



MANUFACTURERS OF  
**ELECTRICAL INSULATION MATERIALS**  
INSULATING COMPONENTS FOR  
POWER SYSTEMS EQUIPMENT

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## MATERIAL DATA SHEET

**Item:** Weidmann Kraft Pressboard Products

**Description:**

**Hi-Lam:**

Hi-Lam has characteristics similar to Hi-V and is used mainly for spacer strips and beams such as oil ducts. Hi-Lam, laminated with dextrin adhesive, is available in thicknesses above .188" (or 4.8mm).

Common Applications: Transformer lead supports, coil blocking, barrier spacers

**TX:**

A resin laminated T-IV, was developed to withstand oil impregnation systems that employ heat and high vacuums for moisture removal. Used primarily for coil support plates and lead structures, it replaces coronapron wood and paper phenolic laminates.

Common Applications: Clamping rings, core blocks, spacer blocks

**Maplex:**

Similar to TX with the exception that it is made from high quality secondary fibers. It is suitable as wood replacement where electrical requirements are less stringent.

Common Applications: Clicker pads

**Tufflam:**

Fills a wide range of electrical industry and other specialized applications requiring low moisture penetration and high stability. It is suitable for those applications not subjected to heat-assisted drying cycles.

Common Applications: Cryogenic structural supports, thermal insulation for injection molds

**Perma-Plex:**

Is a dimensionally stable die board, recommended for long term, high usage steel ruled dies manufactured by the laser process.

Common Applications: Steel ruled die boards

All of the information, suggestions, and recommendations pertaining to the properties and uses of the products herein are based upon tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the use contemplated, the manner of such use, and whether the user infringes any patents is the sole responsibility of the user. There is no warranty, expressed or implied, including, without limitation, warranty of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

Material:	Max. Sheet, In. (mm)	Thickness, In. (mm)	Density, lbs/cu. In. (gms/cc)	Modulus of Rupture Psi (MPa)
Form-Val	148x260(3750x6600)	.040-.250(1.0–6.4)	.033(.92)	----
Hi-Val	148x260(3750x6600)	.031-.250(.8–6.4)	.036(.97)	----
Hi-Co	74x260(1880x6600)	.031-.197(.8–5.0)	.042(1.15)	----
T-IV	126x248(3200x6300)	.40-.315(1.0–8.0)	.043(1.20)	15,000(103.4)
VulcanFibre	126x248(3200x6300)	.040-.315(1.0–8.0)	.043(1.20)	15,000(103.4)
Hi-Lam	80x124(2030x3150)	.250–4.50(6.4–114.3)	.036(.97)	4,000(27.6)
TX	80x124(2030x3150)	.315–4.50(8.0–114.3)	.046(1.28)	16,000(110.3)
Maplex	80x124(2030x3150)	.315–4.50(8.0–114.3)	.046(1.28)	16,000(110.3)
Tufflam	80x124(2030x3150)	.125–4.50(3.2–114.3)	.049(1.35)	22,000(151.7)
Perma-Plex	42x80(1065x2030)	.688(17.5)	.049(1.35)	22,000(151.7)

Material:	Modulus of Elasticity, Psi x 10 <sup>6</sup> (MPa)	Compressive Strength, Psi (MPa)	Tensile Strength: MD, Psi (MPa)	Dissipation Factor, %	Dielectric Constant, 60 Hz
Form-Val	----	----	7,500(51.7)	0.39	3.2
Hi-Val	----	35,000(241.3)	8,000(55.2)	0.43	3.5
Hi-Co	----	35,000(241.3)	8,500(58.6)	0.46	3.8
T-IV	1.6(11,031.6)	45,000(310.2)	14,000(96.5)	0.50	4.2
VulcanFibre	1.6(11,031.6)	45,000(310.2)	14,000(96.5)	0.50	4.0
Hi-Lam	0.5(3,447.4)	35,000(241.3)	8,500(58.6)	0.58	2.9
TX	1.6(11,031.6)	45,000(310.2)	16,000(110.3)	0.66	4.0
Maplex	1.6(11,031.6)	45,000(310.2)	16,000(110.3)	0.64	3.8
Tufflam	1.8(12,410.6)	43,000(296.5)	18,000(124.1)	1.6	4.5
Perma-Plex	1.8(12,410.6)	43,000(296.5)	18,000(124.1)	----	----

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