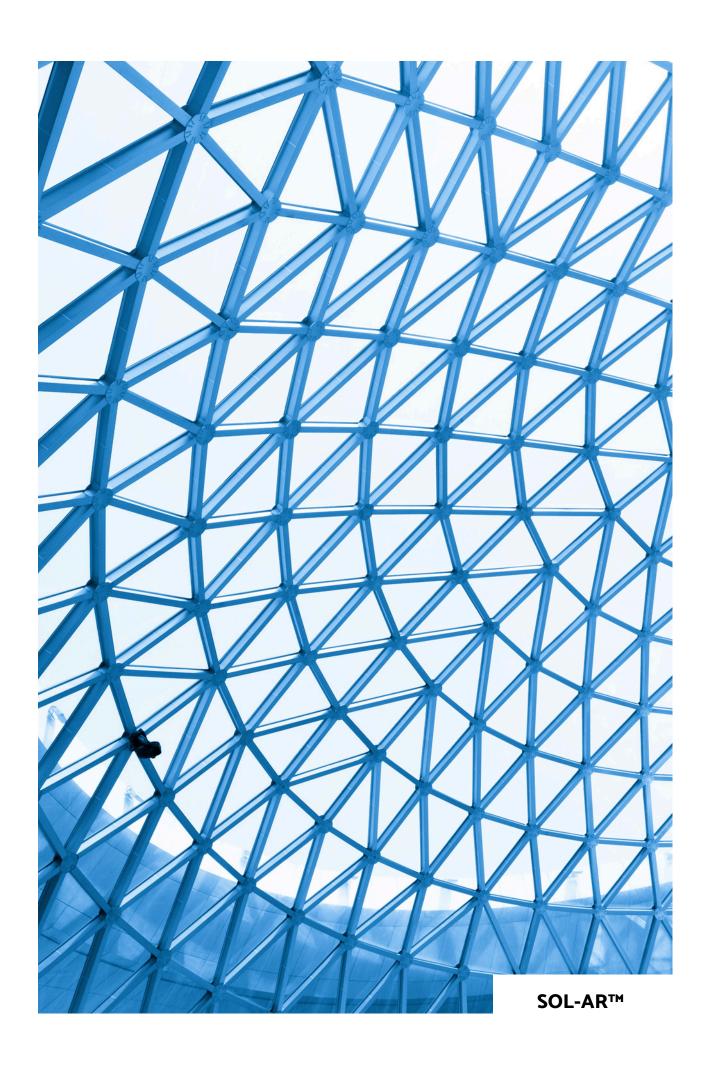
ARCHITECTURE



Buildings are here to last. That's why we work to protect and enhance the beauty and longevity of buildings all over the world by using the right mix.

We formulate to provide a high level of design freedom that makes it easy to match glass, steel, plastic, wood or virtually any other building material. Colors and textures are easily adjusted to suit individual aesthetic preferences without compromising essential functional properties such as weatherability or impact and abrasion resistance.





THERMOSET POWDER COATINGS

SOL-AR™

SOL-AR™ utilizes premium polymers featuring highquality exterior grade pigments to exhibit superior outdoor weathering properties. The unique fluoropolymer technology also provides the highest level of color and gloss retention available.

- High-grade formulation mixed to withstand harsh environmental elements.
- · 30-year limited warranty available.
- Excellent color and gloss retention.
- Excellent resistance to humidity, corrosion, and UV.
- Can be formulated to adhere to most building standards (i.e. AAMA 2605).
- Can be formulated with some Protech Group coatings.

THERMOSET POWDER
COATINGS

Z-SERIES™

Z-SERIES™ is formulated as a super durable polyester resin system, incorporating higher grade pigments and stabilizers with outstanding exterior durability.

- High-grade formulation mixed to withstand harsh environmental elements.
- · 10-year limited warranty available.
- · Excellent color and gloss retention.
- Excellent resistance to humidity, corrosion, and UV.
- Can be formulated to adhere to most building standards (i.e. AAMA 2604).
- Can be formulated with some Protech Group coatings.



THERMOSET POWDER COATINGS

X-GRAF®

The X-GRAF® polyurethane-based coating has been designed to withstand numerous clean-ups, and its appearance will be virtually unaltered, even after using a chemical cleaner. The increased toughness of X-GRAF® also offers a high level of scratch and abrasion resistance, making it an ideal coating for any article subject to graffiti damage.

- Easy-to-clean properties to protect surfaces from the permanent effects of spray paint and markers.
- · Good weatherability for outdoor use.
- · Scratch and chemical resistance.
- Smooth, relatively non-porous and homogeneous finish.
- Can be formulated with most Protech Group coatings.

THERMOPLASTIC COATINGS

POLYARMOR®

POLYARMOR® can be formulated as a functionalized polyethylene copolymer for a flexible, tough, and highly durable plastic coating. It can be applied by fluidized bed, electrostatic spray, flame spray, or extrusion.

- The most versatile thermoplastic coating for extensive market applications.
- Reparable coating for extended product life.
- · Unique one layer, primer-less coating.
- Chemical, corrosion, and abrasion resistance.
- · Sound and electrical insulation.
- Little-to-no maintenance for reduced costs.



THERMOPLASTIC COATINGS

DURALLOY™

DURALLOY™ is formulated as plasticizer with phthalates for flexibility and hardness. It adheres as a single coat.

