



**PATENT  
PENDING**

**SubTHAT! Construction**

**SubTHAT!**

Dye Sublimation Transfer Film

Slip Sheet (Soft Side)

SubTHAT!

Carrier Sheet

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### PREP SUBSTRATE

Before you begin, prepare substrate using the information to the right.

Glass, glazed ceramic, stainless steel and most types of aluminum all require the use of SubTHAT! Prep Wipes.

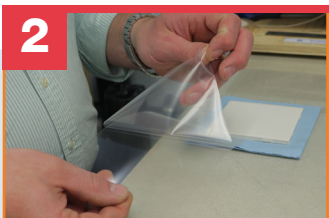
**Glass and Glazed Ceramic:** To achieve a bond that will be water resistant on glass or glazed ceramic, application of SubTHAT! Prep is required. Wipe a pre-moistened SubTHAT! Prep Wipe over clean substrate for a minimum of 30 seconds (wipes are single-use, but can be used on multiple pieces at the same time). Lightly buff surface with lint free cloth to remove any foreign matter. *Please Note: SubTHAT! does not work on crystal substrates.*

**Aluminum:** Standard aluminum requires a 2-step preparation. First, wet sand the aluminum until water completely sheets and does not bead up on the surface. Any grit sandpaper can be used, but take note that the sandpaper's grit size will determine final finish. We recommend wet sanding with 400 grit or finer wet/dry sandpaper for a smooth finish. Second, simply wipe a SubTHAT! Prep Wipe over clean surface, keeping the surface moistened for a minimum of 30 seconds. Lightly buff surface with lint free cloth to remove any foreign matter. *Please Note: Some types of anodized aluminum may not require surface preparation.*

**Stainless Steel:** Works well with 304 and 316 stainless steel. Refer to aluminum instructions above for preparation. SubTHAT! Prep Wipe recommended for best results.

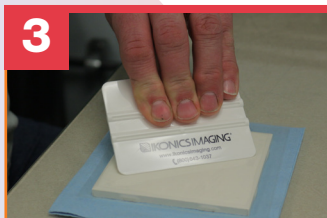
**Wood:** Must be completely dry, smooth, and free of all foreign matter. Do NOT use Prep Wipe.

**Acrylic:** Lightly buff surface with lint free cloth to remove foreign matter. Do NOT use Prep Wipe.



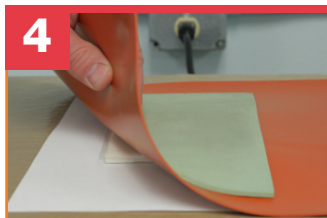
### PREPARE SUBTHAT!

Cut film to be slightly larger than your substrate for edge-to-edge coverage. Remove the slip sheet (the slip sheet is the soft side that is indentable with fingernail; refer to diagram at top of page).



### APPLY SUBTHAT!

Starting on one edge, gently squeegee the tacky film onto the substrate using one pass. The film may not be repositionable once squeegeed down (depending on substrate).



### ADHERE SUBTHAT! WITH HEAT PRESS

Refer to the Time & Temperature table on the next page for the recommended settings based on substrate.

Place in heat press as follows from bottom to top: piece of paper, substrate with SubTHAT!/print side up, 1/16" 70A silicone sheet, green heat conductive pad (H.C.P.) when needed.

**NOTE:** If transferred film feels soft or tacky when cool, or can be scratched using light pressure, increase application time in 30 second increments until you get good cure.



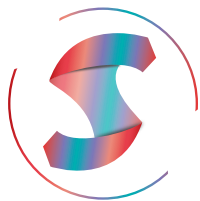
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**SubTHAT!**

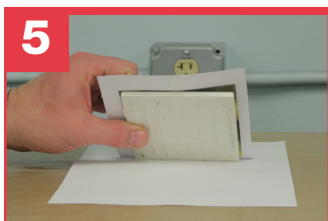
Dye Sublimation Transfer Film

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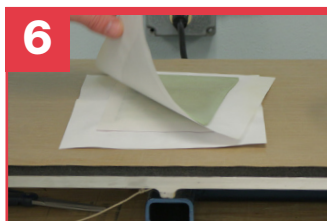
Carrier Sheet

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### APPLY IMAGE

Carefully remove substrate from the press. Let cool to the touch. Once cool, peel away carrier sheet and apply the transfer print.



### TRANSFER IMAGE WITH HEAT PRESS

Image transfer is the same process as for commercially available pretreated substrates. (Shown above from bottom to top: paper, substrate with SubTHAT!/print side up, paper.)

**NOTE:** Print transfer time in the press can vary depending on substrate type, thickness, and whether the green heat conductive pad is used. Generally 1-5 minutes. If substrate has rounded or beveled edges, a green heat conductive pad (H.C.P.) can be used on top.



### REMOVE PAPER

Carefully remove from press and remove transfer paper. Let cool. SubTHAT! will continue to cure and harden for approximately 24 hours following application and print transfer.

## TIME TEMPERATURE TABLE FOR APPLYING SUBTHAT! TO SUBSTRATE



Estimated times were determined using the HIX Corp. Swing Man 20 Model Heat Press. Use medium to heavy pressure, as the substrate allows (fragile substrates may require additional measures to prevent them from flexing and fracturing under pressure). Thicker glass, ceramic and aluminum pieces may require longer press times and/or higher temperatures to achieve full transfer and hardening of SubTHAT!.

SUBSTRATE	THICKNESS (inches)	TEMPERATURE °F / °C	STARTING TIME	PREP WIPE (required)
			(minutes)	
WITH H.C.P. / WITHOUT				
GLASS*	1/8"	410 / 210	5:00 / 4:00	YES
ALUMINUM*	1/16"	410 / 210	2:30 / 2:00	YES
STAINLESS STEEL*	1/16"	410 / 210	2:30 / 2:00	YES
CERAMIC*	1/4"	410 / 210	4:30 (H.C.P. required)	YES
ACRYLIC	3/4"	370 / 188	8:00 (H.C.P. required)	NO
WOOD (Completely Dry)	ALL	410 / 210	2:00 / 1:30	NO

\* Substrates tested using 1/8" (3mm) Heat Conductive Pad (H.C.P.) when required. Thicker materials and/or heat press type may require longer press times and/or higher temperatures. Using test pieces, make adjustments in 30 second increments or small temperature increases until SubTHAT! is not tacky and cannot easily be scratched with a fingernail after removing the carrier sheet from the cooled substrate.

For FAQ or Detailed Instructional videos, refer to: [ikonics.com/SubTHAT](http://ikonics.com/SubTHAT)