

AMERICAN CLAY TROUBLESHOOTING GUIDE

For complete instructions please see our web site www.americanclay.com.

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Note: TS=Traditional System, DM= Dos Manos System

For detailed patching instructions: see Maintenance Manual in the Training Manuals and on the web.

MIXING

Mud Glue Balls Up, Plaster Clumps & Creates Dark Spots on Wall - DM

Problem: When mixing a batch of Dos Manos, the Mud Glue does not dissolve completely and balls up at the bottom of the Mud Glue solution. When plaster is added to this mixture and applied to the wall, the installer will find thick clumps of plaster (the plaster sticks to the Mud Glue balls) that dry significantly darker in color.

Reason for Problem: The Mud Glue was added to still water.

Solution: If the plaster has not yet been added to the Mud Glue, strain the problematic Mud Glue solution through cheesecloth, and use the liquid to mix as usual. If you have already added plaster to the balled-up Mud Glue, use that plaster for a base coat only. Do not use it for a finish coat. If you have used the problematic plaster for a finish coat, re-wet and rework the discolored areas. If that does not resolve color variation, dig out discolored plaster and patch, or re-coat wall with a properly mixed finish coat.

To Avoid This Problem in the Future: Agitate the water (with drill or whisk) as you add the Mud Glue.

Forgot to Add Mud Glue to the Water - DM

Problem: Plaster has been mixed without the Mud Glue, and client wants to know what to do.

Solution: It is too late to add Mud Glue to this plaster. This plaster can only be used as a first or second coat in the Traditional System (over Sanded Primer) or as a second coat in the Dos Manos Classic System. If the client is working on a first coat of Dos Manos Classic, or any coat in the DM Professional System, he/she will have to mix a new bag of plaster with Mud Glue.

To Avoid This Problem in the Future: Always mix the Mud Glue into the water before adding the plaster.

Plaster Is So Thick It Is Hard to Mix - DM or TS

Problem: When mixing, the plaster gets so thick it is hard to mix.

Reason for Problem: There was not enough water in the bucket to start with, and/or not enough water was added as the plaster put into the bucket.

Solution: Add more water to the plaster. If plaster is still too hard to mix, let it soak in for an hour or more before attempting to mix again.

To Avoid This Problem in the Future: Start with at least one and a half gallons of water in the bucket before adding plaster (TS) or Mud Glue (DM), and continue to add more water along with the dry plaster if the mix starts to look too thick.

Uncolored Plaster at the Bottom of Bucket - DM or TS

Problem: At the bottom of the bucket, there is plaster that has no color mixed into it. Some of the plaster may be fairly dry.

Reason for the Problem: The plaster was not mixed thoroughly enough, or the paddle was not able to get into the corners of the bucket, and/or there was not enough water in the bucket before adding the plaster.

Solution: The uncolored plaster may be used for a base coat. Do not use it for a finish coat.

To Avoid This Problem in the Future: Start with 1 1/2 gallons of water in the bucket before adding plaster. Mix the plaster thoroughly, getting all the way to the bottom of the bucket. Angling the drill (instead of keeping it straight up and down) will help incorporate all the plaster in the bucket.

APPLICATION

Second Coat of Plaster Not Sticking to First Coat - DM or TS

Problem: Second coat of plaster is sliding around the wall and not sticking to the first coat.

Reason for the Problem: The first coat is too wet to accept the second coat, usually from over-misting prior to second coat application.

Solution: Let the wall dry out completely before continuing to plaster

To Avoid This Problem in the Future: Do not mist the first coat before applying second coat, or mist the first coat *lightly*, instead of soaking the wall, before applying the second coat.

For Application Issues Involving Color, See "Color" Section

CRACKING AT DRYWALL SEAMS

Wallboard Seams Are Cracking (a.k.a. Air Checking) - DM or TS

Problem: Cracks appear along the seams of wallboard with manufactured edge. (For cut seams, see next problem.)

