



THE GUND COMPANY

MANUFACTURERS & FABRICATORS OF ENGINEERED MATERIAL SOLUTIONS

G-Flex™ APA Flexible Insulation Laminates



G-Flex™ APA are laminates that combine G-Flex™ aramid paper and polyester film. The material is also available with our G-Flex™ aramid papers and electrical grade polyester film - bonded with a proprietary high-temperature adhesive system. Aramid paper provides excellent electrical insulation properties. Polyester film dramatically increases the dielectric strength, overall durability, puncture/tear resistance, and tensile/burst strength. G-Flex™ APA laminates will not delaminate or blister at high temperatures. Applications include slot/phase/end turn insulation, ground/wrapper insulation, dry-type transformers, and punched/fabricated parts.

The Gund Company custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

		ASTM	TYPICAL VALUES (PER LAMINATION GRADE)								
PROPERTIES		Test Method	Units	2/2/2	2/5/2	3/3/3	3/5/3	5/5/5	2/10/2	5/10/5	3/7.5/3
PHYSICAL	Moisture Content	ASTMD644	%	1.16	-	1.33	-	1.60	1.46	-	1.55
	Thickness		mil	7	10	10	12	16	15	21	14.5
	Thickness		mm	0.17	0.25	0.25	0.3	0.4	0.37	0.53	0.36
	Thickness		in.	0.007	0.010	0.010	0.012	0.016	0.015	0.021	0.014
MECHANICAL	Yield		yd²/lb	3.02	1.90	2.05	1.62	1.22	1.19	0.87	1.27
	Yield		lb/yd²	0.33	0.53	0.49	0.62	0.82	0.84	1.14	0.78
	Tensile Strength (lb/in)	ASTM D828	MD	86	126	140	171	210	200	246	206
	Tensile Strength (lb/in)	ASTM D828	CD	57	114	100	137	160	188	240	183
	Tear Strength (lb.)	ASTM D1004	MD	8.5	17	16	26	27	20	35	30
	Tear Strength (lb.)	ASTM D1004	CD	7	12	11	18	18.5	14	31	22
ELECTRICAL	Breakdown Voltage (BDV)	ASTM 149	kV	9	16	12	16	18	20	25	18
	Dielectric Strength	ASTM 149	V	11,000	16,000	13,000	17,000	19,000	20,000	22,000	19,500

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.