

Wilsonart® Phenolic Backer Sheets Technical Data

Manufacturer

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Product Description

Recommended Uses

Wilsonart® Phenolic Laminate Backer Sheets are designed for use in a three (3) ply fabrication on the backside of substrates faced with Wilsonart® High Pressure Decorative Laminates. Types of fabricated pieces using these products include commercial and residential furniture, wall panels, countertops, & cabinetry. Wilsonart® Phenolic Laminate Backer Sheets provide the fabricated piece with some balancing characteristics and added protection from the effects of humidity in their normal use. Wilsonart® Phenolic Laminate Backer Sheets are not designed as a functional decorative surface.

Wilsonart® Phenolic Laminate Backer Sheets are available in various types and thicknesses.

Product Composition

Wilsonart® Phenolic Laminate Backer Sheets are composed of kraft paper core sheets impregnated with phenolic resin. These sheets are then bonded at pressures greater than 1000 lbs. per square inch at temperatures approaching 300° F (149° C). Finished sheets are trimmed, and one or both sides are sanded to facilitate bonding.

Basic Limitations

Wilsonart® Phenolic Laminate Backer Sheets are designed for interior use only and are not recommended for direct application to plaster, concrete walls, or gypsum wallboard. These laminates are not structural materials, and must be bonded to suitable substrates.

Do not subject Wilsonart® Phenolic Laminate Backer Sheets to extremes in humidity, or temperatures higher than 275°F (135°C) for substantial periods of time, or intense, continuous, direct sunlight. Over exposure to extreme heat may cause cracking and crazing, or discoloration.

Materials and Finishes

Because Wilsonart® Phenolic Laminate Backer Sheets are produced primarily for application to unexposed surfaces, Phenolic Laminate Backer sheets have one side sanded and one brown (natural) colored side (no color guarantee). Product Type 293 (black core-black face). To obtain sanding on both sides, specify product type.

Sheet Widths

30"	36"	48"	60"
762mm	914m m	1219m m	1524m m

Sheet Lengths

96"	120"	144"
2438m m	3048m m	3658m m

Note: Not all sizes are available from stock; contact your Wilsonart representative for details on availability.

Technical Data**Thickness and Weight**

Product Type	Sanded Sides	Thickness	Weight per sq. ft. (lbs.)
202	One	0.020"± 0.003" (0.51mm ± 0.008mm)	0.131
203	One	0.028"± 0.004" (0.71mm ± 0.10mm)	0.167
204	Both	0.033"± 0.003" (0.84mm ± 0.08mm)	0.262
205	One	0.030"± 0.003" (0.76mm ± 0.08mm)	0.173
206	One	0.045" ± 0.0003" (1.11mm ± 0.08 mm)	0.297
207	One	0.048"± 0.005" (1.22mm ± 0.13mm)	0.297
208	One	0.060"± 0.005" (1.52mm ± 0.13mm)	0.406
209	Both	0.060" ± 0.005" (1.52mm ± 0.13mm)	0.406
211	Both	0.075" ± 0.004" (1.90mm ± 0.101mm)	0.5782
213	Both	0.105" ± 0.005" (2.67mm ± 0.13mm)	0.7709
220	Both	0.018"± 0.003" (0.46mm ± 0.08mm)	0.117
222	Both	0.018" ± 0.003" (0.46mm ± 0.08mm)	0.117
230	One	0.0295"± 0.002" (0.749 mm ± 0.0508mm)	0.181
231	One	0.028" ± 0.004" (0.71mm ± 0.10mm)	0.167
240	One	0.039"± 0.005" (0.99mm ± 0.13mm)	0.264

264-FR	Both	0.030" ± 0.004" (0.76mm ± 0.10mm)	0.223
266-FR	Both	0.050" ± 0.005" (1.27mm ± 0.13mm)	0.359
268	Do Not Sand	0.500" ± 0.021" (12.70mm ± 0.51mm)	3.537
269	Do Not Sand	0.250" ± 0.012" (6.35mm ± 0.30mm)	1.810
271	Do Not Sand	0.312" ± 0.014" (7.93mm ± 0.36mm)	2.200
272	Do Not Sand	0.375" ± 0.017" (9.525mm ± 0.4318mm)	2.552
275	Do Not Sand	0.750" ± 0.027" (19.05mm ± 0.68mm)	5.375
290	Do Not Sand	1.000" ± 0.030" (25.40 mm ± 0.73mm)	7.187
292	One	0.020" ± 0.003" (0.51mm ± 0.08mm)	0.131
293	One	0.028" ± 0.004" (0.71mm ± 0.10mm)	0.191
295	One	0.030" ± 0.003" (0.76mm ± 0.08mm)	0.230
297	One	0.036" ± 0.003" (0.9144mm ± 0.0762mm)	0.280
298	Do Not Sand	0.125" ± 0.008" (3.18mm ± 0.20mm)	0.948

General Standards

Wilsonart® Phenolic Laminate Backer Sheet Types 202, 203, 207 and 240 conform to the relevant standards for BKL, BKV, BKH, and BKM respectively, of the American National Standards Institute/ National Electrical Manufacturers Association (ANSI/NEMA), LD 3-2005, for thickness.

