

1. **Manufacturer**

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2. **Product Description**

Recommended Uses

Wilsonart® Laminate with AEON™ Enhanced Performance is suitable for use on fine quality residential and contract furniture, fixtures and casework, and also for architectural application on columns, wainscoting, valances, cornices, interior doors and divider systems. **AEON** technology provides up to 3x wear resistance of industry standards, along with improved scratch, scuff & mar performance.

- **General Purpose (HGS) Type 107** 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. Type 107 is produced for both horizontal and vertical interior applications where the surface must be functional, durable and decorative.
- **Vertical Surface (VGP) Type 335** is the usual choice to surface cabinet walls, doors and drawer panels. It often appears on the vertical surfaces of desks, restaurants booths and maitre d' stations, and as architectural cladding. Type 335 is intended for vertical applications where a functional, durable, decorative surface must absorb somewhat less impact than a comparable horizontal surface. VGP surfaces may be postformed to achieve radius edges.
- **Postforming (HGP) Type 350** 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 350 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.
- **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.

(Please refer to the [Wilsonart® HD® Technical Data](#) for additional information).

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 Laminate with AEON 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 Laminate with AEON to extremes in humidity, temperatures higher than 275°F (135°C) for substantial periods of time, or intense, continuous, direct sunlight.

Patterns & Colors

AEON Enhanced Performance is standard on all Wilsonart HD Patterns and on most Wilsonart Premium patterns. Visit www.wilsonartcontract.com/aeon for a complete pattern list. Please see actual sample before specifying.

Finishes

- **#01 High Gloss – Premium**
A mirror sheen finish, which gives a smooth, brilliant appearance. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 110 ± 10.*
- **#07 Textured Gloss – Premium**
A textured finish which reproduces the high sheen of waxed wood furniture. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. **Available only on those designs for which it is the standard finish.** *Glossometer reading: MD and CD 42 ± 4.*
- **#12 SoftGrain – Premium**
A dense, wood grain structure that is low gloss and soft to the touch. Subtle highlights of reflectivity randomly occur within the embossed grains, creating a sophisticated raw wood look. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 8 ± 2.*
- **#16 Casual Rustic - Premium**
A woodgrain texture with a blend of grain variations ranging from linear to subtle movement with random, irregular features. The overall low gloss surface is accented with higher sheen woodgrain ticking and random highlights. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 6 ± 2.*
- **#18 Linearity – Premium**
A directional texture running the length of the sheet, having a narrow, random, and matte-gloss linear quality. It is complementary to linear wood-grains, and linear patterns (such as the “Satin” series), and provides dimension and visual movement to solid colors. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 18 ± 4*
- **#22 Antique – Premium**
A mixture of varying low gloss features combined with organic movement, indicative of the surface of an aged stone or an antique metal. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 9 ± 3*
- **#28 Gloss Line - Premium**
A linear woodgrain texture with varied widths of narrow grain structures in an alternating mix of matte and gloss surfaces areas. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 5 ± 2*
- **#35 Mirage – High Definition**
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 High Definition Laminate and is not available in other designs or product types. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: 50 ± 20.*
- **#45 Facet – High Definition**
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. This

finish is exclusive to Wilsonart HD High Definition Laminate and is not available in other designs or product types. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 50 ± 20.*

- **#52 Quarry – Premium**
Premium finish emulating the “pitted” look of polished natural stone. Available on a select number of designs only. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD 55 ± 5.*
- **#55 Glaze – High Definition**
A layering of matte features over a glaze semi-gloss creates this time worn effect. This finish is exclusive to Wilsonart HD High Definition Laminate and is not available in other designs or product types. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 25 ± 20.*
- **#78 FineGrain – Premium**
The FineGrain premium finish features the polish and luxe of a real wood veneer, with a subtle, narrow grain structure. Features AEON technology and carries a premium upcharge. Recommended for horizontal and vertical applications. *Glossometer reading: MD and CD 38 ± 3.*

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.

Finish Availability: Not all finishes are available in all patterns/colors. Some finish options have limited size availability. Please check with your Wilsonart representative or consult the pattern availability lookup on our website www.wilsonart.com to verify size availability by finish type.

Standard Sheet Widths

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

Standard Sheet Lengths

96"	120"	144"
2438mm	3048mm	3658mm

NOTE: Not all sizes are available from stock; contact your Wilsonart representative for details on local availability. Minimums apply to non-standard designs and finishes, in sizes other than 48"x96" and 60"x144". Please check with your Wilsonart representative.

Thickness and Weight

Description	107	335	350
Thickness	0.048" ± 0.005" (1.22mm ± 0.13mm)	0.028" + 0.001 - 0.004" (0.7mm + 0.03 - 0.10mm)	0.039" ± 0.005" (0.99mm ± 0.13mm)
Weight per square foot	0.322#	0.186#	0.260#

3. Technical Data

Physical Properties of General Purpose Laminates

NEMA Test	Typical Wilsonart Type 107	NEMA Standard HGS	ISO 4586-3 HGS
Thickness	0.048" ± 0.005" (1.22mm ± 0.13mm)	0.048" ± 0.005" (1.2mm ± 0.13mm)	0.048" ± 0.005" (1.2mm ± 0.13mm)
Appearance	No ABC def.	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect	Slight Effect
Cleanability (cycles)	10	20 (max.)	10

