

1. **Manufacturer**

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2. **Product Description**

Recommended Uses

Wilsonart® Compact Laminate is a high pressure solid composite designed for laboratory work surfaces, toilet partitions, wall panels, fume hood decks, fume hood liner panels, pegboards (drying racks), reagent racks, commercial countertops, cabinet drawer fronts, locker drawers, shelving, window sills, decorative casework components and other interior applications. Compact Laminate provides superior impact, fire-rated, chemical and stain resistance.

- Classic Grade – Melamine surface designed for vertical or horizontal applications and casework. Class B/ 2 Fire Rating. Thickness range 1/10” to 1”
- Fire-Rated Grade – Fire retardant properties, required by building codes, e.g., elevator cabs, stairwells, and hospitals. Suitable for all segments within the transportation industry. Class A/ 1 Fire Rating. Thickness range - ¼” to 1”. Fire-Rated Compact Laminate is produced with a black center core, with a brown color line under the decorative layer.
- Solid Phenolic Backer – Non decorative material used for panels that require impact resistance. Thickness range- 1/8” to 1”.

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).

Basic Limitations

Classic Grade and Fire-Rated panels offer special protection for many work surface applications. These product types are designed for interior applications. However, no one material is suitable for all possible conditions; its properties should be checked for suitability under the specific conditions of each application. The information provided herein is not intended for or to guarantee specific properties.

Patterns & Colors

See all patterns and colors at www.wilsonart.com. Please see actual sample before specifying. Some Compact product types are available in limited designs only.

Core Color

Classic Grade and Fire-Rated panels are produced with a black core as the standard offering in ¼” to 1” thicknesses. Product 114 and 117 is produced with a brown core except when ordered with a black melamine face.

Finishes

#60 Matte

Textured finish with a moderate reflective quality. Recommended for horizontal and vertical applications.

Nominal Glossometer Reading = 10

#38 Fine Velvet Texture

A smooth textured finish with moderate reflective value. Recommended for horizontal and vertical applications.

Nominal Glossometer Reading = 14

#74 Finish – Wood Ticking

Wood ticking with a low luster. Recommended for horizontal and vertical applications.

Nominal Glossometer Reading = 17

Finish	Compact Grade Available	Minimum	Special Requirements	Sheet Sizes
60	Classic, Fire-Rated	1 sheet	n/a	4' x 8', 4' x 10', 5' x 8', 5' x 10', 5' x 12'
38	Classic	8 sheets	Designs standard in this finish only.	4' x 8', 5' x 10', 5' x 12'
74	Classic	8 sheets	Woodgrains and Solids only	4' x 8'

Nominal Panel Thicknesses*, Compact Laminate

Product Type	Compact Grade	Imperial Measure (Inches)	Description	Metric Measure (Mm)	Thickness Tolerance	Lbs/ Sq.Ft
114	Classic	1/10" (0.100")	Sanded One Side	2.54 mm	±0.012" (0.30mm)	0.745
117	Classic	0.118"	Sanded One Side	3.00 mm	±0.012" (0.30mm)	0.886
514	Classic	1/10" (0.100")	Double Faced	2.54 mm	±0.012" (0.30mm)	0.745
515	Classic	1/8" (0.125")	Double Faced	3.17 mm	±0.012" (0.30mm)	0.895
569	Classic	1/4" (0.250")	Double Faced	6.35 mm	± 0.012" (0.30mm)	1.81
571	Classic	5/16" (0.312")	Double Faced	7.92 mm	± 0.015" (0.38mm)	2.26
572	Classic	3/8" (0.375")	Double Faced	9.52 mm	± 0.019" (0.48mm)	2.72
568	Classic	1/2" (0.500")	Double Faced	12.7 mm	± 0.025" (0.64mm)	3.62
575	Classic	3/4" (0.750")	Double Faced	19.0 mm	± 0.037" (0.94mm)	5.40
590	Classic	1" (1.00")	Double Faced	25.4 mm	± 0.050" (1.27mm)	7.24
669	Fire-Rated	1/4" (0.250")	Double Faced	6.35 mm	± 0.0125" (0.32mm)	1.81
671	Fire-Rated	5/16" (0.312")	Double Faced	7.92 mm	± 0.0156" (0.40mm)	2.26
672	Fire-Rated	3/8" (0.375")	Double Faced	9.52 mm	± 0.0187" (0.47mm)	2.72
668	Fire-Rated	1/2" (0.500")	Double Faced	12.7 mm	± 0.025" (0.64mm)	3.62
675	Fire-Rated	3/4" (0.750")	Double Faced	19.0 mm	± 0.037" (0.94mm)	5.40
690	Fire-Rated	1" (1.00")	Double Faced	25.4 mm	± 0.050" (1.27mm)	7.24
298	Phenolic Backer	1/8" (0.125")	Double Faced	3.17 mm	±0.012" (0.30mm)	0.895
269	Phenolic Backer	1/4" (0.250")	Double Faced	6.35 mm	± 0.0125" (0.32mm)	1.81
271	Phenolic Backer	5/16" (0.312")	Double Faced	7.92 mm	± 0.0156" (0.40mm)	2.26
272	Phenolic Backer	3/8" (0.375")	Double Faced	9.52 mm	± 0.0187" (0.47mm)	2.72
268	Phenolic Backer	1/2" (0.500")	Double Faced	12.7 mm	± 0.025" (0.64mm)	3.62
275	Phenolic Backer	3/4" (0.750")	Double Faced	19.0 mm	± 0.037" (0.94mm)	5.40
290	Phenolic Backer	1" (1.00")	Double Faced	25.4 mm	± 0.050" (1.27mm)	7.24

