



WILSONART® THINSCAPE® Performance Tops FABRICATION AND INSTALLATION GUIDELINES

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CONTENTS

CHAPTERI	Introduction	3
CHAPTER II	Safety	4
CHAPTER III	Handling	5
CHAPTER IV	Tools	6
CHAPTER V	Cutting & Routing	9
CHAPTER VI	Deck Seams	11
CHAPTER VII	Sinks	13
CHAPTER VIII	Cutouts	15
CHAPTER IX	Cooktop Cutouts	16
CHAPTER X	Conventional Backsplash	18
CHAPTER XI	Edge Profiling & Finishing	20
CHAPTER XII	Installation	21
CHAPTER XIII	Waterfall Edge	25
CHAPTER XIV	Tabletop Fabrication	26



Any fabrication procedure or technique not contained within the Wilsonart[®] THINSCAPE[®] Performance Tops Fabrication Manual will not be recognized by Wilsonart, LLC as an approved method of fabrication. Deviations from these techniques must be approved in writing by a Wilsonart Representative.



SAFETY

General Safety:

Safety is a critical concern for any shop and key to a successful business. The following safety rules should be incorporated into your safety program to help prevent an accident. Safety training, knowledge, product use and environment are the responsibility of the facility owner and the shop employees.

CAUTION: Always follow product, equipment and/or tool manufacturer's recommendations and instructions carefully.

- Read directions carefully before fabricating/installing
 Wilsonart[®] THINSCAPE[®] Performance Tops.
- Read and follow the instruction manual before operating the different tools.
- Keep all guards in place and in working order.
- Ensure all tools are properly grounded. Never remove the third prong.
- Keep work area clean, uncluttered and well lit.
- Don't use electric power tools in a damp or wet work area.
- Keep visitors at a safe distance from the work area.
- Use the right tools. Don't force a tool or attachment to do a job it was not designed to perform.
- Always use safety glasses or approved eye protection and/or face shield, ear/noise protectors and safety shoes. (FIG. 4A & 4B)
- Wear the proper apparel, no loose clothing or jewelry.
- Secure all work with the proper clamp or vise to a stable work surface.
- Don't overreach. Keep proper footing and balance at all times.
- Maintain tools in top condition. Disconnect tools before servicing and when changing accessories such as blades, bits, cutters, etc.
- Keep and use denatured alcohol, adhesives and materials in a safe, ventilated place.
- Dust collection should be used when cutting, routing and sanding. Tools should be used with dust collection at all times.



Figure 4A



Figure 4B



Figure 4D

Figure 4C

Figure 4E

Adhesive Recommendation/Safety:



Wilsonart recommends using 2-part acrylic epoxy with plastic weld or plastic bonder identifiers on the package. Devcon Plastic Welder Plexus MA300 and Loctite Epoxy Plastic Bonder are two recommended 2-part acrylic epoxy. (FIG. 4C, 4D, 4E) ALWAYS refer to the specific Technical Data Sheet AND Material Safety Data Sheet for usage instructions and health/safety concerns, respectively. For information concerning Wilsonart® Adhesives, contact www.wilsonartadhesives.com or the Wilsonart Hotline at 1-800-433-3222.

Handling:

Care should be taken when handling Wilsonart[®] THINSCAPE[®] Performance Tops to protect employees and the decorative surface of the product.

Large panels should be transported by pallet/fork-truck or rolling table. Vacuum lifts are also recommended for handling large panels.

Additional tips for working with Wilsonart® THINSCAPE® Performance Tops include:

- · Place padding (slip-sheet or protective cardboard strips) between panels when stacking.
- Carry vertically to limit flex and possible breakage.

Storage:

- Store Wilsonart[®] THINSCAPE[®] Performance Tops in original packing with plastic sheeting on the face and back in tack.
- Wilsonart[®] THINSCAPE[®] Performance Tops should be stored in a controlled, moderate climate.
- Avoid storing in excessive heat/humidity extremes.
- All materials should be acclimated for a minimum of 72 hours before fabrication/installation.
- Material should not be stored near exterior doors that may result in exposure to rain or temperature/ humidity variations.

Inspection:

Every effort has been made to supply high quality materials, free of defects. However, as the fabricator, you must conduct a final (pre-cut) inspection for manufacturing defects or damages to continue the quality control process prior to fabrication.

Sheet Selection Process:

Wilsonart[®] THINSCAPE[®] Performance Tops have product information on labels that are adhered to each sheet for proper identification.

Fab Tip: Be sure and remove peel coat from top and bottom of Wilsonart® THINSCAPE® Performance Tops before installing.



TOOLS

The following suggested tool list is only a minimum requirement for professional and successful Wilsonart[®] THINSCAPE[®] Performance Tops fabrication. Various woodworking and specialized fabrication tools are available in the market today.

