

Care and Maintenance

Recommendations

for

The UltraKote Products

Trowel Applied Coatings



CARE AND MAINTENANCE

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CARE AND MAINTENANCE

Introduction to Care and Maintenance

Section 1

The UltraKote and ShurKote products covered by this manual include the Exterior Insulation and Finish Systems (EIFS) and the Hard Coat Stucco systems (HCS). When these systems are properly cared for and properly maintained they will provide many years of satisfaction at a very low maintenance cost.

The success of any care and maintenance program begins with the commitment to using quality products and the dedication to maintaining those products. The care and maintenance program begins with a plan for annual inspection of the building exterior to ensure the components are performing properly and to follow a plan of remediation if they are not. Care and maintenance is not limited to the following list but these are some of the most critical:

It is recommended that the exterior of any building be inspected annually and for some of the most critical areas this inspection should be done every quarter. Also recommended is that a qualified professional who understands the requirements for the Exterior Cladding Systems should conduct the annual inspection of the exterior. The observations of the exterior should be well documented in writing and supported with photos and then submitted to the facility ownership. These documents will be the basis for corrective action to be taken.

If at any time there is a question about the products used on the exterior and there is a question as to the care and maintenance procedures to be followed it is recommended that you call the Technical Department at UltraKote Products, Inc.

Call the Plant at (602) 272-5830 or (800) 224-2344
Fax a question to (602) 272-6445

E-Mail us at technicaldepartment@ultrakoteproducts.com

Care and maintenance when approached with a positive attitude can be one of the most cost effective expenditures listed in the budget. Remember:

“AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE”



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Mold and Mildew

Section 2

The formation of Mold and Mildew is not limited to Acrylic or Elastomeric Textured Coatings. Mold and Mildew can be found on all types of coatings generally on the north facing elevations especially if the regions experiencing high humidity.

In very simplistic terms Mold or Mildew is a fungus that is spread as microscopic spores that are carried by the wind. When the spores land on a surface that has not been kept clean, the spores will begin to feed on the dirt accumulated on the surface. To the untrained eye the mold or mildew appearance often resembles the accumulated dirt.

The most likely locations for mold or mildew to begin is on surfaces that are warm and moist and out of direct sunlight. This would include under the eaves on north elevations or in areas heavily shaded by trees or shrubs. During rainy periods mold or mildew can obtain a foothold on virtually any exterior surface.

The inspection for mold and mildew should be done on a more frequent basis than annually only. In susceptible regions it is recommended that the inspection be done every month or so.

CLEANING RECOMMENDATIONS:

There are several options for cleaning and removing mold or mildew. The first line of defense is keeping the Exterior Surface clean. Even with a good cleaning program there is always the potential that mold or mildew will become a maintenance issue.

Option One – Common House Hold Bleach Solution


1. Saturate the wall surface with clean water. Follow immediately with a cleaning solution consisting of:
 - 3 parts of clean water
 - 1 part of common household bleachIn sever areas a mild detergent may be added to increase the cleaning ability.
2. Apply the solution to the wall and let stand for 15 to 20 minutes but do not let the solution dry on the surface.
3. Use a soft bristle brush (never use metal) and gently scrub the affected area.
4. Rinse the wall thoroughly with a low-pressure garden hose and nozzle sprayer.

Note: Thoroughly rinse all shrubbery, trees, flowers, and grass to dilute the solution and prevent any burn spots. Always wear protective clothing and eye protection

Before adding a liquid detergent to any household bleach solution, carefully read the product label to see if they contain ammonia or ammonium compounds. Bleaches should never be mixed with any detergents or cleaners containing ammonia. These mixtures can cause harmful vapors.



