

FUSED SILICA
HOT PRESS PLATENS
CASTABLE CERAMICS
FIRED SHAPES
AEROSPACE TOOLING

Foundry Service & Supplies, Inc.

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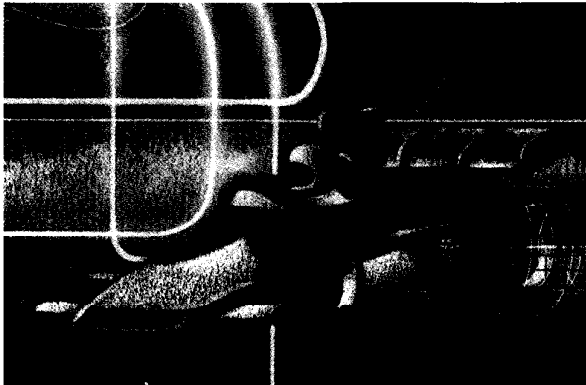
HI-TEMP INSULATIONS
CALCIUM SILICATE BOARDS
MILLBOARD AND BLANKET
PAPERS AND CEMENTS
CUTTING AND FABRICATING

Micarta Industrial Laminates

Shapes of things to come

Like other building materials, Micarta comes in a number of standard shapes and panels. **Flat sheet** is manufactured up to 16 inches in thickness and in sizes up to 5 feet by 12 feet. There are more than 1500 standard round, rectangular, square and elliptical Micarta **convolute tubing** products. These are available with a range of inside and outside diameters, wall thicknesses and lengths. The standard inside diameters range from 1/8 inch to 65 inches. There is also a choice of oil, sanded or special finishes.

Filament-wound tubing is available with up to 60 inch inside diameters, wall thicknesses up to 3/4 inch, in lengths up to 20 feet. Shapes other than cylindrical can be manufactured. A wide range of molded structural rods, angles, channels and zees of various materials and dimensions are available. Micarta materials meet or exceed all applicable NEMA requirements.



The versatility of the Micarta laminate formula, and the range of manufacturing equipment at Hampton, mean that just about any moldable laminate product can be tailor made using customer drawings and specifications.

Micarta®

Micarta Industrial Uses:

- Super collider
- Cryogenic pumps & vacuums
- Rocket propellant containers
- Space shuttle cargo bay
- Military aircraft ejection seats
- Radomes
- Missile nose cones
- Mass Transit
- Medical imaging equipment
- Submarine damping systems
- Turbines
- Voltage generators
- Electrical panels
- Power circuit breakers
- Antennas
- Compound archery bows
- Paper industry
- Ball bearing retainers
- Textile bobbins
- Automotive industry
- Radio-controlled model cars

Grade Selection Guide: Please call Foundry Service & Supplies for detailed technical information and data sheet(s) pertaining to any of the following materials...

Micarta® Grade	NEMA Grade	Specification Number & Type	Construction Resin & Substrate	Color
213	X	Mil-I-24768/12-PBM	Phenolic/Paper	Natural/Black
219	XX	Mil-I-24768/11-PBG	Phenolic/Paper	Natural/Black
254	XXX	Mil-I-24768/10-PBE	Phenolic/Paper	Natural
H-19128	XP	Mil-I-24768/19-PBM-P	Phenolic/Paper	Tan/Black/Chocolate
H-5639	XXXPC	Mil-I-24768/23-PBE-PC	Phenolic/Paper	Natural
H-26887	XPC	Mil-I-24768/20-PBM-PC	Phenolic/Paper	Natural/Black
H-27024	LE	Mil-I-24768/13-FBE	Phenolic/Linen	Natural/Black
223	(n/a)	Mil-P-18324	Phenolic/Canvas	Natural
238	L	Mil-I-24768/15-FBI	Phenolic/Linen	Natural
H-26000	C	Mil-I-24768/16-FBM	Phenolic/Canvas	Natural/Black
H-25126	(n/a)	(n/a)	Phenolic/Linen	Natural
281	(n/a)	(n/a)	Phenolic/Canvas	Natural
51F33	CE	Mil-I-24768/14-FBG	Phenolic/Canvas	Natural
400	(n/a)	Mil-P-5431, MPR-400	Phenolic/Canvas/Graphite	Green
H-19989	G-3	Mil-I-24768/18-GPG	Phenolic/Glass	Natural
259-2	G-5	Mil-I-24768/8-GMG	Melamine/Glass	Gray
H-17825	G-7	Mil-I-24768/17-GSG	Silicone/Glass	White
H-12426	G-9	Mil-I-24768/1-GME	Melamine/Glass	Gray
H-24899	(n/a)	(n/a)	Phenolic/Canvas/Graphite	Black
H-22033	G-10/FR-4	Mil-I-24768/2/27-GEE, GEE-F	Epoxy/Glass	Natural
H-26671	G-11	Mil-I-24768/3-GEB	Epoxy/Glass	Natural

