

Wilsonart Americas

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Introduction

Wilsonart® Solicor™ Laminate ~ The solid choice when color continuity is a must.

Product Grade Description

Solicor™ Product Type I60 - High Pressure Solicor™ laminates are produced for both horizontal and vertical applications where the surface must be functional, durable, high-quality, and resistant to scuff, scratch and stain.

Product Composition

Solicor™ is a distinctive surfacing material composed of decorative papers impregnated with melamine resins pressed over a color-matched décor paper core saturated with special thermosetting resins. These sheets are then bonded at pressures greater than 1,000 pounds per square inch, and at temperatures approaching 275°F (135°C). Finished sheets are trimmed, and the backs are sanded to facilitate bonding.

Patterns, Colors, & Finishes

- ◆ D354 Designer White - 60 finish
- ◆ D427 Linen - 01 and 60 finishes
- ◆ 4925 Calcutta Marble - 38 finish

#01 High Gloss Premium - A mirror sheen finish, which gives a smooth, brilliant appearance. Excellent for vertical application. Carries a premium upcharge.

#38 Fine Velvet Texture - A smooth textured finish with moderate reflective value. Recommended for horizontal and vertical application.

#60 Matte - Textured finish with a moderate reflective quality. Recommended for horizontal and vertical application.

Standard Width & Length

48.5" (1,232mm) width x 96.5" (2,451mm) length

Thickness & Weight

0.048" ± 0.005" (1.22mm ± 0.13mm)

0.382# Weight per square foot

Installation: Fabrication & Assembly Recommendations

Basic Limitations

Solicor™ sheets are for interior use only and are not recommended for direct application to plywood, plaster, concrete walls, or gypsum wallboard. Solicor™ is not a structural material and must be bonded to a suitable substrate. Do not subject Wilsonart® Solicor™ to extremes in humidity, temperatures higher than 275°F (135°C), or intense, continuous, direct sunlight for substantial periods of time.

Due to the unique resin composition, a slight color-shift can occur in Solicor™ in comparison to standard Wilsonart® High-Pressure Laminate. Please be sure to request a sample for color confirmation.

Storage & Handling

Wilsonart® Solicor™ laminate sheets must be stored internally with optimum storage conditions at 75°F (24°C) and 45% to 55% relative humidity. Solicor™ sheets should be stored away from exterior walls and never stored directly on the floor. Solicor™ sheets must be stored horizontally, with the top sheet facing down in order to protect the material from damage and to reduce the chance of possible warpage to the top sheets. Good circulation and air movement is recommended around the Solicor™ stored sheets.

It is recommended NOT to carry Solicor™ flat, but rather turn the sheet on its side. In addition, always use two people in the handling to avoid breakage.

Preconditioning

In preparation for fabrication, it is always recommended to ensure proper acclimation between the Solicor™ laminate and the substrate. Recommended and optimum temperature is approximately 75°F (24°C), and Solicor™ and substrate should be conditioned at 45% to 55% relative humidity. For proper acclimation, all components including face and backing/balancing laminates, substrates, and adhesives should be acclimated for 48 hours before bonding and fabrication.

Substrates

Solicor™ laminates must be bonded to substrates of reliable quality. Industrial 45# density particleboard or medium density fiberboard (MDF) are recommended. High-pressure laminate, plaster, concrete, gypsum boards or plywood should not be considered and are not warranted, suitable substrates. Solicor™ laminates may not be used as structural member.

Balancing

Utilizing a balancing sheet opposite of the Solicor™ material is required in most applications. For best results, using Solicor™ on the other side of the panel will provide a well-balanced panel. For ideal application, using same type of adhesive, same coverage on both sides, and the Solicor™ sanding marks assembled in the same direction will provide a quality assembly.

Recommended Balancing Materials:

- ◆ Product Type I60 Solicor™ Laminate

Contact Wilsonart Technical Services Department for further information on proper panel component lay-ups.

Adhesives

Since Solicor™ laminate does not provide camouflage for a colored adhesive glue line, adhesive selection is critical. Due to the color-through core, recommended adhesives are ridged set polyvinyl acetate (PVA) and non-pigmented contact types. Wilsonart offers a variety of PVA options and non-pigmented contact adhesives to meet the various types of bonding applications. All Wilsonart® Adhesives are available from your local Wilsonart distributor. Be sure to follow adhesive manufacturer recommendations.

FAB TIPS: Do Not Use pigmented adhesives as these will create a visible adhesive line at the seam areas.

Recommended Wilsonart® Adhesives:

- ◆ Product Type WA10
- ◆ Product Type WA3000
- ◆ Product Type WA3310
- ◆ Product Type WA3330

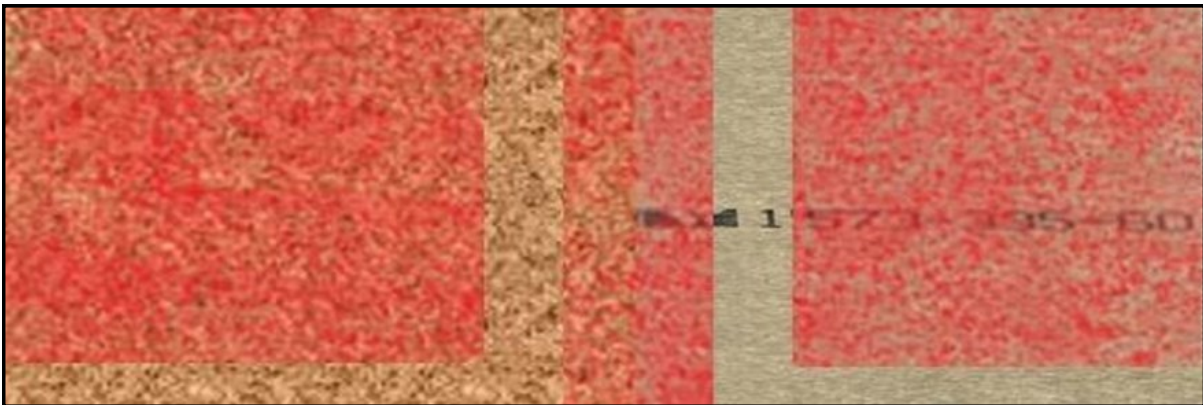
Special Adhesive Techniques – PVA & Perimeter Bonding

