## EN 356 European Standard for Glass in Building

Security glazing -Testing and classification of resistance against manual attack.

## Lower level P1A -P5A

This is a hard body drop test using a 4.11kg steel sphere (100mm diameter) to represent a blunt instrument such as a hammer attack. To pass the test the ball must not penetrate the glass.

The list below shows the glass we can supply

BS EN 356	Drop Height (mm)	No of Strikes	Impact energy Per Stroke (J)	Glass Thickness (mm)	Weight per m2 (kg)
P1A	1500	3	62	6.8	16
P2A	3000	3	123	8.8	19
P3A	6000	3	247	9.1	21
P4A	9000	3	370	9.5	21
P5A	9000	9	370	10.3	21

## Higher Level P6B -P8B

The higher resistance level comprise a test using a hydraulically driven hammer and axe head, to replicate an actual attack. The 40mm square hammer head weighing 2kg, is used first to shatter the glass with a minimum of 12 blows, then a 2kg axe head is used to break through the PVB/Poly interlayers also with a minimum of 12 blows the aim being to cut a 400mm sq hole.

The list below shows the glass we can supply

BS EN 356	Sledgehammer & Axe Blows	Constructions Available	Glass Thickness (mm)	Weight per m2 (kg)
P6B	30/50	Glass/PVB	15	46
		Glass/Poly/Glass	10	23
P7B	51	Glass/PVB	28	67
		Glass/Poly/Glass	16	33
P8B	71	Glass/PVB	26	57
		Glass/Poly/Glass	18	35