Reason for problem: Joint compound was too loose or too wet, and it failed to fill the gap between the wallboard, causing cracks to appear on the seams as the plaster dries.

Solution: Re-mist and rework the surface. If that does not take care of the air checking, scrape back the plaster, remove the tape, and remove the joint compound from drywall seam (if the bad joint compound is not removed and replaced, the air checking will reappear). Re-tape and bed with appropriate joint compound. Then re-prime and re-plaster for Traditional System. For the Dos Manos System, there is no need to prime. Reapply the two coats of plaster (the first of which must be mixed with Mud Glue).

To Avoid This Problem in the Future: Use a joint compound that is appropriately thick. Do not add additional water to pre-mixed joint compound, and add only the recommended amount of water to powdered joint compounds.

Cut Edges of Wall Board (a.k.a. "Butt Joints") Are Cracking - DM or TS

Problem: Cracks appear along the cut edges of wallboard as the plaster dries.

Reason for the problem: Cut wallboard edges, which do not have the bevel of a manufactured edge, are normally held back from each other to allow the joint compound to penetrate the seam and isolate the cut edges. Problems arise when:

- a poor application of joint compound allows water to migrate into the area, swelling the cut edges and loosening the bond with the plaster. This is particularly a problem where the paper is already loose or torn (even 1/100th of an inch of loose paper can cause problems).
- there is a failure to leave a gap between the cut edges of the drywall, making it difficult for the joint compound to isolate the edges. This enables water to migrate into the area, and is especially problematic where there is loose or torn paper on the wallboard.

Solution: Scrape back plaster, pull tape, bevel the edge to a 45 degree angle to open up the seam, removing 1/8" (3 cm) of the edge and all loose or torn paper and crumbled wallboard. Re-tape and bed seam with an appropriate joint compound. Prime (if using TS) and patch with two coats of plaster.

To avoid this problem in the future: Taper the butt joints (cut edges of sheet rock) to a 45 degree angle, removing all loose and torn paper before hanging. Fill joint with joint compound to avoid "air checking", then tape and bed joint.

GENERAL CRACKING AND PEELING ISSUES

Key Questions for Determining Why Plaster Is Peeling:

- Is the plaster Traditional System (TS) or Dos Manos (DM)?
- How thick is the plaster that is peeling?
- What is the substrate?
- Were any lightweight joint compounds (USG Plus-3 or Murco M-100) or topping compounds used?
- Were the walls dusty? Were they cleaned prior to application?
- Was the plaster dry before 2nd coat application and before compression?
- When is the plaster peeling? During 1st or 2nd coat application, compression or as plaster dries?
- Was the plaster worked while it was leather hard, and was then when problem occurred?
- How much water was used during compression?

Porcelina Peeling During Compression - DM

Problem: The Porcelina finish coat peels off the wall during application, as it dries, after it dries and/or during compression. Peel back the plaster and look at the thickness of the base and finish coats. If the *base coat* is less than a credit card thickness, this is your problem. (if thickness is good, see next problem).

Reason for Problem: the base coat of DM Loma is too thin, possibly aggravated by too much water being used (in misting prior to 2nd coat application and/or during compression).

Solution: Allow the plaster to dry completely. Scrape back the wall to where the Loma was thick enough that the plaster sticks to the wall, then base coat the patch with a credit card thickness of Loma. No individual sand grains, chatter marks or drywall should be visible when the plaster is a credit card thickness. Let the patch dry completely, then apply the second coat of Porcelina and blend edges of patch into the rest of the wall. When dry, compress the whole wall.

To Avoid the Problem in the Future: Be sure the Loma base coat has the appropriate thickness. Do not attempt to "stretch" one bag of plaster farther than 200 sq. ft. No individual sand grains, chatter marks or substrate should be visible when the base coat is done. Consider having crew members attend American Clay's 3-day class to prevent such problems in the future.

