

CSI SPECIFICATION SECTION 071900

WATER REPELLANTS (WATERPROOFING)

THE ULTIMATE COATINGS COMPANY ECO-THERM® 2500 ELASTOMERIC

PART 1 – GENERAL

1.1 SUMMARY

- Provision of ECO-THERM 2500 ELASTOMERIC coating system for exterior architectural wall applications.
- Surface preparation and installation of the elastomeric coating.

1.2 RELATED SECTIONS

- Section 04 20 00 Unit Masonry
- Section 09 91 00 Painting
- Section 07 62 00 Sheet Metal

1.3 REFERENCES

- ASTM D412 Standard Test Methods for Vulcanized Rubber and Elastomers (Tensile)
- ASTM D2370 Standard Test Method for Tensile Properties of Organic Coatings

- ASTM D624 Standard Test Method for Tear Resistance of Conventional Vulcanized Rubber and Elastomers
- ASTM D6083 Standard Specification for Liquid Applied Acrylic Coating Used in Roofing and Waterproofing
- ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials

1.4 SUBMITTALS

- Product Data: Manufacturer's Technical Data Sheets for ECO-THERM 2500 ELASTOMERIC.
- Samples: Provide sample panel in required color and finish.
- LEED Submittals: Documentation confirming product meets cool wall and Title 24 energy efficiency criteria.

1.5 QUALITY ASSURANCE

- Manufacturer Qualifications: Formulated and manufactured by The Ultimate Coatings Company; no private labeling.
- Installer Qualifications: Installer certified by Manufacturer, if project requires warranty.
- Product Requirements:
 - Certified free from ethylene glycol and plasticizers.
 - o Low VOC, no hazardous air pollutants (HAPs).
 - o Compliant with California Title 24.
- Mock-Up: Provide 4 sq. ft. mock-up for approval prior to work.
- Pre-Installation Meeting: Coordinate with relevant parties as needed.

1.6 DELIVERY, STORAGE, AND HANDLING

- Deliver in original, unopened containers with intact labeling.
- Store in dry, cool locations away from freezing and sunlight.
- Shelf life: Up to 2 years, if stored properly.

1.7 PROJECT CONDITIONS

- Apply only between 50°F and 100°F ambient temperature.
- Avoid application before precipitation or during high humidity.
- Maintain manufacturer recommended ventilation if higher humidity.

1.8 WARRANTY

- Ten-year warranty* for material and workmanship defects when applied by Maufacturer Certified Applicator. (*Longer by prior specification requirements provided by Manufacturer.)
- Minimum two coat application; No single heavy coat permitted.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- THE ULTIMATE COATINGS COMPANY LLC, 2801-B Vassar Street Reno, NV 89502.
- Tel: 1-800-226-9180.
- No substitutions permitted.

2.2 MATERIALS

- ECO-THERM 2500 ELASTOMERIC Coating:
 - o Type: 100% acrylic elastomeric, high-performance.
 - o Colors: White, Grey, Tan, custom IR-optimized shades; CRRC listed.
 - o Finish: Low-sheen (standard), specify if different.
 - o VOC: <50 g/L.
 - Solids by Volume: Approximately 48%.
 - o Compliance: ASTM D6083.

ACCESSORIES:

- Primer: Manufacturer's acrylic primer required on unpainted masonry, stucco and dried out or chalking painted surfaces. Manufacturer's metal primer required for unpainted galvanized sheet metal.
- Sealant: Manufacturer's recommended urethane sealant to be used upon seams and cracks as noted in Manufacturer's Application Guide document.

2.3 PHYSICAL PROPERTIES

<u>PROPERTY</u>	VALUE/DETAILS	TEST METHOD
TENSILE STRENGTH	Min. 250 psi (tested 534 psi)	ASTM D2370
TEAR RESISTANCE	112 psi	ASTM D624
ELONGATION	Min. 300% (tested 550%)	ASTM D412
WATER RESISTANCE	No blistering/re-emulsification	ASTM D6083
SOLAR REFLECTANCE, WHITE	>.87 SR	CRRC/ASTM C1549
SOLAR REFLECTANCE, COLORS	38–68% TSR (typical)	CRRC/ASTM C1549
THERMAL EMITTANCE	0.89	ASTM C1371
PERMEANCE	7.1 perms	ASTM E96
MILDEW RESISTANCE	Excellent, biocide chemistry	ASTM D3273
DIRT RESISTANCE	High; self-cleaning	Manufacturer
DRY FILM THICKNESS (2 COATS)	18-24 mils	Manufacturer
APPLICATION COVERAGE	80-100 sq. ft./gal (walls)	Manufacturer
HARDNESS	72.3 (Shore A)	Manufacturer
DURABILITY	10–15 years	Manufacturer

Values based upon color white. Optimized solar reflectance in all colors.

Coverage dependent upon surface texture, sealed or unsealed and temperature.

2.4 MIXING

- No mixing is required. May be thinned with clean water only, as neccessary due to temperature, @ maximum 1 quart per 5 gallons.
- Do not over-thin.

PART 3 – EXECUTION

3.1 EXAMINATION

- Verify substrate readiness.
- Report unsatisfactory substrates.

3.2 PREPARATION

- Clean surfaces and repair as needed.
- Prime absorbent or disturbed substrate areas.

3.3 APPLICATION

- Apply in minimum two coats.
- Achieve manufacturer specified dry film thickness.
- Apply by airless sprayer (min. 2500 psi, tip sizes 0.027–0.035 in.); If roller, use 3/4" nap.
- Allow at least 4 hours drying between coats (temperature and humidity dependent).
- Do not over-apply
- Back-roll all second coats.
- Review details in Manufacturer Application Guidlines before installation: https://www.ultimatecoatings.net/application-guides

3.4 FIELD QUALITY CONTROL

- Monitor coating uniformity and adhesion.
- Test adhesion on repairs.
- Correct defects.

3.5 CLEANING

- Clean tools with water immediately.
- Dispose wastes responsibly.

3.6 PROTECTION

- Protect coating until full cure and service condition.
- Note: If over 72 hrs passes after drying of first coat in dusty, pollen, or salt water fog or other contaminant conditions, surfaces to be recoated require clean water rinse and completed drying before application.