Option 2 – Commercial Cleaners

There are commercial cleaners specifically formulated to clean mold and mildew from the exterior surfaces. The following companies provide products  that are compatible with the UltraKote and ShurKote finishes. Contact the individual company for advise and availability in your area:

Pro So Co, Inc. 1-800-255-
1-800-255-4255
www.Proso.co.com

ABR Products Inc.
1-800– 346-7532
Www.abrp.com

Shore Corporation
1-800-860-4978
manager@shorechemical.com

While these companies provide professional cleaning products compatible with UltraKote and Shurkote Finishes, UltraKote Products Inc. is not responsible for the performance or the application of these products.

Preventative Measures following Cleaning

1. If the finish has been discolored or has faded as a result of the mildew or mold growth it is recommended that the finish be recoated with StuccoKote



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Surface Staining

Section 3

No exterior covering impervious to surface staining. Stains can be caused from many different things, such as sprinklers, paint spills, dirt washing off detail bands, or just the act of vandalism. This section will cover the most common sources of staining and the process of removing or covering up the stain.

Lawn Sprinkler Overspray Corrective Recommendations

The formation of multi-colored stains on the surface of the UltraKote or ShurKote Textured Finish Coat is a result of the metallic chemical from the water. This stain is usually a reddish color suggesting a high Iron content in the water.

The discoloration generally is an aesthetic issue, however the stains are very difficult to remove especially if they have not been cleaned for several years. Even the early stages of discoloration, a commercial cleaner may be required to remove the stains. Commercial cleaners must be formulated for and tested to ensure they are compatible with an EIF System. See the appendix for a list of commercial cleaners.

1. The easiest corrective action would be to either relocate or readjust the sprinkler heads so they do not spray directly on the wall.
2. Another solution would be to add a filtration system that would remove the majority of the water based chemicals.

Preventive Action

1. Remove the grass and the foliage away from the house a foot or two and replace it with crushed stone or rocks.
2. Reposition the sprinkler heads at the edge of this new barrier and direct the heads on to the lawn area.

Normal Dirt and Dust Accumulation

Normal dirt could be described as resulting from splash back from a roof overhang or from the splash back from the street during winter conditions. Depending on the severity the following recommendation may have to be repeated periodically throughout the year.

1. Saturate the wall surface with clean water.
2. Apply a soapy solution with a soft bristle brush and scrub gently to loosen the dirt and then let the solution remain on the wall for 15 to 20 minutes but do not let the solution dry on the wall.
3. Rinse thoroughly with a low-pressure garden hose type sprayer.



If this procedure does not remove the dirt from the surface it may be necessary to use a stronger commercial cleaner. See the appendix for a list of commercial chemicals.

4. To prevent having to because of a soil splash back it is recommended that a layer of soil be removed and replaces with crushed stone or rocks or some other mulching material.

Chemical Contamination

There are some conditions that are best described as “chemical contamination”. This condition could exist when there is an unusual high amount of exhaust gases, industrial gases or emissions from smoke stakes.

If and when chemical contamination occurs a sample of the finish should be obtained and sent to an independent testing lab. This type of lab can ascertain what the nature of the contamination is and what chemicals could be used to remove it. This information should be reviewed with the Technical Department at UltraKote Products, Inc.

Other preventively measures

Apply a clear seal coat over the textured finish once the building or wall has been cleaned satisfactorily.

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Surface Cleaning

Section 4

The accumulation of dust and dirt on the exterior of a building (regardless of the cladding system) is a common maintenance issue that is caused by a myriad of sources, all of which are virtually unpreventable. This accumulation of dirt and dust can cause the exterior coating to be discolored or even fade.

In as much as the accumulation of dirt and dust is an aesthetic issue that does not affect the performance of the UltraKote or ShurKote wall system, annual or semi-annual cleaning with clean water and detergent is always the first line of defense in keeping the finish in a pristine condition.

1. Pre Soak the wall surface and then apply the detergent solution and allow this solution to remain on the wall for 5 to 10 minutes.
2. Rinse the wall with clean water until all the detergent has been removed.
3. Repeat this process as needed .

Option Two – When should the entire building be cleaned.