Stationary Tools:

- Table or Panel Saw
- Miter ("Chop") Saw
- Triple Chip Carbide Saw Blades

Hand & Power Tools:

- Routers (FIG. 6A)
 - 3¹⁄₄ HP with ¹⁄₂" (13mm) collet
 - 3¹/₄ HP Plunge base with ¹/₂" (13mm) collet
 - 1½ -2½ HP with ½" (13mm) collet (edge details)
- General Router Bits
 - ¹⁄₂" (13mm) Straight cut
 - ¹⁄₂" (13mm) Bottom bearing flush trim bit
 - 1" (25.4mm) Top bearing flush trim bit
 - Various profile bits
- Sanders (FIG. 6B)-Random Orbital
 - Dust collection system (suggested)
 - Sanding Disks (Micron and Grit Papers)
 - Mirka Abralon pads
- Straight Edges (Phenolic or Aluminum)
- Clamps (FIG. 6C)



Figure 6A



Figure 6B



Figure 6C

For further information, contact Wilsonart Technical and Fabrication Services at 800-433-3222



TOOL MANUFACTURERS

Stationary Tools:

Powermatic 1-800-274-6848 www.powermatic.com

Striebig 1-781-585-4364 www.csaw.com Delta 1-800-223-727 www.detlamachinery.com Holz-Her 1-704-587-3400 www.holzher.com

Hand Tools - Routers, Sanders, Bits, etc:

Porter Cable 1-888-848-5175 www.portercable.com

Router Bits:

Amana Tool 1-800-445-0077 www.amanatool.com

Infinity Tools 877-872-2487 www.infinitytools.com Velepec 1-800-365-6636 www.velepectools.com Southeast Tool 877-465-7012 www.southeasttool.com

Sanding Equipment:

Fein 1-800-441-9878 www.feinus.com

Dynabrade 1-716-631-0100 www.dyabrade.com Festool 1-800-423-3531 www.festoolusa.com

Master Power 1-866-557-8316 www.masterpneumatictools.com Surcare 1-800-669-5519 www.surcare.com

Sandpaper/Finishing Pads:

3M Scotch-Brite & Trizact 1-800-742-9546 www.3m.com Micro Mesh 1-908-788-5550 www.sisweb.com

Norton 1-800-446-1119 www.nortonabrasives.com

Mirka 1-800-843-3904 www.mirka-usa.com Sia 1-800-459-3534 www.sia-abrasives.com

Pipe and Bar Clamps:

Bessey 1-800-828-1004 www.americanclamping.com



TOOL MANUFACTURERS

Recommended Saw Blades:

Amana Tool 1-800-445-0077 www.amanatool.com

Guhdo 1-800-544-8436 www.auhdo.com

DML 1-800-242-7003 www.dmlwoodworking.com

Forrest 1-800-733-7111 www.forrestsawblades.com

DeWalt 1-800-433-9258

Chemical Concepts 1-800-220-1966

www.chemical-concepts.com

www.dewalt.com

FS Tool 1-800-387-9723 www.fstoolcorp.com

Leitz 1-800-253-6070 www.leitz.com

Specialty Tools 1-800-669-5519

www.specialtvtools.com

Miscellaneous Tools:

Betterley Industries 1-800-871-7516 www.betterleytools.com

Karran[®] Sinks 410-975-0128 www.karran.com

Dustless sanding system

Fein Power Tools 1-800-441-9878 www.feinus.com

Fabrication tools

Align-Rite Tool Co. 1-888-624-1942 www.alignritetool.com

Vacuum base seam leveler/clamps

Perfect Seam 1-770-463-8321

Dust containment

Zip Wall 1-800-718-2255 moo.llewaiz.www

Sink Setter Brackets/Easy Leveling **Shelf and Counter Bracket**

Sink Setter at Precision Works 1-714-847-3396 www.sinkset.com

Wilsonart Recommends:

Keep-Nut[™] insert IM2S-P1.4-20/H6 www.chemical-concepts.com

Infinity Tools 877-872-2487 wwwinfinitvtools.com



www.ampsedge.com Vacuum base seam clamps

Straight edge

Specialized tools

www.pinske-edge.com

A.M.P.S. 1-800-669-5519

Wood's Power Grip Co. 1-800-548-7341 www.powergrip.com

The Pinske Edge 1-800-874-6753

Adhesive dispenser repair parts

Conprotec Inc. 1-603-893-2727 moo.com



CUTTING & ROUTING (DRY)

