Finishing Schedule on Acoustic Guitars

<u>Using Nitrocellulose Lacquer Without Grain Filler</u>

- 1) Sand as desired to the grit of choice. Blow off or vacuum off all the dust thoroughly. If not staining, skip to step #3.
- 2) Stain as desired with stain of choice. Wipe all the excess stain off thoroughly. Let the stain dry as per label directions. If in doubt let the stain dry double the time as prescribed on the product's label. With Minwax stain, make certain to let dry at least 24 hours prior to sealing with a solvent based finish. With a water-based finish, the finishing schedule changes as provided under water based finishes further below.
- 3) Apply one coat of vinyl sealer with and against the grain, if possible. Do not sand this coat unless absolutely necessary.
- 4) Let the vinyl sealer dry thoroughly, at least two hours. Apply the second coat of the vinyl sealer as prescribed above. Let this dry overnight, if possible.
- 5) Sand the vinyl sealer lightly with 320 to 400 no-load (no-fill) (gray in color) sand paper. The idea is to remove only surface imperfections, not the vinyl sealer.
 - NOTE: The vinyl sealer is critical to the expansion and contraction of the top coats as the wood expands and contracts with temperature. Hot or cold temperature to room temperature, and vice versa. Vinyl sealer includes a vinyl resin within the formula which allows such expansion and contraction to occur without the finish checking, crazing or cracking. If you want the finish to craze however, do not use a vinyl sealer as the base coat, but rather a stearated sealer or no sealer at all. Crazing will occur within six (6) months.
- 6) Apply top coats of choice with no more than three (3) coats per day and at least two (2) hours drying time between coats. Only two coats per day is preferred. The reason for that is to allow the tail solvents from the lacquer to come out before next coat is applied. Otherwise, checking, cracking or crazing could occur six (6) months down the road.
 - For best results, use our Magna-Shield pre-cat lacquer as the top coat. It builds fast and has exceptional warmth, clarity and durability. Equally important, you don't need to sand between each coat and there is no restriction on the number of total coats applied (within reason) keeping in mind the maximum number of coats to be applied per day. Suffice to sand after each third coat, that is, the third, sixth, ninth, etc. Sand with 320 to 400 no load sand paper between coats and make certain to remove the sanding dust thoroughly to avoid reoccurrence of imperfections.
- 7) Depending on the type of top coat used and number of coats, allow at least one week cure time prior to wet sanding and polishing. With most conventional lacquers, cure time is between two weeks and thirty (30) days. With Magna-Shield, cure time for wet sanding is one week, <u>dry sanding</u> and wax finishing (to a flat, satin or semi-gloss is three (3) days though one week cure time preferred.

- 8) For wet sanding, make certain to use a paraffinic oil such as our Rubbing Lubricant versus water or mineral spirits. It absorbs well the heat of friction without damaging the film lattice of the top coat. However, if there is a need to wet sand between coats to remove major imperfections, use soapy water only followed by thorough wiping with dampened lint free rag with denatured alcohol. Do not use oil of any type to wet sand between coats of lacquer finish.
- 9) To complete a high gloss finish use our Race Glaze Polishing Compound with a buffing wheel for best results. Also for best high gloss results, wet sand to 4000 grit if possible. Abralon Sanding Discs by Mirka are an excellent choice and are available from many retailers, including Hood Finishing Products.

Using Nitrocellulose Lacquer With Hood's Quick Drying Grain Filler

The Quick Drying Wood Grain Filler ("QDGF") is Lacquer Based and susceptible to be finishes over with virtually any type of finish, including water-based and latex paints, urethanes and varnishes as well. Its utility is over the tighter grain woods primarily Mahogany and tighter. If to be used over oak or ash, it is recommended under pigmented finishes since clarity is not an issue. Too many coats of the QDGF under clear finishes can sacrifice clarity.

- 1) Sand as desired to the grit of choice. Blow off or vacuum off all the dust thoroughly. If not staining, skip to step #3.
- 2) Stain as desired with stain of choice. Wipe all the excess stain off thoroughly. Let the stain dry as per label directions. If in doubt let the stain dry double the time as prescribed on the product's label. With Minwax stain, make certain to let dry at least 24 hours prior to sealing with a solvent based finish. With a water-based finish, the finishing schedule changes with Minwax stain as provided under water based finishes further below.
- 3) Apply one coat of vinyl sealer with and against the grain, if possible. Do not sand this coat unless absolutely necessary to remove surface imperfections. You can scuff lightly with 400 grit no-load sandpaper if need. Make certain to remove all sanding dust.
- 4) Let the vinyl sealer dry thoroughly, at least two hours, but no longer than 24 hours.
 - NOTE: If there will be no issue of expansion and contraction to the guitar, application of base coat of vinyl sealer can be avoided by going directly to the QDGF. When in doubt however, do use the vinyl sealer as the base coat, it will not hurt only enhance the quality of your finished job.
- 5) Apply the first coat of the QDGF by spray or brush. Please make certain to follow label directions prior to application. If brushing, make certain to use a suitable brush. If spraying, make certain the atomizing set is 1.8 mm or larger, but not to exceed 2.2 mm. Generally an atomizing set for pigmented lacquers or latex paint