An evaluation should be made as to the need to clean the entire building for aesthetic reasons. Depending on the size of the building and the current building regulations governing cleaning the decision will need to be made as to using a professional cleaning company or using the building maintenance staff.

In any event the cleaning procedure is identical to the procedure described above.

In the event that it is difficult to clean the wall surface satisfactorily, refer to section 2 for the chemicals required to remove stubborn foreign materials.



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Impact Damage— EIFS

Section 5

Impact damage is caused by a variety of things such as rocks, golf balls, lawn mowers, woodpeckers or just simply something running into the wall surface. If the maintenance department is not comfortable in attempting the following procedures it is recommended that a professional stucco applicator be retained to complete the work.

This procedure can be used to repair holes, cracks, dented areas, etc.

The Procedure:

1. Cut a new square piece of EPS insulation board that just slightly larger than the damaged area. Using this EPS board as a template trace the outline around the damaged area.
2. Using a sharp knife cut along the traced lines all the way to the substrate and remove the damaged EPS insulation board.

Caution: if this is a water managed system do not cut into or destroy the secondary moisture barrier.

3. Mark a line roughly 3" on all sides of the damaged area and using a grinder very carefully grind off the finish only.

Caution: Use extreme care not to damage the existing base coat and reinforcing mesh when grinding off the finish.

4. Using the appropriate fastener or adhesive fit the EPS board (from Step 1) into the opening. Use EPS slivers to ensure there are no voids between the edges of the existing EPS and the new plug.
5. Apply the new base coat (adhesive and reinforcing mesh) so it overlaps the damaged area by 2 1/2" on all sides. Allow this base coat to fully dry before applying the new finish. This is usually 24 hours.
6. Prior to applying it is necessary to protect the existing finish with masking tape and paper. When applying the new finish use the same floating technique that was use on the existing finish so the patch will be less visible
7. Remove the tape and paper immediately after applying the finish and using a brush or other tools that will blend the new finish into the existing finish.

Note: If this patch is being made to a building that is more than two years it would be advisable to have the new finish color matched to the existing building. If there are numerous patches to be made it may be necessary to make the patches and then actually recoat the entire area from one architectural break to another architectural break. For re-finishing please refer to Section 7.



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Crack Repair - EIFS and HCS

Section 6

It is not uncommon for cracks to become visible in the Finish coat . The cause of the cracks can be from structural movement, improper application, water intrusion, or vandalism. The repair procedure involves removing and replacing the system.

Following the removal of the system, if it is possible to ascertain the cause of the cracking then this should be corrected prior to the replacement of the system.

The Procedure:

1. Cut a new square piece of EPS insulation board that just slightly larger than the damaged area. Using this EPS board as a template trace the outline around the damaged area.
2. Using a sharp knife cut along the traced lines all the way to the substrate and remove the damaged EPS insulation board.

Caution: if this is a water managed system do not cut into or destroy the secondary moisture barrier.

3. Mark a line roughly 3" on all sides of the damaged area and using a grinder very carefully grind off the finish only.

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Hard coat stucco repairs involves similar tools and techniques as EIFS repairs and also requires more time to cure between steps.

When the procedure does not require removing and replacing the system:

1. Using a hand held grinder with a carborundum blade grind away the finish coat away from the crack for about 2 1/2" on each side of the crack. (Fig 1, pg 2)
2. Using the same grinder and blade clean out the crack to a depth of 1/4" in the form of a "V". (Fig 1B pg 3)

Caution: Use extreme care to avoid cutting into the reinforcing mesh or metal lath.

3. Fill the "V" shaped opening with UltraPatch and allow to cure for 12 to 24 hours.
4. Once the UltraPatch has cured tape off the existing finish with masking tape and painters paper over the existing finish.
5. Apply the new finish coat in the same texture and color as the existing finish using the same floating techniques for texture.
6. Remove the tape and paper immediately after applying the finish and using a brush or other tools that will blend the new finish into the existing finish.