Convolute Tubing

51-B	X, XX	Mil-I-24768/12/11-PBM, PBG	Phenolic/Paper	Tan
5A2	XX	Mil-I-24768/11-PBG*	Phenolic/Paper	Black
20005	XXX	Mil-I-24768/10-PBE	Phenolic/Paper	Tan
76	(n/a)	(n/a)	Phenolic/Cotton Cloth	Tan/Black
79	C	Mil-I-24768/16-FBM	Phenolic/Cotton Cloth	Tan
91	(n/a)	(n/a)	Phenolic/Cotton Cloth/Aluminum Oxide	Tan
97	LE	Mil-I-24768/13-FBE	Phenolic/Cotton Cloth	Tan
HY-1928	(n/a)	(n/a)	Epoxy/Cotton Cloth	Natural
20007	(n/a)	(n/a)	Phenolic/Cotton Cloth/Molydisulfide	Black
HY-1765	(n/a)	(n/a)	Phenolic/Cotton Cloth/Graphite	Black
HY-2180	CE	(n/a)	Phenolic/Cotton Cloth	Tan
HY-278	G-5	Mil-I-24768/8-GMG	Melamine/Glass Cloth/Fine Weave	Tan
HY-689	G-5	Mil-I-24768/8-GMG	Melamine/Glass Cloth	Tan
HY-1293	G-7	Mil-I-24768/17-GSG	Silicone/Glass Cloth/Fine Weave	White
HY-1806	G-7	Mil-I-24768/17-GSG	Silicone/Glass Cloth	White
HY-1216	G-9	Mil-I-24768/1-GME	Melamine/Glass Cloth	Tan
HY-512	G-10/G-11	Mil-I-24768/2-GEE	Epoxy/Glass Cloth/Fine Weave	Natural
HY-180	G-10	Mil-I-24768/2-GEE	Epoxy/Glass Cloth	Natural
HY-180-1	G-11	(n/a)	Epoxy/Glass Cloth	Natural

* Exception to PARA 3.4.2 (color)

Filament Wound Tubing

HY-964	G-10	(n/a)	Epoxy/Glass	Natural
HY-1384	G-10	(n/a)	Epoxy/Glass	Natural
HY-1457	G-10	(n/a)	Epoxy/Glass	Natural
HY-1527	G-10	(n/a)	Epoxy/Glass	Black
HY-2224	G-11	(n/a)	Epoxy/Glass	Natural

- Tubes up to 9" o.d. are furnished centerless ground.
- Tubes over 9" o.d. are furnished as wound unground.

- Tubes over 9" o.d. can be furnished with turned o.d. at an additional charge.

Tolerances of Plate : Please call Foundry Service & Supplies for detailed technical information and data sheet(s) pertaining to any of the following materials...

