

- If the warp is too severe to fasten down, allow both sides of the top to be exposed to the same atmosphere. Warping will be corrected as the moisture content of the block is equalized on both surfaces
- If you make cuts in the top, the new exposed edges must be sealed with a permanent sealer such as polyurethane, epoxy or clear acrylic caulk.
- Any installations over laminate-topped cabinets should be done to allow airspace between the laminate and the counter or warping may occur.
- Grout adhered to wood countertops will fail and crack unless a flexible grout is used. The grout must be a type able to flex with the movement of the wood top. Fortis Arbor makes a flexible wood to tile grout.

If you do not understand the instructions or need additional help, **PLEASE CONTACT US at 610-767-6515, we will do everything we can to assist you. Improper installation will void your warranty. See Warranty section below for details.**

WARRANTY

Our products are warranted for life against any manufacturing error. Our items cannot be warranted against locations of extreme dryness or excessive humidity, both of which are beyond our control, nor abusive handling, care or failure to properly install the top. The Grothouse Lumber Company reserves the right to qualify any claims on our products and does not include transportation or labor involved in claims towards our products.

To activate your warranty please return a signed copy of the activation notice printed on red paper included with your shipment. This form must be completed for your warranty to apply.



PROBLEMS AND SOLUTIONS

| <u>Problem</u> | <u>Cause</u> | <u>Solution</u> |
|-----------------------------|---|---|
| Stains | Allowing food or liquid to remain on surface too long | Use light sandpaper on stain and re-oil. Stain will dissipate in wood grain over time |
| Gouges, Scratches and dents | Outside influences | Simply sand out imperfections and re-oil. |
| Dark streaks in the wood | Natural coloring of the wood | No repair needed – adds to individuality of your piece! |
| Cracks | Improper Installation | Ensure piece was installed with the ability to move per the instructions. Immediately remove any glue or improper fasteners to reduce damage. |
| Warping | Imbalance of moisture content between top and bottom | Top will adjust to new humidity. Review installation instructions |

SUBMIT YOUR FINISHED KITCHEN PICTURES TO OUR FACEBOOK FAN PAGE

We love to see pictures of your finished kitchens. Join the Grothouse Facebook network and share your kitchen photos with Grothouse fans!



<http://www.facebook.com/GrothouseLumberCo>

PAUL GROTHOUSE fine furniture

Visit www.paulgrothouse.com to learn more about our custom table line. Our tables are constructed of solid wood and produced to your design specifications.



The Grothouse Lumber Company

Wood countertops ~ Butcherblocks ~ Bartops ~ Tables

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INSTALLATION & CARE GUIDE FOR WOOD SURFACES WITH FOOD GRADE OIL FINISH



Congratulations on becoming the proud owner of a new Grothouse Lumber wood countertop! Your custom wood surface has been carefully hand crafted to bring you a lifetime of use and enjoyment. We take great care in the selection of the materials and the construction of each individual wood product. Since all of our products are natural, there may be subtle variations in color and tone throughout your wood surface. The rich appearance, distinctive grain, character marks, and color variation are the purest expression of nature.

KEY THINGS YOU SHOULD KNOW

Grothouse Lumber wood surfaces are made from 100% solid wood. Since they are completely natural, they respond to seasonal changes in temperature and humidity. These changes set up tremendous internal forces in the top.

The shape and dimensions of your top will fluctuate with the seasons. If warping or edge cracking appears it is generally related to uneven changes in temperature or humidity. A home with a consistent humidity level is an ideal environment for your wood top. A consistent humidity level can be achieved by adding a home humidification system. Keep the surface dry and away from heat. Be sure to follow our installation instructions to allow for these specific issues when permanently installing a wood countertop or butcherblock.

Wood surfaces that are not immediately installed must be properly stored. The surface should be kept in the environment it will ultimately be installed to acclimate the wood and avoid warping. The wood surface should be stored flat in a manner that permits air flow around the top and bottom of the surface.

CARING FOR YOUR WOOD SURFACE

- Upon receipt, oil the block with Grothouse Lumber Premium Butcher block Oil or food grade mineral oil (available at Drugstores). A good rule of thumb is a minimum of once a week for the first month after you receive your block and monthly thereafter. The frequency will vary based on the environment and amount of use. The block should be oiled when it appears visually dry.
- Letting the block dry out because of a lack of oil is the #1 cause of problems with the block.

