

Why Tangent®?

Tangent® Materials is a privately held company located in Aurora, IL within the Chicago metropolitan area. The current leadership at Tangent® Materials has been recycling plastic and producing innovative recycled plastic lumber and structural timber products for over 20 years. Founded in 2003, Tangent® Materials is committed to **leading innovation in the recycled plastic lumber industry** through engineering processes and new product development.

Tangent® Materials focuses on delivering quality value propositions with a custom engineered and tailored solution to meet your unique project specifications. Our sales and marketing teams strategically work to increase customer satisfaction and expand our reach as an industry leader. Tangent manufactures hundreds of sizes and styles of extrusions, including structural lumber engineered for specific customer applications from bridge fendering systems to marine pilings and more.

What type of finish?

Matte finish on both sides of the sheet.

What colors are available?

Tangent PolySheet™ ST is available in Black, Gray and White

What sizes are available?

Thickness: 1/2", 3/4", 1"
Width: 48", 54", 60"
Length: 96", 120"

Does Tangent® expand and contract?

Yes, at a rate of 6×10^{-5} in./in./°F degrees, changing approximately 1/32 inch for every foot of length or width over a 40°F temperature change. Please refer to thermal expansion/contraction worksheet.
Please call Customer Service at 630.264.1110

What are the features and benefits of Tangent PolySheet™ products?

- Environmentally stabilized – UV stabilized and waterproof
- No volatile organic compounds (VOCs)
- Chemical-resistant and easy to clean
- Will not rust, delaminate or rot
- No finishing or painting required
- Works like wood
- Easy to fabricate
- High-impact strength
- Little to no maintenance
- Qualifies for LEED points

Can I use a CNC machine?

Yes

Can I use glue or paint?

Gluing is not recommended. Because Tangent PolySheet™ products are designed to resist water and grime, they cannot be painted and the use of adhesives is not recommended. It is preferable to mechanically fasten or weld. Specialized welding equipment and rods, designed for use with polymer sheets, are available.

Will the material produce dust when fabricating?

No, only small shavings that can be recycled.

How can the material be fabricated and finished?

Use standard woodworking tools: table saws, table routers, drills, blades and bits. Carbide router bits with two to four flutes are recommended. For more information, please refer to the fabrication brochures

Can I use Tangent PolySheet™ for a countertop?

It has been used as a countertop in some applications such as labs, but it is not recommended for a countertop.

How to clean and maintain?

- **General Cleaning:** Clean surfaces using a soap and water solution with a soft sponge or a plastic bristle brush. A soft-bristled toothbrush is effective for reaching tight spaces. To eliminate dust, rinse the area with cold, clean water.
- **Deep Cleaning:** A pressure washer can effectively deep clean all Tangent® Materials products on its lowest PSI setting. Pressure washers exceeding 1500 PSI are not recommended. Maintain a distance of at least 12 inches between the tip of the pressure washer and the surface to avoid damage.

STAIN	RECOMMENDED CLEANING PROCESS
Pencil Marks	Use a mild dish detergent and water to saturate the stain. Rinse clean with water.
Ink/Marker	Saturate the stain with a mild dish detergent and water, then rinse. For tougher stains, use acetone or isopropyl alcohol to gently wipe the surface.
Grease or Oil Stain	Use a mild dish detergent and water to saturate the stain. Rinse clean with water. Acetone, isopropyl alcohol to gently wipe the surface. For grease that's been soaked in the plastic, try soaking the area/container in a 1:1 solution of vinegar & water for ~30min. Rinse with dish soap and water, dry, and then apply a baking soda paste to the area. Let that sit for 10-20 min, brush with a soft brush, rinse with water. Lastly, try rubbing alcohol or vodka if stains persists.
Embedded Dirt	Use a mild dish detergent to saturate the area. Scrub with a soft-bristled brush and rinse clean with water. Acetone, isopropyl alcohol to gently wipe the surface.
Wine	Use a mild dish detergent to saturate the area. Scrub with a soft-bristled brush and rinse clean with water
Chewing Gum	Use a plastic putty knife to gently pry up hard pieces. Clean fine debris and crevices with a soft brush and acetone, then rinse with water
Bird Droppings	Use a mild dish detergent to saturate the area. Scrub with a soft-bristled brush and rinse clean with water.
Stains and Scuffs	A foam eraser sponge may be used for stubborn marks.
Iron and Rust	For tough iron and rust stains, try soaking the area/container in a 1:1 solution of vinegar & water for ~30min. Scrub with a soft-bristled brush. Rinse with dish soap and water.

What are common applications?

- Bow Pulpit
- Countertops
- Frames and Trim
- Furniture
- Grab Rails and Handles
- Hatches and Doors
- Rod and Cup Holders
- Steps and Dock Boxes
- Tray Tables

How to care and store?

- Store the sheets flat on a level surface
- Keep away from teak oil and other products that can stain the finish
- Use china markers or water-based markers to draw patterns
- Pen marks can usually be removed with household cleaners
- Keep away from heat sources that exceed 180°F
- Because there is no grain, parts can be cut from any area of the sheet
- Save the scraps for small parts, shims, spacers and plugs
- Remnants may be eligible for recycling; contact your distributor or Tangent® for details