

2501 Wilsonart Drive P.O. Box 6110 Temple, TX 76503-6110

1. Manufacturer

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2. Product Description

Recommended Uses

Wilsonart By You High Pressure Laminate is suitable for use on fine quality residential and contract furniture and casework and for architectural application on columns, wainscoting, valances, cornices, interior doors and divider systems.

Most applications of Wilsonart By You are made with one of these basic laminate types:

- **General Purpose (HGS) 174** is most frequently used for work surfaces on counters, islands, vanities, desks and tables. Typical vertical uses include surfacing for wall panels, teller cages and the front panels of workstations, such as those in hospitals, airports and restaurants.
- Vertical Surface (VGP) 364 is intended for vertical applications where a functional, durable, decorative surface must absorb somewhat less impact than a comparable horizontal surface. They often appear on the vertical surfaces of cabinet walls, doors and drawer panels, desks, restaurant booths and maître d' stations and as architectural cladding.
- Postforming (HGP) Type 374 adds the decorative capability of a soft edge to any typical laminate
 use. Common applications of postforming laminates are formed edges for counters, desktops,
 cabinet doors and drawer panels. Type 374 is intended for use on vertical and horizontal interior
 surfaces where it is necessary or desirable to roll the laminate on a simple radius over the edge of the
 substrate. This eliminates seams and leaves an attractive surface.
- Graphic Image Process uses types 174, 364 and 374.

Product Composition

Wilsonart By You is decorative surface papers impregnated with melamine resins are pressed over kraft paper core sheets impregnated with phenolic resin. These sheets are then bonded at pressures greater than 1000 pounds per square inch and temperatures approaching 300°F (149°C). Finished sheets are trimmed and the backs sanded to facilitate bonding.

Wilsonart By You creates a unique sheet of laminate from a graphic image. Paintings, digital images and/or photography are printed onto special decorative paper to be used for lamination.

Basic

Wilsonart By You is intended for interior use only and is not recommended for application to plaster or concrete walls or gypsum wallboard. It is not structural material and must be bonded to a suitable substrate.

Do not subject to Wilsonart By You to extremes in humidity, temperatures over 275° F (135°C) for sustained periods of time, or intense, continuous, direct sunlight.

Finishes

• #01 High Gloss - Premium

A mirror sheen finish, which gives a smooth, brilliant appearance. #01-High Gloss finish also features AEON™ technology and can be used for horizontal applications such as countertops and light-to-medium commercial applications. Excellent for vertical application. #01 finish features AEON™ ENHANCED SCRATCH & SCUFF-RESISTANT PERFORMANCE TECHNOLOGY, and carries a premium upcharge. *Nominal Glossometer Reading* = 110

• #07 Textured Gloss – Premium

A fine textured finish with a sheen level indicative of a waxed wood, polished stone, or other moderately reflective materials. #07 finish features AEON™ ENHANCED SCRATCH & SCUFF-RESISTANT PERFORMANCE TECHNOLOGY, and carries a premium upcharge. Recommended for horizontal and vertical applications.

Nominal Glossometer Reading = 42

#38 Fine Velvet Texture

A smooth textured finish with moderate reflective value. Nominal Glossometer Reading = 14

#60 Matte

Textured finish with a moderate reflective quality. Recommended for horizontal and vertical application. *Nominal Glossometer Reading* = 10

• #90 Crystal - Premium

A very finely beaded texture that minimizes smudges and finger marks and improves scratch resistance. Recommended for horizontal and vertical application. *Nominal Glossometer Reading* = 13

NOTE: Nominal Glossometer readings are made at a 60° angle of incidence.

Wilsonart By You may be specified in other optional designer finishes. Contact your local representative for availability.

Patterns & Colors

Solid Colors	Yes
Woodgrains and Patterns	Yes

^{*}Some limitations apply by process.

Sheet Widths

36"	48"	60"
(914mm)	(1219mm)	(1524mm)

Sheet Lengths

96"	120"	*144"
(2438mm)	(3048mm)	(3658mm)

Sheet Thicknesses

	Typical Wilsonart Thickness	Weight PSF
General Purpose	0.045" ± 0.005"	0.322#
(HGS) 174	$(1.14 \text{mm} \pm 0.13 \text{mm})$	0.322#
Vertical Surface	0.028" + 0.001" - 0.004"	0.106#
Type (VGS) 364	(0.71mm + 0.03 - 0.1mm)	0.196#
Postforming	0.036" ± 0.005"	0.260#
Type (HGP) 374	(0.91mm ± 0.13mm)	0.260#

3. Technical Data

NOTE: Each Typical Wilsonart Value should be compared to the NEMA Standard next to it. For physical properties of Wilsonart Laminate Types 107, 335 and 350 please refer to the Basic Types Tech Data.

