUSTRY SOLUTIONS

Dry Properties & Test Methods	PTU™	HT™ 100F UB	K5™
Tensile Strength, psi ASTM D412	± 3,000 psi	> 3,900 psi	± 5,500 psi
Elongation ASTM D 412	± 100%	> 325%	± 300%
Tear Resistance, pli ASTM D 624	n/a	370 pli avg	690 pli avg
Shore D Hardness ASTM D 2240	65 ± 5 D	50 ± 5 D	57 ± 5 D
Abrasion Resistance ASTM D 4060	n/a	n/a	H 18 Wheel 33 mg. loss
Application Temperature	< 70° to > 100°F	< 70° to > 100°F	< 70° to > 100°F
Service Temperature	*	-50° to +200°F	-40° to +200°F
Return to Service	12 - 24 Hours	24 Hours	24 Hours

* Contact SPI for technical information.