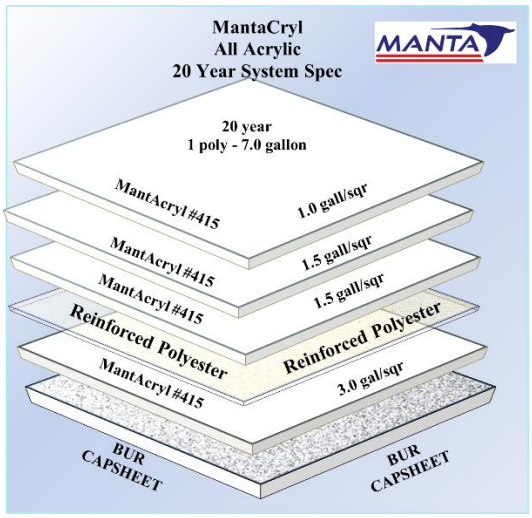
MantAcryl #415 All Acrylic System Spec BUR/MODBIT

20–Year MANTACRYL #415 ALL ACRYLIC 1P-7GAL 415 Restoration System BUR/MODBIT

TECHNICAL DATA	
ASTM	Exceed ASTM D6083 Type I
Color:	Bright White
Dry time:	6 – 12 hours temperature/sun exposure dependent
VOC	<50gal/liter
Density:	10.5-11.5 lbs./G
Solids by Volume:	52% ± 2
Solids by Weight:	65% ± 2
Packaging	5-gal, 55-gal, 275-gal tote
Shelf Life:	18 months (unopened, stored between 35° - 75°F)
Clean Up:	Soap and Warm Water



□	20 YEARS	1. MantaCryl #415 7 gallon 1 Polyester	1. Apply 3.0-gallon #415, 1 Polyester, 4-gallon #415 2. Total System Dry Mils (approximate) 74 mil 3. Dry Weight, (approximate) 52 lbs.

Step#	Assembly Configuration	Material Used	APPLICATION	TOOLS/EQUIP USED	NOTES
1	Pre-Qualify the Roof	Visual	1. Carefully inspect the existing roof for damage, such as delamination, holes, tears, cuts, and seam issues.	1. Photos 2. Knives	Grade the Roof to receive Coating Roof Restoration System: 10% repair – A 15% Repair -B >20% - Fail
2	Moisture Scan	Moisture Scanner	1. Conduct a moisture scan to reveal any trapped moisture. 2. If trapped moisture is detected, cut out areas down to the deck where moisture is found. 3. Allow the deck and structure to be fully dry and repaired.	1. Moisture 2. Scanner 3. Core Cutter	If the roof is full of moisture, it will not qualify for a coating system. It must be completely dry.
3	Adhesion Test (Required For Smooth Only)	MantaPrime Multipurpose #235	1. Conduct an adhesion test using the Manta Adhesion Test Protocol Test. Allow for 72 Cure Time.	1. Polyester, 2. fish scale 3. knife	The adhesion test must be greater than two psi on the fish scale to qualify for coating.
4	Repair The Roof	Materials Compatible with existing roof substrate	1. Replace any deteriorated or structurally unsound roof decking with compatible material. 2. Butt-up replacement membrane to the edge of the existing membrane assembly with Torch materials.	1. Torch Rolls, 2. Other Roof membranes	It is recommended that all the damaged areas be built with torch materials for reinforcement purposes.
5	Surface Prep.	MantaClean #101 Roof Conditioner	1. Pressure Wash the roof with a mixture of MantaClean #101 Roof Conditioner Diluted 10 to 1.	1. Pressure washer	The roof surface must be completely clean, dry, and free of any dirt, dust, grease, wax, or other substances that could affect adhesion.
6	Primer Smooth BUR only	MantaPrime Multipurpose #235	1. If the new membrane is to be applied over smooth BUR, asphalt emulsion, or non-granulated modified bitumen, apply #235 primer at a rate of 1/2 gallon per 100 sq ft. 2. Priming is not required for granulated surfaces or PVC membranes.	1. Spray machine or roller	1. Allow the primer to dry completely before proceeding. 2. Do not puddle primer
7	Flashing	Mantastic #318 MantaCryl #415 MantaPoly 540	1. **Base and Wall Flashings:** Install base flashing over the cant strip with polyester fabric and MantaCryl #415, ensuring it extends onto the deck and up the wall. Wall flashing should overlap the base flashing. 2. **Edge Flashings**: Replace or re-secure existing metal edge, stripping it in with polyester fabric and #318 Elastic Cement. 3. **Vent and Pipe Flashings:** Set new or replaced flanges in #318 and strip them in with fabric and #318. 4. **Roof Drains:** Clean and prepare the drain sump, apply a three-course layer of #318, and replace the clamping ring. 5. **Miscellaneous Flashings:** Seal penetrations like sign anchors with #318, using fabric for larger voids. All flashing installations should be done according to manufacturer recommendations.	1. Trowel 2. Glove 3. Brush	3. Ensure all flashings are properly integrated with the existing roof and prepared for the new membrane.

