

# Topps Seal® Reinforced System 5100

Built Up Roofs

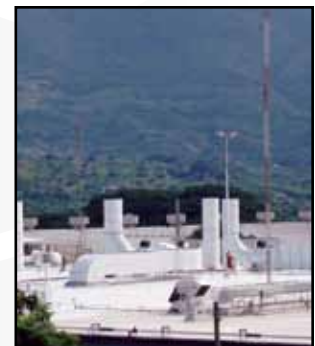
Concrete Roofs

Modified Bitumen Roofs

## The Basics

5 & 10  
Year Spec

Product and Application Specifications



Topps® Roof Restoration and Maintenance Systems

OMSS5100080510

1. **Inspection and marking:** Locate, identify source of potential problems and existing problem areas and mark with spray paint or other marker to receive specialized attention.
2. **Correct all underlying defects** and resulting damages to roof system. This includes, but is not limited to, correcting original support defects, if any, decking, wet or damaged insulation, flashings, and all other damages.
3. **Clean surface thoroughly** using stiff push broom; use commercial blower or vacuum afterward to be sure roof is thoroughly clean of all dirt, debris, failed or not well-adhered substances. Always work away from (not directly into) a seam. Modified bitumen must be scrubbed to remove exudate. **From this point forward, the roof must be completely dry for work.**
4. **Secure any loose seams**, generously applying Polyprene® beneath the joint before tamping firmly and fastening down. Cover repair with Polyprene.
5. **Work Polyprene trowel grade** into and around vibrating rooftop objects.
6. **Make an “H” cut** through blisters. Carefully pry open and sweep clean. Generously apply Polyprene inside and fold back closed. Tamp so excess cement comes through seams. Cover with more Polyprene.
7. **Reinforce all other critical areas.** Embed PolyCore™ nap (fuzzy) side down into Polyprene® over all repairs and areas requiring reinforcement. Because flashings and protrusions account for over 85% of all roof leaks, be sure to do this around all flashings, protrusions, and skylights. This process is most important to obtain maximum long-term maintenance and restoration results.
8. **If surface is uncoated concrete** or mineral surfaced, apply ClearSeal™ at 200 square feet per gallon and allow to dry overnight.
9. **Begin at lowest point** and work across roof. Apply RubberClad™ or Topps Seal® Base Coat to cover the flashing and onto the roof surface at 2 gallons per 100 square feet, slightly beyond the width of the PolyCore roll. Lay PolyCore into the wet compound and brush or roll in so it is smooth and wrinkle-free. Work across all the way to roof edge. If applying to concrete or mineral surfaced substrate, always backroll this coat to achieve greatest adhesion.
10. **Begin next course.** Apply 2 gallons per 100 square feet using RubberClad over previously completed course, extending the compound onto the roof for second course according to instructions above. The previous course is simultaneously sealed as the next course is being readied.
11. **Using same application procedures** above, install second course of PolyCore, overlapping the previous course at the 4" overlap line, marked. Overlap any end terminations 3" as required. Continue until complete.
12. **Inspect after 3 - 4 days** (longer if necessary) or when dry and repair blisters (if any) caused by trapped moisture, by cutting open, laying back down into liquid roofing, and coating over.
13. **If cosmetic bleedthrough is an issue**, test small areas of the roof by applying Topps Seal® or Topps Seal® Excel. If bleedthrough occurs, postpone final coat and test later.
14. **Apply final coat** using Topps Seal or Topps Seal Excel at the rate of 2 gallons per 100 square feet. Additional material may be required at membrane overlap areas. When properly applied, the polyester membrane should be invisible under a smooth finished liquid applied rubber membrane.
15. **Upon completion of work, leave the site clean and tidy.** Remove all bagged debris.

### All Installers

#### 5 Year Standard ToppCare™ Specification

RubberClad™ or Topps Seal® Base Coat	#9125 #9120	4 gallons/100 square feet
Topps Seal® or Topps Seal® Excel	#9100 #9130	2 gallons/100 square feet

### Certified Installers

#### 10 Year Supplemental ToppCare™ Specification

RubberClad™ or Topps Seal® Base Coat	#9125 #9120	4 gallons/100 square feet
Topps Seal® or Topps Seal® Excel	#9100 #9130	2 gallons/100 square feet

### Notes

#### Special Note:

When installing polyester membrane to the substrate, membrane should be smooth, wrinkle-free, and taut (not tight). It is also important to make sure the seam overlaps have additional material applied due to the double layer of PolyCore™. Seams should be re-checked after a three to four week cure time and additional Topps Seal® Excel should be applied to any areas where needed. When properly applied the polyester should be invisible under a smooth finished liquid applied rubber membrane.

### Ancillary Products

Bondit™	1 gallon/100 square feet
ClearSeal™	1 gallon/200 square feet
PolyCore™	40" x 324' per roll. Yields 3' x 324' after overlap.
Polyprene®	1 gallon per 30 linear feet @ 4" wide or as needed for flashings and repair.

