

Roofliner, Inc.
Commercial Roofing and Waterproofing Roofliner
GUIDE SPECIFICATION
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PART 1 GENERAL

1.01 Section Includes

- A. Fluid-Applied Roofing and Waterproofing Systems Including the Following:
 - 1. Adhered fully reinforced, fluid-applied, polyurea waterproofing membrane system
 - 2. Substrate preparation, cleaning, leveling and patching.
 - 3. Waterproofing membrane installation.

1.02 References

- 1. ASTM D412 Tensile Strength
- 2. ASTM D2240 Tear Strength
- 3. ASTM D412 Elongation
- 4. ASTM D1737 Hardness
- 5. ASTM D1737 Flexibility
- 6. ASTM E822 Hailstone

1.03 Submittals

- 1. Submit under provisions of section 01 30 00 - Administrative Requirements.
- 2. Product Data: Provide current standard product literature indicating characteristics of membrane materials, and components; submit copies of current Material Safety Data Sheets (MSDS) for components of the work.
- 3. Shop Drawings: Submit shop drawings of fluid-applied reinforced polyurea showing a project plan, size, and attachment for review and approval by the Owner's Representative.
- 4. Warranty Documentation: Submit 2 executed copies of both the manufacturer and applicator warranties for the periods stipulated, starting from the date of the substantial completion. Each warranty must be signed by an authorized representative of the issuing company
- 5. Selection Samples: Two complete sets of samples representing manufacturer's full range of available products, colors, textures, thicknesses, and surfacing.
- 6. Verification Samples: For each product and finish specified, two samples representing actual products, colors, textures, thicknesses, and surfacing.

1.04 Storage and Handling

- 1. Store roofing materials and accessories in a dry location, in original containers.
- 2. Store all products in an upright position. Do not double stack unless product is on pallets and packaged as received from factory. Acceptability of double stacking must be indicated on product packaging.
- 3. In cold weather store Roofliner in a heated area
- 4. Store combustible materials away from heat and open flame.
- 5. Handle all materials in such a manner as to avoid damage or contamination with moisture or foreign matter.

1.05 Environmental Requirements

- 1. Installation of Roofliner should not be performed during wet conditions.

2. Verify adhesion regularly during application.
3. In cold weather conditions, store materials in a heated location until needed
4. Minimum working temperatures shall take wind chill factor into consideration. Application temperature shall be considered to be the temperature minus ½ the wind speed.

1.06 Protection

1. Contractor and contractor's crew members shall observe and enforce all appropriate safety and fire department regulations during installation and handling of Roofliner.
2. A fully operational fire extinguisher shall be maintained within reasonable access to each spray rig, and/or as required by local fire department regulations.
3. Provide protection against staining and mechanical damage for newly applied roofing and adjacent surfaces throughout this project.
4. Limited Access: Prevent access by the public to materials, tools and equipment during the course of the project.
5. Debris Removal: Remove all debris daily from the project site and take to a legal dumping area authorized to receive such materials.
6. Site Condition: Complete, to the owner's satisfaction, all job site clean-up including building interior where applicable, exterior and landscaping where affected by the construction.

1.07 Prerequisites

1. Submit, in writing, a document stating that the applicator of the primary membranes specified in this Section is recognized by the manufacturer as suitable for the execution of the work.

REQUIREMENTS PRIOR TO JOB START:

1. NOTIFICATION: Give a minimum of 5 days notice to the owner and manufacturer prior to commencing any work and notify both parties on a daily basis of any change in work schedule.
2. PERMITS: Obtain all permits required by local agencies and pay all fees which may be required for the performance of the work.
3. SAFETY: Familiarize every member of the application crew with all fire and safety regulations recommended by OSHA, NRCA and other industry or local governmental groups. See also Section 3.12.

1.08 Quality Assurance

1. All work to be performed in accordance with the Roofliner, Inc. published specifications. Designer is to be advised of any discrepancies prior to commencement of work.
2. At the beginning of the work and during all phases of the work allow access to the site by the manufacturer's representative.
3. Submit documentation that Roofliner complies with the appropriate ASTM standard for the specific material type.

1.09 Warranty

1. The Roofliner membrane manufacturer, based on the system described within this specification, shall furnish the following warranty for this project: (*Specifier: Indicate A or B and complete all references to Year(s)*):

(_____) (_____) -Year Material and Workmanship Warranty (NDL)

Roofline manufacturer warrants that the roofing system shall remain free from workmanship defects and that the roofing membrane shall remain free from any manufacturing defects which would affect the watertight integrity of the roof system for a period of 10 years (from date of installation through the end of year _____). Scope of warranty shall be limited to cost of materials and labor to

restore the roof to watertight condition. Installing contractor must be approved by the Roofliner, Inc. manufacturer for installation of its 10 year roof systems and all aspects of manufacturer's requirements for NDL warranties with respect to said project must be complied with, as outlined in manufacturer's published warranty. Copies of manufacturer's sample warranties to be submitted with bid.