Manta Roofing Products requires strict adherence to application guidelines outlined in the Technical Data Bulletins. Review product information and safety precautions before installation. Implement the Care & Maintenance program to ensure optimal roof performance and warranty validity.

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8	**Base Coat Application**	MantaCryl #415 MantaPoly 540	1. Spread a coat of MantaCryl #415 at a rate of 3 gallons per 100 square feet. 2. **Embed Polyester Felt:** Immediately after applying MantaCryl #415, start at the lowest point of the roof and lay down full-width sheets of polyester felt, working your way upwards. 3. **Ensure Saturation:** Gently use a broom on each layer of polyester felt to ensure it's completely saturated with MantaCryl #415 and lies flat without any wrinkles or air bubbles. The polyester should stop 2 inches above the cant strip.	1. Spray equipment, 2. Roll equipment 3. Spreader	1. Allow Curing: To prevent displacing the MantaCryl #415, avoid walking on the polyester fabric while it's being applied or while it's curing. Allow the membrane to cure completely.
9	**Sealing And Reinforcing This Section Details** **Additional Sealing and Reinforcement Around Critical Roof Areas**	Mantastic #318 MantaCryl #415 MantaPoly 540	1. **Pipe Flashings and Penetrations:** After applying the main roof membrane, but before the reflective coating, use #318 mastics and polyester fabric in a three-course method to seal all pipe flashings, cones, exposed metal joints, and flanges. Also, apply #318 mastics to corners, curbs, skylight flashings, and any areas repaired with roofing mastic. 2. **Drains and Ponding Areas:** Reinforce areas around drains, scuppers, valleys, waterways, and any locations where water may pond for more than 48 hours. This involves adding an extra layer of polyester fabric embedded in MantaCryl #415 acrylic coating. Extend this reinforcement at least 12 inches beyond the ponding area or drain sump. Apply this extra layer after the main membrane and before the final #415 acrylic coating coatings.	1. Trowel 2. Glove 3. Brush	1. This section emphasizes adding extra protection and reinforcement to vulnerable areas and penetrations on the roof.
10	**Top Coat Application**	MantaCryl #415	1. Once the acrylic membrane has fully dried, it's time to apply the reflective coating. This involves covering the entire roof surface with MantaCryl #415 2. Apply it at a rate of 4 gallons per 100 square feet, dividing the application into three separate coats. 3. Use a "crosshatch" technique to ensure even coverage and prevent pinholes. This means applying each coat perpendicular to the previous one (e.g., the first coat is applied north-south, the second east-west, and the third north-south again).	1. Spray Equipment, 2. Roller 3. Spreader	1. Don't thin or dilute the coating, as this can affect its performance. 2. Each coat should use approximately one-third of the total coating amount. Before you begin,
11	**Quality Control**	Thorough documentation and quality control are essential to ensure proper installation and warranty coverage of Manta Roofing products. This involves maintaining a daily log of work completed, including details like areas coated, materials used, and weather conditions. On-site inspections should be conducted to verify proper application techniques and coating thickness and address any issues. This comprehensive approach guarantees that the installation meets Manta Roofing Products' standards and warranty requirements.			
12	**Completion**	Final inspection of the completed coating system involves checking for and correcting defects, such as thin areas, delamination, pinholes, lifting, or texture issues. Thin areas may require recoating to meet the required thickness, while delamination may necessitate re-priming or recoating. Lifting, caused by factors like freezing or improper mixing, requires removal and reapplication of the coating. A Manta Roofing Products Technical Representative will conduct a final inspection and advise on any necessary corrections. After inspection, the site should be cleaned, and traffic on the roof should be restricted to prevent damage.			
13	**Housekeeping**	A final inspection of the completed MantaCryl #415 coating system is crucial to ensure it meets specifications and warranty requirements. This involves checking for and correcting defects, such as thin areas (which may require recoating to achieve the minimum Total Dry Mils), delamination (requiring recoating), pinholes, and texture issues. Consult a Manta Roofing Products Technical Representative for advice on correcting texture problems. After the inspection, restrict foot traffic and equipment movement for 72 hours to allow the coating to fully cure and protect the finished roof from damage by other trades.			
14	**Repairs**	Before, during, and after applying the MantaCryl #415 coating, the contractor must document the project by taking photographs of the roof, including detailed areas and flashing work. To facilitate on-site inspections by Manta Roofing Products, the contractor should have a decision-making representative available, provide access to all roof areas, and share the previously taken photographs. Additionally, the contractor must exercise caution when moving equipment on the roof to avoid damaging the flashing and encapsulated fastener heads.			

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