## Pre-Application Review

### General Information

The Topps® liquid roofing products are designed to encase, seal and generally protect existing structures from moisture penetration, including flashings. **The roof must have positive drainage.**

### Pre-Application Meeting

The approved installer and the building owner will conduct a pre-application meeting at the work site, within 30 days of the scheduled installation. The approved installer will take written meeting notes and will distribute copies to all parties present, as well as to Topps® Products, Inc. at their U.S. headquarters, *at least 14 calendar days prior to commencing work*. If the approved installer does not receive any written objections to the conclusions of this meeting, within 7 calendar days prior to the scheduled work, it will be deemed that all notes are accepted as complete and correct by all parties.

**To ensure proper drainage, a roof must have a minimum slope of 1/4" per foot to provide positive drainage without ponding.**

### Quality Assurance

It is the sole responsibility of the installer to abide by, and to strictly follow all the procedures of this document, including the *Topps General Policy*.

All products must be installed consistent with industry standards, and the installer must have certification training with the Topps products specified in these guidelines for supplemental policy coverage.

### Approvals

Upon request, Topps will make available independent test reports following ASTM standards and test methods, which relate to certain properties and characteristics of Topps Seal®. Additionally, the supplier will make available the Class A evaluation for Topps Seal® FR, as conducted by Omega Point Laboratories or other approved, independent laboratories.

Independent installers will be trained, certified and approved by Topps® Products, Inc. Proof of certification will be provided by Topps upon request.

### Site Inspection

Using the Topps® *Roof Survey Diagram*, primary areas in need of special attention will be pointed out and step-by-step procedures, from preparation to completion, will be recommended and discussed.

### Compliance

Using the Topps® *Roof Survey Form*, the approved installer will document each surveyed item and the action planned, according to these specifications. Any modifications that are required to meet Topps specifications will be documented. A copy of this document will be included in the pre-application meeting notes.

### Delay of Work

In the event of unavoidable delays, such as those caused by weather, any scheduling or action changes needed will be presented to the building owner for review and approval.

### Material Quantity Review

The installer's consumption calculations will be according to Topps specifications.

### Site Marking

72 hours prior to beginning work, the installer will locate and identify sources of both potential and existing problem areas. These areas will be highlighted with marking paint

that is readily visible. Markings will be color coded to differentiate reinforcement and repair work from design modification tasks.

### **Product Delivery**

The required amount of product will be delivered to a pre-arranged, secured area, prior to the start of work.

### **Daily Clean-Up**

Empty containers will be removed from the premises at the end of each working day and moved to an approved site for proper disposal. At all times, the work site will be kept neat and orderly. At the end of each day, materials and equipment must be placed in a secured location as provided by the building owner.

### **Conformity**

At any time, the building owner has the right to inspect goods on the premises. Any products on site not supplied by Topps® will be immediately replaced at no additional cost to the building owner.

### **Safety and Health**

The approved installer will conduct a safety meeting at the site with all workers, prior to commencing work. All necessary routines and procedures required to meet local and national standards, including any special considerations that must be observed, will be identified.

### **Permits and Certificates**

Prior to start of work, the approved installer will be solely responsible for providing the building owner with any local, State, or Federal permits or certificates required. The installer will also provide the building owner with a *Certificate of Insurance*.

## Substrate Preparation

### **Substrate Inspection**

Do not proceed until all underlying defects and conditions are corrected. This includes, but is not limited to, correcting original support defects, mechanical damages from rooftop vandalism, traffic, nature or other causes.

### **Surface Preparation**

Make all necessary improvements as required to assure proper adhesion and maximum results of the newly-installed system. Surface preparation includes, but is not limited to, the following:

- **Foreign Materials**  
Scrape away thick or soft bituminous matter if any, as well as any caulks/sealants that will interfere with the proper installation of the new system. Do not apply to silicone, PVC, or coal tar.
- **Drains**  
All drains will be cleaned and in good working order. All broken, damaged or missing drain components will be replaced with new by the installer.
- **Treatment of Hairline Cracks**  
Any concrete crack over 1/16" shall be opened at a 45° angle on each side to a depth of 1/4"; remove all dust and debris and inject with Polyprene® trowel grade rubber cement to level. For any crack greater than 1/4" in width or depth, directly inject Polyprene.
- **Cleaning**  
Clean surface thoroughly using stiff push broom; use commercial blower or vacuum afterward to be sure the roof is thoroughly clean of all dirt, debris, failed or not well adhered substances, vegetation and all foreign matter. Scrub areas as needed using strong alkaline cleaner and rinse clean to remove any grease residue, if present.
- **Secure any loose seams**  
Generously apply Polyprene beneath the

joint before tamping firmly and fastening down. Cover repair with Polyprene.

- **Flashings**

Secure any unattached flashing, (including an interior seal beneath the joint) using Polyprene® cement underneath before fastening down. Remove and replace any defective or deteriorated existing installed flashing materials with new.

- **Final Preparation**

The surface and all underlayment must be totally clean, and free of dew or moisture of any type, at time of application of the Topps® liquid roofing compounds.

## Reinforcement

### Sealant Reinforcement

Critical rooftop areas will be sealant-reinforced before final system installation with an additional band of protection. Make sure that the surface is thoroughly clean and dry at time of application.

