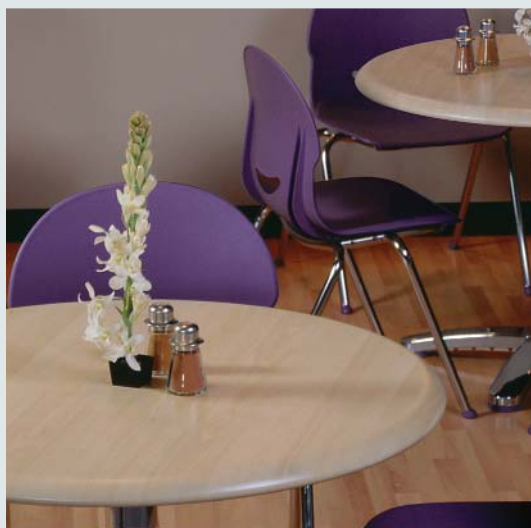


Thermofoil Surfaces

QUALITY
components

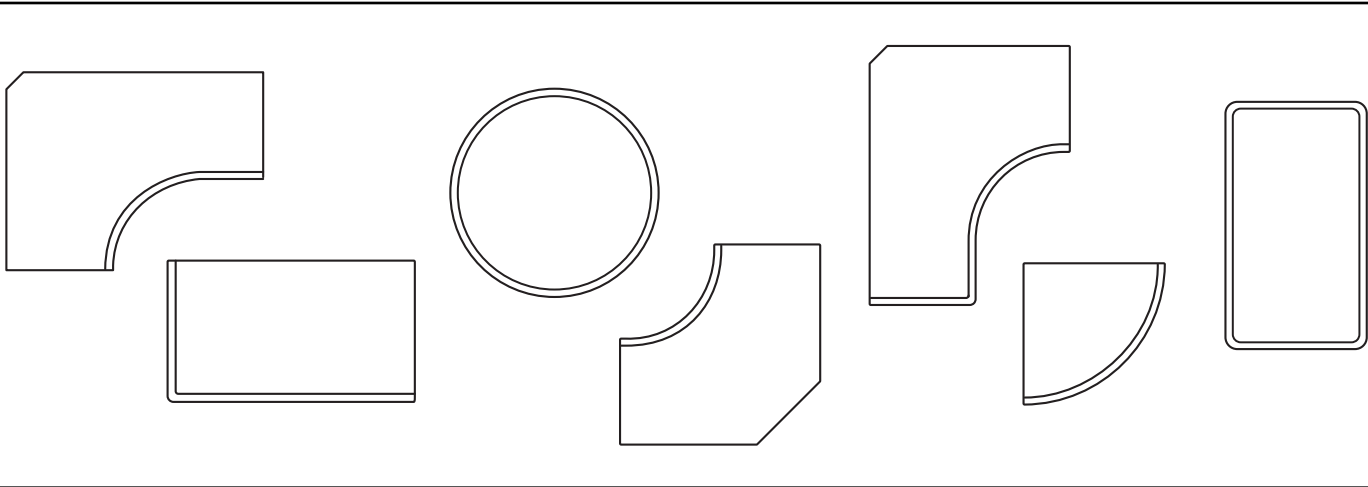


www.northerncontours.com

866-344-8132

Thermofoil Surfaces

Whether you're designing a new environment or updating an old one, our *Thermofoil Surfaces* program provides affordable value with curves and seamless edges. *Thermofoil Surfaces* can be mixed and matched to custom fit your layout, and our specialty topcoats resist scratching, marring, stains and impact. They are durable and easy to clean while seamless edges leave no joints for bacteria to hide and grow.

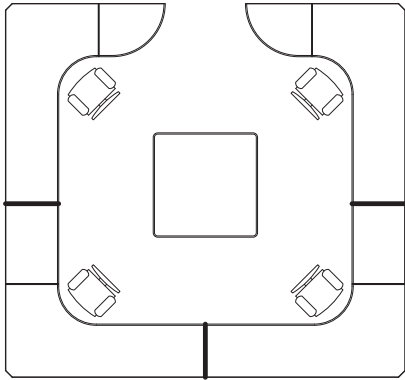


Put our Thermofoil Surfaces to work for you.

