

Shatter preventive safety film

HG-MP2008 *Liquid Safe*

is applied as a liquid.

600 cm

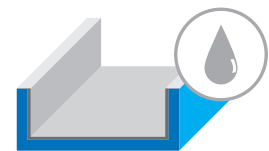
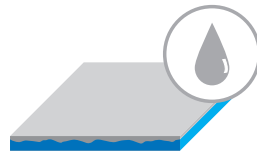
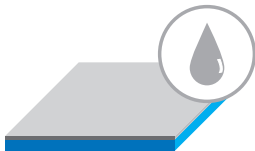
**HOFFMANN
GLAS**

321 cm

Perfekt im Objekt



HG-MP 2008 *Liquid Safe* applied as a liquid



Advantages

- subsequent machining/upgrades of current facades possible
- usable in new buildings/new constructive solutions
- suitable for curved and uneven glass surfaces

Shatter preventive safety film HG-MP2008 Liquid Safe

By using a transparent and tough but flexible PU layer you have the possibility of coating existing glass constructions on the building site retroactively. By doing this, it prevents the glass from shattering away from the coating.

Avoid increasing the weight of the glass by using the preventive film since the use of heavy laminated glass parts is not necessary.

When reglazing, we recommend to use the liquid to improve safety.

What do we mean by "use to improve safety"?

By this, we mean protecting from injuries and also from unpredictable factors both internally and externally.

Advantages HG-MP2008 Liquid Safe

- (Retrofit) to improve residual load capacity: retrofit use also possible when built in.
- Uneven and unflat surfaces can also be covered (curved glass, profile glass, ornamental glass).
- Can be fitted in old buildings (upgrades) and new ones (planned)!
- Fraunhofer-Institut test report
- MFPA Leipzig test report
- ift Rosenheim GmbH test report

Sample applications HG-MP2008 Liquid Safe

Safety film HG-MP2008 applied as a liquid

Profiled glass



Structured glass surfaces



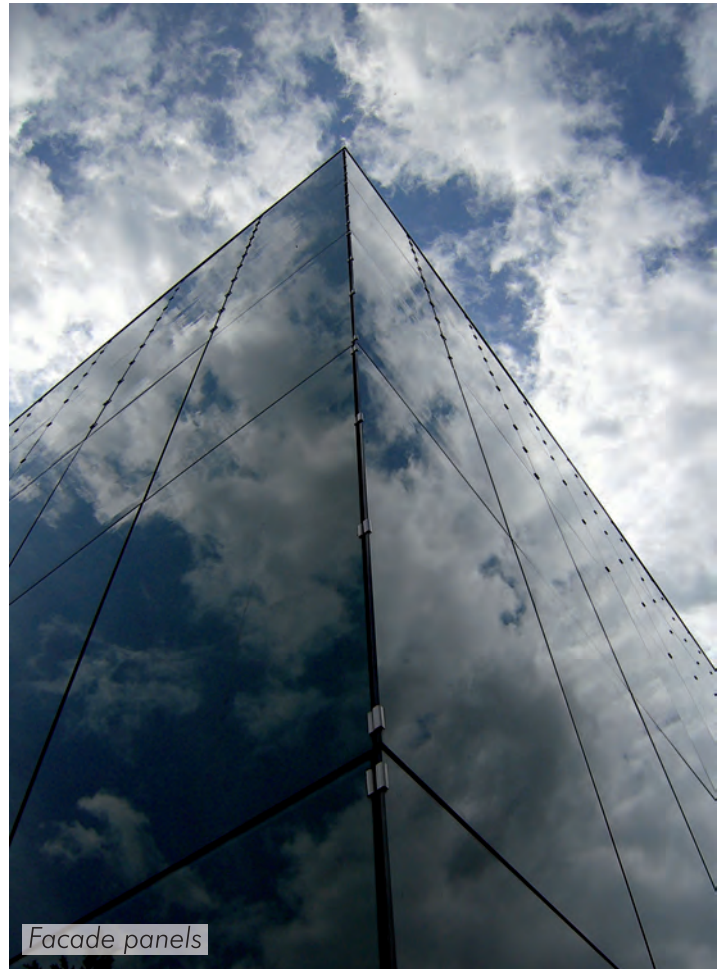
Applies without air bubbles and can be smoothed around every edge.

