



#### HeatSoft™ PREMIUM (ESM-HTMP) Polyurethane Heat Transfer Material Specifications

#### **Product Overview**

Roland HeatSoft™ PREMIUM (ESM-HTMP-75-20/30) is a printable heat transfer media with a water-based coating that has superior stretchability. It features a soft hand and true matte finish that yield high quality prints. This smooth, lightweight and durable product is also ideal for heat sensitive garments because of its low temperature application. HeatSoft PREMIUM can be heat applied as low as 250°F (120°C). Use ESM-HTMP on cotton, polyester, cotton/poly blend and Spandex/Lycra®. It can withstand up to 50 wash cycles. It is extremely easy to weed and easily transferred by lifting the graphic off its backing liner with Roland PTM2 heat transfer mask and applying it to the clothing item or accessory. HeatSoft PREMIUM is compatible with Roland's eco-solvent inks and all Roland eco-solvent printers and printer/cutters.

#### At a Glance

Face: 3.5 mil Polyurethane film Ink Compatibility: TrueVIS Series, Eco-Sol MAX Series, EJ

Finish: Matte VersaWorks Profile: ESM-HTMP
Shelf Life: 1 Year Available Sizes: 20" x 25Y, 30" x 25Y
Certification: CPSIA Actual Widths: 19.6", 29.5"

**Applications** 

Performance wear T-shirts, sweatshirts and jackets

Sports jerseys, hats and caps Bags and totes

**Specifications** 

Total Caliper: 218.5 microns (film and liner)

Ink Compatibility: TrueVIS Series, Eco-Sol MAX Series, EJ

Finish: Matte Durability: Up to 50 wash cycles with mild detergent

Opacity:  $\geq$  90% Available Sizes: 20" x 25Y, 30" x 25Y

Gloss Level: 7 – 8 at 185°F Core Diameter: 3" Liner: Polyester (recyclable) Shelf Life: 1 Year

**Part Numbers** 

ESM-HTMP-75-20: 20" x 75' ESM-HTMP-75-30: 30" x 75'

#### **Storage Conditions**

HeatSoft™ PREMIUM (ESM-HTMP) Polyurethane Heat Transfer Material should be handled with care to prevent surface contamination that may affect the printable surface of the product. This polyurethane film should be processed and stored in an environment of 65° - 75° F (18° - 24° C) and 30 - 50% relative humidity (non-condensing) that is clean, relatively dust-free and away from direct sunlight. It is recommended to store this product in its original packaging in a cool dry area until ready for use. If storage conditions are outside the recommended operating ranges, allow the material to acclimate to the production environment for at least 24 to 48 hours before use.

#### **Roland Certified Media Guarantee**

This product is sold for the usage of the applications stated in this document. The product is free of defects, and produces vibrant, printed graphics when used with Roland's TrueVIS Series, Eco-Sol MAX Series, and EJ inks.