Sample Layouts

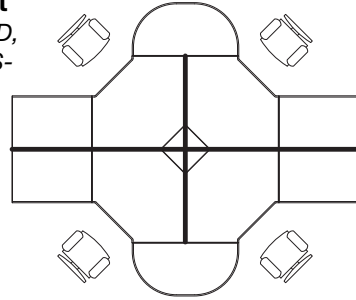
Workcell Layout

includes NCS-CCL, NCS-CCR, NCS-QTRR, NCS-STRT and NCS-SP



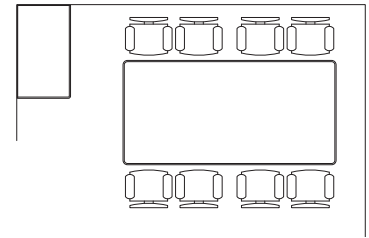
Teaming Layout

includes NCS-CBD, NCS-HR and NCS-STRT



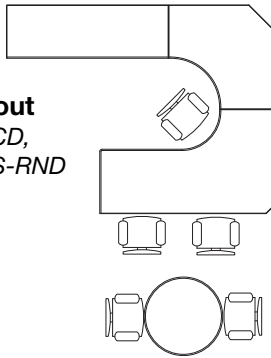
Conference Room Layout

includes NCS-SEL and NCS-SP



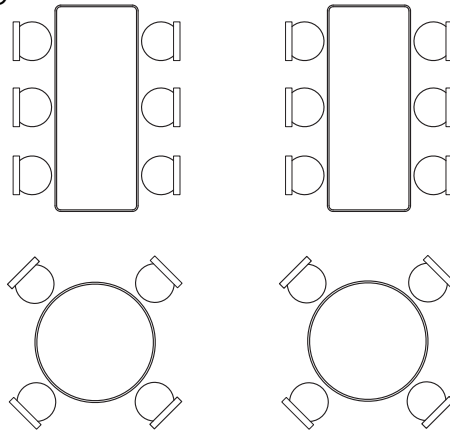
Executive Layout

includes NCS-CCD, NCS-CCER, NCS-RND and NCS-STRT



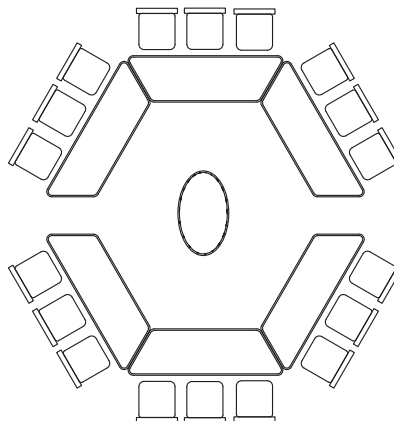
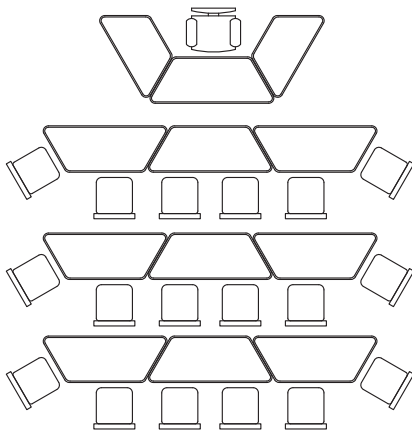
Breakroom Layout