Second Coat Peeling During Compression - DM

Problem: Loma, Porcelina or Marittimo peels during compression.

Reason for Problem: the first coat of DM Loma was not allowed to dry prior to second coat application and compression, or the wall was sprayed with too much water during compression. (This problem can also be caused or exacerbated by a first coat application that is too thin. See above.)

Solution: Allow plaster to dry fully before continuing compression. Scrape off peeling plaster and apply a Dos Manos first coat to the patch. Allow the plaster to dry, apply second coat, allow plaster to dry and then compress.

To Avoid the Problem in the Future: Always apply the first coat of Loma at a thickness of a credit card). Always allow the first coat to dry completely before applying the second coat, and allow the second coat to dry completely before compression. Minimize or eliminate misting of first coat prior to second coat application, and minimize misting during compression.

Cracking and Peeling Plaster - DM or TS - 1st or 2nd coat

Problem: The plaster is cracking and possibly peeling, usually around edges of the wall or around windows, doors, or outlets.

Reason for the Problem: The plaster is too thick. Pull off a chunk and measure the thickness. If one coat is more than a credit card thickness, or two coats total more than two credit card thicknesses, (2 1/2 for Marittimo) the plaster is indeed too thick. Check also to be sure there is adequate primer on the wall (TS). If the plaster is not too thick, lack of primer may be the problem. See next problem.

Solution: Mist plaster lightly, and allow the moisture to soak in. Mist the plaster lightly again, so that the surface is saturated but not dripping, and there are no dry spots. Compress with a trowel or a sponge and let dry. If the dry repair then seems stable and does not "bounce" when tapped, the repair is complete. This is frequently all that is needed. If the repaired plaster is curling away from the wall or "bounces" when tapped, remove the plaster and patch area (if using the Traditional System, remember to apply more Sanded Primer if little or none is present), let dry, and compress.

To Avoid the Problem in the Future: Apply the plaster the appropriate thickness: Loma should be a credit card thickness, Porcelina should be 1-2 business cards thickness, and Marittimo should be 1 1/2 credit cards thickness.

Second Coat Peels While Drying - TS

Problem: The second coat of plaster peels while drying or during compression.

Reasons for the Problem:

- The American Clay Sanded Primer was not mixed before it was applied (leaving all the sand at the bottom of the bucket). If this is the case, large sections or all of the wall will peel. OR
- a section of wall was missed during priming. In this case, the peeling tends to be in small spots scattered across the wall, frequently around the edges.

Solution: Scrape off loose plaster.

- If the sand was not mixed into the Sanded Primer before it was applied, all of the plaster may be loose and will need to come off. In that case, sponge off any dust after the wall has been scraped, mix the Sanded Primer thoroughly (scraping bottom of container) then re-prime and re-plaster the wall.
- If only a small area is missing Sanded Primer, only the plaster over that area will scrape off easily. Remove dust from the area and apply Sanded Primer to the patch. When dry, apply a first coat, then a second coat, and then compress. See maintenance manual for complete patching instructions.

To Avoid the Problem in the Future: always mix Sanded Primer prior to application, scraping sand off the bottom of the container. You should be able to see the gray sand grains in the primer as you mix. Be sure to prime every square inch of the wall.

Peeling Second Coat over Gypsum Substrate - DM

Problem: A second coat over a gypsum-based plaster substrate (e.g. Structolite, Imperial Diamond, Red Top, etc.) peels off the wall as the second coat dries or as it is compressed, especially if too much water is used. You will rarely see problems on the first coat. (A gypsum-based plaster substrate does **not** include drywall).

Reason for the Problem: All gypsum substrates (e.g. Structolite, Imperial Diamond, Red Top, etc.) must be primed or sealed prior to American Clay application. This wall was not sealed.

