

# RETRO - PLY TEN

## 100% ROOF REPAIR SYSTEM

### PART 1 - GENERAL

#### RELATED SECTIONS

- A. Installation relating to roof repair system:
1. As per roof membrane manufacturer requirements, instructions or detail drawings are pertaining to this project. If referenced manufacturer specifications, industry standards are in conflict; the more restrictive and higher quality shall govern.

#### REFERENCES

- A. American Society for Testing and Materials (ASTM): Reference latest revisions of standards unless otherwise indicated.
- B. If referenced manufacturers' specifications, industry standards or applicable building codes, etc. are in conflict, and the more restrictive and higher quality shall govern.
- C. Factory Mutual:
1. Meet F. M. Standard 4470 Class I Roof Covering: I-90.
- D. Building Code:
1. Meet applicable provisions of local, state and national building codes. This also applies to agencies regulating safety, environmental, transportation, etc.
  2. Meet applicable requirements of the current edition S.B.C.C.I. "Standard Building Code."

#### ROOF SYSTEM DESCRIPTION

- A. Installation of **RETRO-PLY TEN** 100% roof repair system and roof deck shall conform to manufacturer's requirements. Manufacturers' specification designed specifically for this project may supersede printed literature. Project drawings shall not be exclusive and may supersede printed literature. Project drawings shall not be exclusive and used mutually with requirements set forth in project specification. In the event where provisions of codes, safety orders, contract documents, referenced manufacturers specifications or industry standards are in conflict, the more restrictive and higher quality shall govern.

- B. Roof deck shall meet the following criteria as minimum standards:
1. The selection and design of a roof deck system shall be determined by the design professional and owner.
  2. Construct all decks in accordance with requirements and recommendations of the deck manufacturer.
  3. All roof decks shall be designed and constructed:
    - a. So as not to deflect more than one-two hundred fortieth (1/240) of the clear span under all load conditions.
    - b. To provide a minimum one-quarter (1/4) inch per-foot slopes and/or designed so that standing water dissipates within a 48-hour period.
    - c. To accommodate movement of the roof system.
- C. List of **RETRO-PLY TEN** 100% roof repair materials:
1. Stitch bound polyester sheet 40" in width.
  2. ARC "Tack Coat" Blue (gray optional)
  3. ARC "SEBS Stain Blocker" (aluminum)
  4. ARC-FLEX 35M APP Smooth (self adhering)
  5. ARC "SEBS Roof Coat" (white)
  6. ARC "POND-X" (roof leveler)
  7. ARC "ACRYLIC PRIMER" or "HP- PRIMER" or "ASPHALT PRIMER"

#### DELIVERY, STORAGE AND HANDLING

- A. Deliver roofing materials and accessories in manufacturer's original protective containers with labels intact and legible. Comply with manufacturer's published instructions for storage and handling.
- B. Store materials in dry, protected areas, on clean, raised platforms with securely anchored weather protective covering.
- C. Store flammable products away from sparks or open flames.
- D. Store roofing materials at a minimum of forty-five (45) degrees Fahrenheit prior to use as recommended by the manufacturer. Protect materials from freezing.

#### ENVIRONMENTAL REQUIREMENTS

- A. Proceed with roofing work only when weather conditions comply with manufacturer's recommendations. Do not exceed temperature limitations recommended by the manufacturer.

## **PART 2 - PRODUCTS**

### **GENERAL**

- A. Products in **RETRO-PLY TEN** 100% Roof Repair System:
1. Polyester reinforcement Tietex, ARC, Superior
  2. ARC "TACK COAT" Blue (gray optional)
  3. ARC "SEBS STAIN BLOCKER" (aluminum)
  4. ARC-FLEX 35M APP Smooth (self adhering)
  5. ARC"SEBS ROOF COAT" (white ENERGY STAR Listed)
  6. ARC "POND-X" (Roof Leveler)
  7. ARC "ACRYLIC PRIMER" or "HP- PRIMER" or "ASPHALT PRIMER"

### **PREPARATION FOR 100% ROOF REPAIR**

#### **A. BUILT UP ROOF AGGREGATE/SMOOTH**

1. Remove all existing aggregate from roof membrane if present.
2. Remove all dust and debris from roof area.
3. Repair splits and damaged roof membrane during aggregate removal with Polyester and Tack Coat Blue. Optional other repair is asphalt primer and ARC-FLEX self adhering membrane.
4. Blisters are to be "X" cut cavity filled with Tack Coat Blue or Pond-X and allowed to dry. Apply two (2) plies of Polyester reinforcement in Tack Coat Blue over repaired areas. Allow to dry. Optional blister repair is asphalt primer and ARC-FLEX self adhering membrane.
5. Known standing water areas are to be leveled with POND-X roof leveler and allowed to dry.
6. Aggregate/Smooth surface BUR'S in order to qualify for Material and Labor Warranty requires either one ply (1) of Polyester reinforcement after item #3 above has been completed or one ply of (1) ARC-FLEX 35M APP Smooth.