includes NCS-SP and NCS-RND



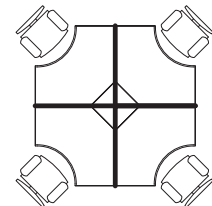
Training Layouts - Options 1 & 2

includes NCS-TPZD and NCS-OVAL



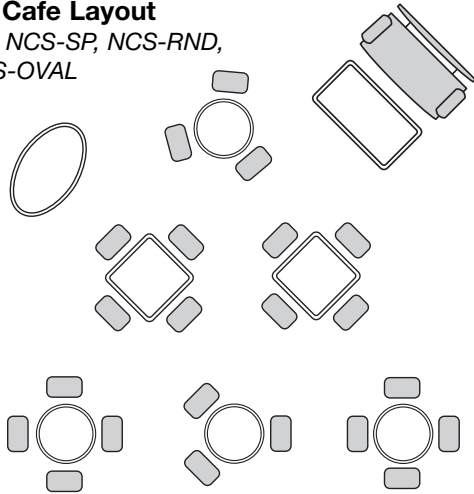
Educational Layout

includes NCS-CCD



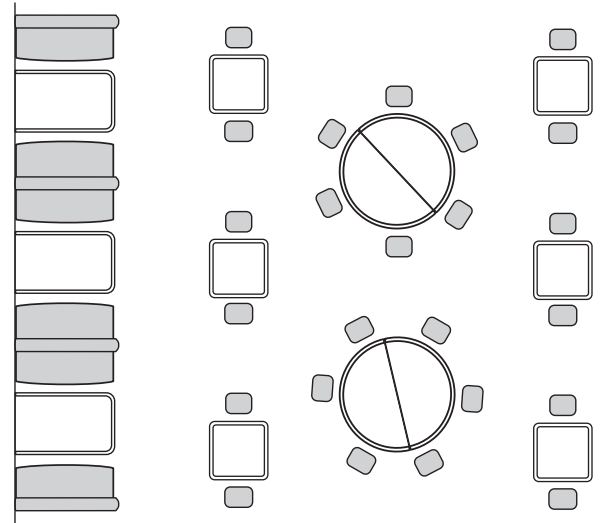
Coffee Cafe Layout

includes NCS-SP, NCS-RND, and NCS-OVAL



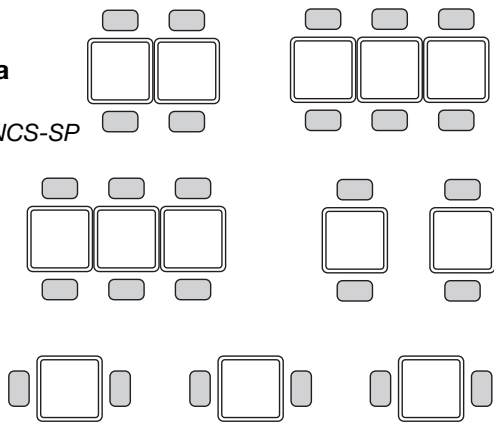
Family Restaurant Layout

includes NCS-SP, NCS-DS and NCS-HR



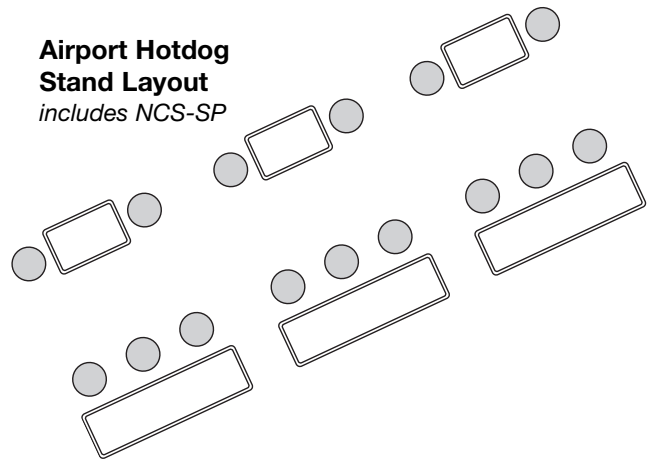
Hospital Cafeteria Layout

includes NCS-SP



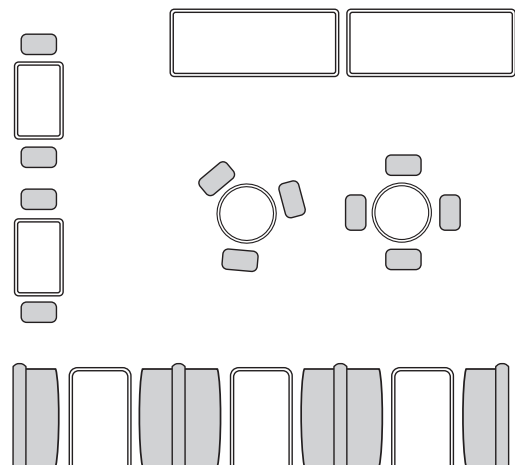
Airport Hotdog Stand Layout

includes NCS-SP



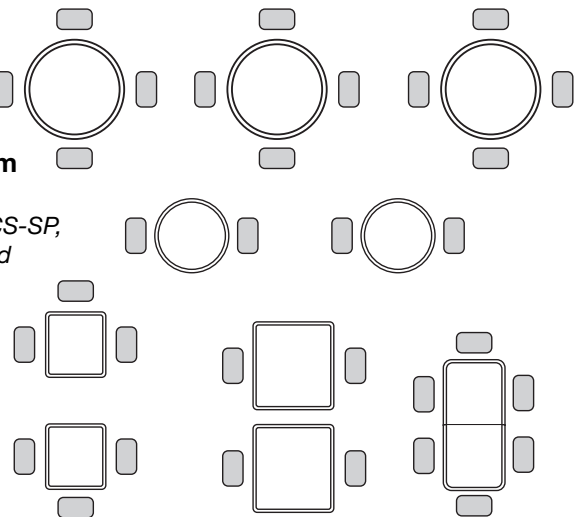
Bagel Shop Layout

includes NCS-SP, NCS-DS and NCS-RND



Executive Lunchroom Layout

includes NCS-SP, NCS-DS and NCS-RND



Ordering Instructions & Information

1. To order *Thermofoil Surfaces*, complete the order form for your part found at the end of this Product Guide. Indicate billing address, shipping address, quantities, part measurements, foils and profiles.
2. Fax the Order Form to 218.998.1783. You may also e-mail files to surfaces@northerncontours.com.
3. You will receive an order acknowledgement by fax within 24 hours of our receipt of your order (Monday - Friday 8:00 AM - 4:00 PM Central time). If you do not receive an acknowledgement, please contact us at 877-998-1814 to confirm we received your order.

Order Information

- **Part Sizes:** The *Thermofoil Surfaces* program is designed to give customers a few popular standard shapes plus the flexibility to order parts in the exact sizes you require. Size parameters are listed in the Notes section of each individual print. Due to the manufacturing process, the largest part we currently manufacture is 47" x 96". We have listed this requirement on all order forms.