- is recommended. You want to minimize the thinning of the QDGF to avoid excessive coats, thus maximize clarity
- 6) Let this first coat of the QDGF dry overnight so that it can shrink like a lacquer does. Sand with 220 no-load sandpaper until smooth. DO NOT SAND OFF.
- 7) Repeat the second coat as in #5 above, and then let dry overnight. Sand as prescribed in #6.
- 8) I applying over a stained surface, you can apply a coat of stain over the QDGF or add to the QDGF a nitrocellulose lacquer compatible stain to even out or enhance the color of the stain. You can add up to 10% of an compatible stain to the QDGF, but, first premix with small amount of lacquer thinner prior to addition.

A good hint to compatibility is mixing the stain with a good quality lacquer thinner. If it mixes without separation or the colorant kicking out, compatibility with the QDGF should not be an isse. Minwax stain will mix with Toluene or Toluol rich lacquer thinner like the one provided by Hood Finishing Products. Some alcohol based stains will mix with most lacquer thinners as well.

- 9) Apply top coats of choice with no more than three (3) coats per day and at least two (2) hours drying time between coats. Only two coats per day is preferred. The reason for that is to allow the tail solvents from the lacquer to come out before next coat is applied. Otherwise, checking, cracking or crazing could occur six (6) months down the road.
 - For best results, use our Magna-Shield pre-cat lacquer as the top coat. It builds fast and has exceptional warmth, clarity and durability. Equally important, you don't need to sand between each coat and there is no restriction on the number of total coats applied (within reason) keeping in mind the maximum number of coats to be applied per day. Suffice to sand after each third coat, that is, the third, sixth, ninth, etc. Sand with 320 to 400 no load sand paper between coats and make certain to remove the sanding dust thoroughly to avoid reoccurrence of imperfections.
- 10) Depending on the type of top coat used and number of coats, allow at least one week cure time prior to wet sanding and polishing. With most conventional lacquers, cure time is between two weeks and thirty (30) days. With Magna-Shield, cure time for wet sanding is one week, <u>dry sanding</u> and wax finishing (to a flat, satin or semi-gloss is three (3) days though one week cure time preferred.
- 11) For wet sanding, make certain to use a paraffinic oil such as our Rubbing Lubricant versus water or mineral spirits. It absorbs well the heat of friction without damaging the film lattice of the top coat. However, if there is a need to wet sand between coats to remove major imperfections, use soapy water only followed by thorough wiping with dampened lint free rag with denatured alcohol. Do not use oil of any type to wet sand between coats of lacquer finish.
- 12) To complete a high gloss finish use our Race Glaze Polishing Compound with a buffing wheel for best results. Also for best high gloss results, wet sand to 4000

grit if possible. Abralon Sanding Discs by Mirka are an excellent choice and are available from many retailers, including Hood Finishing Products.

Using Water-Based Lacquer/Finish Without Grain Filler

- 1) Sand as desired to the grit of choice. Blow off or vacuum off all the dust thoroughly. You can also remove the sanding dust by wiping with a lint-free rag dampened with Rubbing Alcohol. If not staining, skip to step #3.
- 2) Stain as desired with stain of choice. Wipe all the excess stain off thoroughly. Let the stain dry as per label directions. With Minwax stain or any other slow-drying oil based stain (including tung-oil based stains), make certain to let dry per label directions. However, just prior to finishing, wipe thoroughly the surface with a lint-free cloth dampened with Rubbing Alcohol. That removes any residual oil from the surface, thus avoiding adhesion problems since oil and water do not mix.
- 3) For best finish results durability, warmth and clarity use Hydrocote Polyshield or Resisthane Plus (pre-catalyzed lacquer) as your top coat. No sealer is required under since these products are self sealing. Both are excellent water-based finishes and best on the market with over 25 years of existence and product enhancements. If using another water-based finish, make certain to follow their respective labels directions.
- 4) Apply no more than three (3) coats per day and at least two (2) hours drying time between coats. Only two coats per day is still preferred. The reason for that is to allow all the water to come out of the finish similar to tail solvents with nitrocellulose lacquers.