Grade	213 / 219 / 254 H-5639 / H-19128 H-26887	238	223	H-27024	400 H-26000 H-24899	281 51F33 H-25126	259-2 / H-12426 H-22033 / H-19989 H-26671 / H-17825
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Molded

Nominal Thickness (Inches)	1/32	± .0035	± .005	± .0065	± .005	± .0065	± .0065	± .0065
	3/64	± .0045	± .0055	± .0075	± .0055	± .0075	± .0075	± .0075
	1/16	± .005	± .006	± .0075	± .006	± .0075	± .0075	± .0075
	3/32	± .007	± .007	± .009	± .007	± .009	± .009	± .009
	1/8	± .008	± .008	± .010	± .008	± .010	± .010	± .012
	5/32	± .009	± .009	± .011	± .009	± .011	± .011	± .015
	3/16	± .010	± .010	± .0125	± .010	± .0125	± .0125	± .019
	7/32	± .011	± .011	± .014	± .011	± .014	± .014	± .021
	1/4	± .012	+ .024	± .015	± .012	+ .030	± .015	± .022
	5/16	± .0145	+ .029	± .0175	± .0145	+ .035	± .0175	± .026
	3/8	± .017	+ .034	± .020	± .017	+ .040	± .020	± .030
	7/16	± .019	+ .038	± .022	± .019	+ .044	± .022	± .033
	1/2	± .021	+ .042	± .024	± .021	+ .048	± .024	± .036
	5/8	± .024	+ .048	+ .053	± .024	+ .053	± .027	± .040
	3/4	± .027	+ .054	+ .058	± .027	+ .058	± .029	+ .043
	7/8	± .030	+ .060	+ .062	± .030	+ .062	± .031	± .046
	1	± .033	+ .065	+ .065	± .033	+ .065	± .033	± .049
	1-1/4	± .037	+ .073	+ .073	± .037	+ .073	± .037	± .055
	1-1/2	± .041	+ .081	+ .081	± .041	+ .081	± .041	± .061
	1-3/4	± .045	+ .089	+ .089	± .045	+ .089	± .045	± .067
	2	± .049	+ .097	+ .097	± .049	+ .097	± .049	± .073

Sanded

Nominal Thickness (Inches)		Fine Weave Cloth/Paper (Sanded one side)	Fine Weave Cloth/Paper (Sanded two sides)	Medium & Coarse Weave Cloth/Glass (Sanded one side)	Medium & Coarse Weave Cloth/Glass (Sanded two sides)
	.031 to .060	± .003	± .002	± .005	± .003
	.061 to .125	± .004	± .003	± .006	± .004
	.126 to .250	± .005	± .004	± .007	± .005
	.251 to .375	± .0055	± .0045	± .0075	± .006
	.376 to .500	± .006	± .005	± .0075	± .007
	.501 to .625	± .0065	± .0055	± .008	± .0075
	.626 to .750	± .0075	± .0065	± .010	± .0085
	.751 to .875	± .009	± .007	± .011	± .0095
	.876 to 1.000	± .010	± .0075	± .012	± .010
	1.001 to 2.00	± .018	± .015	± .018	± .015

Thicknesses & Plate Sizes

Grade	36" x 72"	36" x 48"	48" x 48"	48" x 96"	48" x 108"
281	.031-5	.031-5	.031-5	.031-5	.031-5
213 / 423 / H 26887 / H 19128	.031 2.250	.031 2	.031.2	.031.2	.031.2
219 / 429	.031-2	.031-2	.031-2	.031-2	.031-2
H-27024	.031-5	.031-5	.031-5	.031-5	.031-5
223 / 238 / H-25126 / 281 / 400 / H-24899	.031-5	.031-5	.031-5	.031-5	.031-5
259-2 / H-12426	.031-4	.031-4	.031-4	.031-4	.031-4
H-26000	.031-6	.031-10	.031-6	.031-6	.031-6
H-26671	.031-3	.031-3	.031-3	.031-3	.031-3
51F33	.031-6	.031-6	.031-6	.031-6	.031-6
H-5639	.031-.250	.031-.250	.031-.250	.031-.250	.031-.250
H-22033 / H-19989	(n/a)	.031-5	.031-5	.031-5	.031-5
H-17825	.031-2	.031-2	.031-2	.031-2	.031-2

- When plus tolerance only is requested on thickness, allowable tolerance range will be added to plus side
- 48" x 48" sheets must be ordered in multiples of two unless in stock
- Check with factory on availability of thicknesses greater than shown