Application of a sheet to prevent shattering



Do not leave flush on edges otherwise it can delaminate.

Can be fitted to concrete



Tested by independent institutions.

The shatter preventive safety film HG-MP2008 Liquid Safe has been tested by various independent institutes for its residual load, shatter protection and the effect of weather. The entire testing process had the publicly appointed and sworn expert Eberhard Achenbach as technical and professional advisor.



Investigating the remaining service life of covered glass compared to single pane safety glass. After 30 days only a minor increase in deflection was noticed.



Falling ball test in accordance with DIN 52338 and Building Rule List for covered profile glass. The profile glass "Linit" P26/60/07 with safety film was not broken from a falling height of 4.000 mm.



Impacts on uncovered glass

Fraunhofer

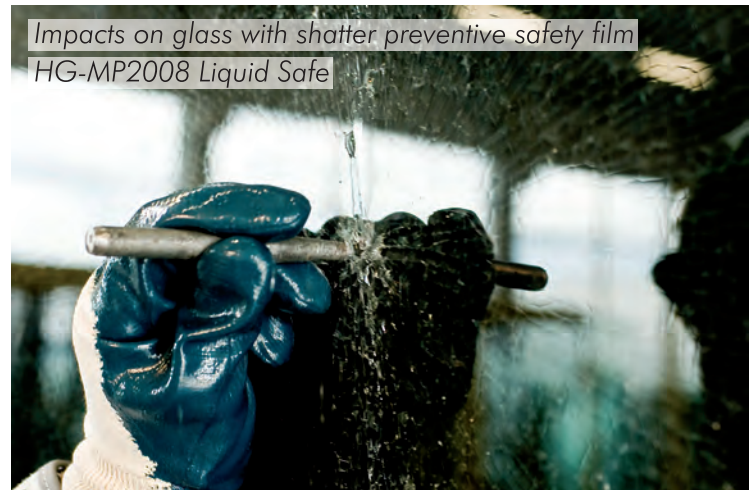
In agreement and working alongside the Fraunhofer Institute for Building Physics in Stuttgart a test was set up in which the essential factors:

- UV radiation (up to 765 W/m²)
- Temperature (up to 60 °C)
- Humidity (100 %)

were imposed for 1.000 hours. This corresponds in practice to a side-printed glass surface with a rear covering (averted from the sun), over a time period of approx. 20 years. After alternative storage in a water bath, with changing temperatures up to 60 °C externally as well as permanent direct UV radiation there were no changes in colour, delaminations of the cut glass edges as well as no loss of the 4 x 4 mm large lattice cut square.

All test reports can be found online (only german):

www.hoffmannglasgruppe.de



Impacts on glass with shatter preventive safety film
HG-MP2008 Liquid Safe

The development was run under expert advice and supported by

expert office Dipl.-Ing. (FH)
Eberhard Achenbach
Am Kosorsberg 82a
26203 Wardenburg

specialist departments:
glazing and glass construction
window and facade construction
Ö.b.u.v.SV Oldenburgische IHK





Contact details

HoffmannGlas Peine

Max-Otto-Hoffmann-Str. 1
D- 31228 Peine
Germany
+49(0) 51 71 2 91-0

HoffmannGlas Halle/S.

Gewerbehof 3
D- 06188 Landsberg OT Peißen
Germany
+49(0) 34 55 70 09 -0

HoffmannGlas Berlin

Vulkanstr. 13
D- 10367 Berlin
Germany
+49(0) 30 55 67 04 -0

hg-mp2008@hoffmannglasgruppe.de

Contents and experiences gained from test results. Measures to improve the safety of glass when used. The use of shatter preventive safety film is a source of knowledge but not the only one. All content is for information purposes only and is not legally binding. The contractor must test the use in accordance with legal guidelines. Our T&Cs are also applicable.