



The Ultimate Sublimation Panels

**GUIDELINES TO SUBLIMATE DURALUXE PANELS**



## BEFORE YOU START

All presses operate slightly differently and ambient temperatures can affect results as well. Duraluxe recommends testing your press using small panels to dial-in your setup process before pressing large panels. The surface of your Duraluxe panel has been coated with Decoral's premier powder coatings, which are unique in the sublimation world and press differently from other similar products.

Please remember to remove the white protective film on the panel before you decorate and make sure all panel surfaces are completely dry and clean before attempting to sublimate. Any contaminants present on the sublimation surface will adversely affect the outcome of your decoration. Preheat all your pressing surfaces by running two (empty) cycles before decorating, in order to warm up the base of the heat press.

## STEP BY STEP

To achieve the best decorated surface, Duraluxe recommends sublimating your panels face down, placing a clean cloth or paper between the heating element face and the Duraluxe panel.

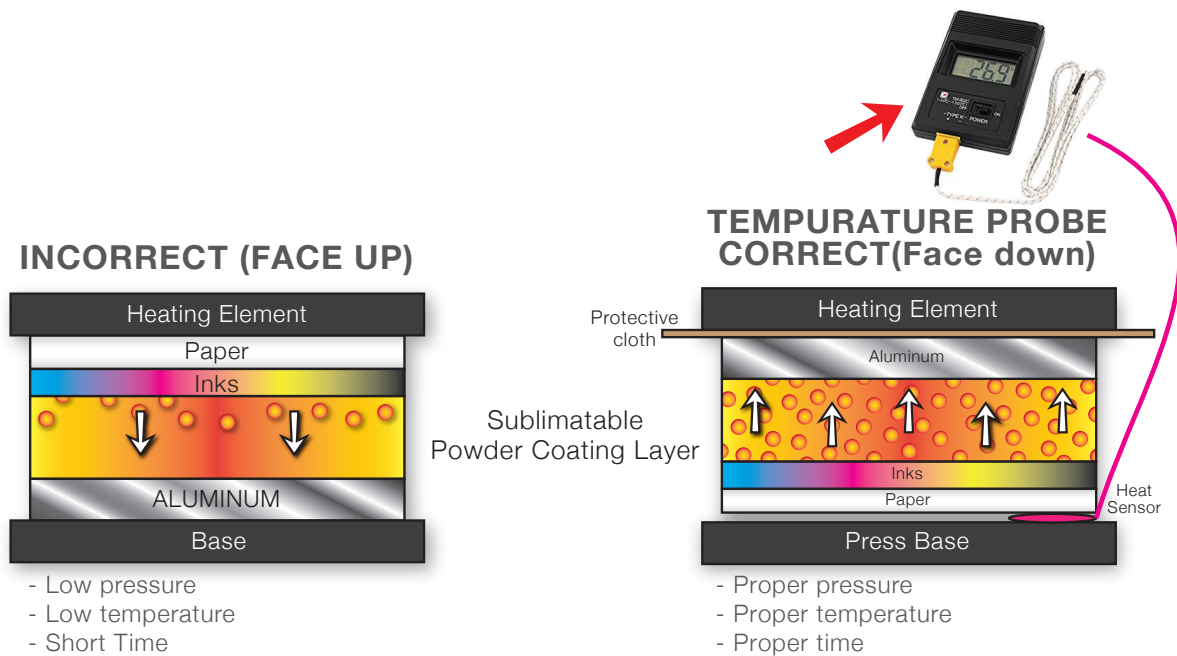
These are the steps to follow:

1. Place the transfer paper on a table with the image facing up.
2. Position the Duraluxe panel facing down on the sublimation paper to align the image properly.
3. Wrap the sublimation paper around the Duraluxe panel and fix it in position with masking tape.
4. Place the wrapped panel on the press with the Duraluxe panel facing down.
5. Having the heat press at 205°C/400°F and making sure that the base plate of the press is preheated (two empty cycles), press the Duraluxe panels for 140-160 seconds or the necessary time for the sublimation paper to reach the 205°C/400°F. For this reason it is recommend to use a thermo-couple sensor to make sure that the actual temperature on the sublimation paper reaches the 205°C/400°F.

# USING A THERMOCOUPLE SENSOR TO CHECK PROPER SURFACE TEMPERATURE

The images below show the correct and incorrect way to sublimate Duraluxe panels.

In order to make sure that the surface of the panel has reached the proper temperature of 205°C/400°F, place the thermocouple sensor between the press base and the transfer paper. Check the display on the thermocouple so the reading is actually 205°C/400°F.



## *Time, Temperature, and Mechanical Pressure.*

Based on Decoral's 25 years of experience in outdoor architectural decoration, ideal settings for sublimation of Duraluxe panels are: 205°C/400°F, for 140 - 160 seconds, at a pressure of 105 PSI (Medium pressure).

Note: This pressure setting (105 PSI) is designed for 70 gram paper. The use of heavier sublimation paper will require you to lower the pressure to avoid sticking. Example: 140 gram at 60 PSI (Low pressure).