FAB Tips

- Based on the thickness of the final Wilsonart[®] THINSCAPE[®] Performance Top application, consideration of cabinets and appliances must be made during the plannings stages.
- When working with Wilsonart[®] THINSCAPE[®] Performance Tops, slower feed-speeds should be expected due to the density of the material (as compared to HPL on particleboard/MDF).
- It is always appropriate to contact your tooling supplier for specific recommendations for feed, speed, and tool geometry.
- While good quality carbide proves effective for small projects, diamond cutting tips may be more durable and cost effective.
- Rate of advance of the cutter (chip load) should be .001"- .002".
- Triple chip designs have shown to provide good cut quality. Hook + 15°.
- Panel saws with a "scoring-saw" option can minimize chipping on the exit side of the panel.
- While surface wear inhibitors can be a factor in tool life, the enemy in any machining process is heat.
- Cutting rates and feed speeds play a major role in both the practical life of tooling, as well as the quality of cuts during machining. As in any machining process, specific machines and tool types will vary and specific parameters will have to be established on site.
- Only use recommended cleaners per the care and maintenance sheet.
- Colored or printed towels can leave a residue which will contaminate the seam material and cause a weak or stained bond line.
- Postforming is not recommended or approved by Wilsonart for the THINSCAPE® Performance Tops. Please contact Wilsonart Technical Service Group at 800-433-3222 for further information.
- All edges should be sanded smooth and free of sharp corners and kerf marks, which result in stress points.
- Hand Routing—For best results, finished edges of Wilsonart® THINSCAPE® Performance Tops should be routed/milled. Rough cut panels to approximately 1/16" before finish routing. It is best to use cutters with larger diameter shanks (1/2"). However, smaller tools may be used with minimal feed rates and trim amounts. Two-flute carbide straight cutting bits work well for trimming.
- CNC Routing—The appropriate cutting sequence is largely determined by the type of machining required. For example, large panel sizing may be completely different than cutting out nested parts. In any case, the specific panel's thickness, cutting sequence, and type/condition of the machine will require that you "tune" adjustments for your particular process. A good starting point for machining is:
 - Spindle speed—16,000-18,000.
 - RPM's Feed-rate—200-900 in/min.



FAB Tips

Wet saw cutting

- When working with Wilsonart[®] THINSCAPE[®] Performance Tops, it is always appropriate to contact your machine and tooling supplier for specific recommendations for feed, speed, and programing,
- Wet cutting equipment can vary between each machine. Proper maintenance of the blade and waterjet is important to producing clean cuts.
- When cutting with a wet saw blade such as an 18" Zenesis, ensure that the blade depth is set to cut through the Thinscape material. If a thin layer remains, chipping on the bottom side can occur.
- A feed rate of 120 inches per min can be set, and the percentage can be adjusted depending on your needs and machine. This speed adjustment is especially critical when cutting smaller slabs. Since this material is lighter in weight compared to quartz and granite, Thinscape slabs may need to be secured or blocked to ensure the slab does not move during the cutting process.
- A standard target of 9 amps is desired, with a fixed down feed of 10 inches per minute.
- The cut from your wet saw should not contain any burn marks or rough edges. The finishing steps should include light dry sanding of the top and bottom edges with an orbital sander (120 grit on the top and bottom edge, and finish with a 500 Mirka Abralon pad)

Wet jet cutting

- There are two options on cutting with a water jet. One is initiating the jet from the previous wet saw kurf. The second is plunging through the center of the slab for a circular or oval cutout.
- When cutting from the previous saw kurf, the pressure can be set at 65,000 psi traveling at 12 to 14 inches per minute. This will produce a very clean cut with minimal chipping on the bottom edge. This will allow the fabricator to connect cut areas with a combination of the two cutting processes. It is important that the jet starts in the center of the kurf and not on the edge of the Thinscape.
- When punching through a Thinscape slab, it is necessary to understand that this is a layered material. Therefore, if you initiate the punch too close to an edge, the water stream can exit on the edge or chip out a larger area. Therefore, it is recommended to start the punch through a minimum of 4" from a finished edge.
- Initial plunge should be between 25,000 to 35,000 psi. This can vary between machines and your base underlayment. After the initial plunge cut, the pressure can be increased to 65,000 psi.
- Finishing the edge is accomplished by sanding with a dry orbital sander (80, 120, 180, 220 Grit, finishing with a Mirka Abralon pad).





