

**Table 1: Impact safety performance of Pilkington Optilam™**

Glass thickness (mm)	Classification to BS 6206 : 1981	BS EN 12600
6.4, 8.4	Class B	2
6.8, 7.5, 8.8, 9.5, 10.8, 11.5, 12.8, 13.5	Class A	1

Note: In the future, references to BS 6206 in BS 6262-4 and relevant Building Regulations (e.g. Part N in England & Wales) are likely to be superseded by BS EN 12600.

**Table 2: Resistance to manual attack**

Category of resistance	Drop height (mm)	Number of strikes	Code designation of resistance class
P1A	1500	3 drops of 4.11kg sphere	BS EN 356 P1A
P2A	3000	3 drops of 4.11kg sphere	BS EN 356 P2A
P3A	6000	3 drops of 4.11kg sphere	BS EN 356 P3A
P4A	9000	3 drops of 4.11kg sphere	BS EN 356 P4A
P5A	9000	9 drops of 4.11kg sphere	BS EN 356 P5A
P6B	Axe strikes on broken glass	From 30 to 50	BS EN 356 P6B
P7B	Axe strikes on broken glass	From 51 to 70	BS EN 356 P7B
P7B	Axe strikes on broken glass	More than 70	BS EN 356 P8B

## Applications

### Safety

Pilkington **Optilam™** can be used in applications where it is subject to accidental human impact. A summary of typical performance in accordance with BS 6206/BS EN 12600 is given in Table 1.

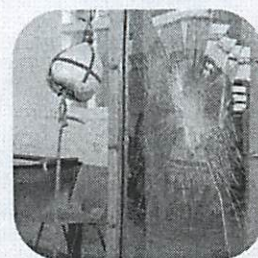
### Security

Depending on the configuration, Pilkington **Optilam™** can be used in applications where resistance to manual attack is required. According to BS EN 356, glass in buildings is divided into categories, of resistance to manual attack on the basis of results of tests carried out with the use of a hard body impactor and an axe. These are summarised in Table 2.

### Noise control

Efficient noise control is a major challenge for architects. Noise is an environmental factor which may be both physically and mentally harmful to human beings. Pilkington **Optilam™** offers excellent sound insulation. With greater emphasis on personal protection and comfort, noise protection is a major consideration in any design. Both the law and building regulations provide recommendations regarding permissible noise levels in various buildings. This encourages architects to use materials which satisfy specific acoustic protection requirements, and motivates them to offer interesting solutions.

Pilkington **Optilam™** reduces the level of noise with considerably greater efficiency than ordinary glass of the same thickness – in fact, it is superior to insulating glass units having the same total thickness of glass. For even greater performance, Pilkington **Optilam™** Phon is available. (See separate datasheet)



**Table 3: Maximum sizes of Pilkington Optilam™**

Glass thickness (mm)	Maximum Stock Sizes (mm)
<i>Determined in accordance with BS 6206 : 1981 Class B/BS EN 12600 – Class 2</i>	
6.4	3210 x 6000
8.4	3210 x 6000
<i>Determined in accordance with BS 6206 : 1981 Class A/BS EN 12600 – Class 1</i>	
6.8	3210 x 6000
8.8	3210 x 6000
10.8	3210 x 6000
12.8	3210 x 6000
<i>Determined in accordance with BS 5544/BS 6206 : 1981 Class A/BS EN 12600 – Class 1</i>	
7.5	3210 x 6000
9.5	3210 x 6000
11.3 (5 Ply)	2500 x 3210
11.5	3210 x 6000
13.5	3210 x 6000