



BasicMetal™ by FORMICA®

TECHNICAL DATA

RECOMMENDED APPLICATION

BasicMetal™ by Formica® is real Aluminum foil laminated to a phenolic core combined to exhibit the look of real metal with the practicality of high pressure laminate (HPL). BasicMetal™ laminate is suitable for interior light duty horizontal or vertical applications such as furniture, exhibits, accents, etc., where the look and design of metal are required. BasicMetal™ is not designed for postforming applications.

Product Description

BasicMetal™ sheet is impregnated with a polyester coated aluminum foil surface (brushed & matte) combined with phenolic-treated kraft paper that is fused together at high pressure and temperature. The sheet back is sanded to maintain a uniform thickness and facilitate bonding.

FABRICATION AND ASSEMBLY

Special Cutting and Trimming Guidelines:

Cutting

- Cut BasicMetal™ sheet to yield a minimum overhang (<1/8" (3.18mm)).
- Use clean, sharp carbide saw blades.
- Eliminate pulling and bending by cutting BasicMetal with “zero clearance” at blade kerf or spot-gluing metal to scrap carrier board.

Trimming

- Use a small diameter cutter (3/8" (9.53mm)) and a variable speed router set at minimum setting, or use an electronic speed control accessory to reduce router RPM as slow as possible.
- Use a flush bit (rather than a bevel bit) which can be adjusted to yield up to 10 fresh cutting edges. Protect the self-edge face with masking tape at the bearing line.
- Feed the router as fast as possible. Rough cut at one height adjustment and re-trim at a fresh cutting edge. Retract cutter from the work piece as soon as cut is complete. Dwelling in one spot during start or finish will greatly diminish cutter life. Plan your cutting strategy to reduce static start and stops.

- Having excessive overhang will allow for excessive heat build up, which could cause delamination of the aluminum surface from the phenolic core.
- Finish the edges with a fine file, always cutting on the downward stroke.
- BasicMetal™ is made from real aluminum which is a natural occurring metal and hence a conductor.

Limitations

BasicMetal™ is intended for application to dry interior light-duty horizontal or vertical surfaces. It is not recommended for application directly to plaster, drywall (gypsum board), fiberglass, concrete, softwood fir and/or pine plywood. BasicMetal™ sheets should not be used in areas exposed to water, moisture, high humidity, temperatures exceeding 140°F (60°C) for prolonged periods of time, or for exterior applications. BasicMetal™ is manufactured using real aluminum. This surface is softer and will scratch easier than the surface of Formica® Brand Laminate. BasicMetal™ is not recommended for heavy duty horizontal applications such as countertops or for use in high heat or high moisture areas such as backsplashes, behind cooktop or range hoods.

BasicMetal™ IS NOT a postformable grade laminate.

The surface of BasicMetal™ is covered with a protective peelcoat, which should not be removed until all fabrication work has been completed. Directional arrows are noted on the peelcoat indicating the proper direction for application. Before routing, inspect the router base and bit guide bearings and perform work on a piece of scrap material to assure that you will not scratch the surface.

Do not apply adhesive tapes directly to the surface of BasicMetal™, as it can damage the finish. Masking tape may be applied over the peelcoat for additional surface protection for the router base and router bit bearing to guide on.

Color Limitations

Due to deviations which are inherent to natural aluminum products, BasicMetal™ may display a range of color shades, which do not indicate a product defect. Check that all sheets are of a consistent shading before fabrication. Lift a corner of the peelcoat to check shading; reposition peelcoat after color check to protect the surface during fabrication.

BasicMetal™ is directional and may show a color shift when viewed at different angles. It is absolutely necessary that the running direction is the same, and the general appearance checked, before assembly. Directional arrows are printed on the peelcoat of laminate, indicating alignment direction. Do not remove the peelcoat prior to fabrication.

Exposure of BasicMetal™ sheets to direct sunlight may produce color change in the tinted surface coating. Any slight change in color over time does not indicate a product defect. Do not expose solid metal sheets to temperatures that exceed 200°F (93°C) or to direct sunlight.

Storage

BasicMetal™ should be stored horizontally, with a caul board or other protective sheet placed on top to protect the material from possible damage and reduce possibility of warpage. The material should be protected from moisture, and should never be stored in contact with the floor or an outside wall. Storage temperature should not exceed 85°F (30°C), or go below 50°F (10°C) for prolonged periods of time. Optimum conditions for storage are approximately 70°F (21°C) and 45% to 65% relative humidity (RH). Do not damage the protective peelcoat. The material should be protected from ultraviolet light and excessive heat to insure easy removal of peelcoat and prevent color shift due to exposure of light.