When the procedure requires removing the system completely:

1. Using a hand held grinder with a carborundum blade cut into the system to a depth of about 1/4" and use extreme caution not to cut into the reinforcing mesh or metal lath.
2. Using a hammer lightly pound on surface of the damaged area to loosen this top layer away from the reinforcing mesh or metal lath.
3. With the reinforcing mesh or metal lath exposed use the grinder and blade cut through the reinforcing and remove the center part, leaving 2 1/2" of reinforcing intact. (Fig. 2, pg 3)
4. Then cut the reinforcing to allow it to be bent out of the way. (Fig. 3 pg 3)
5. Remove the damaged base coat down to the secondary moisture barrier.

Caution: Do not cut into the secondary moisture barrier.

6. Begin replacing the system with enough base coat to embed the reinforcing metal and fold the metal back into place and secure with non corrosive fastener. Complete the application with enough base coat to fill in the damaged area.
7. Allow the base coat to cure for 7 days before applying the finish.
8. Once the base coat has cured tape off the existing finish with masking tape and painters paper over the existing finish.
9. Apply the new finish coat in the same texture and color as the existing finish using the same floating techniques for texture.
10. Remove the tape and paper immediately after applying the finish and using a brush or other tools that will blend the new finish into the existing finish.



Figure 1

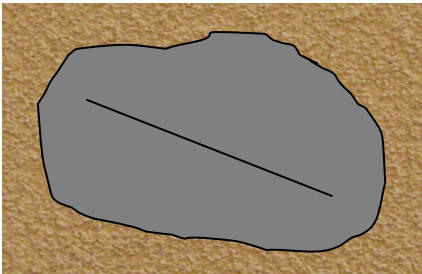
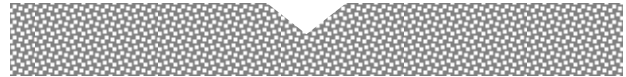
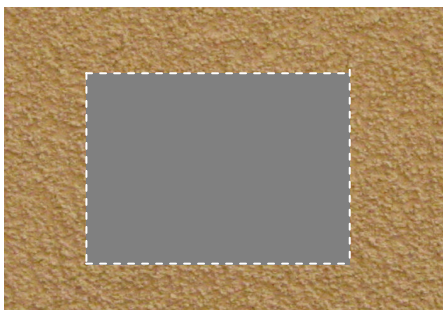


Figure 1 B



Grinding off the finish and fill in the crack.

Figure 2



Cutting through the finish and the top stucco base coat, removing the top base coat, exposing the reinforcing metal.

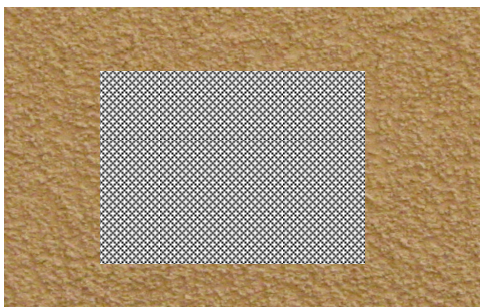
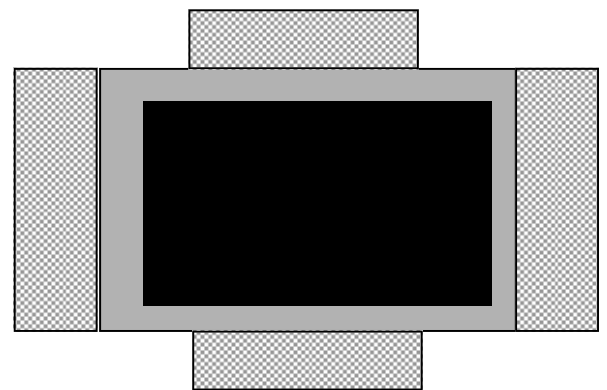


Figure 3



Cut the reinforcing metal and fold back to back to remove the remaining stucco base coat.