Solution: Scrape peeling plaster off the wall. If the wall is dusty, use a sponge to wash the scraped wall with a 25% sealer solution (1 part sealer to 3 parts water—this can be used any time you wish to remove dust or potential dust.) Then apply one of the following primers or sealers: American Clay Sanded Primer, a conventional PVA primer, a 50% dilution of American Clay Penetrating Sealer (1 part sealer, 1 part water) or other acrylic sealer. When the primer/sealer is dry, apply a Dos Manos base coat and second coat, allowing the wall to dry in between coats. Compress as usual.

To Avoid the Problem in the Future: Always prep a gypsum substrate with American Clay Sanded Primer, a PVA primer, or a 50% dilution of American Clay Penetrating Sealer or other acrylic sealer before applying American Clay DM Systems

Second Coat Peeling Due to Dusty Substrates, Lightweight Joint Compound or Topping Compounds - Primarily DM, Some TS

Problem: Second coat peels as it dries or as it is compressed

Reason for the Problem: Substrate was dusty or included light weight joint compound (USG Plus-3 or Murco M-100) or topping compounds.

Solution: Scrape back peeling plaster until you find a solid connection between plaster and wall.

Remove dust. Paint wall with an isolating primer, or wash walls with a 25 % sealer solution (1 part sealer to 3 parts water). Allow wall to dry. If using TS, apply American Clay Sanded Primer and two coats of plaster, then compress. If using DM, apply two coats of plaster and compress. Always allow plaster to dry between steps.

To Avoid This Problem in the Future: Do not use lightweight joint compound or topping compounds. If walls are dusty or lightweight joint compound or topping compounds have been used, wash wall with a 25% sealer solution prior to American Clay application.

Marittimo Crazing - DM or TS

Problem: Marittimo Second Coat is crazing (spider checking) as it dries.

Reason for the Problem: Marittimo will always craze as it dries, as it must be applied thicker than the other plasters to cover the shell aggregate.

Solution: If the plaster is already dry, simply compress as normal. It will take a bit of extra elbow grease to get out the crazing.

To Avoid the Problem in the Future: Using no water and a clean trowel, lightly hard trowel the Marittimo when it is leather hard to minimize crazing. (Never mist any leather hard Dos Manos plaster, as the Mud Glue will rise to the surface and create staining.) Then compress as usual after it is dry

Air Pockets or Bubbles Appear During Second Coat Application - DM or TS

Problem: The second coat develops small bubbles or air pockets in the plaster during application or when worked at leather hard stage. They often dry flat, leaving cracks around the circle.

Reason for the Problem: Overworking the second coat with too much water and too much pressure.

Solution: Stop working the area and let it dry completely. Re-wet and compress the area to remove the cracks.

To Avoid This Problem in the Future: Do not overwork walls. If you are using DM system for artistic finishes requiring significant troweling, be sure your first coat is thick enough, and consider using American Clay's Sanded Primer before plastering (plaster over Sanded Primer can be worked much harder and longer before air pockets appear).

Small Circles Popping Off As Wall Dries - DM

Problem: As the second coat dries, small circles of plaster pop off the wall and there is cracking that looks like the bottom of a creek bed after it has dried out (the plaster cups as the cracked edges pull off the wall). It looks like some of the plaster did not bond to the wall.

Reason for the Problem: This problem can occur when the first coat contains skips that allow the substrate to show through (a.k.a. cat faces) and then the second coat is applied with a large trowel and there is inadequate pressure to force the base coat material into the voids to bond with the substrate. Dust on the substrate can cause similar problems (see above)

Solution: Patch any areas where plaster has fallen off wall. Re-wet and rework cracked areas. If cracks remain, or area "bounces" when tapped, peel back cracked plaster and patch.

To Avoid This Problem in the Future: Be sure to cover the entire wall with the first coat, leaving no substrate exposed. If there are skips, use a smaller trowel or greater pressure to force the second coat into the voids.

FINISHES

Dusty Wall, Crazing, &/or Color Doesn't Match Color Chip - DM or TS

Problem: The finished wall is dusty, and/or there may be some crazing (spider checking) and/or the color doesn't match the color chip.

