

SECTION 071800
TRAFFIC COATINGS

BURBANK UNIFIED SCHOOL DISTRICT
SUMMER 2025 ROOFING PROJECTS

1.GENERAL

1.1 SECTION INCLUDES: Traffic coatings for the following applications:

- A. Re-coat of existing traffic-bearing waterproofing system at designated areas, as designated on drawings.

1.2 SCOPE OF WORK

- A. Provide all labor, equipment, and miscellaneous materials to install District purchased and furnished roofing materials over the properly prepared substrate.

- B. DISTRICT SUPPLIED MATERIAL

Note that this project includes the installation of owner-supplied material; the District has acquired roofing material through the CMAS (California Multiple Award Schedules) program.

- C. All products listed in 2.1, D will be furnished by the District. All products not listed in 2.1, D are to be furnished by the Contractor. All products listed in 2.1, D will be manufactured by The Garland Company and purchased by Burbank Unified School District. Any material or accessories required for the installation of the roof system in excess of the district provided material must be supplied by the Contractor. It is up to the Contractor to determine the precise amount of material required for the completion of this project; and to provide excess material, as required.

- D. Contractor to comply with Roof Site Maps to determine scopes of work for each building. Contractor responsible to determine deck type. Color-coded site map for reference only.

- E. Pedestrian Traffic Coating Scope of Work (Buildings highlighted in brown including stairs)
 1. Prepare existing coating via diamond grind to adequate surface profile, as approved by Garland Representative.
 2. Grind and remove all existing striping, paint, markings, and defects in existing coating system.
 3. Vacuum and remove all dust and debris.
 4. Solvent wipe as needed.
 5. Route and caulk all cracks, joints, and horizontal-to-vertical transitions with Green-Lock XL Sealant. Remove all old expansion joint and crack material and fill with backer rod and Green-Lock Sealant XL. Detail per specifications and details.
 6. Grind and "key-in" coating termination areas.
 7. Apply Dura-Walk FC Primer at approximately 250-300 sf/gal.
 8. Apply Dura-Walk 2K Base coat at 50 sf/gal.
 9. Apply Dura-Walk 2K Top Coat at 100 sf/gal and broadcast #16/30 Monterey Aggregate until refusal. Let cure and remove all excess aggregate.
 10. Apply Dura-Walk 2K Top Coat at approximately 80-90 sf/gal.
 11. Re-stripe deck to match previous design.

- F. Site Specific Instructions:
 - 1. Joaquin Miller Elementary School
 - a. Building 12 (Parking Structure): Apply Dura-Walk 2K System to stairs and entire upper deck.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's standard submittal package including specification, installation instructions, and general information for each product indicated. For coatings, indicate VOC content in g/L.
- B. Shop Drawings: Show extent of each traffic coating. Include details for treating substrate joints, cracks, flashings, deck penetrations, and other termination conditions.
- C. Samples for Initial Selection: For each type of finish/system indicated.
- D. Sample Warranty: For Manufacturer's Warranty.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with NRCA Roofing and Waterproofing Manual.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified with documented ISO 9001 certification and minimum of twelve years of documented experience and must not have been in Chapter 11 bankruptcy during the last five years.
- C. Installer Qualifications: Company specializing in performing Work of this section with minimum five years documented experience and a certified Pre-Approved Garland Contractor. Installer must submit a Certified Pre-approval letter from Garland with bid form.
- D. Installer's Field Supervision: Maintain a full-time Supervisor/Foreman on job site during all phases of roofing work while roofing work is in progress.
- E. Product Certification: Provide manufacturer's certification that materials are manufactured in the United States and conform to requirements specified herein, are chemically and physically compatible with each other, and are suitable for inclusion within the total roof system specified herein.
- F. Source Limitations: Obtain all components of roof system from a single manufacturer. Secondary products that are required shall be recommended and approved in writing by the roofing system Manufacturer. Upon request of the Architect or Owner, submit Manufacturer's written approval of secondary components in list form, signed by an authorized agent of the Manufacturer.

