

Acry-Tech Coatings

EARTH AND USER FRIENDLY PROTECTIVE COATINGS

DuraTex® Speaker Cabinet Coatings

Temperature & Humidity WILL Affect Your Success

The **DuraTex® Coatings** are quite complex formulations that require more diligence in application than do typical wall paints. In order to achieve the hardness and durability in the finished product, **DuraTex®** contains some very strong additives to knit the film to make it tough, weather resistant and beautiful.

Temperature and Humidity levels at the time of application play a large part in the success or failure of the application. Here's why...

HUMIDITY EFFECTS: As a latex product, **DuraTex®** contains water. It is imperative that the water evaporate out of the product within a certain time frame in order for the remaining solvents in the product to be able to begin the curing process. First the product has to dry, then it begins to cure and with a little time or heat, the curing is complete.

The product cures as the small amount of slow evaporating solvents in the coating knit the film together after the water evaporates BUT, before the solvents evaporate. Film formation problems can happen when the water portion of **DuraTex®** evaporates too slowly while the slow evaporating solvents are also leaving the film. When the water portion slowly evaporates, there are no solvents left to knit the film. This is what happens when **DuraTex®** is applied in very high Relative Humidity conditions. **DuraTex®** should not be applied when the R.H. is above 70% as this means it will take a long time for the **DuraTex®** to dry because the surrounding air is already concentrated with more than 70% of the water vapor it can hold and it can't hold much more. A slow drying means that the film may not form correctly as there will be too low a concentration of remaining solvents to make the film tough and durable. In extreme cases, cracking, checking, a rubbery feel and lack of adhesion will result.

Make sure that the Relative Humidity is below 70% for best results.

TEMPERATURE EFFECTS: When **DuraTex®** is applied there is a surface cooling effect that happens as the water begins to evaporate. You may find that what was a 60° surface is now a 55° or even 50° surface depending on how much of a breeze is blowing from fans, etc.

At temperatures below 55°, the coating will NOT cure properly. It's similar with epoxy products, cool temperatures become a problem for proper curing. **DuraTex®** likes heat! It's best when the surface temperature and the surrounding air temperatures are at 70° and higher. Even 95° is not a problem as long as the Relative Humidity is below 70% (see above).

When the temperature is low, the film will not form correctly and the product (even though it is dried) will not adhere, will have cracks and checks and will not have any film integrity.

APPLICATION TEMPERATURE AND HUMIDITY RANGES:

Over 65°F with Relative Humidity levels below 70%.

If temperatures are below 70°, do not use fans as this will cause the surface temperature to drop below the critical point and improper curing can result.

Note:

Several places sell an Indoor/Outdoor Thermometer with Hygrometer for less than \$20.00 so you can always know what the temp and humidity levels are in your work area.