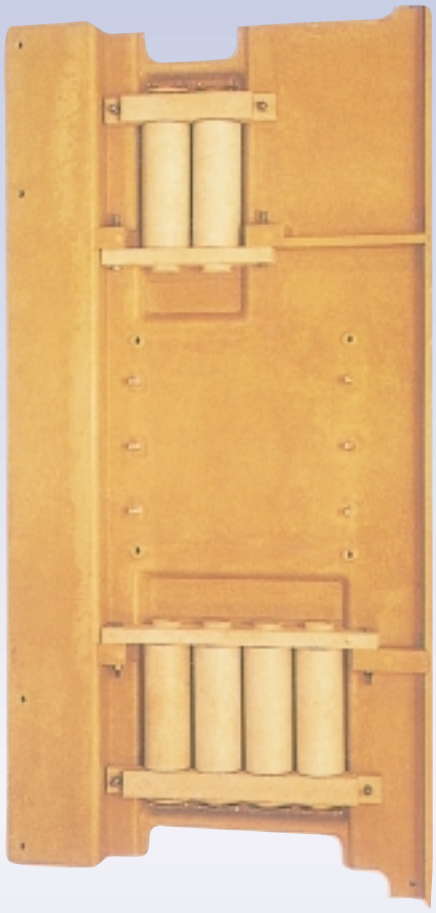
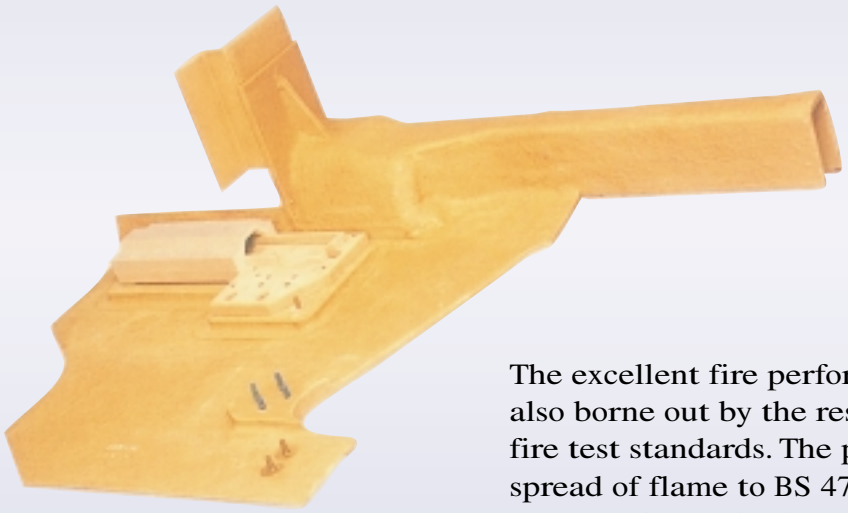
Brimico 300 Arc Barriers

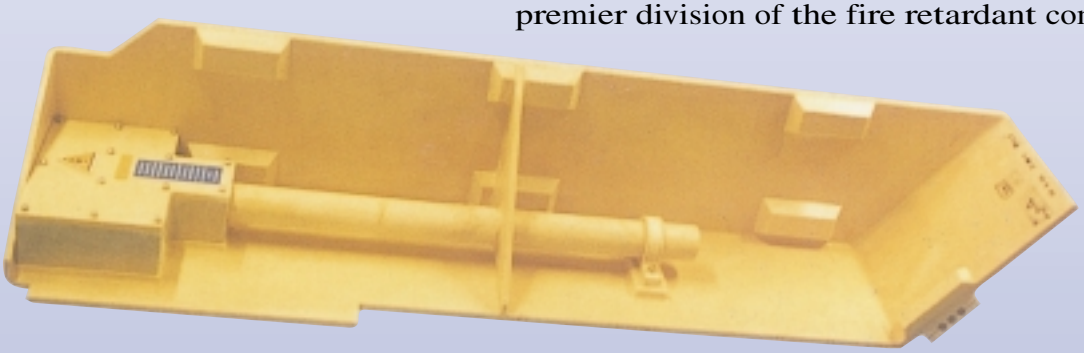
British Mica produce a range of custom designed Handlay Arc Barriers. All recent new building and refurbishments on London Underground's Central, Metropolitan, Jubilee, Piccadilly, Hammersmith and City and Northern Lines have been fitted with Arc Barriers supplied by British Mica. These components ensure the safety of passengers should an electric arc occur underneath a train.