1.5 PRE-INSTALLATION CONFERENCE

- A. Convene a pre-installation conference approximately two weeks before scheduled commencement of sealant installation and associated work.
- B. Require attendance of installers of traffic coating products and other associated work which must precede or follow traffic coating work as well as, Architect, Owner, and traffic coating manufacturer's representative.
- C. Objectives include:
 - 1. Review foreseeable methods and procedures related to traffic coating work, including set up and mobilization areas for stored material, and phasing.
 - 2. Review safety concerns related to the work including traffic control methods.

3. Tour representative areas of concrete substrates, inspect and discuss condition of substrate and preparatory work.
 4. Review Drawings, Specifications and other Contract Documents.
 5. Review and finalize schedule related to sealant work and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.
 6. Review required inspection, testing, certifying procedures.
 7. Review weather and forecasted weather conditions and procedures for coping with unfavorable conditions, including possibility of temporary weather protection.
 8. Record conference including decisions and agreements reached. Furnish a copy of records to each party attending.
- D. Mock-Ups: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Mockups establish the standard by which the Work will be judged and should be applied as follows:
1. After surface prep and/or coating removal, one representative area will be identified for the traffic coating mock-up. Apply deck coating to at least 200 sq. ft. to demonstrate surface preparation, joint and crack treatment, thickness, texture, color, and standard of workmanship.
 2. Remove and re-apply mock-ups until they are approved by product rep.
 3. Approved mock-up may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to Project site in original unopened containers or bundles with labels indicating manufacturer, product name and designation, color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials.
- B. Store all coating materials in clean, dry location protected from exposure to direct sunlight. Store materials in the original unopened containers at 50° to 80°F (10° to 27°C) until ready for use.
- C. Store and handle materials in compliance with manufacturer's recommendations to prevent deterioration or damage due to moisture, high/low temperatures, contaminants, or other causes.
- D. Safety: Refer to all applicable data, including, but not limited to safety data sheets, technical data sheets, product labels and specific instructions for specific personal protection requirements.

1.7 PROJECT CONDITIONS

- A. Environmental Conditions: Proceed with work of this section only when existing and forecasted weather conditions will permit the application to be performed in accordance with the manufacturer's recommendations.
- B. New concrete must be cured for at least 30 days prior to applying traffic coating system.
- C. Maintain surface and ambient temperature according to manufacturer's recommendations. Surface temperature must be at least 5°F above dew point.
- D. Concrete must be free of hydrostatic, capillary, or moisture pressure. Substrates in contact with the ground must have a properly installed, functioning, and effective moisture vapor barrier to help prevent potential problems resulting from hydrostatic, capillary or moisture

vapor pressure. Concrete must contain less than 3.0 pounds per 1,000 square feet per 24 hours when tested per ASTM F-1869.

- E. Concrete should have been designed and installed as approved by architect/engineer to minimize random cracking, curling, and slab deflections and shall contain well-designed control and isolation joints as approved by architect/engineer.
- F. Do not apply sealers or membrane curing agents to concrete. Moisture curing is recommended. If said agents have been placed, they are to be removed prior to application of any part of this system.
- G. Surfaces are to be kept free of traffic and no trades shall be permitted in areas during the preparation of the concrete surface, the application of the coating system, or the curing cycle of the coating system.

1.8 WARRANTY

- A. **Installer Warranty:** The contractor shall guarantee that all work performed will be free from defects in materials and workmanship for a period of two (2) years from the date of Substantial Completion. Upon notice of defect in writing to the contractor within two years after completion of work, the contractor shall, at his own expense, make necessary repairs or replacements of the defective work in question.
- B. **Manufacturer's Warranty:** Manufacturer's standard form in which traffic coating manufacturer agrees to furnish traffic coating products to repair or replace those that do not comply with performance and other requirements specified in this section within specified warranty period.
 - 1. **Warranty Period:**
 - a. **Dura-Walk 2K Pedestrian Traffic Coating System (Heavy Duty):** Ten (10) Year Material Warranty
 - 2. Systems equipped with a ten (10) year warranty will require an inspection and re-application of Garland's interlaminary FC Primer, aggregate, and aliphatic Top Coat at five (5) years. This recoat will require prepping the existing coating and applying each product per the manufacturer's specifications.