# **HeatSoft™ Comparison Chart**

	HeatSoft™ PREMIUM ESM-HTMP	HeatSoft™ PLUS ESM-HTM3	HeatSoft™ SATIN ESM-HTMS
Facestock	3.5 mil polyurethane film (water-base print surface)	2.9 mil polyurethane film	3.1 mil polyurethane film
Finish	Matte	Gloss	Semi-gloss
Liner	Polyester (recyclable)	Polyester	Polyester
Shelf Life	1 Year	1 Year	1 Year
Certification	CPSIA	CPSIA	CPSIA
Ink Compatibility	<ul><li>TrueVIS Series</li><li>EJ</li><li>Eco-sol MAX Series</li></ul>	<ul><li>TrueVIS Series</li><li>EJ</li><li>Eco-sol MAX Series</li></ul>	<ul><li>TrueVIS Series</li><li>EJ</li><li>Eco-sol MAX Series</li></ul>
Material Compatibility	<ul> <li>100% polyester</li> <li>100% cotton</li> <li>Polyester/cotton blends</li> <li>Spandex/Lycra®</li> </ul>	<ul> <li>100% polyester</li> <li>100% cotton</li> <li>Polyester/cotton blends</li> <li>Spandex/Lycra®</li> <li>Leather</li> </ul>	<ul> <li>100% polyester</li> <li>100% cotton</li> <li>Polyester/cotton blends</li> </ul>
Transfer Mask Compatibility	Roland HeatSoft PLUS PGM-PTM2	Roland HeatSoft PLUS PGM-PTM2	Roland HeatSoft PLUS PGM-PTM2
Application Settings*	<ul> <li>250°F/121°C</li> <li>Medium pressure</li> <li>10 - 15 seconds</li> <li>Hot peel</li> </ul>	<ul> <li>295°F/146°C</li> <li>Medium pressure</li> <li>15 - 20 seconds</li> <li>Hot peel</li> </ul>	<ul> <li>300°F/149°C</li> <li>Medium pressure</li> <li>15 - 20 seconds</li> <li>Warm peel</li> </ul>
Durability	Up to 50 washes	Up to 50 washes	Up to 25 washes
Available Sizes	<ul><li>20" x 25Y</li><li>30" x 25Y</li></ul>	<ul><li>20" x 25Y</li><li>30" x 25Y</li></ul>	<ul><li>20" x 25Y</li><li>30" x 25Y</li></ul>
Actual Widths	<ul><li>19.6"</li><li>29.5"</li></ul>	<ul><li>19.6"</li><li>29.5"</li></ul>	<ul><li>19.6"</li><li>29.5"</li></ul>

<sup>\*</sup> Always test fabric and adjust heat, pressure and time as needed



# Application Instructions HTMP & PTM2



- Use a flatbed heat press (clamshell or swing-away). Preheat the heat press to 250° Fahrenheit (121° Celsius) for:
  - 100% Cotton
  - · 100% Polyester
  - · Poly/Cotton blends
  - Spandex

Use medium pressure setting. Set application time to 10–15 seconds.

Note: Always test fabric and transfer for compatibility. Adjust time, temperature and pressure as needed. Some materials require higher application temperature (max. 305°F/150°C) and shorter press time (5–7 seconds).

- Perform Cut Test from Cut Config menu on your printer/cutter. Set Cut Pressure (approximately 50–70 grams of force) according to conditions of cutting blade and results. Due to the product's thin caliper, using a newer blade will produce the best quality results.
- Set Heat Settings on your printer to 113°–122° Fahrenheit (45°–50° Celsius). For VersaWorks®, select the Roland DGA HTMP: HeatSoft™ PREMIUM media profile from the Roland Profile Center. If a profile is not available, please use one of the following profiles:
  - Generic Vinyl already in VersaWorks
  - · Roland DGA HTMS: HeatSoft SATIN
- Print and cut your graphic. There is no need to wait for ink to dry before weeding. You can also cut at full bleed.

Note: For very small objects, use the "Dry Time" feature in VersaWorks and VersaWorks Dual. Set the dry time between printing and cutting to 5 minutes for best results

Remove all excess material from the graphic by weeding.

This information is intended as a guide; testing for compatibility with the application garment and durability is strongly recommended.

- Lay the printed/weeded ESM-HTMP on a smooth, flat surface. Make sure that the piece of PGM-PTM2 is larger than your transfer. Remove the paper liner from polyester transfer mask and hold the mask with adhesive side down with both hands to make a "U" shape. Apply the mask onto the graphics (starting from the center) and roll the mask outwards. Once applied, either manually swipe or squeegee from the center out with firm even pressure to ensure the transfer adheres properly to the mask.
- 7 Immediately after masking, lift the graphic off of the backing liner with a quick fluid motion at a sharp angle to ensure the heat transfer material does not stretch.
- Position the graphic in the desired location of the garment and press for 10–15 seconds. If you are not applying the graphics immediately to the fabric, store the masked graphics by placing it back on the glossy (coated) side of the PTM2 paper liner.

Note: Pre-press the garment for 2–3 seconds to remove any moisture from the garment as well as wrinkles. Removing the moisture from the textile is crucial as moisture can have an adverse effect on the transfer bonding with the textile.

