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: <u>www.wilsonart.com</u>

2. Product Description

Recommended Uses

Wilsonart[®] HD[®] Laminate is suitable for use on high quality residential and commercial countertops, furniture, fixtures and casework. Wilsonart[®] HD[®] carries AEON[™] Enhanced Scratch & Scuff-Resistant Performance Technology, and built-in Antimicrobial Protection.

Wilsonart[®] HD[®] Laminate with AEON[™] Performance Technology outperforms competitive laminates with similar finishes on wear resistance, as well as scratch/scuff/mar resistance.

- Wilsonart[®] HD[®] Laminates have AEON[™] Enhanced Performance Technology, making them:
 - Up to 5X MORE SCUFF & SCRATCH RESISTANT* Up to 3X MORE WEAR RESISTANT*

*Versus competitive laminates with similar finishes

Wilsonart[®] HD[®] Laminate with Antimicrobial Protection helps inhibit the growth of stain and odor causing bacteria on your countertop or surface. Antimicrobial agents protect the surface from the growth of mold, mildew, and bacteria that cause odors when used for countertops and work surfaces. Wilsonart's Antimicrobial Protection won't wash away or wear off.

• HD Type HGP 376 is used for work surfaces on counters, islands, vanities, desks and tables. Type 376 is made for both horizontal and vertical interior applications where the surface must be functional, durable and decorative. Type 376 may be postformed to eliminate seams for a more attractive edge.

Product Composition

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 at temperatures approaching 300°F (149°C). Finished sheets are trimmed, and the backs are sanded to facilitate bonding.

Basic Limitations

Wilsonart[®] HD[®] Laminate is for interior use only and is not recommended for direct application to plaster, concrete walls, or gypsum wallboard. It is not structural material and must be bonded to a suitable substrate.

Do not subject Wilsonart[®] HD[®] Laminate to extremes in humidity, temperatures higher than 275°F (135°C) for substantial periods of time, or intense, continuous, direct sunlight.

Patterns & Colors

Wilsonart[®] HD[®] Laminate comes standard with Antimicrobial Protection and AEON[™] Enhanced Scratch & Scuff-Resistant Performance Technology. Visit <u>www.wilsonart.com</u> for pattern availability. Please see actual sample before specifying.

Finishes

#35 Mirage – Wilsonart® HD®

Subtle variations in matte and gloss finish connect to nature's own finishes: rough and weathered, smooth and polished. #35 finish features AEON™ Enhanced Scratch & Scuff-Resistant Performance Technology. Recommended for horizontal and vertical applications. *Nominal Gloss Reading* = 50 #55 Glaze – Wilsonart[®] HD[®]

A layering of matte features over a semi-gloss glaze, creates this timeworn effect. #55 finish features AEON^m Enhanced Scratch & Scuff-Resistant Performance Technology. Recommended for horizontal and vertical application. *Nominal Gloss Reading* = 25

#57 Aligned Oak – Wilsonart® HD®

Authentic realism is brought to the surfaces using synchronized texture as each elegantly aged oak design exhibits the natural dimension and feel or real world. #57 finish features AEON^{III} Enhanced Scratch & Scuff-Resistant Performance Technology. Recommended for horizontal and vertical applications. *Nominal Glossometer Reading* = 7

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

Standard Sheet Sizes

48" (1219mm) x 96" (2438mm) 60" (1524mm) x 96" (2438mm) 60" (1524mm) x 120" (3048mm) 60" (1524mm) x 144" (3658mm)

Thickness and Weight

Description	376	
Thickness	0.039" ± 0.005" (0.99mm ± 0.13mm)	
Weight per square foot	0.260#	

3. Technical Data

Physical Properties of HD Laminate 376

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ISO 4586 Test	Typical Wilsonart Type 376	ISO 4586-3 HGP	
Thickness	$0.039" \pm 0.005"$ (0.99mm \pm 0.13mm)	$0.039" \pm 0.005"$ (1mm ± 0.12 mm)	
Appearance	No ABC def.	No ABC def.	
Light Resistance	Slight effect	Slight effect	
Clean ability (cycles)	10	20	
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No 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	55" (1397mm)	31.5" (800mm)
Radiant Heat Resistance	140 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)	1200 (min.)	350 (min.)
Formability*	*9/16" face (14.28mm) *3/16" back (4.76mm)	*9/16" face (14.27mm) *3/4" back (19.05mm)
Blistering	70 seconds	\geq 40 seconds

*Radius for face is actually the radius of the form around which the laminate is postformed. The radius for back is actually the radius to which the decorative face 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.