Due to the special laminate formulation, Solicor™ can generate internal force when a humidity change causes movement. Slight shrinkage from loss of moisture is more frequent than expansion from increased moisture. A strong bond between the Solicor™ and the substrate is critical and can be achieved with multiple Wilsonart® Adhesive options and methods of applications. Wilsonart® PVA type adhesives provide the most suitable bond between Solicor™ and substrate, providing a ridged expansion resistant bond.

PVA Masking Method

When using contact adhesives, one of the two following methods are recommended. Determine critical (target) areas to enhance such as seams, front edges, and inside corners. Mask target areas on both laminate and substrate with masking tape approximately 1” from edge/seam. Apply contact adhesive as directed by manufacturer. When adhesive reaches the start of the open time, remove masking tape and apply a small bead of PVA adhesive. Index and apply pressure as recommended. Contact adhesive acts as a clamping device while PVA cures. Use caution on the amount of adhesive applied to minimize the likelihood of telegraphing.

FAB TIPS:
Perimeter bonding



Perimeter bonding recommended

Recommended for controlling

*PVA and non-pigmented contact types are recommended. Pigmented adhesive in diagram illustrated for visual only

for controlling

Alternative Method (Non-Masking)

Determine critical (target) areas to enhance such as seams or front edges. Apply contact adhesive as directed by manufacturer. (No masking is necessary) When adhesive reaches the start of the open time, apply 3/16" bead of rigid type adhesive (examples: Melamine Adhesive, or Urethane) on the target area of the substrate approximately 2" from the edge(s). Use a disposable scraper or scrap laminate chip to spread the adhesive bead to a flat, uniform appearance. Index and apply pressure as recommended.

Contact adhesive acts as clamping device while adhesive cures. Use caution on the amount of adhesive applied to minimize the likelihood of telegraphing.

FAB TIPS: Contact adhesive acts as a clamping device while adhesive cures.

Recommended Perimeter Bonding Wilsonart® Adhesives:

- ◆ Product Type WA-Melamine Adhesive-PVA



*PVA and non-pigmented contact types are recommended. Pigmented adhesive in diagram illustrated for visual only

Postforming

Type 160 is recommended for flat surfaces only. Do not use in postforming equipment or applications. Smaller radii can fracture the surface of the Solicor™ material. Call Wilsonart Technical Services for further information regarding cold forming.

Fabrication

Fabrication should follow approved methods. Assembled pieces should meet the specifications of KCMA (Kitchen Cabinetmakers Manufacturers Association), ANSI A-161.2-1998 (revised), and "Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program" guidelines of the Architectural Woodwork Institute where applicable.

FAB TIPS: Keep all Solicor™ seams and edges clean. Remove dirt, pencil, marker, finger prints, Solicor™ identification ink, etc... prior to adhering material.

To avoid stress cracking, do not use square-cut inside corners. All inside corners should have a minimum of 1/8" (3.175mm) radius and all edges should be routed smooth. Drill oversized holes for screws or bolts. Screws or bolts should be slightly countersunk into the face side of a laminate-clad substrate. All edges and corners should be sanded or filed smooth and free of chips or nicks.

FAB TIPS: A 1/4" diameter 2-flute carbide flush-trim bit provides a 1/8" inside corner radius.

Carbide-tipped saw and router blades should be used for cutting. High tool speed and low feed speed are advisable. Cutting blades should be kept sharp. Use a hold-down to prevent any vibration. For saws, such as table or panels saws use sharp, carbide tipped blades with 60 or more triple-chip design teeth and with a low to 5° negative hook angle. When cutting Solicor™ material, use proper support (scrap wood) material to assist in support and help eliminate chipping.

FAB TIPS: Keep all tooling sharp and clean. (2-Flute Carbide Spiral-Down bit is recommended)

Routers for Solicor™ fabrication must have carbide tips, kept clean and sharp at all times. Basic laminate trim routers with standard laminate two-flute flush cutters and bottom-bearing guide are recommended.

Various other types of carbide tip bits are also recommended such as slight round-over and bevel bits to finish the edge profiles. Light finishing can be achieved with a fine-ribbed file and/or sanding block with finishing sandpaper. Belt sanders, shears, and slitters are not recommended to be used on Solicor™ material.

FAB TIPS: Standard edge options recommended are 5/32" round over and 45° bevel, adjusted to the correct height these profiles will provide good wear with a nice attractive look.

FAB TIPS: The use of felt on the bottom of all router base plates is recommended. This will protect the surface of the Solicor™ face material.

Care And Maintenance

The Solicor™ surface may be cleaned with warm water and mild soaps, such as those used for hands or dishes. Do not use cleansers that contain abrasives, acids or alkalis; they will damage the decorative surface. Remove stubborn stains with a 2-minute exposure to hypochlorite bleach such as Clorox®, followed by a clean water rinse.

Free copies of the "Care and Maintenance Guide," which covers all Wilsonart® products, are available. The guide can be accessed at <http://www.wilsonartlaminate.com> or by calling our hotline at 800-433-3222. It can be used for your own information, for project manuals, and for provision to clients and contractors involved with interior construction and finishing.