

Test Report

Name of client: Hammerglass AB

Product name: Hammerglass Enkel

File no.: PFA11740A

Date: 2021-05-10 **Revision no.:** 0

Pages: 5 **Encl.:** 1

Ref: LIA / MPA



File: PFA11740A Date: 2021-05-10



Client information

Client: Hammerglass AB

Address: Åkagårdsvägen 9

SE-26971 Förslöv

Sweden

The results relate only to the items tested. The report should only be reproduced in extenso - in extracts only with a written agreement with this institute.

Date: 2021-05-10



1. Product

Surface coated polycarbonate, for further information see enclosure 1.

Trade name

Hammerglass Enkel.

2. Manufacturer

The client is the manufacturer.

3. Nature of test

By request of the Hammerglass Danmark dated 2021-04-28, the product has been subjected to the test procedure of ISO5657.

4. Sample

On 2021-04-28 DBI-Danish Institute of Fire and Security Technology received the following sample:

15 test specimens of Hammerglass Enkel in 6 mm, each with dimensions 165.1 x 165.1 x 5.9 mm.

Density at 20°C (undried): 1194 kg/m³ at the state of receipt determined by weight and measures of the sample.

15 test specimens of Hammerglass Enkel in 12 mm, each with dimensions 165.1 x 165.1 x 11.7 mm.

Density at 20°C (undried): 1195 kg/m³ at the state of receipt determined by weight and measures of the sample.

The test specimens were not marked apart from the print on the protecting foil. The test specimens were weighed without this foil.

5. Conditioning

2021-04-28 the specimens were stored in a conditioning room with an atmosphere of relative humidity of 50 \pm 5% at a temperature of 23 \pm 2 °C. The specimens were kept in this room until the tests were performed.



6. Test method

The tests were performed in accordance with:

ISO 5657:1997

Reaction to fire tests – Ignitability of building products using a radiant heat source.

7. Test results

Date of test: 2021-05-04 & 06.

The test results are shown in the following tables

Hammerglass Enkel 6 mm

Specimen No.	Time (s) to sustained surface ignition at a given irradiance	
	40 kW/m ²	30 kW/m ²
1	109	690
2	226*	437
3	101	320
4	181*	835*
5	162	216
Average	156	500

NI: No sustained surface ignition

Hammerglass Enkel 12 mm

Specimen No.	Time (s) to sustained surface ignition at a given irradiance	
	40 kW/m ²	30 kW/m ²
1	103	800
2	135	NI
3	207	NI
4	133	NI
5	195	NI
Average	155	-



8. Conclusion

The investigated samples of Hammerglass Enkel in 6 and 12 mm satisfies the part requirements with regard to ignitability according to the criteria for a class A material given in DS 1065-1.

Thus, Hammerglass Enkel in thicknesses from 6 to 12 mm satisfies the part requirements with regard to ignitability according to the criteria for a class A material given in DS 1065-1.

9. Comment

The characteristics regarding heat release and smoke generation have not been investigated.

Martin Pauner M.Sc.Civ.Eng

Lina Ivar Andersen B.Sc.Chem.Eng.Hon.

Hammerglass AB Åkagårdsvägen 9 SE-26971 Förslöv Sweden



PRODUCT SPECIFICATIONS

Hammerglass Single



Recommended uses

Schools, shops, shopping malls, public buildings, office blocks, petrol stations, pharmacies, bus shelters, media display cabinets etc. or anywhere you want to protect against vandalism or break-ins.

Hammerglass Single can also be used as a traffic divider between lanes, as well as noise reduction barriers on roads and railways.

Product description

Compared to toughened or laminated glass, Hammerglass can be installed in reduced thickness which, in turn, reduces the overall product weight further.

Through its unique surface treatment, Hammerglass is resistant against chemicals and most acid attacks. This means that graffiti and other dirt can be removed with solvents or graffiti removal products. Single panes consist of 6, 8, 10, 12, 15, 17 or 20 mm Hammerglass.

Hammerglass does not contribute to the spread of fire in the event of fire

Security Class and certificates

- 6 mm Hammerglass Single P7B
- 8 mm Hammerglass Single P8B (equivalent to Protection Level 3,the highest safety rating for antiburglary grilles and rolling shutters)
- Hammerglass is also certified according to British Police standards "Secured by Design"

Hammerglass*

Hammerglass Single

Hammerglass Single is of a single ply construction supplied in different thicknesses for mounting/installing into existing framework and over glaze profiles. Ideal for older window frames in for example listed buildings and commercial properties etc.

With its unique tough, durable hard wearing surface Hammerglass single a popular choice for use in both the initial stages of new build design through to the replacement glazing.

Installing Hammerglass Single would mean no alterations to existing architecture.

Lightweight.

Text proposal for product specifications

"The single glass pane is to be of type Hammerglass Single. Installation is to be done using Hammerglass recommended silicone for the best adhesion and durability."

Designation example: HmG06 Single (if 6 mm).

Laser marking

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

Warranty

The warranty period against any degeneration or colour changes is ${\bf 10}$ years .

Installing

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