Reason for the Problem: The wall has not been properly compressed.

Solution: Re-wet and rework the surface (see compression directions). Slight color variations will result from different compression techniques.

To Avoid the Problem in the Future: Compress the wall after the second coat has dried.

COLOR

American Clay Color Policy

Although we are striving for perfection in our color samples, please know that the color you receive may vary from the sample. We are using Mother Nature's pigments that at times vary in coloring strength from batch to batch. Although color variations are closely monitored and variations are slight, it is a good idea to buy all pigment for a project from the same batch.

We also anticipate variations in color resulting from the installer's finishing techniques (for example: raising the cream will lighten the color, while burnishing will deepen the color). We believe this is one of the benefits of our product. As well, two different installers doing the same technique may end up with two slightly different colors. Pigment can be lost in the mixing process if care is not taken, and sealers, waxes, black soap and other finishes will all affect the color in different ways. With so many variations possible, we cannot guarantee that your final product will match an American Clay color tile. We recommend that all installers make their own sample boards on-site for final color and finish approval.

Color Does Not Match Sample Swatch - DM or TS

Problem: The color of the plaster does not match the color of American Clay's sample tile.

Reasons for the Problem: There are many possible reasons for a plastered wall to be slightly different in color from American Clay's sample color tile.

1. The plaster has not been compressed (see Finish Problems for more information).
2. Pigment was lost in the mixing process or was not uniformly mixed.
3. There are natural variations in pigment batches due to our use of natural mineral pigments. Although this is closely monitored and variations are slight, it is a good idea to buy all pigment from the same batch. The batch number is the stamped date code found on each package.
4. Changes in lighting will dramatically affect color. The same color on two different walls may look significantly different because of differences in lighting.
5. a) Different troweling and compression techniques vary color, and b) two installers using the same compression technique may end up with slightly different colors.
6. On very rare occasions, retailers provide the wrong pigment. In these cases, the plaster color

will be substantially different from the color tile. If you suspect this is the case, please check the packaging to be sure your retailer gave you the color you asked for.

Note: Variation in water content from bucket to bucket does **not** cause variation in color on the wall.

Solution according to number:

1. Compress the plaster.
2. Re-compress the wall, working to blend in the slightly different colors. If that does not work, re-coat the wall with plaster and pigment that have been mixed without losing pigment.
3. Re-mist and compress the wall where the slightly different colors come together. This will help the colors blend together more effectively.
4. View the plaster under similar lighting conditions to be sure it is the same color. Also view the plaster over the course of the day to see how the colors change. If a wall feels too dark because of the lighting, the wall could be re-coated with less pigment in the plaster (be sure to use a gram scale to measure pigment so that color can be duplicated if you need more than one bag of plaster. We strongly recommend creating a sample color tile prior to applying the plaster to the wall.)
5. a) If two different compression techniques have been used on one wall and it looks splotchy, re-compress the wall. Once the wall has been hard troweled, it is impossible to take it back to a rougher sand finish without adding more plaster. If cream has accidentally been raised, resulting in a lighter color, you may be able to remove the cream with a barely damp sponge. If that does not work, rub fresh plaster into the spot with a hand or sponge, then brush off excess sand and compress. There are a number of artistic techniques that can be used in the finish process to finesse wall color. b) Have one installer recompress the entire wall.
6. Check to be sure retailer gave you correct pigment.

To Avoid the Problem in the Future, according to number:

1. Always compress the plaster.
2. Mix carefully and thoroughly.
3. Buy all pigment from the same batch.
4. Expect that lighting will dramatically change color.
5. a) Do an on-site sample to get final approval for color and compression technique. b) Check to be sure installers are getting the same color as they compress, or have one installer do all compression in a room.
6. Double check that retailer gives you correct pigments.

