

## RIGID INSULATION

### Epoxy Phenolic Laminate – EP5008

Properties		Values
Sheet Size		2040 x 1020mm
Thickness		0.5 - 80mm, tolerance $\pm$ 0.14mm
Specific Gravity		1.70 - 1.90
Bending Strength		
	longitudinal	min. 32225N/cm <sup>2</sup>
	horizontal	min. 2942N/cm <sup>2</sup>
Tensile Strength		
	longitudinal	min. 34323N/cm <sup>2</sup>
	horizontal	min. 24515N/cm <sup>2</sup>
Impact Strength		
	longitudinal	min. 1471N/cm <sup>2</sup>
	horizontal	min. 980N/cm <sup>2</sup>
Surface Resistivity		
	normal state	min. $1.0 \times 10^{13}$ ohm
	immersion state	min. $1.0 \times 10^{13}$ ohms
Volume Resistivity		
	normal state	min. $1.0 \times 10^{13}$ ohm
	immersion state	min. $1.0 \times 10^{13}$ ohms
Thermal Stability	longitudinal	min. 200°C
Adhesive Strength		min. 5687N
<b>Parallel to laminate</b>		
Insulating resistance		
	normal state	min. $1.0 \times 10^{13}$ ohm
	immersion state	min. $1.0 \times 10^{13}$ ohms
Dielectric loss angle, tangent, at 50Hz		0.05
<b>Vertical to laminate</b>		
Breakdown strength in transformer oil		
	0.5~1.0mm min.	22.0kV/mm
	1.1~2.0mm min.	20.0kV/mm
	2.1~3.0mm min.	18.0kV/mm
For sheets with one side processed	3.0mm and above	min. 18.0kV/mm
Parallel to laminate in transformer oil of 90 $\pm$ 2°C		min. 30kV
Temperature Rating		Class 'B' 130°C