#### **B. MODIFIED BITUMEN GRANULATED/SMOOTH**

1. Remove all dust and debris from roof area.
2. Repair seams, splits and damaged roof membrane with Polyester reinforcement and Tack Coat Blue. Optional other repair is asphalt primer and ARC-FLEX self adhering membrane.

3. Blisters are to be “X” cut cavity filled with Tack Coat Blue or Pond-X and allowed to dry. Apply two (2) plies of Polyester reinforcement in Tack Coat Blue over repaired areas. Allow to dry.
4. Known water pond areas are to be leveled with POND-X roof leveler. Allow to dry.
5. Granulated/Smooth surface BUR’S in order to qualify for Material and Labor Warranty require one (1) ply Polyester reinforcement.
6. All Modified Bitumen Smooth removed requires either one ply (1) of Polyester reinforcement after item #3 above has been completed or one ply of (1) ARC-FLEX 35M APP Smooth.

### C. EPDM, PVC AND TPO’S

1. Remove all dust and debris from roof areas
2. Prime roof with required primer at one (1) gallon per 300 square feet.
3. Repair seams and damaged roof membrane with Polyester reinforcement and Tack Coat Blue. Allow to dry.
4. Damaged roof membrane will require complete roof to have Polyester reinforcement adhered with Tack Coat Blue and Polyester.
5. There is no warranty available for TPO’S or PVC roof that have not weathered a minimum of five (5) years.

### INSTALLATION OF POLYESTER PLY 100% ROOF REPAIR OR TEXKFGJG

- A. Start at the low point of the roof install Polyester shingle fashion with 4”overlap.
- B. Roll Polyester reinforcement out approximately 15’ and pour ARC Tack Coat Blue across top of Polyester at the rate of 3.0 gallons per 100 square feet.
- C. Use a soft bristle broom to embed the Tack Coat Blue in the Polyester until Polyester is completely saturated.
- D. Allow a minimum of 3-days to completely dry. Low areas that retain moisture (water ponds) must air blown or hand broomed until this area is dry and then allowed to dry thoroughly.
- E. Alternative to above items A through D is to apply Asphalt Primer to entire roof surface at 1 gallon per 200 square feet. Allow to dry 2 to 3 hours. Apply ARC-FLEX 35M APP Smooth starting at the low point of the roof. Release film backing and press ARC-FLEX 35M APP Smooth into place following the shingle 4” overlap and 6 “end lap rule.

## FLASHING SYSTEMS - AGGREGATE AND SMOOTH

- A. All roof penetrations are to be flashed with Polyester reinforcement and Tack Coat Blue.
- B. Flashing to be strip-in with Polyester reinforcement and Tack Coat Blue.
- C. ARC-FLEX end and side laps must be reinforced with Tack Coat Blue and Polyester 4”.

## SURFACING 100 % ROOF REPAIR

- A. Before applying any surfacing products to the **RETRO-PLY TEN** 100% repair system inspect with manufacturer rep for any flaws. After receiving written approval to finish the **RETRO-PLY TEN** system, (a 3-day minimum cure is required), continue with surfacing products.
- B. ARC-FLEX must be primed with Acrylic Primer at 200 square feet per gallon and cured (a 3-day minimum cure is required), before continuing with surfacing products.
- C. Apply one coat of SEBS STAIN BLOCKER in a one-pass application over areas that show bleed-through. Allow to-set overnight before proceeding to next step.
- D. Apply two coats of SEBS, (STAIN BLOCKER and ROOF COAT), at the rate of one and one half (1.5) gallon per 100 square feet per coat. Allow application to dry over-night between coats. Apply SEBS STAIN BLOCKER first. The next day apply SEBS ROOF COAT.
- E. Streaks, voids or shadows will require an additional coat for uniform coverage.

## WARRANTY

- A. The above surfacing with ARC SEBS Coatings and Polyester reinforcement qualify for the 10-year **RETRO-PLY TEN** material warranty.
- B. To qualify for the **RETRO-PLY TEN** Labor and Material Warranty the surfacing application of both the SEBS STAIN BLOCKER and SEBS ROOF COAT are to be increased from 1.5 to 2.0 gallons for the SEBS STAIN BLOCKER and the same for SEBS ROOF COAT.

## FIELD QUALITY CONTROL

- A. ARC provides on-the-job inspections, technical assistance and membrane application guidance as required by project document to complete the **RETRO-PLY TEN** 100% roof repair system

JOB COMPLETION

- A. Inspect completed **RETRO-PLY TEN** 100% roof repair system and correct all defects to meet the warranty issuance requirements.
- B. Clean up all debris, excess materials and equipment and remove from site.
- C. Clean any drips or spills of asphalt or primers.
- D. Restrict construction traffic and equipment movement on the completed roofing to only essential personnel. Provide appropriate protection against traffic and construction activities on completed roofs.

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