*Note: thickness tolerance according to ISO 4586-4 for Compact Laminate grade (CGS)

Standard Panel Sizes, Compact Laminate

Compact Grade	Imperial Measure (Feet)	Metric measure (mm)	Finish Availability
Classic	4' x 8'	1220 mm x 2440 mm	38, 60, 74
Classic	4' x 10'	1220 mm x 3050 mm	60

Classic	5' x 8'	1525 mm x 2440 mm	60
Classic	5' x 10'	1525 mm x 3050 mm	38, 60
Classic	5' x 12'	1525 mm x 3660 mm	38, 60
Fire-Rated	4' x 8'	1220 mm x 2440 mm	60
Fire-Rated	4' x 10'	1220 mm x 3050 mm	60
Fire-Rated	5' x 8'	1525 mm x 2440 mm	60
Fire-Rated	5' x 10'	1525 mm x 3050 mm	60
Fire-Rated	5' x 12'	1525 mm x 3660 mm	60
Phenolic Backer	4' x 8'	1220 mm x 2440 mm	Backers are produced with a slight texture and mottled black appearance.
Phenolic Backer	4' x 10'	1220 mm x 3050 mm	Backers are produced with a slight texture and mottled black appearance.

Phenolic Backer	5' x 8'	1525 mm x 2440 mm	Backers are produced with a slight texture and mottled black appearance.
Phenolic Backer	5' x 10'	1525 mm x 3050 mm	Backers are produced with a slight texture and mottled black appearance.
Phenolic Backer	5' x 12'	1525 mm x 3660 mm	Backers are produced with a slight texture and mottled black appearance.

3. Physical Properties

Sample	Test Method	Units	Scale	Wilsonart® Classic Grade
SEFA 3 stain (24 hr. stain)	SEFA 3	Pass/Fail	Pass/Fail	Pass
Number of Level 3 effects	SEFA 3	Numerical Rating	Maximum of 4 level 3	3
Scratch resistance	EN438-2:25	N	1 to 5 (5 best)	>5
Resistance to Wear	EN438-2:10	Cycles	Cycles	≥390
Resistance to Impact	EN438-2:21	Indentation diameter, mm	Max of 10mm	0
		Height, mm	Measurement of distance	1800
Resistance to Dry Heat	EN438-2:16	Rating (min)	1 to 5 (5 best)	≥ 4
Resistance to Wet Heat	EN12721	Rating (min)	1 to 5 (5 best)	≥ 5
Boiling Water Immersion	EN438-2:12	Appearance	1 to 5 (5 best)	≥ 5
Dimensional Stability	EN438-2:17	Cumulative change (%)	Percent Change	≤0.15
Resistance to Water Vapor	EN438-2:14	Rating	1 to 5 (5 best)	≥4
Resistance to Cigarette Burn	EN438-2:30	Rating	1 to 5 (5 best)	≥4
Resistance to Crazeing	EN438-2:24	Grade	1 to 5 (5 best)	≥5
Modulus of Elasticity	EN ISO 178/ASTM 638-08	Mpa	>11000	≥12000
Modulus of Elasticity	EN ISO 178/ASTM 638-09	psi	> 1,400,000	>1,800,000
Flexural Strength (MD)	EN ISO 178/ASTM 790-07	Mpa	> 114.0	≥177
Flexural Strength (CD)	EN ISO 178/ASTM 790-08	Mpa	>82.7	≥120
Tensile Strength (MD)	EN ISO 527-2/ASTM 638-08	Mpa	> 114.0	≥145
Tensile Strength (CD)	EN438-2:25	Mpa	>82.7	≥99
Density	EN ISO 1183/ASTM 792-08	g/cm2		1.39
Light Fastness	EN438-2:27	Blue wool scale	Min of 4 to 5	≥6
Fire Properties	ASTM E-84			Class B
Warpage		On products >3/8"	Maximum of 1/4"	Maximum of 1/4"
Screw Hold Strength	1/4"	Pounds (N)		≥ 500 (≥2000)
	3/8"	Pounds (N)		≥ 900 (≥4000)
	1/2"	Pounds (N)		≥ 1300 (≥5000)
	3/4"	Pounds (N)		≥ 1900 (≥8000)
	1"	Pounds (N)		≥ 2000 (≥8500)

