

1. Manufacturer

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2. Product Description

Recommended Uses

Wilsonart® HD® High Definition® Laminate is suitable for use on high quality residential and commercial countertops, furniture, fixtures and casework. Wilsonart HD carries AEON™ technology and provides 3x wear resistance of industry standards, along with improved scratch, scuff & mar performance.

Wilsonart HD features Antimicrobial Protection that helps inhibit the growth of stain and odor causing bacteria on your countertop or surface. 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.

- **High Definition 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 Enhanced Scratch and Scuff-Resistant AEON™ Technology. Visit www.wilsonart.com for pattern availability. Please see actual sample before specifying.

Finishes

- #35 Mirage
Subtle variations in matte and gloss finish connect to nature's own finishes: rough and weathered, smooth and polished. This finish is exclusive to Wilsonart HD Laminate and is not available in other designs or product types. *Glossometer reading: MD and CD 50 ± 20.*
- #45 Facet
A medium to small scale texture providing an optical surface effect that adds dimension and depth to laminate. It is comprised of a balance of matte and gloss areas. The angular, faceted, textural characteristics connect it to the stone and quartz-like visuals it was designed for. *Glossometer reading: MD and CD 50 ± 20*
- #55 Glaze
A layering of matte features over a glaze semi-gloss creates a time worn effect. Glossometer reading: *MD and CD 25 ± 20.*

NOTE: Glossometer readings are made at a 60° angle of incidence. MD refers to the machine direction of a laminate sheet, and CD refers to the cross direction.

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 High Definition Laminate 376

NEMA Test	Typical Wilsonart Type 376	NEMA Standard HGP	ISO 4586-3 HGP
Thickness	0.039" ± 0.005" (0.99mm ± 0.13mm)	0.039" ± 0.005" (1mm ± 0.12mm)	0.039" ± 0.005" (1mm ± 0.12mm)
Appearance	No ABC def.	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect	Slight effect
Clean ability (cycles)	10	20 (max.)	20
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No effect Moderate effect	No effect Moderate effect
Boiling Water Resistance	No effect	Slight effect	Slight Effect (Gloss) No Effect (Other Finishes)
High Temperature Resistance	Slight effect	Slight effect	Slight Effect (Gloss) No Effect (Other Finishes)
Impact Resistance	55" (1397mm)	30" (762mm)	31.5" (800mm)
Radiant Heat Resistance	140 seconds	100 sec. (min.)	≥ 200 sec.
Dimensional Stability Machine Direction Cross Direction	0.5% 0.8%	1.1% (max.) 1.4% (max.)	1.1% (max.) 1.4% (max.)

Surface Wear Resistance (cycles)	1200 (min.)	400 (min.)	350 (min.)
Formability*	*9/16" face (14.28mm) *3/16" back (4.76mm)	*5/8" face (16.00mm)	*9/16" face (14.27mm) *3/4" back (19.05mm)
Blistering	70 seconds	55 seconds	≥ 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:

Typical Flame Spread and Smoke Developed Properties 376

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

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

Flame Spread Classification (Max. Rating)	International (IBC)	Life Safety (NFPA 101)
25	A	A
75	B	B
200	C	C

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/National Electrical Manufacturers Association (ANSI/NEMA) LD 3-2005, for thickness, performance properties and appearance. Wilsonart HD High Definition 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 Laminates have received Forest Stewardship Council™ Certification Registration. ([SCS-COC-002415](#))

Wilsonart Laminate exceeds the industry’s highest standards for [Indoor Air Quality](#), with UL GREENGUARD® Certification and SCS Indoor Advantage™ Gold ([SCS-IAQ-02654](#)) 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.

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 Laminates 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. High Definition 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® High Definition® Laminate, produced by Wilsonart LLC, Temple, Texas 76503-6110	
Type: 376	
Surface	
Color Number: _____	Color Name: _____
Finish	
Number: 35, 45 or 55	
Name: Mirage, Facet or Glaze	
Edge Trim	
Color Number: _____	Color Name: _____
Adhesive	
Name: _____	Grade/Type: _____
Brand: Wilsonart® Adhesive	

Wilsonart® High Definition® HD® Laminate Technical Data
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