LPS1270 ATTACK RESISTANT SECURITY GLASS

In addition to the BS EN356 standard you have an alternative type of security standard, LPS1270. This standard was developed by LPCB because the BS EN 356 standard is not compatible with the LPS 1175. LPS1175 refers to intruder resistant standard for windows and doors. BS EN 356 does not classify glass according to its resistance to different levels of attack, or is it based on different tools and time available to an intruder.

The LPS 1270 standard for the glass runs alongside the LPS 1175. As noted above this glass has been tested against intruders that are more calculative and use specialised tools to gain entrance. Usually the construction of the glass panel is multiple layers of glass and polycarbonate and can be as thick as 42mm when considering the higher standards.

The tools used are categorised and time limits are given when the test is carried out. Below is a table giving an indication of the tool categories and times required for each classification.

To better understand the Tool Categories, an outline of Category and Type of Tool is indicated on the following page. For an in depth list of tools used on each category please refer to the LPS 1270 page on our website;

https://www.architecturalarmour.com/tech-spec/-attack-specs/lps1175-and-lps1270tool-categories

Security rating	Tool category	Maximum working time	Maximum test
classification		(minutes)	duration
			(minutes)
0†	The glazing fails to achieve the manual intervention attack resistance		
	requirements defined for security rating 1		
1	A	1	10
2	В	3	15
3	С	5	20
4	D	10	30
5			
6	E	10	30
7	F	10	30
8	G	20	60

Table 1 Security rating requirements for each manual intervention attack test



For our full range of Bullet, Blast & Attack Resistant Windows Walls and Doors contact +44(0)1981 257000 sales@architecturalarmour.com www.architecturalarmour.com **Tool Category A** – The tools of this category are selected in order to simulate an opportunist attack by bodily physical force and by stealth using minimal tools, and includes knives, levers, glass cutters, and punches.

Tool Category B – This tool category provides a more determined opportunist attack by physical force and tools with a higher mechanical advantage, and includes claw hammers, hand drills, and junior hack saws..

Tool Category C – This tool category is for deliberate forced entry of well-protected premises using bodily physical force and a wide selection of attack options, and includes axes, cold chisels, crowbars, cordless electric drills, and wood chisels.

Tool Category D – This tool category is for experienced attempts at forced entry, and includes disc grinders, fire axes, hooligan bars, cordless jig saws, and sledgehammers. **Tool Category D+** – This tool category is for experienced attempts at forced entry, and includes circular saws, reciprocating saws, and 18 volt drills.

The glass is coded with three numbers, when referring to the frame rating e.g. LPS1175 SR3 it usually denotes the last number in the code so a 013 or 123 glass would provide the corresponding security rating.

1st Digit - Local Penetration - 8 mm (-0 mm/+3 mm) by 25 mm (-0 mm/+3 mm) rectangular section.

Note: This is to determine resistance to creation of a hole through which a piece of wire, screwdriver lever, or other such device can be passed

2nd Digit - Hand Hole - 60 mm (-0 mm/+3 mm) diameter.

Note: This is to determine resistance to creation of a hand hole through which to operate an unprotected thumbturn to release the boltwork

3rd Digit - Complete Access - Elliptical section of 400 mm (-0 mm/+3 mm) major axis by 225 mm (-0 mm/+3 mm) minor axis.

Note: This directly reflects the size of aperture specified in LPS 1175 and ensures the glazing offers resistance to complete access through the glass

This product can be incorporated into secondary or primary glazing and can be sealed into a double glazed unit to offer insulation and acoustic properties.

For more information on what Architectural Armour can offer and to discuss your project in detail please contact us on +44(0) 1981 257000 or email <u>info@architecturalarmour.com</u>



For our full range of Bullet, Blast & Attack Resistant Windows Walls and Doors contact +44(0)1981 257000 sales@architecturalarmour.com www.architecturalarmour.com