DECK SEAMS

Deck Seams–Conventional

- Machine both edges to be seamed. Slightly oversize both Wilsonart[®] THINSCAPE[®] Performance Tops parts by a maximum of 1/8". Both sides must be routed for a proper dry fit and quality seam. (FIG. 10A)
- Seams should fit tightly when dry fitted.
- Alignment biscuits/wafers or slot bits are required for alignment and leveling.
- For alignment, use biscuit slot cutter or slot bit to machine slots for #20 biscuits. (FIG 10B)
- Minimum of 4 biscuits are required for butt seam or 45° seam. Biscuits on ends must be 3" from inside and outside corners. Other biscuits should be distributed evenly for maximum alignment and leveling. (10B. & 11B.)
- Dry fit seams to insure a tight fit. Place clear packing tape (or other release material) under seam area that may come in contact with seam supports to prevent contamination.
- Thoroughly clean areas to be seamed with denatured alcohol using clean white shop rag.
- Position sheets to be seamed 3/16" (4.8mm) to 1/4"
 (6.4mm) apart.
- Prepare clamping materials.
- Prepare 2-part acrylic epoxy seam kits. Wilsonart recommends using a 15 to 20 minute epoxy to allow time for proper leveling and clamping.
- Prepare tube and tip to ensure proper mixture of adhesive.
- Fill the seam to 1/2 full and biscuit slots, apply biscuits.
- Damming the ends will make this easier.
- Slide the sheets together make sure there is adhesive squeeze out along entire seam. Clamp the seam together using bar clamps, suction cups, wood blocks or spring clamps. (FIG. 10C)
- DO NOT OVERTIGHTEN clamps.
- Over tightening will cause starved, weak seams.
 - Clean seam area with denatured alcohol and clean white shop rag.
 - Do not scrape, chisel or remove adhesive prior to being fully cured.



Figure 10A



Figure 10B



Figure 10C



DECK SEAMS

Deck Seams-45° Seam

This method is recommended to be used for movement or directional designs. Conventional 45° seams are the preferred method for seaming, allowing the pattern movement to continue throughout the application and flow in similar direction through the angle or corner. (FIG. 11A)

- Machine both edges to be seamed.
- Alignment biscuits/wafers or slot bits are required for alignment, leveling and to eliminate movement of 45° seaming process. (FIG. 11B) Use of 2-part acrylic epoxy adhesive is recommended.
- Minimum of 4 biscuits are recommended for butt seam or 45° seam. Biscuits on ends must be 3" from inside and back corners. Other biscuits should be distributed evenly for maximum alignment and leveling. (FIG. 11B)
- Seams should fit tightly when dry fitted.
- Place a release material (such as packing tape) under the seam to prevent contamination of deck seam.
- Thoroughly clean areas to be seamed with denatured alcohol using clean white shop rag.
- Position sheets to be seamed 3/16" (4.8mm) to ¼" (6.4mm) apart. Prepare clamping materials. (FIG. 11C)
- Prepare 2-part acrylic epoxy seam kits. Wilsonart recommends using a 15 to 20 minute epoxy to allow time for proper leveling and clamping.
- Prepare tube and tip to ensure proper mixture of adhesive.
- Slide the sheets together, making sure there is adhesive squeeze out along the entire length of the seam.
- Clamp the seam together using selected clamping process; wood blocks or suction cups with spring clamps (FIG. 11C), bar clamps and/or other seaming system.

Note: Based on kitchen dimensions, seam location and movement design may vary and should be taken into consideration.



Figure 11A



Figure 11B



Figure 11C



Wilsonart® THINSCAPE® Performance Tops and Sink Installation Drop-In/ Self-Rimming

Stainless steel and other material type drop-in (FIG. 12A) sinks/bowls can be installed by following these instructions:

- Inspect sink for imperfections and verify color.
- Identify the location. The distance between the drop-in sink cutout and a seam location must be a minimum of 3" (75mm), while the distance from the front edge of the countertop must be a minimum of 1.5" (40mm).
- Position sink using center-line dimensions. Place the sink upside down on the face of the countertop and mark around the perimeter of the sink flange. (FIG. 12B)
- Using a template, draw a second line at least 3/8" (10mm) to a ½" (13mm) inside the first line of the sink perimeter, or to the manufacturer's guidelines. This should allow the drop-in to fit properly inside the cutout once the cutout section is removed.
- Ensure all countertops are adequately supported during all cutting processes.
- Using a ¹/₂" (13mm) bit, drill each of the 4 corners of the inner line to create a clean radius corner.
 Minimum ¹/₄" (6mm) radius required at all inside corner cutout locations. This will prevent any potential stress cracking in the corners.

Following the inner line, plunge with a hand router using a ½" router bit (13mm) (FIG. 12C) or use a circular saw with a guide rail and TCT triple chip blade. Recommend cutting in stages of 1/8" (4mm) depth increments. Always use a router bit cut to finish final cut into the radius corners.