PLEASE NOTE: unlike nitrocellulose lacquers, Hydrocote Polyshield and Resisthane Plus shrink to the minimum. After two hours, generally what you see in film build is what you get.

- 5) The cure time for Hydrocote Polyshield and Resisthane Plus is one week for high gloss polishing and three (3) days for satin rub out. Wet sanding between coats of a water-based finish to be avoided, especially with water, since water will redissolve the finish as lacquer thinner does to nitrocellulose lacquers.
- 6) For wet sanding, make certain to use a paraffinic oil such as our Rubbing Lubricant. It absorbs well the heat of friction without damaging the film lattice of the top coat. Do not use oil of any type to wet sand between coats of a waterbased finish.
- 7) To complete a high gloss finish use our Race Glaze Polishing Compound with a buffing wheel for best results. Also for best high gloss results, wet sand to 4000 grit if possible. Abralon Foam Sanding Discs by Mirka are an excellent choice and are available from many retailers, including Hood Finishing Products.

<u>Using Water-Based Lacquer/Finish With Grain Filler</u>

- 1) Sand as desired to the grit of choice. Blow off or vacuum off all the dust thoroughly. You can also remove the sanding dust by wiping with a lint-free rag dampened with Rubbing Alcohol. If not staining, skip to step #3.
- 2) Stain as desired with stain of choice. Wipe all the excess stain off thoroughly. Let the stain dry as per label directions. With Minwax stain or any other slow-drying oil based stain (including tung-oil based stains), make certain to let dry per label directions.
- 3) Apply the first coat of the QDGF by spray or brush. Please make certain to follow label directions prior to application. If brushing, make certain to use a suitable brush. If spraying, make certain the atomizing set is 1.8 mm or larger, but not to exceed 2.2 mm. Generally an atomizing set for pigmented lacquers or latex paint is recommended. You want to minimize the thinning of the QDGF to avoid excessive coats, thus maximize clarity
- 4) Let this first coat of the QDGF dry overnight so that it can shrink like a lacquer does. Sand with 220 no-load sandpaper until smooth. DO NOT SAND OFF, JUST SAND SMOOTH.
- 5) Repeat the second coat as in #3 above, and then let dry overnight. Sand as prescribed in #4.
- 6) I applying over a stained surface, you can apply a coat of stain over the QDGF or add to the QDGF a nitrocellulose lacquer compatible stain to even out or enhance the color of the stain. You can add up to 10% of an compatible stain to the QDGF, but, first premix with small amount of lacquer thinner prior to addition.

A good hint to compatibility is mixing the stain with a good quality lacquer thinner. If it mixes without separation or the colorant kicking out, compatibility with the QDGF should not be an isse. Minwax stain will mix with Toluene or Toluol rich lacquer thinner like the one provided by Hood Finishing Products. Some alcohol based stains will mix with most lacquer thinners as well.

- 7) For best finish results durability, warmth and clarity use Hydrocote Polyshield or Resisthane Plus (pre-catalyzed lacquer) as your top coat. No sealer is required under since these products are self sealing. Both are excellent water-based finishes and best on the market with over 25 years of existence and product enhancements. If using another water-based finish, make certain to follow their respective labels directions.
- 8) Apply no more than three (3) coats per day and at least two (2) hours drying time between coats. Only two coats per day is still preferred. The reason for that is to allow all the water to come out of the finish similar to tail solvents with nitrocellulose lacquers.

PLEASE NOTE: unlike nitrocellulose lacquers, Hydrocote Polyshield and Resisthane Plus shrink to the minimum. After two hours, generally what you see in film build is what you get.

- 9) The cure time for Hydrocote Polyshield and Resisthane Plus is one week for high gloss polishing and three (3) days for satin rub out. Wet sanding between coats of a water-based finish to be avoided, especially with water, since water will redissolve the finish as lacquer thinner does to nitrocellulose lacquers.
- 10) For wet sanding, make certain to use paraffinic oil such as our Rubbing Lubricant. It absorbs well the heat of friction without damaging the film lattice of the top coat. Do not use oil of any type to wet sand between coats of a water-based finish.
- 11) To complete a high gloss finish use our Race Glaze Polishing Compound with a buffing wheel for best results. Also for best high gloss results, wet sand to 4000 grit if possible. Abralon Foam Sanding Discs by Mirka are an excellent choice and are available from many retailers, including Hood Finishing Products.

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