Here is typical data for Wilsonart® HD® Laminate , averaged from two specific tests:

Product Type	Test Condition	Flame Spread	Smoke Developed
Postforming Type 376	Unbonded	60	35
Postforming Type 376	Bonded with contact adhesive to particleboard substrate; 3/8"	50	140

Typical Flame Spread and Smoke Developed Properties 376

When you wish to specify decorative laminate for a Class I or A fire rating, please refer to the Fire-Rated or Metal Core Laminate Tech Data.

Model Code Designations used to determine flame spread classification

International	Life Safety
(IBC)	(NFPA 101)
А	A
В	В
С	С

RE: Architectural Woodwork Quality Standard, 8th Edition, Version 1.0, - 2003

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[®] HD[®] Laminate Type 376 conforms to the voluntary standards of the American National Standards Institute, for thickness, performance properties and appearance. Wilsonart[®] HD[®] Laminate -376 meets or exceeds the International Standards Organization specifications as found in ISO 4586, titled "High-Pressure Decorative Laminate (HPDL) – Sheets Based on Thermosetting Resins – Part I: specifications."

Wilsonart[®] Laminate contains a minimum of 20% *post-consumer recycled content* – the highest percentage of post-consumer content in the industry - as certified by SCS Global Services (SCS-MC-002028).

Wilsonart[®] HD[®] Laminate s have received Forest Stewardship Council[™] Certification Registration. (<u>SCS-COC-002415</u>)

Wilsonart[®] Laminate exceeds the industry's highest standards for <u>Indoor Air Quality</u>, with UL GREENGUARD[®] Certification and SCS Indoor Advantage[™] Gold (<u>SCS-IAQ-02654</u>) certification by SCS Global Services on all laminate types. Wilsonart Laminate contains No Added Urea-Formaldehyde.

Specific Product Standards

U.S. Federal Specification L-P 508H, April 9, 1977, "Plastic Sheets, Laminated, Decorative and Nondecorative," spells out criteria for decorative laminates for federal installations. Wilsonart 107, 335, 350, and 376 laminates comply.

NSF International (NSF) #35 "Laminated Plastic for Surfacing for Food Service Equipment." All solid colors and printed patterns in types 107, 335, 350, and 376, comply.

U.S. Federal Motor Vehicle Safety Standard (FMVSS) 302, "Flammability of Interior Materials." Basic Types 107, 335, 350, and 376 comply.

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[™] 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[®] 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[®] Laminates 107,335,350 and 376 conforms to BIFMA – Healthcare Furniture Design Guidelines for Cleanability, Section 9 Resistance to Furniture to UV Lights. Wilsonart Laminates 107, 335, 350 and 376 meet or exceed the acceptance level for surface evaluation.

4. Installation: Fabrication and Assembly Recommendations

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.

Wilsonart[®] HD[®] Laminate s must be bonded to a substrate of reliable quality, such as particleboard, medium density fiberboard or plywood with one A-face. High-pressure laminate, plaster, concrete and gypsum board should not be considered suitable substrates. HD laminates may not be used as structural members.

Bond with adhesives and follow the techniques recommended by the adhesive manufacturer. Recommended adhesives are permanent types, such as urea and polyvinyl acetate (PVA), and contact types. Wilsonart adhesives are recommended for most bonding conditions.

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.

Take care to ensure appropriate acclimation has taken place with the laminate and the substrate prior to fabrication. The face and backing laminates and the substrate should be conditioned in the same environment for 48 hours before fabrication.

Recommended conditioning temperature is about 75°F (24°C). Laminates should be conditioned at 45% to 55% relative humidity.

With postforming machinery, Wilsonart[®] HD[®] Laminate Type 376 will postform at a nominal sheet temperature range of 325°F to 338°F (163°C to 170°C) in 20 ± 5 seconds.

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.

5. Warranty

6. Maintenance

7. 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 [®] HD [®] Laminate, produced by Wilsonart LLC, Temple, Texas 76503-6110			
Туре: 376			
Surface Color Number:		Color Name:	
Finish Number: Name:	35, 45 or 55 Mirage, Facet or Glaze		
Edge Trim Color Number:		Color Name:	
Adhesive Name: Brand:	Wilsonart [®] Adhesive	Grade/Type:	

Wilsonart[®] HD[®] Laminate Technical Data Revised: August 17, 2020 © 1998-2020, Wilsonart LLC