Preconditioning

BasicMetal™ and substrates gain moisture and expand under high relative humidity conditions, and lose moisture and shrink under dry relative humidity conditions. Allow the sheet(s) and substrate(s) to acclimate for at least 48 hours at the same ambient conditions prior to fabrication. Optimum conditions for storage are approximately 70°F (21°C) and 45% to 65% relative humidity (RH). Provisions should be made for the circulation of air around components.

SUBSTRATES

The recommended cores/substrates for BasicMetal™ are 45# density, industrial particleboard, (CS 236-66: Type 1, Grade B, Class 2), or Medium Density Fiberboard (MDF). Softwood fir and pine plywood have rough surfaces and high shrinkage characteristics and are unusable as substrates. Plywood is also unusable, due to the potential

for stress cracking, shrink-back, and surface telegraphing problems. The substrate should be sanded smooth, clean, free of oil or grease, and uniform in thickness. Do not use drywall (gypsum), plaster, concrete, solid lumber, bending plywood, or underlayment.

Adhesives

Conventional contact, PVAc, and rigid-set adhesives (resorcinol) can be used to bond BasicMetal™. Do not use urea adhesives. Do not hot press. Avoid contact adhesive contamination of the metal surface. Avoid contamination of the metal surface with contact adhesive.

Do not allow contact adhesive solvent, lacquer thinner, or other strong solvents to come into contact with the coated surface of the BasicMetal™ as it will stain the surface. Keep peelcoat on surface through fabrication to prevent such contamination.

Assembly

Material, equipment, and workmanship should conform to the industry standard practices, conditions, procedures, and recommendations as specified by ANSI/NEMA LD3-2005, Architectural Woodwork Quality Standards, DLPA (Decorative Laminate Products Association) and ANSI 161.2-1995 standards. Critical applications requiring a well-balanced panel assembly, such as cabinet doors, should use the same material on both sides to minimize warpage. Less critical assemblies may only require a cabinet liner or phenolic backer.

Always align material in the same running direction. Directional arrows are printed on the peelcoat to indicate alignment. Do not remove the peelcoat prior to fabrication.

BasicMetal™ sheets can be sawed, drilled, routed, and fabricated similarly to standard high pressure laminate. Carbide-tipped cutting tools are recommended. Always cut with the decorative surface face up. BasicMetal™ is not a postforming grade laminate.

All inside corners of cutouts must be radiused as large as possible, 1/8" (3.18mm) minimum, to avoid stress cracking. The edges and corners should be routed, sanded, or filed smooth and free of chips or nicks.

Cut or milled edges should be finished with a fine file or abrasive paper to remove any burrs.

Fire Test Data - ASTM E-84

Test reports are available upon request.

SIZES

Brushed Aluminum 48" x 120" (1020 x 3050 mm) and 48" x 96" (1020 x 2440 mm). All others 48" x 96" (1020 x 2440 mm).

NOMINAL THICKNESS

0.027" ± 0.005" (0.685 mm ± 0.12mm), -Grade 36

PATTERNS, GRADE AND FINISH

BasicMetal™ is available in:

- Seven Patterns
- One grade: 36 (see Nominal Thickness)
- Two Finishes: Brushed (91) and Matte (92).

BasicMetal™ has a polyester coated aluminum surface.

BasicMetal™ samples are available from Formica Corporation specification representatives or directly from Formica Corporation.

U.S. Customers - Call 1-800-FORMICA™ (option 1).

Canada Customers - Call 1-800-363-1405 for ZIP-CHIP™ service.

HOW TO SPECIFY

Surface shall be BasicMetal™ by Formica®, Cincinnati, Ohio.

COLOR NUMBER _____

COLOR NAME _____

GRADE _____

FINISH _____

SIZE _____

USE AND CARE

BasicMetal™ may be cleaned with a damp cloth and mild detergent or citrus cleaner. To remove contact adhesive overspray, use hexane, heptane or Formica® Brand #203 Adhesive Remover. If in doubt about the suitability of a particular cleaner or detergent, check with its manufacturer. Use of abrasive cleaners, powders, scouring pads, steel wool, sandpaper, etc., will damage the finish. Acid or alkaline-based cleaners, compounds, solvents, etc. will mar, etch, corrode, and permanently discolor BasicMetal™ sheets. Never use these materials on BasicMetal™, or allow bottles, rags, etc., contaminated with the solution to contact the surface. Accidental spills or splatters from these harsh materials should be wiped off immediately, and the area cleaned thoroughly with a damp cloth.

