

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

#### 1. Manufacturer

Wilsonart LLC 2501 Wilsonart Drive P.O. Box 6110

Temple, Texas 76503-6110

Phone: (254) 207-7000; (800) 433-3222

Fax: (254) 207-2384

Web Site: www.wilsonart.com

### 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.

Wilsonart® HD® finishes feature Antimicrobial Protection that helps inhibit the growth of stain and odor causing bacteria, mold, and mildew on your countertop or surface. Wilsonart's Antimicrobial Protection won't wash away or wear off. Premium and Standard finishes are available with Antimicrobial Protection upon request during the ordering process. Antimicrobial Protection request for Wilsonart By You and Wilsonart® VDL must be pre-approved by product management.

# **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<sup>TM</sup> 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<sup>TM</sup> 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

<sup>\*</sup>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	$(1.14 mm \pm 0.13 mm)$	0.322#
Vertical Surface	0.028" + 0.001" - 0.004"	0.196#
Type (VGS) 364	(0.71mm + 0.03 - 0.1mm)	0.196#
Postforming	0.036" ± 0.005"	0.260#
Type (HGP) 374	$(0.91 \text{mm} \pm 0.13 \text{mm})$	0.∠60#

#### 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	ISO 4586-3
	Type 174	HGS
Thickness	$0.045" \pm 0.005"$ (1.14mm $\pm 0.13$ 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
Dailing Water Desistance	No effect	Slight Effect (Gloss)
Boiling Water Resistance		No Effect (Other Finishes)
Lligh Tomporature Desistance	Cliabt offeet	Slight Effect (Gloss)
High Temperature Resistance	Slight effect	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	Monto or Eveneda 400	350 (min.)
(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
Boiling Water Resistance	No effect	Slight Effect (Gloss)
Boiling Water Resistance	140 ellect	No Effect (Other Finishes)
High Tomporature Posistance	Slight effect	Slight Effect (Gloss)
High Temperature Resistance	Slight effect	No Effect (Other Finishes)
Impact Resistance	40" (1016mm)	23.5" (600mm)
Radiant Heat Resistance	120 seconds	<u>&gt;</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

<sup>\*</sup>Radius for face is actually the radius of the form around which the laminate is postformed.

# **Physical Properties of Postforming Laminate**

ISO 4586 Test	Typical Wilsonart Type 374	ISO 4586-3 HGP
Thickness	$0.036" \pm 0.005"$ (0.91mm $\pm 0.13$ mm)	$0.039" \pm 0.005"$ (1mm $\pm 0.12$ 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
Bailing Water Basistanes	No official	Slight Effect (Gloss)
Boiling Water Resistance	No effect	No Effect (Other Finishes)
High Tompovoture Desistance	Climbt offers	Slight Effect (Gloss)
High Temperature Resistance	Slight effect	No Effect (Other Finishes)
Impact Resistance	55" (1397mm)	31.5" (800mm)
Radiant Heat Resistance	140 seconds	≥ 200 sec.
Dimensional Stability		
Machine Direction	0.5%	1.1% (max.)
Cross Direction	0.8%	1.4% (max.)
Surface Wear Resistance (cycles)	Meets or Exceeds 400	350 (min.)
F 139.4	*5/8" face (16.00mm)	*9/16" face (14.27mm)
Formability*		*3/4" back (19.05mm)
Blistering	70 seconds	≥ 40 seconds

<sup>\*</sup>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	International	Life Safety
(Max. Rating)	(IBC)	(NFPA 101)
25	Α	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 <a href="https://www.greenguard.org">www.greenguard.org</a>.