Variations in Finish Coat Color - DM Professional

Problem: Staining or variation in color on finish coat

Reason for the Problem: Wall was troweled with too much water when leather hard. If Dos Manos Professional plasters are misted and troweled at the leather hard stage, the Mud Glue is brought to the surface, creating different concentrations of binder at the surface. This causes color variations that become visible after the plaster has dried.

Solution: Re-wet and rework the surface. This should even out the color variation.

To Avoid the Problem in the Future: Use no water if working the plaster when it is leather hard.

Variations in Color over Different Substrates - Primarily TS, Some DM

Problem: Variations in color appear over different substrates on the same wall. This problem will appear as the first coat dries. It is primarily a problem that appears in the TS. The DM system is not as prone to this problem.

Reason for the Problem: Different substrates absorb water from the plaster at different rates, and the pigment goes where the water goes. So when substrates with two different absorption (back suction) rates are coated with plaster, the substrate that pulls in the most water will appear lighter in color. "Hot mud" (any powdered, quick-setting drywall mud) can create this problem,

as it absorbs more moisture than the drywall it is used to patch. In new construction, it is not uncommon to have a combination of regular and hot mud.

Solution:

- If just the first coat is on, you can
 - a) use Mud Glue in the second coat to minimize color variations (this will be the quickest and easiest solution, but it might not work for severe suction differences).
 - b) mist the areas of lighter color, and do not mist the rest of the wall, as you apply the second coat. This **may** solve the issue, particularly if combined with option a above.
 - c) spray on a coat of American Clay Penetrating Sealer diluted 3:1 with water (not a heavy coat, but an even one). The sealer will help eliminate the excess suction. When the sealer is dry, continue with your TS or DM second coat application.
- If the second coat has been applied already, and there are color variations, the compression step will frequently even that out, although the plaster may need to be re-wet and reworked several times. If re-wetting and reworking does not do the trick, you will need to re-coat the wall. See the recommendations above for going over a first coat with color variations.

To Avoid the Problem in the Future: Use regular joint compound instead of hot muds. When different suction rates exist or are suspected, we recommend priming the wall with a conventional paint primer (PVA works well), or spraying on American Clay Penetrating Sealer diluted 1:1 with water. Both options will even out the suction rate. This is followed by a coat of American Clay Textured Primer (a breathable primer that will not even out suction rates, but will provide sand that creates the "tooth" necessary for the clay to bond to the wall). Then the two coats of plaster may be applied.

Also, when possible, allow hot mud to dry as long as possible before covering with plaster. The longer hot muds are on the wall, the less moisture they will pull into the wall.

Variations in Color over Joint Compound - TS

Problem: Plaster color over joint compound is lighter than the rest of the wall. This problem will appear as the first coat dries. It is primarily a problem that appears in the TS. The DM system is not as prone to this problem.

Reason for the Problem: The drywall installer used "hot mud" (powdered, quick-setting drywall mud) to tape and bed the joints. Hot muds absorb water from the plaster at a higher rate than the wallboard, and the pigment goes where the water goes. So plaster over hot mud will be lighter than the plaster over the drywall or regular joint compound. In new construction, it is not uncommon to have a combination of regular and hot mud.

Solution:

If just the first coat is on, you can:

- a) use Mud Glue in the second coat to minimize color variations (this will be the quickest and easiest solution, but it might not work for severe suction differences).
- b) mist the areas of lighter color, and do not mist the rest of the wall, as you apply the second coat. This **may** solve the issue, particularly if combined with option a above.
- c) spray on a coat of American Clay Penetrating Sealer diluted 3:1 with water (not a heavy coat, but an even one). The sealer will help eliminate the excess suction. When the sealer is dry, continue with your TS or DM second coat application.

If the second coat has been applied already, and there are color variations, the compression step will frequently even that out, although the plaster may need to be re-wet and reworked several times. If re-wetting and reworking does not do the trick, see the recommendations above for going over a first coat with color variations.