Figure 12A



Figure 12B



Figure 12C



Wilsonart® THINSCAPE® Performance Tops and Sink Installation Drop-In/Self-Rimming Continued

- Dry fit vanity or sink to ensure proper fit.
- Clean Wilsonart[®] THINSCAPE[®] Performance Tops and vanity/sink flange with denatured alcohol.
- Apply ample amount of 100% silicone to the Wilsonart® THINSCAPE® Performance Tops in areas to receive flange of vanity/sink.
- Check for silicone squeeze-out around entire sink area.

Wilsonart® THINSCAPE® Performance Tops and Sink Installation Undermount

Stainless steel and other material type undermount vanities (FIG. 13A) and sinks can be installed by following the instructions below. It is always recommended to review and follow vanity/sink manufacturer instructions.

- Develop a sink template from particleboard or Wilsonart® THINSCAPE® Performance Tops by taking dimensions from vanity/sink and transferring to template material along with center lines.
- For best results, all cutouts must be conducted using a router for template and Wilsonart[®] THINSCAPE[®] Performance Tops cutouts. (FIG. 13B)
- Fasten template with clamps to the face side of the countertop. The use of an inner template is recommended to support router and can be fastened to face with hot melt.



Figure 13A



Figure 13B



Figure 13C

- Using router with top bearing bit or template guide and ½" (13mm) router bit, follow the template with router. Recommend cutting in stages of 1/8" (4mm) depth increments. Always use router bit to complete cutout.
 - Dry fit sink to ensure proper fit and that dimensions are accurate.
 - Wilsonart[®] THINSCAPE[®] Performance Tops edges can be finished using a multi-step sanding process. (FIG. 13C) See finishing section on page 18 for steps in finishing the sink cutout edge prior to fastening vanity/sink to Wilsonart[®] THINSCAPE[®] Performance Tops countertop.



Sink Installation Undermount Continued

- During the dry fitting process mark locations of sink clips. Use 4-6 sink clips for vanities and 6-8 clips for kitchen sinks. (FIG. 14A)
- With sanding materials, scuff the Wilsonart[®] THINSCAPE[®] Performance Top at the bonding location of flange or clip system stems. (FIG. 14B)
- Sink clips can be fastened by using Rotoloc® threaded stems and clips, or by using inserts with threaded stems and clips.
 - Wilsonart recommends Keep-Nut™ insert.



Figure 14A

- Clean vanity/sink flange and area with denatured alcohol to receive Rotoloc® stems and Devcon/Plexus MA300 or equivalent plastic welder/bonder adhesive to adhere to the backside of Wilsonart® THINSCAPE® Performance Top. (FIG. 14C)
 - SinkSetter, an undermount sink installation kit is also recommended to install sinks in Wilsonart® THINSCAPE® Performance Tops. <u>www.sinksetter.com</u>
- For insert installation, please follow recommended manufacturer installation guidelines providing best support scenario.
- Avoid securing sink clips to plumbing fixture areas.
- Avoid screwing through the material unless adding wooden strips or plate to secure to.
- Apply ¼" bead of 100% silicone to the center of the vanity/sink flange. Fit vanity/sink, apply pressure and fasten sink clips using wing nuts. Fasten wings equally and apply pressure evenly. Prior to tightening, secure vanity/sink to ensure proper installation and then tighten. Ensure 100% squeeze out around the perimeter of the vanity/sink.

Adhering vanity/sink may take place during the installation process in the actual application location.



Figure 14B



Figure 14C



General Cutout Requirements

These procedures are for cutouts that do not involve heat generating/producing appliances or items. See Cooktop Cutout requirements on page 16 for cutouts involving heat generating items installed in or over a cutout.

- Cutouts must be completed and performed with a router only. (FIG. 15A)
- Inside corners of all cutouts must be radiused.
 - Use 1/2" (9.5mm) or larger diameter bits.
 - A 1/4" (6.4mm) minimum radius required or larger preferred at all cutout inside corners.
 - See page 16 for Cooktop Cutouts requirements.
- Round over top and bottom edges of cutouts to a minimum of 1/16" (1.5mm) radius.
- Remove any roughness, nicks and/or router "chatter" with 150-grit (80 micron) or finer sandpaper. (FIG. 15B)
- Allow at least 1/8" (3mm) clearance space on all sides for drop-in sinks and appliances.
- Allow at least 1/16" (1.5mm) clearance space on all sides for outlets.
- Web supports are required within 3" (76mm), but no closer than 1" (25mm) from the edge of the cutout.