Physical Properties of Wilsonart By You

ISO 4586 Test	Typical Wilsonart Type 174	ISO 4586-3 HGS
Thickness	$0.045" \pm 0.005"$ (1.14mm ± 0.13 mm)	N/A
Appearance	No ABC def.	N/A
Light Resistance	Slight effect	Slight Effect
Cleanability (cycles)	10	10
Stain Resistance		
Reagents 1-10	No effect	No effect
Reagents 11-15	Slight effect	Moderate effect
Boiling Water Resistance	No effect	Slight Effect (Gloss) No Effect (Other Finishes)
High Temperature Resistance	Slight effect	Slight Effect (Gloss) No Effect (Other Finishes)
Impact Resistance	65" (1651mm)	31.5" (800mm)
Radiant Heat Resistance	160 seconds	≥ 200 sec.
Dimensional Stability		
Machine Direction	0.3%	1.1% (max.)
Cross Direction	0.7%	1.4% (max.)
Surface Wear Resistance (cycles)	Meets or Exceeds 400	350 (min.)
Formability	Not applicable	Not applicable
Blistering	Not applicable	Not applicable

ISO 4586 Test	Typical Wilsonart Type 364	ISO 4586-3 VGP
Thickness	0.028" + 0.001 - 0.004" (0.7mm + 0.03 - 0.10mm)	N/A
Appearance	No ABC def.	N/A
Light Resistance	Slight effect	Slight effect
Cleanability (cycles)	10	20 (max.)
Stain Resistance		
Reagents 1-10	No effect	No effect
Reagents 11-15	Slight effect	Moderate effect
Dailing Water Danistones	No effect	Slight Effect (Gloss)
Boiling Water Resistance		No Effect (Other Finishes)
High Temperature Resistance	Slight effect	Slight Effect (Gloss)
riigii reiliperature Nesistance	Slight effect	No Effect (Other Finishes)
Impact Resistance	40" (1016mm)	23.5" (600mm)
Radiant Heat Resistance	120 seconds	<u>≥</u> 200 sec.
Dimensional Stability Machine Direction Cross Direction	0.5% 0.8%	1.1% (max.) 1.4% (max.)
Surface Wear Resistance (cycles)	Meets or Exceeds 400	350 (min.)
Formability	½" radius (13mm)	7/16" radius (11mm) 9/16" radius(14.7mm)
Blistering	45 seconds	≥ 40 seconds

^{*}Radius for face is actually the radius of the form around which the laminate is postformed.

Physical Properties of Postforming Laminate

ICO AFOC Took	Typical Wilsonart	ISO 4586-3
ISO 4586 Test	Type 374	HGP
Thickness	0.036" ± 0.005"	0.039" ± 0.005"
THICKNESS	$(0.91 \text{mm} \pm 0.13 \text{mm})$	$(1\text{mm}\pm0.12\text{mm})$
Appearance	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect
Cleanability (cycles)	10	20
Stain Resistance		
Reagents 1-10	No effect	No effect
Reagents 11-15	Slight effect	Moderate effect
Dailing Water Desistance	No effect	Slight Effect (Gloss)
Boiling Water Resistance	но епест	No Effect (Other Finishes)
High Temperature Resistance	Slight effect	Slight Effect (Gloss)
rigii reiliperature Resistance		No Effect (Other Finishes)
Impact Resistance	55" (1397mm)	31.5" (800mm)
Radiant Heat Resistance	140 seconds	<u>≥</u> 200 sec.
Dimensional Stability		
Machine Direction	0.5%	1.1% (max.)
Cross Direction	0.8%	1.4% (max.)
Surface Wear Resistance	Meets or Exceeds 400	350 (min.)
(cycles)	oto o. Exceeds 100	
Formability*	*5/8" face (16.00mm)	*9/16" face (14.27mm)
1 ormasinty	5,5 1466 (10.00.11111)	*3/4" back (19.05mm)
Blistering	70 seconds	≥ 40 seconds

^{*}Radius for face is actually the radius of the form around which the laminate is postformed.

Typical Fire Test Data

High-pressure laminates are subject to Flame Spread and Smoke Developed standards in structures where codes establish such conditions.

Test data to determine compliance with these codes are obtained by the Steiner Tunnel Test method of the American Society for Testing Materials (ASTM-E-84, Standard Test Method for Surface Burning Characteristics of Building Materials). Tests were conducted in accordance with test method and mounting procedure as described in Paragraph X1.7.2 of the test method. This procedure is cataloged by Underwriters Laboratories, Inc. as UL 723.

Typical Frame Spread and Smoke Developed Properties

Specific Flame Spread and Smoke Developed properties for Graphic Image types will depend on the specific design selected. Testing on individual designs will be required to verify these values.

