



Hammerglass **Insulate**

Hammerglass Insulate is an insulated glazing unit fitted with Hammerglass which is 300 times stronger than the corresponding thickness of normal glass, half the weight and virtually unbreakable!

Hammerglass Insulate is available as double or triple glazing with Hammerglass in the outer pane and normal glass in the inner panes. Hammerglass can be delivered in different security classes.

Hammerglass Insulate offers protection in environments that often experience problems with vandalism or break-ins.

All window manufacturers/aluminium installers can deliver windows or doors with Hammerglass in the frames.

Applications

Schools, commercial establishments or private domestic properties that require additional protection against vandalism or break-ins. Also suitable for private homes.

Product description

Hammerglass Insulate is produced in all kinds of insulated glass formats, often with Hammerglass as an outer pane. For the second or third pane one can choose between different types of glass: float/annealed, toughened/tempered, laminated – or even have Hammerglass as an inner pane.

A classified production method permits a full insulated glazing guarantee on the products.

Hammerglass insulate has a unique surface layer, through nanotechnology, giving the glass a very good UV- and chemical resistance. This means that for example graffiti marks can be eliminated without the glass being damaged.

Security Class and Certificates

Hammerglass Insulate has been tested by SBSC (the Swedish Fire Protection Association and the Swedish Theft Prevention Association) and is approved according to EN 356 in Security Class P7B and P8B. Security Class P8B is equivalent to Protection Level 3, the highest safety rating for anti-burglary grilles and rolling shutters. Hammerglass is also certified according to British Police standards "Secured by Design".

Text proposal for product specifications

"The Insulate glazing unit is to be of type Hammerglass Insulate, with Hammerglass as the outer/inner pane and as an outer/inner pane."

Designation example: HmG06-16-FE4

We recommend double glazing instead of the triple glazing option. With double glazing we can increase the distance (16-24 mm) between each pane in order to avoid the regular standard glazing being broken in an attack.

When choosing a triple glazing to lower the U-value, we recommend using a toughened glass in the middle to lower the risk that the middle pane will break in an attack.

Laser marking

All Hammerglass panes are laser marked with logo and serial number.

Warranty

10 years insulation warranty.

Installing

Hammerglass is installed only by certified installers in order to guarantee the highest quality.



Spacer

The insulating unit is delivered with a spacer (distance between the glass panels).

Spacer	
Width	12, 14, 16, 18 or 24 mm
Height	14 mm
Colour	Anthracite grey
Sealing	Black butyl

Performance of Hammerglass Insulate

The data is measured and calculated conform to standards EN 410 and ISO 9050.

Glazing units with argon	Light transmission	Solar transmission	g-value	U-value	Security Class
Hammerglass Insulate					
HmG06-16-FE4	0,74	0,60	0,70	1,53	P7B
HmG08-16-FE4	0,73	0,60	0,70	1,53	P8B
HmG06-14-F4-16-FE4	0,67	0,60	0,62	1,19	P7B
HmG08-12-F4-16-FE4	0,66	0,51	0,61	1,19	P8B
FE4-14-HmG06-16-FE4	0,62	0,47	0,58	0,87	P7B
HmG06-14-F4-16-SFE4	0,69	0,44/0,43	0,53	0,98	P7B
SFE4-14-HmG06-16-SFE4	0,66	0,39/0,38	0,48/0,47	0,66	P7B
HmG06-16-44.2E	0,72	0,60	0,70	1,50	P8B
Hammerglass Insulate Sunergy					
HmG06-16-SuCl6	0,61	0,46	0,67	1,86	P7B
HmG06-14-SuCl6-16-F4	0,55	0,39	0,52/0,58	1,37/1,35	P7B
Hammerglass Insulate Planibel					
PE N71/39-15-HmG06-14-SFE4	0,61	0,31	0,38/0,37	0,65	P7B

Abbreviations

HmG = Hammerglass Clear

FE = Float Energy glass

SFE = Soft coated Float Energy glass

SuCl = Sunergy Clear

PE = Planibel Energy Solar Protection glass