Figure 15A

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Figure 15B



COOKTOP CUTOUTS

Cooktop Cutouts

- Cutouts must be performed with a router only.
- A minimum 1/4" (6.4mm) gap is required between the edge of Wilsonart® THINSCAPE® Performance Tops cutout and cooktop. (FIG. 16A)
- Inside corners of all cutouts must have a minimum radius of 1/4" (6.4mm). (FIG. 16B)
- Round over top and bottom edges of cutout a minimum of 1/16" radius.
- Sand sides of cooktop cutout to be free of roughness, nicks and router "chatter" with minimum 150-grit or finer sandpaper.
- Wrap entire cooktop opening with Wilsonart® 9 mil aluminum heat reflective tape.
- Place an additional layer of tape at all corners. Inform cooktop installer that tape must not be removed. Nomex[®] will assist with heat resistance.
- Do not fold tape under the bottom of the cutout.
- Tape must extend past the edge of cooktop flange. Trim excess. (FIG. 16A)
- Never fasten cooktop to Wilsonart® THINSCAPE® Performance Tops with mechanical fasteners.
- Use a wood block between the Wilsonart® THINSCAPE® Performance Top and the cooktop fasteners.
- If minimum cutout dimension listed above cannot be met, follow requirements for cooktop mantle or stainless steel ring.



Figure 16A



Figure 16B



Backsplash

- Use 100% silicone to adhere backsplash to countertop and wall.
- Apply continuous bead to the bottom of backsplash to be adhered to countertop. Apply dots of silicone to backsplash, hot melt adhesive can be used to adhere backsplash to the wall while silicone cures. (FIG. 17A)
- Remove excess silicone squeeze-out, leaving only a small inside corner bead. (FIG. 17B)



Figure 17A

- On full height backsplash, apply all Wilsonart® THINSCAPE® Performance Tops fabrication guidelines.
 - 1/4" (6.4mm) radiused inside corners.
 - Space for expansion.
 - Cutouts must be made with a router.
 - Attach backsplash with silicone.
 - Do not hard seam to countertop.



Figure 17B



Edge Profiling

- Wipe sanding dust from countertop edge between sanding steps.
- Exposed edges can be shaped to enhance the appearance and ergonomics of the installation. This is especially true for Wilsonart® THINSCAPE® Performance Tops used as a work-surface or countertop. Typical shapes in wood-working and Solid Surface applications are also obtainable with Wilsonart® THINSCAPE® Performance Tops:
 - Fillet, Thumbnail, Flat, Reverse-Knife

- Figure 18A
- Radius should be limited at the transition to the face in order to minimize the "feathering" of the decorative surface.
- For any other questions concerning edge profiling, please contact the Wilsonart Smartline at 800-433-3222.

Finishing

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- Machining edges will normally result in slight-to-moderate cutter/kerf marks.
- These edges can be finished by using a random orbital sander to smooth the edges until they possess an attractive appearance. (FIG. 18A)
- Edge finishing is a multi-step sanding process that utilizes large-to-small grit. Similar to Solid Surface finishing, the final finish using the following sanding steps are the recommend finishes:

Finish Type	USA Grit	3M™ Micron
Matte Finish	120, 180, 220 Grit Finishing with Mirka Abralon 360 or Scotch-Brite	100, 80, 60 micron Finishing with Mirka Abralon 360 or Scotch-Brite
Satin Finish	120, 180, 320 Grit Finishing with Mirka Abralon 1000 or Scotch-Brite	100, 80, 60 micron Finishing with Mirka Abralon 1000 or Scotch-Brite
Semi-Gloss Finish	120, 180, 320 Grit Finishing with Mirka Abralon 1000 and 2000 or Scotch-Brite	100, 80, 60 micron Finishing with Mirka Abralon 1000 and 2000 or Scotch-Brite



EDGE PROFILING & FINISHING

Suggested Products

3M®Trizact™ Abrasives

1-800-742-9546

- 1-800-364-3577 in the U.S.A.
- 651-737-6501 outside the U.S.A.

Mirka Abralon Pads

1-800-843-3904

Recommended for dark colors.

Standards

U.S. standard system: 16 grit (coarsest) to 2,000 grit (finest)

- Trizact[™]: 60mx (coarsest) to 20,000mx (finest)
- Micron system: 100 micron (coarsest) to .3 micron (finest)
- Abralon: Medium (coarsest) to mirror fine (finest)



Jobsite Preparation

- Based on the thickness of the final Wilsonart[®] THINSCAPE[®] Performance Top application, consideration of cabinets and appliances must be made during the plannings stages.
- Do not install Wilsonart® THINSCAPE® Performance Tops over a solid substrate. Air movement must be allowed to reach the top and bottom of the slab. Warpage may occur due to changes in temperature and humidity. Where a full substrate is required holes can be cut in the substrate to allow air movement.
- Supports are required every 24".
- Ensure cabinets are leveled. Shims may be used for assistance. (FIG. 20A)
- Certain unsupported areas are in need of stronger frame material. These include inside corner cabinets, especially for a Lazy Susan, dishwasher openings, sink base fronts, desks and anywhere else that the cabinet is weaker. (FIG. 20B)





- Place cabinet supports at both sides of all cutouts. Place supports no closer than 1" (25.4mm) and no further than 3" (76.2mm) from sides of cutout.
- · Multiple bowl installations require special reinforcement to provide adequate support.
- Place cabinet support along both sides of the bowl installation.
- Place sink setters, solid wood, MDF or plywood supports between each bowl.
- Supports must be attached to cabinet base to alleviate flexing.
- Free standing stoves must be set at a minimum of 1/16" higher than the surface of the countertop.
- Insert method is recommended to be used for dishwasher clips only.