Model Code Designations used to determine flame spread classification

Flame Spread Classification (Max. Rating)	International (IBC)	Life Safety (NFPA 101)
25	A	Α
75	В	В
200	С	С

(RE: Architectural Woodwork Standards, 1st Edition, Version 1.0, - 2009)

All Model Codes regulate the generation of smoke by interior finish material. In all cases they specify a maximum smoke development rating of 450.

Codes and Certifications

General Standards

Wilsonart By You laminates conform to the relevant standards of the American National Standards Institute, for thickness, performance properties and appearance. Wilsonart By You Laminates meet or exceed the International Standards Organization specifications as found in ISO 4586, titled, "High-Pressure Decorative Laminate (HPDL) — Sheets Based on Thermosetting Resins — Part 1: Specifications."

The UL GREENGUARD Environmental Institute™ has awarded its UL GREENGUARD® Indoor Air Quality Certification to Wilsonart Laminate. All Wilsonart Laminate product types were tested under the stringent UL GREENGUARD Standards for low-emitting products. All UL GREENGUARD Indoor Air Quality Certified products ensure minimal impact on the indoor environment. For a copy of the certificate, visit www.greenguard.org.

Branded Cleaner and Sanitizer Resistance for Wilsonart By You Laminate

No effect was exhibited except as noted (* or **) on the following:

- 1. Clorox Healthcare Bleach Germicidal Cleaner *
- 2. Clorox Healthcare Versa Sure Cleaner Disinfectant Wipes
- 3. Oxivir TB
- 4. Oxivir 1
- 5. Virex II 256
- 6. Benefect
- 7. PDI Super Sani-Cloth Germicidal Disposable Wipes
- 8. PDI Sani-Prime Germicidal Spray
- 9. Expose II 256
- 10. Stride Floral Neutral Cleaner *
- 11. PURELL Advanced Instant Hand Sanitizer *

Test procedure: Listed materials were placed in contact with Wilsonart By You Laminate surface under 1" (25.4mm) diameter watch cover glass for 16 hours duration prior to evaluation for effect. The branded cleaners and sanitizers listed above were cleaned with water only.

- * Causes slight change of gloss or color.
- ** Causes slight damage, with degree of damage proportionate to length of exposure and concentration.

12. Installation: Fabrication and Assembly Recommendations

Both the laminate sheet and the substrate material should be ordered sufficiently in advance of fabrication to allow time to reduce internal moisture. During cold months, store laminate sheets and substrate material in a heated room with moving air. During periods of warm weather with high humidity, still air is preferable.

For best results, the room where fabrication takes place, as well as all materials, should be preconditioned to 65°F (18°C) or above. The ideal climate is 75°F (24°C) at 45% relative humidity. Take care to ensure an appropriate moisture balance between the laminate and the substrate prior to fabrication. The face and backing laminate and the substrate should be conditioned in the same environment for 48 hours before fabrication.

With postforming machinery, Wilsonart 374 will postform at a nominal sheet temperature range of 325°F to 350°F (163°C to 176°C) in 20 ± 5 seconds.

Materials

Desirable substrate materials include particleboard, fiberboard, and plywood with one A-face. Any substrate material should have a density of at least 45 pounds per cubic foot.

Proper adhesive selection is critical to achieving a correct bond for all Wilsonart Laminates since glue lines must not show color. Rigid-set, permanent-type adhesives, such as white glue (PVAc), and uncolored contact adhesives are recommended. Wilsonart® Adhesives, available from your Wilsonart product distributor, meet the majority of bonding conditions. Permanent PVAc types include Wilsonart WA10 and WA20. Contact adhesives include WA950.

Methods

Fabrication of components should be done using approved methods. Assembled pieces should meet specifications of DLPA (Decorative Laminate Products Association), ANSI-A-161.2-1979, and "Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program" guidelines of the Architectural Woodwork Institute where applicable.

Give special attention to edges and seams. To prevent stress cracking, do not use square-cut inside corners. All inside corners should have a minimum of one-eighth inch (3.18mm) 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.

Use permanent adhesive to reinforce contact adhesive at corners, along all edges, and at seams.

13. Warranty

14. Maintenance

15. Technical Services

For samples, literature, questions or technical assistance, please contact our toll-free Hotline at (800) 433-3222, Monday through Friday, 8 am -5 pm, CST.

Specification Form:

Surface shall be Wilsonart By You Custom Laminate, produced by Wilsonart LLC, Temple, Texas 76503-6110			
Type: Specify Graphic Image (Types 174, 364 and 374)			
Surface Color Number:		Color Name:	
Edge Trim Color Number:		Color Name:	
Adhesive Name: Brand:	Wilsonart® Adhesive	Grade/Type:	

Note: Please consult with the Custom Laminate Department (800-433-3222) for instructions to complete this document.

Wilsonart By You Technical Data Revised: September 12, 2019 © 2017 - 2019, Wilsonart LLC