- **Flashing Preparation and Repairs**

Reinforcement: Evenly apply RubberClad™ or Topps Seal® Base Coat at a rate of 2 gallons per 100 square feet to flashing and at least 6" beyond all terminations onto the roof surface. Polyprene® may be substituted using a heavy coat. While wet, embed PolyCore™ polyester membrane nap (fuzzy) side down. Firmly place membrane so it is smooth and wrinkle-free. A dry paint brush may be used on top to smooth out wrinkles and assist bonding. Lightly topcoat so membrane is sealed. Reinforce any repairs at seams and elsewhere using PolyCore and this method so they are completely reinforced.

- **Perform a Walk-Through**

Review all repairs to be sure that all previously highlighted areas have been properly treated before proceeding with installation of the new system.

- **Miscellaneous**

Using rubber gloves, apply trowel-grade Polyprene to any area subject to vibration or movement such as vents, exhaust fans, sign standards, skylights, etc. Applied material should be 1/4" thick.

## Liquid Membrane Application

### Application Equipment

Apply Topps® liquid membranes in a smooth uniform manner to encase the entire roof. Use spray equipment specified by Topps® or a long-handled, conventional roofing brush or roller to produce the best finish. *Do not apply by spray on windy days, or under conditions that may result in overspray of mist onto other surfaces and objects.*

### Weather Conditions

Follow Topps recommendations for each product. Do not apply to surfaces until the temperature is at least 40° F and rising. Applications may begin in the morning, once the surface is free of frost or dew. *Stop work when surface is within 5 degrees of the dew point.*

### Laying Membrane

Begin at lowest point and work parallel to slope. Work across and not up the slope. Apply RubberClad™ or Topps Seal® Base Coat evenly across the entire surface at 2 gallons per 100 square feet, slightly beyond the width of the Poly Core roll. When spraying, position gun no more than 12" from the surface and hold perpendicular to reduce the possibility of overspray. Lay PolyCore into the wet compound and broom in, or use a dry roller so it is smooth, wrinkle-free, and taut (not tight). Completely overlap any flashing membrane installed previously onto the roof surface (see Flashing Preparation). Begin with no greater than 10 yard lengths (do not cut membrane). Afterward, installers may work longer distances as efficiencies increase. Proceed to roof edge, manually applying liquid for the last yard so

as to prevent overspray. It is also important to make sure the seam overlaps have additional material applied due to the double layer of PolyCore™. If applying to concrete or mineral surfaced substrates, always backroll this first coat to achieve greatest adhesion.

Begin next course; apply RubberClad or Topps Seal® Base Coat at approximately 2 gallons per 100 square feet over previously completed course, extending the compound onto the roof deck for second course according to instructions above, except when using colors other than white. Colors require two coats of the same color. The previous course is simultaneously sealed as the next course is being applied. Using same application procedures above, install second course of PolyCore, overlapping the previous course at the 4" overlap line, marked. Overlap any end terminations as required. Continue until complete.

**First Inspection:** After 3-4 days, or as required (when material is dry and tack-free), inspect and repair any installation deficiencies.

**If cosmetic bleedthrough is an issue,** test small areas of the roof by applying Topps Seal® or Topps Seal® Excel. If bleedthrough occurs, postpone final coat and test later.

**Apply final coat** using Topps Seal or Topps Seal Excel at the rate of 2 gallons per 100 square feet. Additional material may be required at membrane overlap areas. When properly applied, the polyester membrane should be invisible under a smooth finished liquid applied rubber membrane.

## Final Inspection

After 3-4 weeks, inspect the roof for sufficient coverage. Begin with all repair areas noted on the survey - including all flashings, skylights, etc. Make sure that all PolyCore is thoroughly covered so that no texture can be seen. At this stage, the approved applicator will correct any damages or defects that may have occurred after the start of application.

### Annual Follow-Up Inspections

Arrange annual inspections to provide for continued optimal performance, and to:

- rectify any damages from abuse
- maintain free-flowing drainage systems
- remove vegetation

**THE TOPPS® REINFORCED SYSTEM WAS DESIGNED FOR SMOOTH, OR GRANULAR SURFACED SLOPED ROOFS OF STABLE AND SOUND SUBSTRATES THAT ARE FREE OF MOISTURE AND HAVE POSITIVE DRAINAGE.**

**POLICY REQUIREMENTS FOR OLDER INSTALLATIONS: ROOF SCANS, PICTURES WITH COMPLETED ROOF SURVEY MUST BE SUBMITTED AND APPROVED IN ADVANCE OF STARTING PROJECT. Pictures are also required before, during and after project.**

**NEW INSTALLATIONS TO A DECK NOT INTENDED AS THE PRIMARY WATERPROOFING SYSTEM REQUIRE INSULATION BOARD AND A TWO-PLY ASPHALT ROOF BE INSTALLED WITH A SLOPE PRIOR TO INSTALLATION OF THE TOPPS REINFORCED SYSTEM 5100.**



**Roof Restoration  
and Maintenance  
Systems**

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