Overhangs

Additional support is required when the countertop overhangs the cabinet. Refer to the following chart to determine support required:

Overhang	Support Required
0" to 6" (0-152.4mm)	None
6" to 18" (152.4mm- 304.8mm) Figure 21A	Brackets or Corbels
18" to 24" (457.2mm- 609.6mm)	Brackets (corbels) and Supporting legs

When brackets (corbels) are used, place them no more than 24" (609.6mm) apart. In addition, place brackets 12" (304.8mm) from open ends and against wall ends. (FIG. 21A & 21B)





Fab Tip: Be sure and remove peel coat from top and bottom of Wilsonart THINSCAPE Performance Tops before installing.

Tools

- · Keep Nut Inserts Keep-Nut™ insert (IM2S-P1.4-20/H6). https://www.chemical-concepts.com/
- Thread cutting screws Type F point thread cutting screw with a machine screw thread with a blunt tapered point, having multi-cutting edges and chip cavities.
- Cordless Drill
- Drill Bit
- Hammer
- Silicone

Silicone Installation

- Ensure cabinets are secure and level prior to installation.
- Use only 100% pure silicone to secure countertop to cabinet frame no construction mastic.
- Use lineal beads of silicone at a minimum width of 1/8".
- Apply bead along the front of cabinet and add dime-sized dabs every 12" (304.8mm) to 18" (457.2mm) along the back of cabinet's supports.
- Do not place silicone in the inside corners.

Keep-Nut Installation

- Wilsonart[®] THINSCAPE[®] Performance Tops should be fastened to countertops using Keep-Nut inserts, threaded stems, wingnuts and L-Brackets along with silicone.
- Attach L-bracket to corners of cabinet bases using wood screws.
- Pre-mark holes to be drilled by placing the slab on the cabinet base in correct location and mark with a pencil through L-bracket.
- Flip top over and pre-drill holes using Keep-Nut drill bit (11.8mm) and stop collar.
- Using Keep-Nut setting tool and a hammer, insert Keep-Nut inserts into pre-drilled holes by tapping into place and insert threaded stems.
- Apply silicone to cabinet base as described in previous section.
- Flip the slab back over, and align the slab to the cabinet base using the treaded stems and L-brackets
- Thighten with wing nuts.

Thread Cutting Screw Installation

- Wilsonart[®] THINSCAPE[®] Performance Tops should be fastened to countertop using a proper sized Type F thread cutting screw, L-bracket or Figure 8 fastener, and silicone.
- Attach brackets or fasteners to corners of cabinet bases using wood screws.
- Pre-mark holes to be drilled by placing the slab on the cabinet base in correct location and mark with a pencil through bracket or fastener.
- Flip top over and pre-drill holes using appropriate drill bit and stop collar.
- Apply silicone to cabinet base as described in previous section.
- Flip the slab back over, and align the holes in the slab with the bracket or fasteners and screw the Type F thread cutting screws into the slab, being careful not to over tighten.

Fab Tip: Be sure and clean out holes to allow room for Type F screw



Wilsonart® THINSCAPE® Performance Tops Backsplash

- With all Wilsonart[®] THINSCAPE[®] Performance Tops, 100% silicone adhesive should be used to adhere the product backsplash to the wall.
- Apply ¼" (7mm) diameter vertical beads of silicone approximately 5/8" (15mm) in from each edge
- Then, apply vertical beads every 4" (100mm).
- Do not trowel or spread beads prior to installation, the bead format recommended will allow space for proper airflow.
- Be sure to start and stop the bead approximately 1/2" from the bottom and top of the panel.
- The area directly behind the cooktop should also have additional ¼" (7mm) vertical beads spaced 1" (25.4mm) apart and at least 12" (300mm) high (FIG. 22).

Fab Tip: Do not apply a horizontal bead of silicone on the top of the Wilsonart[®] THINSCAPE[®] Performance Top. This will prevent air flow to the backside of the panel.