2.PRODUCTS

2.1 MANUFACTURERS

- A. **Garland Company, Inc. (The);** 3800 E. 91st St., Cleveland, OH 44105. Web Site: www.garlandco.com.
Tony DeMartinis
(818) 900-3000
tdemartinis@garlandco.com
- B. **Roofing Contractor** to be responsible for all Garland materials in excess of District purchased and furnished amount. District to provide material quantities matching the specified amount below. Any additional Garland material required to complete the project is the responsibility of the roofing contractor. Roofing Contractor responsible for purchasing additional materials required, including all freight and tax charges.
- C. **Roofing contractor** to be at delivery of District purchased roof materials. The District has no responsibility to provide any equipment for handling and / or loading the materials to the Contractor's trucks. Upon signature of delivery, the roofing contractor assumes full responsibility for all District purchased roof materials. Any materials lost or stolen are the responsibility of the roofing contractor to replace. Roofing Contractor responsible for freight

and tax on the replaced materials.

- D. Listed in the tables below are quantities of district provided material. Any material or accessories required for the installation of the roof system in excess of the district provided material must be supplied by the Contractor. It is up to the Contractor to determine the precise amount of material required for the completion of this project; and to provide excess material, as required. Maximum quantity of the OFCI materials to be provided for all roofing which will be provided to the Contractor is as follows:

Joaquin Miller Elementary School

Material	Amount	Unit Size
Dura Walk FC Primer	7	15 Gal KIT
Dura Walk 2k Base Coat	113	5 Gal KIT
Dura Walk 2k Top Coat - Color #1	57	5 Gal KIT
Dura Walk 2K Top Coat - Color #2	71	5 Gal KIT

2.2 MATERIALS, GENERAL

- A. Compatibility: Provide traffic coating, joint sealants, and other related materials that are compatible with one another and with substrates under conditions of service and application, as demonstrated by traffic coating manufacturer based on testing and field experience.
- B. Colors: Provide color of exposed traffic coating to comply with the following:
1. Provide selections for review and approval by Owner from manufacturer's full range of standard colors for products of type indicated.

2.3 TRAFFIC COATING

- A. Primer: FC Primer, two-component high solids, low VOC epoxy concrete sealer/primer.
1. VOC 100g/l
 2. Hardness (ASTM D-2240) 70 ± 5 Shore D
 3. Solids Content (ASTM D-1353; mixed) 92 ± 2%
- B. Polyurea Base Coating: Dura-Walk 2K Base Coat, two-component, 100% solids, solvent free, hybrid polyurea elastomer coating.
1. VOC Solvent Free
 2. Tensile Strength (ASTM D-412) 2000 ± 200 psi
 3. Ultimate Elongation (ASTM D-412) 600 ± 100%
 4. Tear Resistance (ASTM D-1004) 250 ± 25 pli
 5. Hardness (ASTM D-2240) 73 ± 3 Shore A
- C. Polyurea Intermediate Coating: Dura-Walk 2K Top Coat, two-component, high solids, low VOC hybrid polyurea elastomer coating.
1. VOC (mixed) < 100 g/l
 2. Tensile Strength (ASTM D-412) 3750 ± 400 psi
 3. Ultimate Elongation (ASTM D-412) 175 ± 50%
 4. Tear Resistance (ASTM D-1004) 350 ± 50 pli
 5. Hardness (ASTM D-2240) 90 ± 5 Shore A
- D. Polyurea Top Coating: Dura-Walk 2K Top Coat, two-component, high solids, low VOC hybrid polyurea elastomer coating.

Note: Dura-Walk 2K Top Coating is available in four (4) different colors.

- E. Aggregate:
 - 1. Uniformly graded, hard non-crushable, non-angular, rounded, washed silica sand (16/30 mesh), unless otherwise specified.
 - 2. Spreading Rate: As recommended by manufacturer for the specified system, substrate, type of aggregate, location, and service conditions indicated.
- F. Joint and Crack Sealant: Green-Lock Sealant XL, single-component joint sealant.
- G. Component Coat Thickness: As recommended by manufacturer for substrate and service conditions indicated, but not less than the following (measured excluding aggregate):
 - 1. Primer: Apply specified primer at 300 sq. ft. / gal; approx. 5 wet film thickness (WFT)
 - 2. Base Coat: 50 sq. ft. / gal; 32 mils WFT
 - 3. Intermediate Coat: 100 sq. ft. / gal; 16 mils WFT
 - 4. Top Coat: 100 sq. ft. / gal; 16 mils WFT
 - 5. Total System Thickness: 64 mils WFT

