

BSI and EN Standards for Glazing, windows, doors and shutters
plus draft International Standards for security glazing.

Compiled by PSDB Explosion and Ballistic Protection

EXPLOSION RESISTANCE BS EN's	Issue and date
Glass in building – Security glazing – Testing and classification of resistance against explosion pressure A 'materials' Shock tube test method, 0.5, 1.0, 1.5 and 2.0 bar tests	BS EN 13541:2001 January 2001
Windows, doors and shutters – Explosion resistance – Requirements and classification – Part 1 : Shock Tube 0.5, 1.0, 1.5 and 2.0 bar tests	BS EN 13123 - 1 April 2001
Windows, doors and shutters – Explosion resistance – Test Method – Part 1 : Shock Tube	BS EN 13124 - 1 April 2001
Windows, doors and shutters – Explosion resistance – Requirements and classification – Part 2 : Range Test 3 kg TNT at 5 and 3 m; 12 kg at 5.5 and 4 m; 20 kg at 4.0 m	BS EN 13123 – 2 c March 2004
Windows, doors and shutters – Explosion resistance – Test Method – Part 2 : Range Test	BS EN 13124 – 2 c March 2004
EXPLOSION RESISTANCE Draft ISO Standards in preparation	ISO/TC160 SC2/WG7
N 121. Glass in building – Explosion resistant security glazing - Test and classification by shock tube airblast loading. 0.3, 0.5, 0.7, 1.0, 1.5 and 2.0 bar tests (i.e. as BS EN plus 0.3 and 0.7 bar)	
N 122. Glass in building – Explosion resistant security glazing - Test and classification by arena airblast loading. Two categories:- Blast from Satchel bombs as BS EN plus 3 kg at 7 m and 3 kg at 9 m Blast from 100 kg TNT Equivalent at 10, 12, 15, 19, 25, 33 & 45 m	
BULLET RESISTANCE	
Glass in building – Security glazing – Testing and classification of resistance against bullet attack Note: BS EN 1063:2000 replaces BS 5051-1:1988 which is no longer valid except for plastics glazing sheet materials.	BS EN 1063:2000 July 2000
Windows, doors, shutters and blinds – Bullet resistance – Requirements and classification	BS EN 1522:1999 April 1999
Windows, doors, shutters and blinds – Bullet resistance – Test Method	BS EN 1523:1999 April 1999
ISO draft N 120. Glass in building - Bullet resistant security glazing - Test and classification	

The International Standards Organisation (ISO/ TC 160/ SC 2/ WG 7) is also proceeding with preparation of Security Glazing test standards to resist Forced entry and Windstorm (Typhoon) damage.