# Branded Cleaner and Sanitizer Resistance for Wilsonart® Laminate per ISO 4586-2 Method 31 (B)

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

- 1. Beckart Environmental (Stabilized Chlorine Dioxide Mixed with Water at 3000ppm)
- 2. Benefect®
- 3. Claire® Germicidal Cleaner (Country Fresh Scent)
- 4. Claire® Disinfectant Spray Q (Country Fresh Scent)
- 5. Clean Republic All Purpose Everyday Cleaner (Hypochlorous Acid 0.003% Solution)
- 6. Clorox® Anywhere® Hard Surface Sanitizing Spray\*
- 7. Clorox® Clean-Up (Cleaner & Bleach)
- 8. Clorox® Disinfecting Bleach w/6% Sodium Hypochlorite (24:1/Water:Bleach)
- 9. Clorox® Disinfecting Spray
- 10. Clorox® Disinfecting Wipes
- 11. Clorox Healthcare® Bleach Germicidal Cleaner \*
- 12. Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant
- 13. Clorox Healthcare® Fuzion® Cleaner Disinfectant\*
- 14. Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes
- 15. Clorox® Total 360 Disinfectant Cleaner
- 16. Diversey™ Expose® II 256
- 17. Diversey™ Oxivir 1
- 18. Diversey™ Oxivir Tb Wipes
- 19. Diversey™ Stride® Floral Neutral Cleaner
- 20. Diversey™ Virex® II 256
- 21. Fabuloso® Complete (Multi-Purpose Cleaner)
- 22. Lysol® Professional Disinfectant Spray
- 23. Microban® 24 Hour (Multi-Purpose Cleaner)
- 24. PDI Sani-Prime® Germicidal Spray
- 25. PDI Super Sani-Cloth® Germicidal Disposable Wipes
- 26. Purell® Advanced Hand Sanitizer Gel
- 27. Purell® Food Service Surface Sanitizer
- 28. Purell® Professional Surface Disinfectant
- 29. Purell® Healthcare Surface Disinfectant
- 30. Simple Green® Concentrated (All-Purpose Cleaner)
- 31. Spic and Span® Everyday (Antibacterial Cleaner)

Test procedure: Listed materials were placed in contact with Wilsonart® 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.

# Branded Cleaner and Sanitizer Resistance for Wilsonart® Laminate per BIFMA HCF 8.1-2014 (Section 6 / Modified)

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

- 1. Beckart Environmental, Inc. (Stabilized Chlorine Dioxide Mixed with Water at 3000ppm)
- 2. Benefect®
- 3. Claire® Germicidal Cleaner (Country Fresh Scent)
- 4. Claire® Disinfectant Spray Q (Country Fresh Scent)
- 5. Clean Republic All Purpose Everyday Cleaner (Hypochlorous Acid 0.003% Solution)
- 6. Clorox® Anywhere® Hard Surface Sanitizing Spray
- 7. Clorox® Clean-Up (Cleaner & Bleach)
- 8. Clorox® Disinfecting Bleach w/6% Sodium Hypochlorite (24:1/Water:Bleach)
- 9. Clorox® Disinfecting Spray
- 10. Clorox® Disinfecting Wipes

- 11. Clorox Healthcare® Bleach Germicidal Cleaner
- 12. Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant
- 13. Clorox Healthcare® Fuzion® Cleaner Disinfectant
- 14. Clorox Healthcare® VersaSure® Cleaner Disinfectant Wipes
- 15. Clorox® Total 360 Disinfectant Cleaner
- 16. Diversey™ Expose II 256
- 17. Diversey<sup>™</sup> Oxivir 1
- 18. Diversey™ Stride® Floral Neutral Cleaner
- 19. Diversey™ Tb Wipes
- 20. Diversey™ Virex II 256
- 21. Fabuloso® Complete (Multi-Purpose Cleaner)
- 22. Lysol® Professional Disinfectant Spray
- 23. Microban® 24 Hour (Multi-Purpose Cleaner)
- 24. PDI Sani-Prime® Germicidal Spray
- 25. PDI Super Sani-Cloth® Germicidal Disposable Wipes
- 26. Purell® Advanced Hand Sanitizer Gel
- 27. Purell® Food Service Surface Sanitizer
- 28. Purell<sup>®</sup> Professional Surface Disinfectant
- 29. Purell® Healthcare Surface Disinfectant
- 30. Simple Green® Concentrated (All-Purpose Cleaner)
- 31. Spic and Span® Everyday (Antibacterial Cleaner)

Test procedure: Listed reagent materials were placed in contact with Wilsonart® Laminate surface with a one-inch square 100% cotton cloth completely saturated and covered with a 2" (50.8mm) diameter watch cover glass for 15 minute duration. The reagents listed above were removed with clean cloth and the area was then cleaned with clean cloth and distilled water only. The surface area was allowed to dry for 1-hour prior to evaluation for effect.

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

Resistance of Furniture to UV Lights for Wilsonart® Laminate per BIFMA HCF 8.1-201X Section 9 (Alternate Method per ASTM G155 using ISO 4586-2.33 conditions).

Wilsonart® By You Laminates 174, 364, and 374 conforms to BIFMA — Healthcare Furniture Design Guidelines for Cleanability, Section 9 Resistance to Furniture to UV Lights. Wilsonart® By You Laminates 174, 364, and 374 meet or exceed the acceptance level for surface evaluation.

#### 4. 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  $20 \pm 5$  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.

## 5. Warranty

#### 6. Maintenance

# 7. <u>Technical Services</u>

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 Digital Print Studio (800-433-3222) for instructions to complete this document.

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