(____) (_____) -Year Limited Material Warranty

Roofline manufacturer warrants that the roofing membrane and other materials provided by the manufacturer shall remain free from any manufacturing defects which would affect the watertight integrity of the roof system for a period of 10 years (from date of installation through the end of year _____). All aspects of manufacturer's specification and material application requirements with respect to roof system must be complied with, as outlined in manufacturer's published warranty. Copies of manufacturer's sample warranties to be submitted with bid.

2. Contractor hereby warrants that roofing system will be installed in a workmanlike manner in accordance with Roofliner, Inc. specifications and industry standards, and will remain in a watertight condition and leakproof. Contractor's warranty is for not less than two (2) years from the date of installation.

1.10 Deck Requirements

1. The roof deck must be well secured to the structural assembly or framing of the building, and be able to support the designed live and dead loads required by the building code of jurisdiction.
2. The roof deck must be sound, smooth, dry, free from deformation, and have adequate slope for proper drainage.
3. The roof deck must be suitable for the type of roofing system selected.

- 1.11 Scope of Work: The work to be performed under this specification shall include but is not limited to the following: Attend necessary job meetings and furnish competent and full time supervision, experienced roof mechanics, all materials, tools, and equipment necessary to complete, in an acceptable manner, the roof installation in accordance with this specification. In addition, application practice shall comply with requirements and recommendations contained in the latest edition of the Handbook of Accepted Roofing Knowledge (HARK) as published by the National Roofing Contractor's Association.

- 1.12 Local Regulations: Conform to regulations of public agencies, including any specific requirements of the city and/or state of jurisdiction.

- 1.13 Manufacturer Requirements: Roofliner, Inc. shall provide direct trained company personnel to attend necessary job meetings, perform periodic inspections as necessary, and conduct a final inspection upon successful completion of the project.

- 1.14 Recommended Maintenance: In addition to the guarantee, furnish to the Owner Roofliner's printed recommendations for proper maintenance of the specified roof system including inspection frequencies, penetration addition policies, temporary repairs, and leak call procedures.

PART 2 PRODUCTS

- 2.01 _____ Insulation: Primary insulation shall be rigid insulation set forth by ASTM for its particular type. Insulation shall be mechanically attached (where feasible). Insulation type and brand subject to approval by Roofliner, Inc.
- 2.02 Walkways, if needed, shall be provided by installing appropriate walkway material as specified by Roofliner, Inc.
- 2.03 Materials Criteria: Roofliner material specified must meet established ASTM criteria for the specific product type as outlined in section 1.02 of this specification. Documentation of the ASTM standards met must be provided with bid

PART 3 EXECUTION

- 3.01 Examination: Verify that all deck and substrate surfaces are acceptable to receive the new roofing system. Deck substrate must be smooth, dry, clean and free from deformities or defects. No excessive deflection or movement shall occur and drainage shall be positive and adequate. Steel decks must be securely fastened as per manufacturer's specifications and deflection must be less than $1/240^{\text{th}}$ of the clear span under all types of roof traffic/load conditions.
- 3.02 Flashing details: Perform flashing with Roofliner roofing membrane as required at all penetrations, curbs and parapet walls.
- 3.03 Roof layout shall be in accordance with NRCA published recommendations, with all membrane installation beginning at the low point of the roof and in such a manner that no laps are against the flow of water.
- 3.04 Workmanship: all aspects of roof system installation are to be performed in accordance with NRCA published recommended standards for good workmanship and Roofliner, Inc. published specifications.
- 3.05 Safety
1. All appropriate safety measures are to be exercised by the contractor with respect to workers, materials application, equipment and property.
 2. All crewmembers shall be properly trained in the recommended safety procedures for the work to be performed. Appropriate safety clothing will be worn including gloves, long pants, work boots, long sleeved shirts, and hardhats as deemed appropriate.
 4. A minimum of one ABC type fire extinguisher, within accessible distance and/or as required by local fire dept. regulations. Observe all recommended safety precautions.
 5. Hazardous materials must be properly labeled and stored.
 6. Store all material safely.
 7. Refer and adhere to the guidelines in the roofing material manufacturer's specification manual, safety sections.
- 3.06 Housekeeping: Job site and premises are to be kept clean and work is to be conducted in a manner least disruptive to building/site occupants.
- 3.07 Weather Considerations: Roofing installation will not be attempted to wet surfaces or during rainfall. No more roofing will be applied in a given day than can be properly covered and sealed.