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	No effect	No Effect
High Temperature Resistance	Slight effect	Slight effect	Slight Effect
Impact Resistance	65" (1651mm)	50" (1270mm)	31.5" (800mm)
Radiant Heat Resistance	160 seconds	125 sec. (min.)	≥ 200 sec.
Dimensional Stability Machine Direction Cross Direction	0.3% 0.7%	0.5% 0.9%	1.1% (max.) 1.4% (max.)
Surface Wear Resistance (cycles)	1200 (min.)	400 (min.)	350 (min.)
Formability	Not applicable	Not applicable	Not applicable
Blistering	Not applicable	Not applicable	Not applicable

Physical Properties of Vertical Surface Laminates

NEMA Test	Typical Wilsonart Type 335	NEMA Standard VGS	NEMA Standard VGP	ISO 4586-3 VGP
Thickness	0.028" + 0.001 - 0.004" (0.7mm + 0.03 - 0.10mm)	0.028" ± 0.004" (0.7mm ± 0.10mm)	0.028" ± 0.004" (0.7mm ± 0.10mm)	0.028" ± 0.004" (0.7mm ± 0.10mm)
Appearance	No ABC def.	No ABC def.	No ABC def.	No ABC def.
Light Resistance	Slight effect	Slight effect	Slight effect	Slight effect
Cleanability (cycles)	10	20 (max.)	20 (max.)	10
Stain Resistance Reagents 1-10 Reagents 11-15	No effect Slight effect	No effect Moderate effect	No effect Moderate effect	No effect Moderate effect
Boiling Water Resistance	No effect	No effect	Slight effect	Slight Effect (Gloss) No Effect (Other Finishes)
High Temperature Resistance	Slight effect	Slight effect	Slight effect	Slight Effect (Gloss) No Effect (Other Finishes)
Impact Resistance	40" (1016mm)	20" (508mm)	20" (508mm)	23.5" (600mm)
Radiant Heat Resistance	120 seconds	80 sec. (min.)	80 sec. (min.)	≥ 200 sec.
Dimensional Stability Machine Direction Cross Direction	0.5% 0.8%	0.7% (max.) 1.2% (max.)	1.1% (max.) 1.4% (max.)	1.1% (max.) 1.4% (max.)
Surface Wear Resistance (cycles)	Meets or Exceeds 400	400 (min.)	400 (min.)	350 (min.)
Formability	7/16" radius (11mm)	Not applicable	1/2" radius (13mm)	9/16" radius(14.7mm)
Blistering	45 seconds	Not applicable	40 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.

Physical Properties of Postforming Laminate

NEMA Test	Typical Wilsonart	NEMA Standard	ISO 4586-3
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	Type 350	HGP	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
Cleanability (cycles)	10	20 (max.)	10
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) (min.)	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)	Meets or Exceeds 400	400 (min.)	350 (min.)
Formability*	*9/16" face (14.28mm) *3/16" back (4.76mm)	*5/8" face (16.00mm)	*3/4" face (19.05mm) *9/16" back (14.27mm)
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.

Physical Properties of Wilsonart® 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
Cleanability (cycles)	10	20 (max.)	10
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) (min.)	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)	*3/4" face (19.05mm) *9/16" back (14.27mm)

Blistering	70 seconds	55 seconds	≥ 40 seconds
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*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.

Scuff, Scratch, and Mar – Wilsonart® AEON™ Laminate (All Grades)

Wilsonart Internal	Typical Wilsonart AEON Laminate	Typical Non-AEON Laminate
*Scuff by ScotchBrite (7446) Gloss Change (200 passes)	< 8.0%	> 30.0%

*Some finishes disguise scuff, scratch, and mar better than others. Applying this test to a gloss surface provides the most accurate means for assessing visual and measurable improvements.

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 laminates, averaged from two specific tests:

Typical Flame Spread and Smoke Developed Properties

Product Type	Test Condition	Flame Spread	Smoke Developed
General Purpose Type 107	Unbonded	50	45
Vertical Surface Type 335	Unbonded	45	40
Postforming Type 350	Unbonded	60	35
General Purpose Type 107	Bonded with contact adhesive to particleboard substrate; 3/8"	40	100
Vertical Surface Type 335	Bonded with contact adhesive to particleboard substrate; 3/8"	40	155
Product Type	Test Condition	Flame Spread	Smoke Developed
Postforming Type 350	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 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 laminates 107,335,350 and 376 conform to the voluntary standards of the American National Standards Institute/National Electrical Manufacturers Association (ANSI/NEMA) LD3-2005, for thickness, performance properties and appearance. Wilsonart laminates 107,335,350 and 376 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 I: specifications.”

Specific Product Standards

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

NSF International (NSF) #35, “Laminated Plastic for Surfacing for Food Service Equipment.” All printed patterns offered in finishes 7, 35, 45, 52 and 78 comply. U.S. Federal Register, August 9, 1984, Housing and Urban Development Mobile Home Construction and Safety Standard, (24CFR) 3280.203. General Purpose Type 107 and Vertical Surface Type 335 comply.

U.S. Federal Test Method, Federal Aviation Regulation, DOT, Part 25.853, Airworthiness Standards: Transport Category Airplane (Interior Finish). Vertical Surface Type 335 and Postforming Type 350 comply with parts A and C.

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

U.S. Military Standard MIL-P-17171E (SHIPS)/Plastic Laminate. General Purpose Type 107 complies.

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 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. Basic Types laminate 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 an appropriate acclimation between 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 335, 350 and 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® Laminate, produced by Wilsonart LLC, Temple, Texas 76503-6110	
Type: Specify 107, 335, 350 or 376	
Surface	
Color Number:	_____
Color Name:	_____
Finish	
Number:	_____
Name:	_____
Edge Trim	
Color Number:	_____
Color Name:	_____
Adhesive	
Name:	_____
Grade/Type:	_____
Brand:	Wilsonart® Adhesive

AEON Enhanced Performance Tech Data

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