

Mechanical Test Results

Type/Description	Test Standard	Observation / Results
Ballistic Tests Carried Out ON 6,13 And 19mm Velstone In Accordance with Guidelines And to The Methods Laid Down In BS 5051: PART 1:1988 Method For Classification Of The Ballistic Capabilities Of Products	BS 5051: PART 1: 1988	Type One Passed GO & G1 Type two Passed G2 Passed S86 Type three Passed G2 Passed S86
Thermal Conductivity Of Polymer And Aluminium Trihydrate	NPL DA164	<u>Thermal Conductivity Result</u> Mean hot face temperature / ^o C 77.0 Mean cold face temperature / ^o C 62.9 Mean test temperature /^o C 70.0 Thermal Conductivity /(W/m.K) 0.683)
Density	ASTM D792-91	1.7 g/cm3
Hardness	D785-89	89
Tensile Strength, PSI	ASTM D638-91	5060 PSI
Elongation %	ASTM D638-91	0.6
Modulus Of Elastic (Young's)	ASTM D638-91	919,000 PSI
Abrasion Resist	ASTM C501-84	0.27
Boiling Water Resistance	NEMA LD3-3.05	No Effect
High Temperature Resistance	NEMA LD3-3.06	No Effect
Flexural Strength	ASTM D790	10300 PSI
Flexural Modulus	ASTM D790	1566970 PSI
Ball Impact, Inch Drop	NEMA LD3-3.03	>120
Test to assess the comparative durability of the surface finish 1. Resistance to Surface Penetration 2. Impact 3. Wet Heat 55 C 70 C 85 C 4. Dry Heat 120 C 140 C 160 C 5. Condensation 6. Water Ingress 7. Flooding 8. Large Ball Impact 9. Ease Of Renovation	BS 3202 Part 2	5 5 3 2 2 3 2 2 No Visible Deterioration >0.8mm >0.8mm 1 OK