If after the heat transfer there is excessive ink left on the sublimation paper and the colors on the Duraluxe panels are very light, then the recommended 205°C/400°F temperature has not been reached on the surface of the sublimation paper. If so, we recommend increasing the pressing time/temperature in small steps until the proper results are achieved.

If the sublimation paper sticks on the powder coated surface or the surface looks dull (image is over sublimated) then most likely the recommended 205°C/400°F temperature was exceeded by a significant amount. If so, we recommend decreasing the pressing time/temperature gradually until the proper results are achieved.

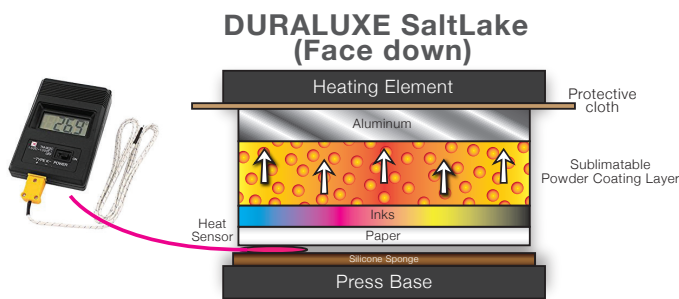
## DECORATION INSTRUCTIONS FOR SALT LAKE FINISH

SaltLake Duraluxe Panels have an exclusive textured surface that resembles Utah's Salt Lake surface wrinkles. Because of its high-relief texture, SaltLake requires the use of a 1/4" silicon sponge when you press to sublimate. The silicon sponge allows the paper to conform to the surface shapes of the Salt Lake tightly, insuring proper ink penetration and uniform color. Presses that already have a rubber surface will not require the use of a silicon sponge. Large format presses normally use Nomex felt for this purpose.

Place the silicon sponge on the base of your press, then place the Duraluxe panel on top. The sublimatable side of the panel should face down on the silicone sponge.

The diagram below demonstrates the proper way to sublimate on a SaltLake finish.

Make sure the surface of the sublimation paper has reached the proper temperature of 205°C / 400°F and use a thermo-couple probe placed between the silicone sponge base & the paper to verify heat.



### *Time, Temperature, and Mechanical Pressure.*

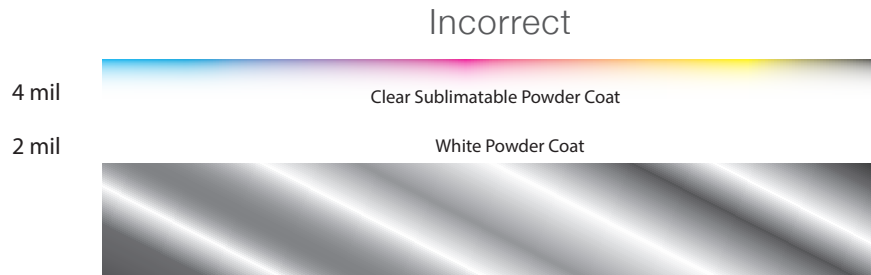
Based on Decoral's 25 years of experience in outdoor architectural decoration, ideal settings for sublimation of Duraluxe panels are: 205°C/400°F, for 140 - 160 seconds, at a pressure of 105 PSI.

Note: This pressure setting is designed for 70 gram paper. The use of heavier sublimation paper is not recommended by the sublimation of the Salt Lake finish as the heavier sublimation paper may not enter properly inside the high relief texture of Salt Lake finish.

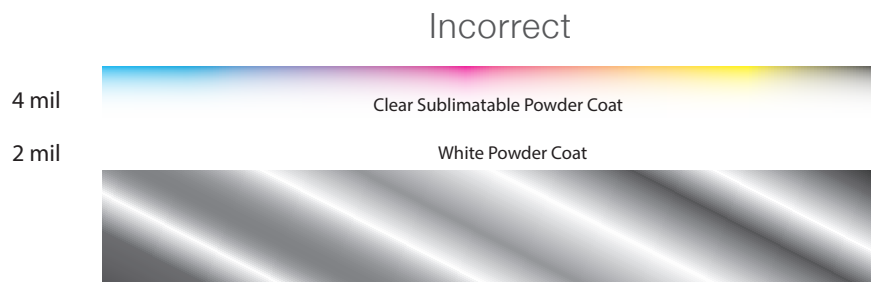
If there is excessive ink left on the sublimation paper after the heat transfer and colors on the Duraluxe panels are very light, then most likely the recommended 205°C/400°F temperature has not been reached on the surface of the sublimation paper. If so, we recommend increasing the pressing time/temperature in small steps until the proper results are achieved.

If the paper sticks on the powder coated surface or the surface looks dull (image is over-sublimated) then most likely the recommended 205°C/400°F temperature was exceeded by a significant amount. If so, we recommend decreasing the pressing time/temperature gradually until the proper results are achieved.

## INK PENETRATION IN RELATION TO TEMPERATURE



Duraluxe panel decorated at **160°C/320°F** Ink penetration depth = 1 mil



Duraluxe panel decorated at **180°C/356°F** Ink penetration depth = 2 mil



Duraluxe panel decorated at **205°C/401°F** Ink penetration depth = 4 mil

**NOTES:**