To Avoid the Problem in the Future: Use regular joint compound instead of hot muds. If hot mud has been used or its presence is suspected, we recommend priming the wall with a conventional paint primer (PVA works well), or spraying on American Clay Penetrating Sealer diluted 1:1 with water. Both options will even out the suction rate and bring you to a Category I substrate. This is followed by American Clay Textured Primer (a breathable primer that will not even out

suction rates, but does provide sand that creates the "tooth" necessary for the clay to bond to the wall). Then the two coats of plaster may be applied.
Also, when possible, allow hot mud to dry as long as possible before covering with plaster. The longer hot muds are on the wall, the less moisture they will pull into the wall.

ACRYLIC SEALERS

Sealer Is Changing Color of Wall - DM or TS

Problem: The first coat of acrylic sealer (e.g.: American Clay Penetrating Sealer) deepens the color of the wall

Reasons for the problem:

1. The sealer has not been diluted enough before application, and/or
2. Even with properly diluted sealer, the color will deepen if the first coat of sealer is troweled in or rubbed with a sponge.
3. The plaster is unevenly compressed.

Solution: Once the first coat of sealer has been applied to the wall, there are only two reliable ways to change any variations in color:

- Sand off the sealer with fine sandpaper after the sealer is dry. Re-compress the wall, let dry, and seal again, or
- Re-coat the wall with another layer of plaster. To recoat the wall, use an American Clay plaster made with 30% Admix mixed into the water, or use a coat of Dos Manos (the Admix will create a stronger bond with the acrylic sealer).

Some professionals have success modifying the color with a second coat of sealer, but this is quite challenging. Another option would be to rub the wall with a 10% ammonia solution. This will remove some of the sealer, but again results are not guaranteed.

To Avoid this Problem in the Future:

1. If you desire no color change, dilute 1 part American Clay Penetrating Sealer to 2 parts water for the first coat. Test that dilution on a plaster sample before applying it to the wall.
2. Do not trowel in the first coat of sealer or rub it with a sponge. Use a sponge to tap off drips if necessary. Second and third coats of sealer are far less susceptible to color change.

Sealer Is Dripping - DM or TS

Problem: The sealer is dripping down the wall.

Reason for the Problem: Too much sealer is being sprayed in one area. Instead, spray with a sweeping side-to-side motion. Also, client may be using a pump-style sprayer instead of an airless or HVLP (High Volume Low Pressure) sprayer, which drip less. However, it is possible to create drips with an airless or HVLP if too much sealer is applied at one time.

Solution:

If the sealer is still wet:

- tap off drips with an absorbent sponge (do not rub or wipe - this will change plaster color on a first coat of sealer)
- spray wet drip with more sealer and trowel in quickly (on a first coat, this may change color of plaster in troweled area).

If the sealer is dry:

- Sand drip off and reseal.
- Spray drip with water three times and then break down the sealer with a trowel (this is especially effective on sealer that is less than three days old).
- Ammonia breaks down acrylic. Use a 10% ammonia solution to remove drip marks and other blemishes left by sealers.

To Avoid this Problem in the Future: Use an airless or HVLP sprayer or apply three very dilute coats

of sealer (1 part sealer to 2 parts water) and tap off drips with a sponge. To minimize drips, spray with a sweeping side to side motion, overlapping the spray pattern slightly and working from the bottom of the wall to the top. (Working from the bottom to the top reduces the visibility of drips that occur)

Sealer Is "Grabbing" the Trowel and Leaving Drag Marks - DM or TS

Problem: When the sealer that is being troweled in, as the sealer begins to dry, it "grabs" the trowel and leaves drag marks.

Reason for the Problem: The sealer is getting sticky as it begins to dry.

Solution: Quickly spray the drag marks with water and re-trowel. This will remove the drag marks.

To Avoid this Problem in the Future: Trowel quickly and stop troweling once sealer begins to set. Keep a water sprayer handy for any drag marks that appear.