- **Size Note:** Parts can be stretched in many ways but some parts have size limitations in specific directions. Please see individual order forms for details.
- **Pricing:** All parts are priced per square foot. Consult the price list for current pricing.
- **Custom Components - NCS-CUSTOM:** The NCS-CUSTOM option allows you to customize a part to meet your needs and requirements. You choose the shape, size, and profile locations (within the parameters listed in the "Notes" section on the NCS-CUSTOM order form). Use the other order forms as an example of the best way to draw your custom part. For clarity, please note the dimensions of all edges.
- **Order Form and Custom Part Drawings:** Please be certain your order form and part drawings are complete and accurate before sending them. Your order will be taken directly from these documents. Those missing information will be returned to you for clarification which may delay your order.
- **Standard Leadtime:** 5 business days. Add 1-5 days for delivery.
- **Packaging:** All orders will be bulk palletized (strapped in layers on a pallet). Individual boxing of components is not available. All shipments will require the use of a forklift, unless specified otherwise. Sample orders will ship UPS.
- **Shipping Terms:** All orders are shipped FOB manufacturing facility.
- **Shipping Method:** CCX or Fed Ex Freight. All orders will be shipped freight pre-paid, unless otherwise specified.

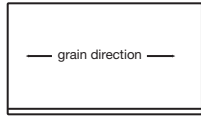
Standard Shapes

Order forms for the following standard shapes can be found at the end of this Product Guide.