- Silicone bead is recommended between countertop and backsplash bottom edge interface and ensure squeeze-out for proper seal of area after clean-up.
- · J-Roll the entire Backsplash area to ensure a proper bond.
- Cutouts require a minimum 1/8" radius on all inside corners.







INSTALLATION

Wilsonart® THINSCAPE® Performance Tops Waterfall Edge

- 1. Pieces must be level and flat
- 2. 2 part epoxy
- 3. 3-1/4hp router and 45-degree chamfer bit
- 4. Straight edge
- 5. Monument clamps
- 6. Waterfall miter clamp accessory
- 7. Cabinet base
- 8. Spring clamps
- 9. Sanding sponge



This method is recommended to be used for the fabrication of Wilsonart[®] THINSCAPE[®] Performance Tops Waterfall Edges.

- The slabs will need to be cut separately.
- · Identify all cutout and appliance locations.
- · Oversize the pieces, the final cut will be made before seaming.
- Profile and sand edges prior to cutting 45-degree miters.
- Use a 3-1/4 hp router with a 45-degree in both places. This will take three passes to complete this cut. The first two passes can be made using the bearing to run on the bottom of the slab. On the final cut a straight edge will need to be clamped to the slab so that the base plate of the router will run up against it for the final pass.
- Repeat this process on the other half of the slab.
- Mount the vertical panel to the cabinet base using spring clamps to hold in place.
- Place horizontal piece on cabinet base and dry fit the 45-degree seam for proper fit.
- Mount the vertical piece to the cabinet base using 100% silicone or Keep Nut fasteners. Depending on style of cabinet.
- Remember if the base has a solid panel that will be adjacent to the slab holes will need to be cut into the side panel to allow airflow to the backside of the slab.
- $\cdot\,$ Spring clamps can be used along with shims to hold in place until silicone cures.
- Place the horizontal panel on the cabinet base and slide near the vertical panel allowing enough room to apply adhesive.
- Place waterfall miter clamp about 1/2" from 45-degree edge on the horizontal panel use monument clamps to hold in place.
- Repeat process on the vertical panel.
- Prepare epoxy 2-part seam kit. Apply to vertical panel edge.
- Slide the horizontal panel toward the vertical panel and make sure there is squeeze out along the entire seam.
- $\cdot\;$ Apply pressure by using the spring clamps attached to the waterfall miter clamp.
- $\cdot \;$ Clean squeeze out with laminate chip and clean rag with denatured alcohol.
- Allow the epoxy to fully cure before removing the clamps (1 hour).
- Remove clamps and clean with rag and denatured alcohol.
- Soften edge using a sanding sponge.



FABRICATION OF TABLETOPS USING WILSONART® THINSCAPE® PERFORMANCE TOPS

Tools

- Keep Nut Inserts Keep-Nut™ insert (IM2S-P1.4-20/H6). https://www.chemical-concepts.com/
- Thread cutting screws Type F point thread cutting screw with machine screw thread with blunt tapered point, having multi-cutting edges and chip cavities.
- \cdot Cordless drill
- Drill bit
- Hammer

Tabletop General

- Support for the Wilsonart[®] THINSCAPE[®] Performance Tops composite material is critical when choosing table bases.
- Choose a base that is going to provide the necessary support and balance for the appropriate size tabletop.
- 36" or 42" Tabletops are recommended. Larger tops will require additional support.
- Single corner legs are not recommended unless additional support or framing is applied.

Installation

Keep Nut Installation

- Wilsonart® THINSCAPE® Performance Tops can be fastened to table base using Keep Nut inserts threaded stems and wingnuts .
- Pre-mark holes by placing table base on backside of the slab and marking with a pencil.
- Pre-drill holes using Keep Nut drill bit (11.8mm) and stop collar.
- Using setting tool and hammer, insert Keep Nut inserts into pre-drilled holes by tapping into place.
- Insert threaded stems. Align table base onto stems and use wing nuts to tighten.

Thread Cutting Screw Installation

- Wilsonart® THINSCAPE® Performance Tops can be fastened to table base using a proper sized thread cutting screw.
- Pre-mark holes by placing table base on backside of the slab and marking with a pencil.
- Pre-drill holes using appropriate drill bit and stop collar.
- · Align table base with pre-drilled holes and insert thread cutting screws and tighten.



Customer Support

Customer Satisfaction

Customer satisfaction is achieved by using a commonsense approach. Treat your customer fairly. Word of mouth is the best and least expensive form of advertising. Quality assurance in fabrication and installation is of the utmost importance, as the fabricator's reputation depends upon this.

The following is mandatory:

 Care and Maintenance information should be provided to end user.
 Information can be found at the Wilsonart website, <u>www.wilsonart.com/</u> <u>care-and-maintenance</u>. (FIG. 23A)



Figure 23A