The Sealer Is Cloudy - DM or TS

Problem: The sealer becomes cloudy, particularly over dark colors of plaster.

Reason for the Problem: Insufficient drying time between coats of sealer, or the sealer was not agitated prior to use, resulting in the sealer at the bottom of the container being too concentrated.

Solution: Light cloudiness might clear as the sealer continues to dry. If the sealer is under 72 hours old, you can attempt to break down the sealer by misting it and working it with a trowel. If that does not work, or the cloudiness is substantial, try rubbing the wall with a 10% ammonia solution, which might remove enough sealer to clear up the cloudiness. If this does not work, you have two options,

- Sand off the sealer once it is dry with fine sandpaper, re-compress the wall, and seal again, or
- Re-coat the wall with another layer of plaster. To re-coat the wall, use an American Clay plaster made with 30% Admix mixed into the water, or use a coat of Dos Manos (the Admix will create a stronger bond with the acrylic sealer). Then seal, shaking sealer well before using, and allowing proper drying time between coats.

To Avoid this Problem in the Future: Shake sealer well before using, and allow proper drying time (at least two hours—more if humidity is high and/or temp is low) between coats of sealer.

BLACK SOAP COLOR ENHANCER

The Black Soap is Fading in Spots - DM or TS

Problem: Black Soap (or Ecover Floor Soap) that was applied to a plastered wall as a color enhancer is fading in spots.

Background on Black Soap: Black soap was traditionally made from black olives and was used as a finish over clay and lime plasters. Over clay, it only functions as a color enhancer (bringing the dry plaster back to the "wet look"). It is **not** a sealer. American Clay no longer sells black soap because it is difficult to find a good supply and has caused significant troubleshooting problems. When customers really want it, we suggest they use Ecover Floor Soap available in many natural food stores.

Reasons for the Problem: Black soap fades (blushes) in the presence of moisture.

1. Black soap will develop light spots where it has been splashed with water.
2. Blushing can appear in black soap that has been applied over a freshly plastered wall that looks dry but has not had time to release all its moisture.
3. Blushing can happen anytime in humid climates,
4. Blushing can happen when the substrate or plaster is absorbing moisture from the floor, from the ceiling, or from residual moisture or moisture wicking through the substrate (e.g. basement walls).

Solutions to Problems by Number:

1. Reapply black soap over light spots that have been splashed with water. We have had applicators report that coating the black soap with paste wax reduces the possibility of spotting but does not eliminate it. Bioshield Floor and Furniture Wax is one wax we know of that has produced adequate results. Please note: Test waxes prior to application. Not all wax will stick to black soap. Waxing will **not** stop moisture problems related to the substrate.
2. Allow plaster to dry until humidity levels in the room drop below 30%. This may require using a dehumidifier for two days or more in cool or damp conditions. Then reapply black soap to faded areas to even out the visual effect of the black soap.
3. Wall can be treated as in #2, however, blushing may continue to be a problem when humidity rises. Option 1 is to wash black soap off the wall with a barely damp sponge. Walls that have had the black soap washed off may be coated with an oil or a hard oil wax to achieve a similar color, but these products should be applied only by installers who have experience using these products over American Clay. Option 2 is to allow the wall to blush when the house is opened up in the summer and then to re-coat the wall with black soap in the winter, when the house is closed up and humidity levels tend to be lower.
4. Resolve moisture issue and allow walls to dry out so that the humidity level in the room drops below 30%, using a dehumidifier if necessary. Then reapply black soap to the faded areas to even out the visual effect of the black soap.

To Avoid These Problems in the Future: Do not use black soap in humid climates, or anywhere it may be exposed to moisture. Prior to black soap application, allow plaster to dry thoroughly - moisture in the room should be below 30%. In a hot, dry climate, the plaster may need one week or more to dry to this level. Drying in humid climates will take longer. Dehumidifiers will speed the process and may be necessary in damp or cool conditions.