- · One coat system.
- · Corrosion and chemical resistance.
- · Excellent durability.



PLASTISOL

PLASTISOL is a liquid dispersion of PVC resin in plasticizer. It is formulated based on processing parameters, end-use applications, and desired product specifications. By utilizing an extensive group of raw material additives, PLASTISOL is an incredibly versatile polymer choice.

- Can be custom formulated for a wide variety of market applications and processing methods.
- Optimized for applications including dip coating, dip molding, rotational molding, slush molding, hot melts, inks, textile coatings, and adhesives.
- Performs as a protective, functional and decorative coating for a variety of end products with many types of resistance properties.
- Formulated without solvents and low in Volatile Organic Compounds (VOCs).

APPLICATION MATRIX

	FENCING & RAILING	WINDOWS & DOORS	FACADES & CURTAIN WALLING	ROOF & CEILING TILES	SUN SHADES & SHUTTERS	STONE MASONRY	OUTDOOR LIGHTING
THERMOSET POWDER COATINGS							
AG-KOTE™	②	②	Ø	②	Ø	8	②
CLONECOAT™	8	8	⊗	②	Ø	8	②
E-BOND™	②	©	②	Ø	Ø	8	②
SOLAR™	②	igoremsize	②	8	\bigcirc	8	②
VELVACOAT™	②	igoremsize	②	\bigcirc	\bigcirc	8	②
X-GRAF®	②	igoremsize	②	8	\bigcirc	8	②
Z-SERIES™	②	©	②	②	Ø	8	②
THERMOPLASTIC COATINGS							
DURAVIN™	②	8	⊗	8	8	8	②
DURALLOY™	②	8	⊗	8	8	8	②
POLYARMOR®	•	8	8	8	•	8	Ø
SPECIALTY MATERIALS							
PLASTISOL	8	8	⊗	8	8	•	8
NATLEX	8	8	8	8	8	•	8

PROVEN PERFORMANCE

We are constantly striving to improve by researching new chemistries to solve whatever challenges our customers present to us. If our current product lines do not suit your exact requirements, we have the ability to custom engineer one that will. Through development, we always deliver the right mix.



THERMOSET POWDER COATINGS

Thermoset powder coatings, such as SOL-AR™, X-GRAF®, and Z-SERIES™ are developed and manufactured with state-of-the-art chemistries that comply with the latest environmental and operational regulations.

PRE-TREATMENT	For steel and Aluminum-Phosphating or Zirconium or other suitable surface treatment		
APPLICATION CONDITIONS	Electrostatic powder spray 40 to 120 kv		
FILM THICKNESS	For normal usage 1.5 to 4.0 mils (Color and finish type related)		
HARDNESS	HB to 4H (Formulation related)		
SPECIFIC GRAVITY	1.2 to 1.75 (Color related)		
COVERAGE	160 to 110 ft ² / lbs / mil at 100% efficiency (Color related)		
BAKING SCHEDULE	METAL TEMPERATURE (Formulation Related)		
	8-10 minutes at 280°F (138°C) Super low temperature cure		
	8-10 minutes at 320°F (160°C) Low temperature cure		
	2-6 minutes at 400 (205°C) Fast cure		
	7 minutes at 400°F (205°C) Regular cure		
	8+ minutes at 400F (205°C) Slow cure		



Thermoplastic coatings, such as POLYARMOR®, can be formulated to be compliant with certain guidelines.

TYPE	METHOD	RESULT
Tensile Strength	ASTM D638	3496 psi (24 MPa)
Elongation	ASTM D638	414 %
Vicat Softening Point	ASTM D1525	162 °F (72 °C)
Impact, Direct/Reserve (inch lbs)	ASTM D2794	160/160
Impact Resistance	ASTM G14 - 04	<77 in.lb. if tup weight 3.2 lb.
Taber Abrasion	ASTM D4060	28 mg loss, CS10 wheel & 61 mg loss, CS17 wheel
Adhesion	ASTM D4541	>2000 psi (13.78 MPa)
Cathodic Disbondment	ASTM G95-07	5 mm Average Radial Dispondment
Flexibility	ASTM D522	1/8 in (3.2 mm), no cracks (>32%) (Conical Mandrel)
Salt Spray	ASTM B117	>2000 hrs. No significant under cut or creep
Q-Panel UltraViolet (QUV)	ASTM G53	>2000 hrs, No significant change in color or gloss.
High Irradiance Xenon-Arc	JIS K 5600-7-7:2008	>1000 hrs, No significant change in color or gloss.
Humidity Resitance	ASTM D2247	No blistering or loss of gloss after 1000 hours.
Volatile organic compounds (VOCs)		ZERO



Specialty Materials, such as PLASTISOL, can be tested on demand for various properties:

- Tensile
- Tear
- Elongation
- Density
- Gelation
- · Temperature
- · Flame retardancy
- · Fineness of Grind

- Gloss
- Viscosity
- · Dielectric strength
- Hardness
- · Bond strength
- Heat
- Ageing
- Phthalates

FORMULATING THE RIGHT MIX.

Since 1976, the Protech Group has been developing and manufacturing coatings, paints, and specialty materials. Through quality and innovation, we formulate the right mix to protect and enhance what matters most to our customers. Protech Group products are manufactured in more than 20 sites worldwide. We serve our customers in countless markets and industries, including construction, infrastructure, transportation, consumer goods, and healthcare.