Oiling will help keep that beautiful sheen and create the desired patina.

- **Wash your surface by hand using anti-bacterial dish soap and warm water.**
- Add a small amount of bleach or vinegar to water for extra bacteria killing power. Do not place small wood surfaces in the dishwasher.
- Do not allow liquid to stand on the block for a long period of time, it will stain the block and cause the wood to expand, causing glue joint failure and warp.
- Use a steel scraper to keep the top free of food build-up. Use 220 grit sandpaper as needed to keep the top smooth and free of knife marks. For deep cuts, start with 150 grit sandpaper and move up to 220 grit to finish. Always oil the top after sanding.
- **Do not expose tops to excessive heat, cold or moisture!** Never put in a microwave or dishwasher. Never place on stove burners.

• INSTALLATION

- All wood tops are at a moisture content of 6-8% when fabricated. Occasionally the blocks may take on additional moisture while being transported, especially in the spring and fall of the year, and slight warping may occur. In addition, the top may expand or contract as much as 3/8". The wider the block, the greater the expansion. Seasonal changes will cause shrinking in the winter and expansion in the summer. These changes must be taken into consideration during installation.
- **Do not screw or glue the top down without the ability to move and flex due to seasonal expansion and contraction. This will cause cracking, splitting, and failure outside the warranty!**
- When installing the counter, a hole 3/8" larger in diameter than the self tapping wood screw should be drilled in the cabinets or

mounting brackets to allow for expansion. Install the screws with large washers to allow the top to move on the screws. A self tapping wood screw at each corner should suffice. See Illustration A.

- Most cabinet manufacturers provide corner blocks or plywood within the cabinet for attaching the countertop to the cabinet base. Pilot holes should be predrilled through the corner blocks into the underside of the top.

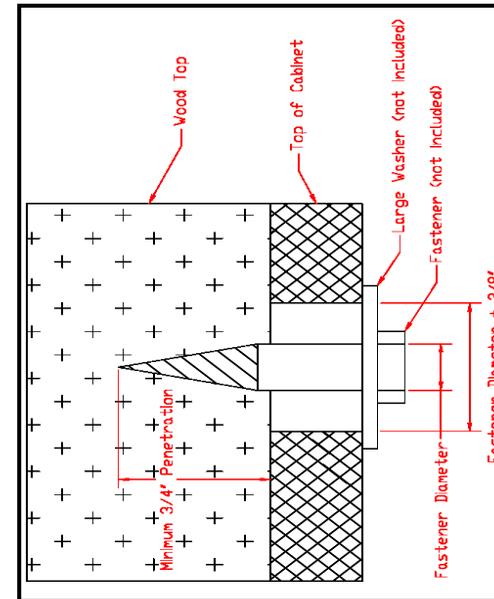


Illustration A.

- To seal over mount sink openings, apply a thin bead of silicone caulk under the sink flange. For under mount sinks, apply a thin bead of caulk to the top of the sink flange.
- For wall-tight applications, affix the tops with slots at the wall to keep the top against the wall and allow side to side expansion at the wall. Edge grain and flat grain tops will expand and contract in the width only, and an end grain block will flex in both width and length.

- A flexible silicone may be used when screw fasteners are not a viable option. When utilizing this option, apply a dab of silicone on the corner edges of the cabinets to secure the wood top. Do not apply a continuous bead of silicone. **This is not a preferred installation method as it does not constitute a permanent mechanical connection.**

- Seal any dishwasher, under counter oven, or warming drawer or with a sheet metal cover to keep heat and steam away from your block. We recommend common aluminum roll flashing available at Home Depot.

- Under counter wine coolers and refrigerators require special consideration. A layer of silver Reflectix® insulation (or a similar silver double reflective insulation) must be placed over the appliance. This type of insulation acts as a vapor barrier as well as an insulation. Do not use fiberglass insulation. In addition, we recommend a 2" gap between the appliance and the cabinet to allow for proper ventilation from the appliance.



- Under counter wine coolers, microwaves and refrigerators will condense moisture on the outside during periods of high humidity. Some appliance manufacturers offer heat blankets to retard condensation of the refrigerator or wine cooler. Contact your appliance provider for further details. We highly recommend this accessory product be utilized when offered as an option by the manufacture. Follow the manufacturer's instructions.