Examples of these materials:

- drain cleaners
- ceramic cooktop cleaners
- some countertop cleaners
- metal cleaners
- oven cleaners
- coffeepot cleaners
- chlorine bleach
- rust removers
- tub and tile cleaners
- toilet bowl cleaners

LIMITED WARRANTY

Formica Corporation expressly warrants that, for a period of one (1) year from the date of first sale, these products will be reasonably free of defects in materials and workmanship, and that when properly handled and fabricated, will conform, within accepted tolerance, to applicable manufacturing specifications. Colors subject to dye lot variations. This limited warranty only applies to Formica® Brand Laminate which is stored, handled, fabricated and installed in the manner recommended by Formica Corporation. Due to the variety of uses and applications to which Formica Brand Laminate may be put, FORMICA CORPORATION CAN MAKE NO WARRANTY THAT THIS PRODUCT IS SUITABLE FOR ANY PARTICULAR PURPOSE AND CAN MAKE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OTHER THAN THOSE SET FORTH ABOVE.

Disclaimer of Warranties

THE WARRANTIES SET FORTH HEREIN OR IN FORMICA CORPORATION'S WARRANTY DOCUMENTS WITH RESPECT TO A PRODUCT ARE THE ONLY WARRANTIES MADE BY FORMICA CORPORATION IN CONNECTION WITH THESE PRODUCTS, AND ARE EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PRODUCTS SOLD BY FORMICA CORPORATION ARE SOLD ONLY TO THE SPECIFICATIONS SPECIFICALLY SET FORTH BY FORMICA CORPORATION IN WRITING. FORMICA CORPORATION'S SOLE OBLIGATION FOR A REMEDY TO BUYER SHALL BE REPAIR OR REPLACEMENT OF NON-CONFORMING PRODUCTS, OR AT THE OPTION OF FORMICA CORPORATION, RETURN OF THE PRODUCT AND REFUND OF THE PURCHASE PRICE. BUYER ASSUMES ALL RISK WHATSOEVER AS TO THE RESULT OF THE USE OF THE PRODUCTS PURCHASED, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES.

Limitation of Liability

No claim by buyer of any kind, including claims for indemnification, whether as to quality or amount of products delivered or for non-delivery of products, shall be greater in amount than the purchase price of the

products in respect of which damages are claimed. IN NO EVENT SHALL FORMICA CORPORATION BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, RELIANCE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES OR COVER, OR LOSS OF PROFIT, REVENUE OR USE, IN CONNECTION WITH, ARISING OUT OF, OR AS A RESULT OF, THE SALE, DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS SOLD HEREUNDER, OR FOR ANY LIABILITY OF BUYER TO ANY THIRD PARTY WITH RESPECT THERETO. BUYER SHALL INSPECT FOR NONCONFORMITY PROMPTLY UPON RECEIPT. Failure by buyer to give Formica Corporation written notice of claim within 30 days from date of delivery or, in the case of non-delivery from the date fixed for delivery, shall constitute a waiver by buyer of all claims in respect of such products.

IMPORTANT NOTICE

The information and statements herein are believed to be reliable but are not to be construed as a warranty or representation for which Formica Corporation assumes legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein.

NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

MANUFACTURER

Formica Corporation
(or an unaffiliated manufacturer in accordance with the specifications of Formica Corporation)
10155 Reading Road
Cincinnati, OH 45241

TECHNICAL SERVICES

Technical assistance may be obtained through your local Formica® Brand Products distributor or from Formica Corporation trained representatives in sales offices throughout the country. To assist these representatives, Formica Corporation maintains a sales technical services staff in Cincinnati, Ohio. For technical assistance, contact your distributor or sales representative; write the company directly at Formica Corporation Technical Services Department, 10155 Reading Road, Cincinnati, OH, 45241; call (513) 786-3578 or 1-800-FORMICA™ (option 2); or fax (513) 786-3195. In Canada, call 1-800-363-9280. In Mexico, call (525) 530-3135.



©2007 Formica Corporation
Cincinnati, Ohio 45241
Printed in the U.S.A.
Form No. YLT14144W (10/08)

Formica and the Formica anvil logo are registered trademarks of The Diller Corporation. 1-800-FORMICA™, BasicMetal™ and ZIP-CHIP™ are trademarks of The Diller Corporation.