NCS-CUSTOM - Send Your Own Drawing

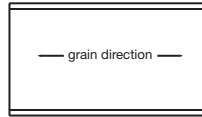
NCS-STRT

Straight



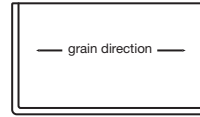
NCS-SD

Straight with Double Profile



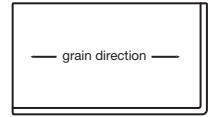
NCS-SEL

Straight End Left



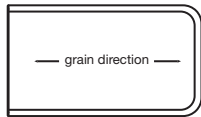
NCS-SER

Straight End Right



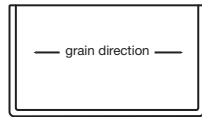
NCS-DS

D Shape Short Profile



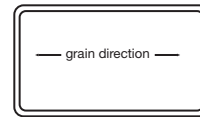
NCS-DL

D Shape Long Profile



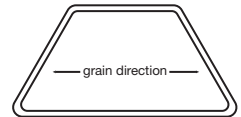
NCS-SP

Straight with Profile Around



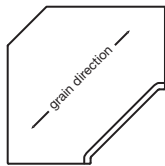
NCS-TPZD

Trapezoid



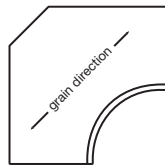
NCS-CBD

Corner Beveled Diagonal



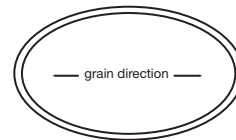
NCS-CCD

Corner Curved Diagonal



NCS-OVAL

Oval



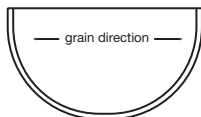
NCS-RND

Round



NCS-HR

Half Round



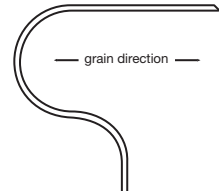
NCS-QTRR

Quarter Round



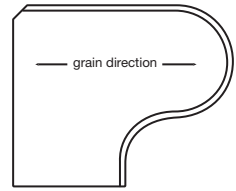
NCS-CCBL

Corner Curved Bullet Left



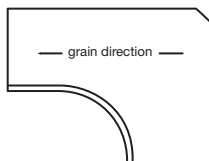
NCS-CCBR

Corner Curved Bullet Right



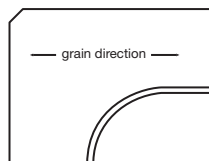
NCS-CCL

Corner Curved Left



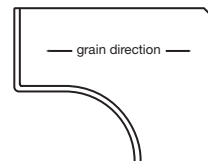
NCS-CCR

Corner Curved Right



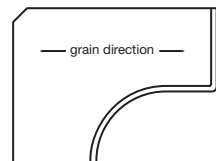
NCS-CCEL

Corner Curved End Left



NCS-CCER

Corner Curved End Right



Thermofoil Selection, Materials & Technical Data

Thermofoil Surface components are available in all of the standard Furniture & Fixtures foils. Please see the current Furniture & Fixtures foil deck for selections.

Thermofoil

Thermofoil Surfaces give customers consistent color, gloss and surface quality from edge to edge. They are scratch, mar and water resistant and won't chip or crack. Woodgrain foils provide a realistic-looking, long-lived alternative to diminishing hardwood resources.

Thermofoil Surfaces have foil covering the faces and the edges, with a seam at the bottom edge where the foil meets the black melamine. Because the seam is only at the bottom side, problems associated with spilled liquids or dirt lines from edgebanding or t-moldings are eliminated. Also, there is no need to coordinate colors between the face and edges.

Thermofoil is made from PVC which is one of the most versatile polymers. It prints and laminates very well and can accept a variety of coatings, making it a suitable alternative to HPL.

The majority of our thermofoils are manufactured with a specialty topcoat formulated to improve performance. Contact your Sales Representative for additional information.

MDF Core

Product core is Medium Density Fiberboard (MDF), a panel product manufactured from wood fibers combined with a synthetic resin or other suitable binder and bonded under heat and pressure to a density of between 31 and 55 lb/cubic foot (45-48lb/cubic foot is typical). MDF is omni-directional, so it can be shaped and finished without the grain and pitting problems associated with solid lumber or particleboard. MDF provides a stable core and superior surface for laminating. The random fiber orientation eliminates built-in stress that could cause warping, while increasing strength and impact resistance. MDF has excellent screw holding strength, surface hardness, and deflection resistance.

The backside of MDF (underside of surface) has thermally-fused melamine applied to it, typically black in color. Because of its properties, predrilling for screws is recommended.

Manufacturing Process

CNC Routing

We use Computer Numerically Controlled (CNC) Routers with diamond tooling to shape our MDF core. CNC Routers have quick tool changers allowing us to route with accuracy, consistency, speed and repeatability. Our diamond tooling offers tight tolerances, consistent dimensions and extremely clean profiles.