CARE AND MAINTENANCE

Re-Finishing

Section 7

When it becomes necessary to change the color of the building there are two methods that can be used effectively. The reasons for refinishing include finish color has faded, there are numerous patches where the finish color just does not match, or the color scheme of the business has changed.

Method One:

If the existing finish coat is in good condition and not in need of repair it is possible to re-coat the textured surface with a top coat of high quality acrylic paint.

1. Understand that by re-coating with a paint type product that some of the texture will be lost.
2. The first step is to ensure that the existing finish is clean and dry prior to the re-coating
3. Power wash and lightly scrub the wall surface with a stiff bristle brush to remove all embedded dirt or contamination.
4. Once the wall is dry, apply a new finish top coat by using an appropriate nap roller, spray equipment, or even a brush.

Method Two:

If the existing wall has been repaired numerous times it would be time to be more aggressive by using the following re-finishing process:

1. The wall still needs to be clean and dry before proceeding. This is also the time to make any final repairs.
2. The next step is to “blank out” the wall. There are two methods to accomplish this.
 - A. One method is to apply a skim coat of extremely fine finish over the existing textured finish. The reason for using finish would be to maintain the maximum breath-ability of the exterior coating.
 - B. The most common method is to skim the wall with an adhesive base coat. This process could use incorporate an additional reinforcing mesh if needed..
3. Regardless of the method used allow the skim coat to dry for 24 hours before applying the new textured finish coat.
4. It is recommended that professional stucco mechanics be hired to accomplish the re-finishing because they have the tools and the talent.



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Sealant Joints

Section 8

The ShurKote Class PB EIF System is a barrier type wall system and is referred to generically in the trade as a "face sealed system". In large part the integrity of the system on how well the sealant joints are installed and maintained.

By Design sealant joints are required at all dissimilar materials. This means, for example, that all doors, windows, penetrations, vents, handrails, etc, will have a sealant joint. With the purpose of the sealant joint being to prevent moisture intrusion, it is understandable just how important it is that they are properly inspected and maintained.

Sealant joints should be inspected annually and repairs made accordingly. There is no guarantee as to the life expectancy of any given sealant because there is no way to control the natural elements of wind, rain, and sunlight (ultra-violet rays). Typically the southern exposure from East to West is the most vulnerable area of any building and the corresponding sealant joints because of the longer duration of sun exposure. These areas may require more maintenance than the northern exposure.

The Inspection Process

1. All sealant joints should be inspected for the following characteristics:
 - A. Adhesion on both sides
 - B. Elasticity of the sealant
 - C. Clean smooth surface
 - D. Discoloration
 - E. Pin holes
 - f. Cracking, crazing or alligating
2. If any of these conditions exist it is recommended that the sealant be removed and a new sealant joint system be applied.

Removing the existing sealant

1. Use a sharp knife and cut the existing sealant away from where it has adhered to both sides.
2. Remove the old backer rod.
3. Clean any residual sealant from the exposed edges.
4. Apply new sealant primer as per manufacturers recommendations.
5. Install a new closed cell backer that is big enough to compress into the opening by 25% and to a maximum depth of 1/2" .
6. Always install the new primer/sealant to a hard base coat and never to the Acrylic finish coat.
7. When a "glazing" type sealant joint is applied it required that a "bond breaker" be used to prevent continuous adhesion.



NOTE:

- 1. It is recommended that a profession sealant applicator be used to complete all repairs on sealant joints.**
- 2. Always follow the sealant manufacturers instructions when reconstructing a sealant joint. In particular - ensure that the sealant primer is designed to be used with the sealant.**

The following list of sealants is acceptable when replacement is required:

Tremco	TSCS@tremcoinc.com	1-800-852-8173
Geocel Engineered Polymers	www.gnpsolutions.com	1-800-268-4484

Contact UltraKote Products Technical department when requesting other sealant manufactures.