The key features of the material are that it is free from Halogens and that smoke and toxic emissions are only a fraction of other more conventional materials used in public vehicles. The components are hand laid in open moulds with barriers up to 80kg in weight having been produced.



The excellent fire performance of this low smoke composite is also borne out by the results obtained in a series of international fire test standards. The product achieves a Class 1 surface (zero) spread of flame to BS 476 Part 7 and an index of performance 1 on BS 476 Part 6 below 12. It therefore conforms to the class 'O' requirements of the UK building regulations. It passes the French M1 standard on the Epiradiateur test (NFP-92-501) and the FO standard on the French test for combustion gases (NFF 16 101/102). With an oxygen index of 100% and a temperature index in excess of 350 deg C, this polyester system is in the premier division of the fire retardant composites.



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NQA ISO 9002 REGISTERED COMPANY

Cert No. 6419

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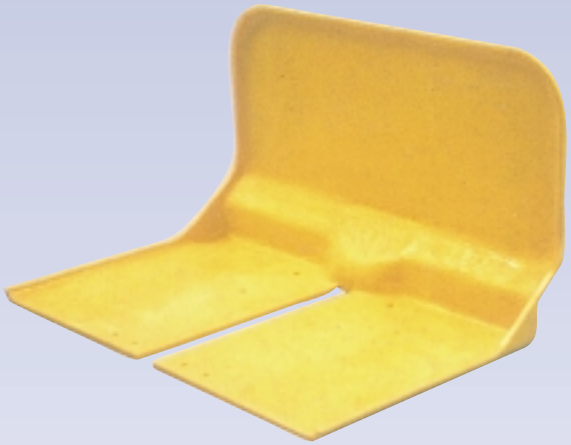

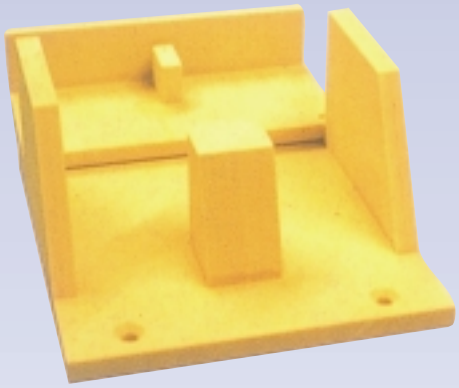

BRIMICO 300

Test	Result	Method
Flexural strength*	103 MPa	ISO 178
Flexural modulus*	14.6 GPa	ISO 178
Tensile strength*	29.4 MPa	ISO 3268
Tensile strength	51.2 MPa	ISO 3268
Tensile modulus*	15.4 GPa	ISO 3268
Tensile modulus	19.2 GPa	ISO 3268
Elongation at break*	0.37%	ISO 3268
Elongation at break	0.45%	ISO 3268
Compressive strength at 90% to the plane of the reinforcement	162.8 MPa	ISO 604
Compressive strength measured in the plane of the reinforcement	166.9 MPa	ISO 604
Impact strength* (Charpy unnotched)	20.5 kj/m2	ISO 179
Barcol 934.1 hardness	63	EN 59
Limiting oxygen index	100%	ISO 4589
Temperature index	356 deg C	BS 6853
Surface spread of flame*	Class 1 (zero spread)	BS 476 Pt 7 (1987)
Fire propagation test*	I=9.0, i=0.20	BS 476 Pt 6 (1989)
Three metre cube smoke emission test	A1(ON)=1.95 A0(OFF)=2.66	BS 6853
NBS smoke chamber, max. specific optical density (DS)	Smouldering 45 Flaming 32	
French fire tests – Epiradiateur	M1	NFP-92-501
F test (combustion gases)	FO	NFF16-101/102
Comparative tracking index (CTI)	600 V	BS 5901
Volume resistivity	2.0e+14ohm.cm	BS 6233
Surface resistivity	8.6+13ohms	BS 6233
Arc erosion	831 sec	BS 4145

NOTE: *indicates test pieces had a nominal filled system/glass ratio of 10/1 in these instances. Sheet thickness was 3-4mm in all cases except for compressive strength measurement, where 10mm sheet was employed.