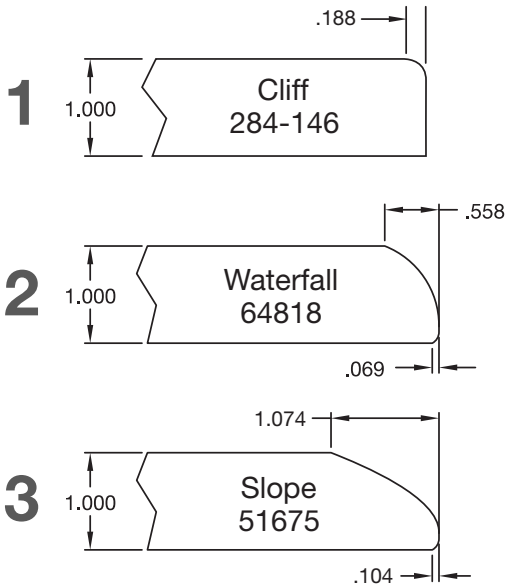
Membrane Pressing

After routing, sanding and inspecting the MDF core, we apply a water-based, catalyzed polyurethane adhesive to the face and edges of the shaped MDF work piece. Next we use membrane press technology to create a seamless and permanent bond between the core and thermofoil. After a pre-heating cycle to relax the thermofoil, a vacuum initiates the pressing process. The membrane and press then go to work, providing 35-65 pounds per square inch of positive pressure, forcing contact between the foil and the routed MDF component. This eliminates wrinkles, gives great adhesion inside functional cutouts and decorative details, and tucks the foil under the part to create back bevels and back angles. Finally, finished components are trimmed, buffed and inspected again.

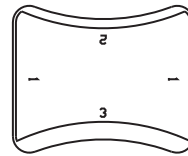
Profile and Sample Information

The following profile options are available for all *Thermofoil Surfaces*. Select the primary profile for your part on the order form. Secondary profiles are Cliff unless otherwise noted.

Profile Options



Sample - 11" x 9"



This product sample features all three profiles shown at left. All profiles are available for any *Thermofoil Surfaces* product. Use your order form to see all the options.

Frequently Asked Questions

Can I use Thermofoil Surface components for kitchen or break areas?

Yes and No. The components work great for break room tables but are not made for preparation areas where knives or hot pans are used. *Thermofoil Surfaces* have a working temperature of approximately 160 to 170 degrees,

Is there a size limit on Thermofoil Surface parts?

Due to the manufacturing process, single parts cannot be larger than 47" x 96".

If a change occurs, can a part be cut down in the field?

Yes. Be sure to use a sharp blade. Also, taping the surface prior to cutting helps eliminate chipping. Keep in mind that MDF is not water resistant and excessive exposure to the raw edge after cutting may cause the core to swell. Please note that altering the original component in this way will void our warranty.

Can I modify a radius or profile location on one of the standard part drawings?

No. These parts are standardized and available in the exact design shown in the range of dimensions listed. This reduces production time, creating a cost savings that we in turn pass on to you and your customer. We do however have a part number (NCS-CUSTOM) which allows you to draw a customized part.

What do I do if the part requires grommet hole(s)?

To install a grommet, purchase a plastic grommet, apply masking tape over the area to be cut, and use a hole saw to cut a hole slightly oversized from the grommet cylinder. The lip of the grommet should cover any chipping that may occur. If a dull hole saw is used, scoring the surface laminate with a knife blade will help prevent chipping. Please note that altering the original component in this way will void our warranty.

Do I have to order to the nearest 1"?

No, you can order by any dimension necessary. We just ask you order in decimal inches, not millimeters. Please note, the standard tolerances are + or - 1/16".

Will coffee or mustard stain these table tops?

Not with most of the finishes. The majority of our thermofoils are manufactured with a specialty topcoat which is formulated to resist such stains. Contact your Sales Representative for additional information.

I plan to use undermount keyboard trays. How can I figure out the radius size to determine if I will have enough clearance to access the keyboard tray?

There is a simple formula in the Notes section on each order form that explains how to calculate certain dimensions. It also gives you rules for minimum dimensions.

Do I have to order 24" & 30" deep parts?

You can order whatever depth (width) you choose (within the size parameters listed on the individual part order forms). The program's intent is to meet the needs of you and your customer. For example, you can order a straight in a 12" width for shelving or as a transaction surface.