Since such backer sheets are designed for application to the unexposed backs of fabricated pieces, NEMA LD 3-2005 sets no standards for performance properties or appearance on these products.

The GREENGUARD Environmental Institute™ has awarded its GREENGUARD Indoor Air Quality Certification to Wilsonart Laminate. All Wilsonart Laminate product types were tested under the stringent GREENGUARD Standards for low-emitting products. All GREENGUARD Indoor Air Quality Certified® products ensure minimal impact on the indoor environment. For a copy of the certificate, visit www.greenguard.org.

Codes & Certifications

Fire-Rated Backer (BKV) Type 264: A stabilizing backer sheet for applications where the decorative surface is Wilsonart® Fire-Rated Type 604 (Vertical Surface).

Fire-Rated Backer (BKH) Type 266: A stabilizing backer sheet for applications where the decorative surface is Wilsonart® Fire-Rated Type 605 or 607 (General Purpose).

The U.S. Coast Guard approves Wilsonart® Laminate Backer Types 205, 264, and 266 for "Interior Finish" as follows.

Military/Ships

Product Type	U.S.C.G. Certificate of Approval	Canadian Board of Steamship Inspection
264-FR	164.012/46/0 & 164.112/11/0	G1-161
266-FR	164.012/106/ & 164.112/12/0	G1-165
205	164.012/132/0 & 164.112/6/0	G1-168 (R1)

Mobile Homes: U.S. Federal Register August 9, 1984, Housing and Urban Development Mobile Home Construction and Safety Standard (24CFR), 3280.203. Fire-Rated Laminate Types 264 and 266 comply.

Typical Fire Test Data

Underwriters' Laboratories of Canada/Listed Plastic Material/Form 50. Classified as to surface burning characteristics in accordance with the standard CAN/ULC-S 102-2.

Typical Flame Spread and Smoke Developed Properties

NEMA Type	Wilsonart Product	Unbonded	Bonded to Incombustible Cement Board	Bonded to Fire-Rated Particleboard
BKV	264-FR	15/0	15/0	20/10
BKH	266-FR	20/0	15/0	10/15

Note: Adhesive to attain Flame Spread and Smoke Developed figures for bonded laminates (above) is resorcinol. Fire-rated particleboard is Duraf Flake, with a UL rating 25/25, or comparable material. The above values are UL approved.

Fabrication and Assembly

Fabrication should follow approved methods. Assembled pieces should meet the specifications of KCMA (Kitchen Cabinetmakers Manufacturers Association), ANSI A-162.2-1998 (revised), and "Architectural Woodwork Quality Standards, Guide Specifications and Quality Certification Program" guidelines of the Architectural Woodwork Institute where applicable.

Wilsonart® Phenolic Laminate Backer Sheets must be bonded to a suitable substrate of reliable quality, such as particleboard, medium density fiberboard or plywood with one "A" face. All decorative laminate, plaster, concrete and gypsum board should not be considered suitable substrates. Wilsonart® Phenolic Laminate Backer Sheets may not be used as structural members.

Wilsonart® Phenolic Laminate Backer Sheets may be bonded with most adhesives. Recommended adhesives are permanent types, such as urea and polyvinyl acetate (PVA), and contact types. Wilsonart adhesives are recommended for most bonding applications. Please follow all manufacturers' recommended instructions and technical data information.

Take care to ensure an appropriate acclimation between the laminate the substrate and the phenolic backer sheets prior to fabrication. The materials should be acclimated/conditioned a minimum of 48 hours before fabrication.

The recommended conditioning/acclimation temperature for the materials is approximately 75°F (24°C), with 45-55% relative humidity.

Carbide-tipped saw blades and router bits are recommended for cutting. High tool speed and low feed rates are advisable. Cutting blades and bits should always be kept sharp. The use of a hold-down bar is recommended to prevent vibration.

Care and Maintenance

Maintenance of surfaces with Wilsonart® Phenolic Laminate Backer Sheets requires little or no maintenance as long as they are protected from physical abuse.

Warranty

Wilsonart LLC warrants that, under normal use and service, the material and workmanship of its Wilsonart® Phenolic Laminate Backer Sheets shall conform to the standards set forth on the applicable technical data sheets for a period of one (1) year from the date of sale to the first consumer purchaser. Dealers and distributors are provided with the technical data sheets, which contain specific standards of performance for the products. In the event that this product does not perform as warranted, the first consumer purchaser's sole remedy shall be limited to repair or replacement of all or any part of the product which is defective, at the manufacturer's sole discretion.

This warranty applies only to product:

- In its original installation; and
- Purchased by the first consumer purchaser.

This warranty is not transferable, and expires upon resale or transfer by the first consumer purchaser.

This warranty shall not apply to defects or damage arising for any of the following:

- Accidents, abuse or misuse;
- Exposure to extreme temperature, corrosive atmospheres or precipitants;
- Improper fabrication, or installation; or
- Improper maintenance

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES SHALL WILSONART INTERNATIONAL, INC. BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES. NO FABRICATOR, INSTALLER, DEALER, AGENT OR EMPLOYEE OF WILSONART LLC HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATIONS OF THIS WARRANTY.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state; therefore, some or the limitations stated above may not apply to you. It is to your benefit to save your documentation upon purchase of a product.

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.

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