3.EXECUTION

3.1 EXAMINATION

- A. Verify that substrate is ready to receive work; surface is clean, dry, and free of substances that could affect bonding or the performance of the new traffic coating.
- B. Verify that the concrete meets the requirements of the coating manufacturer.
- C. Begin coating application only after minimum concrete curing and drying period recommended by the designer of record and concrete contractor has passed, after unsatisfactory conditions have been corrected, and after surfaces are dry.
 - 1. Verify that substrates are visibly dry and free of moisture.
 - a. Test for vapor transmission by plastic sheet method according to ASTM D4263
 - 2. Verify that no vapor drive issues will negatively affect the performance of the new traffic coating.
 - a. Calcium chloride test will establish vapor drive issues within the slab that may prevent functional performance of new coating applications. Install several test kits around the area to be coated and compare the weight of the calcium chloride before and after the duration of the test. All testing should be documented and filed as a pre-job checklist item.
- D. Perform adhesion tests per manufacturer's recommendations when going over existing traffic coating membranes or coatings.
- E. Verify that all other work involved with this area, done under other sections, has been completed and accepted by the architect and general contractor prior to starting the waterproofing application.
- F. Application of coating indicates acceptance of surface and conditions.

3.2 PREPARATION

- A. Surface Cleaning: Clean substrate to remove any and all surface contaminants. Concrete surfaces must be thoroughly clean, dry and free from any surface contaminants or cleaning residue. Acceptable methods of cleaning are sandblasting, shotblasting or mechanical grinding followed by the complete removal of any residue. Concrete surface profile required for Dura-Walk 2K coating is CSP-3.
- B. Mask off all adjoining areas that are not to receive traffic coating.

- C. Provide a suitable workstation to mix the coating materials.
- D. The concrete surfaces shall be of sound structural grade (3000 psi compressive strength recommended), of adequate design and thickness, and shall have a steel troweled followed by a fine broom finish, free of fins, ridges, voids or air entrained holes.
- E. Concrete: Special attention should be given to smoothness of surface and freedom from contaminants including paint or previous coatings. Consult manufacturer's representative for alternate procedures for coating over existing coatings. Such procedures are highly dependent on specific job conditions. Curing compounds if used shall be removed by shotblasting. In the event specifications are not met, the following corrective procedures are recommended.
 - 1. Surface Contaminants: Wipe up grease or oil with a solvent and absorbent sweeping material. Disposal of this material should be in accordance with local laws and codes. Wash with solvent-alkaline cleaners diluted one part cleaner and five parts water. Rinse thoroughly with clean water.
 - a. Remove curing compounds by shotblasting. Grinding may remove heavy deposits of contaminants.
 - 2. Fins and projections: Grind smooth.
 - 3. Rock Pockets and Depressions: Commercially available concrete patching compounds can be used provided they contain no bitumen based binders. Only those patching compounds utilizing a binder are recommended for patching. Neat cement sacking is NOT an acceptable surface preparation for coatings.
 - 4. Small/Shallow Depth Concrete Repairs – Perma-Top Patch Kit: Sound the concrete to outline the size and shape of the spalled and/or debonded concrete area. Saw cut the perimeter of the repair area to prevent feathering out of the patch material. Chipped out the deteriorated concrete and around the reinforcing steel. Sandblast or grind the reinforcing steel and patch area to remove rust and surface contaminants that would prevent good adhesion of the repair material. Patch with Perma-Top Repair Kit per the product data sheets. See typical shallow depth concrete repair detail for more information.
 - 5. Deep/Larger Concrete Repairs – Please contact the manufacturer's representative.
 - 6. Heavily Pitted Areas of Concrete – Leveling Course: Shotblast or grind the pitted areas. Use a notched squeegee to float Treadshield Flex Primer over the pitted areas and broadcast sand aggregate into the epoxy while it is still wet. Allow to cure before installing Dura-Walk 2K Traffic Coating system.