Can a High Pressure Laminate or Pantone color be matched in thermofoil?

The simple answer is yes. Our sales team can help you source the colors and prints you need. A growing number of matches are readily available. We can also arrange a custom color match; however, the minimum order quantity for custom thermofoil orders is fairly high. Consult your Sales Representative for details and options.

Can I order door and drawer fronts to match my Thermofoil Surfaces?

Yes. We have a complete line of custom doors for all your storage areas. Please contact your Sales Representative for details.

Thermofoil Care, Cleaning & Product Warranty

Regular Care and Cleaning

Always use a cotton cloth or non-abrasive sponge.

Option 1: Wipe with a damp cloth or sponge with mild dish soap.

Option 2: Wipe with a damp cloth or sponge with a 50/50 mix of water and Simple Green®. Simple Green® works well on oily or tacky surfaces.

Cleaning of Stains (Infrequent Care)

Always use a cotton cloth or non-abrasive sponge.

Step 1: Using a damp cloth or sponge with a 50/50 mix of water and Simple Green®, scrub lightly for 10 to 20 strokes. This should remove most stains.

If Stain persists, move on to Step 2 and if necessary Step 3.

Step 2: Using a damp cloth or sponge with Buckeye Workout, standard Fantastik (S.C. Johnson), or standard Formula 409 (The Clorox Co.), lightly wipe for 10 to 20 strokes. Buckeye Workout is a commercial cleaner and readily available from a local distributor (to locate call 314-291-1900).

Note: Buckeye Workout contains water & propylene glycol phenyl ether.

Step 3: Place a cloth or damp sponge with 70% Isopropyl Alcohol on top of the stain for 30 minutes. After 30 minutes, remove the cloth or sponge and wipe. This should remove make-up, ball-point ink, and other stubborn stains. If stain persists, repeat step 3 until stain is removed.

Disinfecting Thermofoil Surfaces

Bleach (a 10% mixture) can be used as a disinfectant on most *Thermofoil Surfaces*. Before using the mixture on an entire surface, be sure to test it on a non-visual spot.

Cleaners to Avoid

- Any abrasive cleaner
- Most solvent based cleaners and harsh chemicals such as sink & toilet bowl cleaners
- Any cleaner in combination with a brush
- Cleaners containing ammonia
- Baking Soda

If a harsh chemical is spilled on a thermofoil surface, wipe it up immediately. Then wash the surface with soapy water and rinse several times.

*NOTE- For special cases and stains that are not removable using the above guidelines, please contact Northern Contours.

Product Limitations

Thermofoil products are not intended for use as cutting surfaces; always use a cutting board. Do not place hot pans from a stove directly onto surface. This product is also not intended for use in an exterior application.

Product Warranty

Northern Contours, Inc. warrants all components it manufactures against defects occurring in the manufacturing process and against delamination or surface discoloration for a period of 5 years from the date of original purchase. For warranty details, terms and limitations, please contact customer service or see our website: www.northerncontours.com.

Cancellation Policy

Changes and Cancellations

At Northern Contours, we strive to produce and deliver a wide variety of components on short lead times. Starts and stops in order production, order revisions and “holds” slow the flow of orders through the system. We ask that customers place only firm orders and be aware of the following guidelines for changes and cancellations.

Submitting Requests for Order Changes

To modify an acknowledged order, you must submit a written request to Northern Contours. The changes must be agreed to and again acknowledged.

Changes to Orders for Standard* Products

No changes or cancellations can be accepted on standard products 0 to 10 business days prior to ship date as printed on our order acknowledgement. That is to say, there is a 100% cancellation fee at this stage in production. If changes or a cancellation are requested 10 or more days prior to the ship date, a 50% change/cancellation fee will apply. Change-orders are also subject to revised lead times and additional fees.

Changes to Orders for Specials*

No changes or cancellations will be accepted after order acknowledgement for specials. This is to say, there is a 100% cancellation fee.

Special Order Materials

Where specific materials are procured for a customer order/project, the customer will be responsible for the full value of all special order materials even if the order is cancelled.

*Standard products are products included in the *Thermofoil Surfaces* program. Specials are non-standard products (shapes and/or thermofoils). Specials include modified standard product and new items requiring additional engineering.