- Do a hot peel. Remove the PGM-PTM2 polyester transfer mask at a sharp angle to ensure that the graphic is not distorted or stretched in the process. For additional durability, cover the graphic and press for another 2–3 seconds.
- 10 The graphic is ready to wear.

Note: Wait 24 hours before first wash. Do not dry clean. Follow garment manufacturer's care instructions regarding washing and drying. The garment can be machine washed warm or cold with mild detergent and dried on normal dryer settings. While the garment does not need to be washed inside out, this is recommended in order to extend the longevity of the graphic. Do not use chlorine bleach. If necessary, you can iron the entire garment, including the transfer.





#### **ESM-HTMP FAQ's**

#### 1. What is the construction of HeatSoft™ PREMIUM ESM-HTMP?

ESM-HTMP is made of flexible 3.5 mil matte polyurethane film with a water-based coating. As a result, the print surface is extremely smooth and yields beautiful, vibrant prints resembling screen printed graphics. It is supplied on a clear polyester liner that is recyclable. ESM-HTMP is exceptionally easy to weed and transfer, thus increasing productivity.

#### 2. Is ESM-HTMP CPSIA Certified?

Yes, it is. It is safe for use on children's products.

# 3. What types of materials is ESM-HTMP compatible with?

ESM-HTMP is compatible with 100% Cotton, 100% Polyester, Cotton/Poly blends, and performance fabrics like Spandex/Lycra®. Each material is different, so please test each one for compatibility and best application methods.

# 4. How much grams of force do I need to use for ESM-HTMP?

You will need to use approximately 50 – 70 grams of force to cut ESM-HTMP. Always perform a Cut Test on your printer/cutter to confirm the correct grams of force needed for ESM-HTMP.

# 5. Are there profiles for ESM-HTMP?

Yes, there will be profiles created for the BN-20 Series and TrueVIS Series printers. You can download them from the Roland Profile Center. If a profile cannot be found for your Roland DG printer, please use Generic Vinyl profile in VersaWorks or Roland DGA HTM3: HeatSoft PLUS.

# 6. Do I need to use a transfer mask with ESM-HTMP?

Yes, you will need to use a transfer mask. ESM-HTMP is compatible with our HeatSoft<sup>m</sup> PLUS PGM-PTM2.

#### 7. What is the best way to apply PGM-PTM2 to ESM-HTMP?

Place the printed and weeded ESM-HTMP on a clean, flat surface with prints facing up. Remove the paper liner from PGM-PTM2. Using both hands, hold the mask with adhesive side down until it forms a "U" shape. Slowly lower and apply the mask onto



HTMP starting from the center and roll the mask out towards the edges of the graphics. Make sure that the PGM-PTM2 is larger than your printed graphics. Once applied, either manually swipe or squeegee from the center out with even pressure to ensure the ESM-HTMP adheres properly to the mask.

# 8. How do I apply ESM-HTMP and PGM-PTM2 to my garment?

Set your heat press to  $250^{\circ}$  F ( $121^{\circ}$ C). Pre-press your garment for about 2-5 seconds to remove any moisture or wrinkles from the fabric. Place the graphics onto the fabric. Use medium pressure setting and press for 10-15 seconds. Perform a hot peel to remove PGM-PTM2. For additional durability, cover the graphic and press for another 2-3 seconds. Always test fabric and transfer for compatibility and adjust temperature, pressure and time as needed. If you need to increase the temperature, make sure that you decrease the press time, i.e.,  $305^{\circ}$  F ( $150^{\circ}$ C) for 5-7 seconds.

#### 9. How do I care for my garment after applying ESM-HTMP?

Wait 24 hours before first wash. Do not dry clean. Follow garment manufacturer's care instructions regarding washing and drying. ESM-HTMP can be washed with mild laundry detergent and dried on normal dryer settings. The garment does not need to be turned inside out during laundering, but in doing so, you will extend the longevity of your graphics. Do not use chlorine bleach.

# 10. How many wash/dry cycles does ESM-HTMP last?

Depending on how you launder and care for your garment, ESM-HTMP can last up to 50 washes.

# 11. Can I iron over ESM-HTMP after laundering?

Yes, you can iron over ESM-HTMP as needed. You do not need to turn your garment inside-out.