Note: All SEFA and EN438 testing were performed on Compact laminate with a black decorative surface

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.

Fire Test Information for Classic Grade Compact (ASTM E84)

Thickness	Flame Spread	Smoke Development
¼” to 1”	55 - 60	165 -250

Fire Test Information for Fire-Rated Compact (ASTM E84)

Testing Company	Thickness	Flame Spread	Smoke Development
U.L.	¼” to 1”	15	110-165

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

SEFA 8 Test Results - See [Technical Data Sheet for Laboratory Grade](#) products.

NSF International (NSF) #35 “Laminated Plastic for Surfacing for Food Service Equipment.” All solid colors and printed patterns in product types 514, 515, 568, 569, 572, 575, 590, 668, 669, 672, 675 and 690 comply.

Branded Cleaner and Sanitizer Resistance for Wilsonart® Compact 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® Compact 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® Compact 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® Compact 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® Compact per BIFMA HCF 8.1-201X

Section 9 (Alternate Method per ASTM G155 using ISO 4586-2.33 conditions)

Wilsonart® Compact conforms to BIFMA – Healthcare Furniture Design Guidelines for Cleanability , Section 9 Resistance to Furniture to UV Lights. Wilsonart® Compact meet or exceed the acceptance level for surface evaluation.

4. **Fabrication**

Compact Laminate panels can be cut, drilled and machined using standard wood-working equipment fitted with carbide cutting edges. Rough cuts can be made with carbide tip blades typically 62 tooth or greater on a table saw or Kane saw.

To achieve a clean edge, routers with ¼” or ½” shaft, with 2 flute carbide blades can be used to remove rough edges. CNC routers typically will run at 10,000 to 18000 RPM’s at 150 to 900 inches per minute. (Dependent on thickness of panel and type of cut). It is common to run 10,000 RPM’s at 200 inches per min on ½” and ¾” material.

Final sanding, of the edge, can be achieved with an orbital sander

Matte Finish	Satin Finish	Semi-Gloss Finish
100u	100u	100u
80u	80u	80u
60u	60u	60u
	1000 Mirka Abralon	1000 Mirka Abralon
		2000 Mirka Abralon

Installation

Generally, the principles applicable to the installation of decorative laminate work, will also apply to the installation of Compact Laminate panels.

Surface mounted objects should be secured into the face or back of the laminate using self-tapping machine screws in pre-drilled holes. IMPORTANT NOTE: Care needs to be taken when screwing into the edge of the Compact Laminate. Using the appropriate drill diameter and screw size/quality is important. Leveling at joints can be done using shims on the underside if necessary. Metal brackets or retaining clips are recommended for securing the laminate panels together, and to abutting surfaces. To secure counters to cabinets and provide liquid proof butt joints, a two part epoxy, and two part urethane or silicone sealant can be used.

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® Compact Laminate, produced by Wilsonart LLC, Temple, Texas 76503-6110

Type: Specify Compact _____

Surface

Color Number: _____

Color Name: _____

Finish

Number: _____

Name: _____

Edge Trim

Color Number: _____

Color Name: _____

Adhesive

Name: _____

Grade/Type: _____

Brand: Wilsonart® Adhesive

Wilsonart® Compact Laminate Technical Data
Classic, Fire-Rated & Phenolic Backers
Revised: June 18, 2020
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