3.3 TERMINATIONS AND PENETRATIONS

- A. Prepare vertical and horizontal surfaces at terminations and penetrations through the traffic coatings and at expansions joints, drains, and sleeves by installing Green-Lock Sealant XL per the manufacturer's specifications.

3.4 JOINT AND CRACK TREATMENT

- A. Rout all cracks > 1/16" and caulk with Garland single-component Green-Lock Sealant XL.
- B. Remove and replace sealant at all expansion, control, cove, and construction joints with Green-Lock Sealant XL.

3.5 WALLS AND EDGE DETAILING

- A. Apply a cove joint of sealant at the deck to wall transition. Apply a detail coat of FC Primer and 23 mil Base Coat, turning up the wall 4" (refer to details and Application Guide for reference).
- B. For slab edges, turn down face of slab edge 4" with FC Primer, Base Coat and Top Coat

applications.

3.6 INSTALLATION

A. DURA-WALK 2K PEDESTRIAN TRAFFIC COATING SYSTEM

1. **Technical Advice:** The installation of this waterproofing membrane shall be accomplished in the presence of, or with the advice of the manufacturer's technical representative. Contact the nearest regional office for assistance.
2. **Detail Work:** Apply a 4" wide application of FC Primer followed by a 23 mil detail coat of Dura-Walk 2K Base Coat at all cracks, transitions, movement joints, control joints and cove joints.
3. **Primer:** Prime all surfaces to be coated with FC Primer at the rate of 300 sf/gal, mix only as much as can be used in a 2 hour period and allow to cure.
4. **Base Coat:** Install 32 mil application of Dura-Walk 2K Base Coat at the rate of 50 sf/gal in low humidity conditions (< 75% R.H.). Apply Base Coat with a notched squeegee and back roll with a heavy-duty nap roller to help avoid pin holes and squeegee lines. Repair any pinholes as they occur. Allow Base Coat to for at least 4 hours, and until firm, before overcoating (but not more than 24 hours before installing the next intermediate or top coat).
5. **Intermediate Coat:** Install 16 mil application of Dura-Walk 2K Top Coat at the rate of 100 sf/ gal in low humidity conditions (< 75% R.H.) with a notched squeegee. While coating is still wet, broadcast 16/30 rounded sand aggregate uniformly into wet coating until refusal, to provide an even, uniform aggregate layer with no bare areas. Allow the Intermediate Coat to cure for at least 4 hours, and until firm, before overcoating (but not more than 24 hours before installing the next intermediate or top/finish coat). Sweep and vacuum all excess aggregate prior to final Top Coat Installation.
6. **Top/Finish Coat:** Install 16 mil application of Dura-Walk 2K Top Coat in the desired color at the rate of 80-100 sf/ gal in low humidity conditions (< 75% R.H.) with a squeegee. Back roll with a heavy-duty nap roller to help avoid pinholes and squeegee lines. Repair any pin holes as they occur. Allow Top Coat to cure overnight for light foot traffic (24 hours for full cure).
7. **Line Striping:** Re-stripe entire deck with heavy-duty traffic marking paint to match all previous designs.

3.7 CLEANING AND PROTECTION

- A. Protect traffic coatings from damage and wear during the remainder of construction period.
- B. Clean spillage from adjacent construction using cleaning agents and procedures recommended by the manufacturer of affected construction.
- C. Coordinate traffic re-striping and phasing operations with Owner.

3.8 FIELD QUALITY CONTROL

- A. **Inspection:** Provide manufacturer's field observations at start-up and at intervals of 3 days per working week. Provide a final inspection upon completion of the Work.
 1. Warranty shall be issued upon manufacturer's acceptance of the installation.
 2. Field observations shall be performed by a Sales Representative employed full-time by the manufacturer and whose primary job description is to assist, inspect and approve membrane installations for the manufacturer.
 3. Provide observation reports from the Sales Representative indicating procedures followed, weather conditions and any discrepancies found during inspection.
 4. Provide a final report from the Sales Representative, certifying that the roofing system has been satisfactorily installed according to the project specifications, approved details and good general roofing practice.

B. Correct defects or irregularities discovered during field inspection.

END OF SECTION