

Test report

Test report relating to a glass product according to European standard EN 1794-1, impact of stones, concerning the product marked as: Laminated HS glass 8.8.3, manufactured by: AVIC/SGT

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Contents

1 Introduction	3
1.1 Purpose	3
1.2 Description of the samples	3
1.3 Sampling procedure	3
1.4 Application	3
1.5 Method of testing	3
1.6 Put out to contract	3
1.7 Privacy statement	4
1.8 Notifications and accreditations	4
2 Test results	5
3 Conclusion	6
4 References	7
5 Signatures	8
Appendix A, Pictures of the tested object(s)	9

1 Introduction

1.1 Purpose

The tests have been performed in order to establish whether or not the product meets the requirements of the European standard EN 1794-1 annex C [1].

1.2 Description of the samples

General

Name of the manufacturer	AVIC/SGT
Address of the manufacturer	17/F Xinbaohui Bulding, 2016 Nanhai road Nanshan District Shenzen City Guangdong Province 518054 P.R. China
Production plant of the samples	17/F Xinbaohui Bulding, 2016 Nanhai road Nanshan District Shenzen City Guangdong Province 518054 P.R. China
Line ID where the samples are made	N/A
Production date	not specified
Sampling date	not specified
The product was marked as	Laminated HS glass 8.8.3
Dimensions of the samples	965 x4006 mm

Specific

Kind of glass	laminated, clear with printed patron, heat strengthened
Nominal thicknesses	17.2 mm
Configuration	8.8.3

1.3 Sampling procedure

The test house, acting as notified test body, has had no influence on the selection of the samples.

1.4 Application

The request for testing was submitted by the manufacturer on 11 December 2013. Assignment Form number: 13.A327.

1.5 Method of testing

All applicable tests have been performed according to the European standard EN 1794-1 annex C [1].

The tests were conducted on the premises of IFS Zelhém, The Netherlands on 19 December 2013..

The test object, a metal frame with the laminated glass fixated in rubber gaskets, was placed horizontal. The impact was carried out with a steel striker with a mass of 2.93 ± 0.005 kg fallen from a drop height of 1.04 ± 0.01 m.

1.6 Put out to contract

No tests were performed at third parties.

1.7 Privacy statement

Due to privacy reasons, the names of involved personnel that executed the tests, are not disclosed in the report. However, this information is available on internal work sheets, test forms etc. in the project file.

1.8 Notifications and accreditations

TÜV Rheinland Nederland B.V. has been notified by the Dutch Ministry of Infrastructure and the Environment as Notified Test Laboratory (number 1750) and Notified Product Certification Body (number 0336) for the European Construction Products Regulation EU No 305/2011.

TÜV Rheinland Nederland B.V. has been accredited by the Dutch Accreditation Council (RvA) as ISO 17025 Test Laboratory (accreditation number L 484) and EN 45011 Certification Body (accreditation number C078). The RvA is signatory of the international ILAC-MRA arrangements for laboratory and inspection accreditation and IAF arrangements for management systems, products, services, personnel and other similar programmes of conformity assessment for global recognition.

TÜV Rheinland Nederland B.V. has been designated as Technical Service (Laboratory) by RDW competent Administrative Department (Approval Authority) for the Netherlands to grant approvals as mentioned in Directive 70/156/etc. and in the 1958 Agreement of the Economic Commission for Europe of the United Nations (UN-ECE) for glass as used in the automotive sector: ECE Regulation 43, safety glazing; EC Directive 92/22, Safety glass; EC Directive 2009/144, Glazing cat. T. (designation number RDW-99050043-01).

2 Test results

Test results after performing all applicable tests according to European standard EN 1794-1 annex C [1].

Test requirements § C.2:

- Damage shall be confined to the outer parts of the construction and internal elements shall not be damaged or displaced by the impacts;
- The striker shall not penetrate the outer wall of hollow elements, but localised damage in the form of splits less than 50 mm long is acceptable;
- Minor damage to the surface of brittle materials in the form of craters (where fragments are broken out) is acceptable, provided that the depth of any crater is less than the thickness of the outer wall or 20 mm, whichever is smaller.

No.	Order of strikes	Result
1	near centre	damage (cracks) in upper glass pane no penetration
2	near one corner	damage (cracks) in upper glass pane no penetration
3	random	damage (cracks) in upper glass pane no penetration

Assessment: tested element performed satisfactory.

3 Conclusion

The tested glass product, marked by the client or manufacturer as trade Laminated HS glass 8.8.3, manufactured by: AVIC/SGT, meets the applicable requirements as stated in the European standard EN 1794-1 annex C [1]

The test results exclusively relate to the tested objects.

Remark 1

When and if changes are made in production method and/or equipment, assessment according to this standard shall be reconsidered and re-tests shall be performed when the changes can lead to different specifications of the glass. The decision and responsibility lies at the manufacturer.

Remark 2

If no reference of the product description was supplied by the manufacturer, than that document shall be added to this test report by the manufacturer. It was to the manufacturer's responsibility that the samples delivered for initial type test are representative to the production and deviations from perfection were included in the delivered test samples.

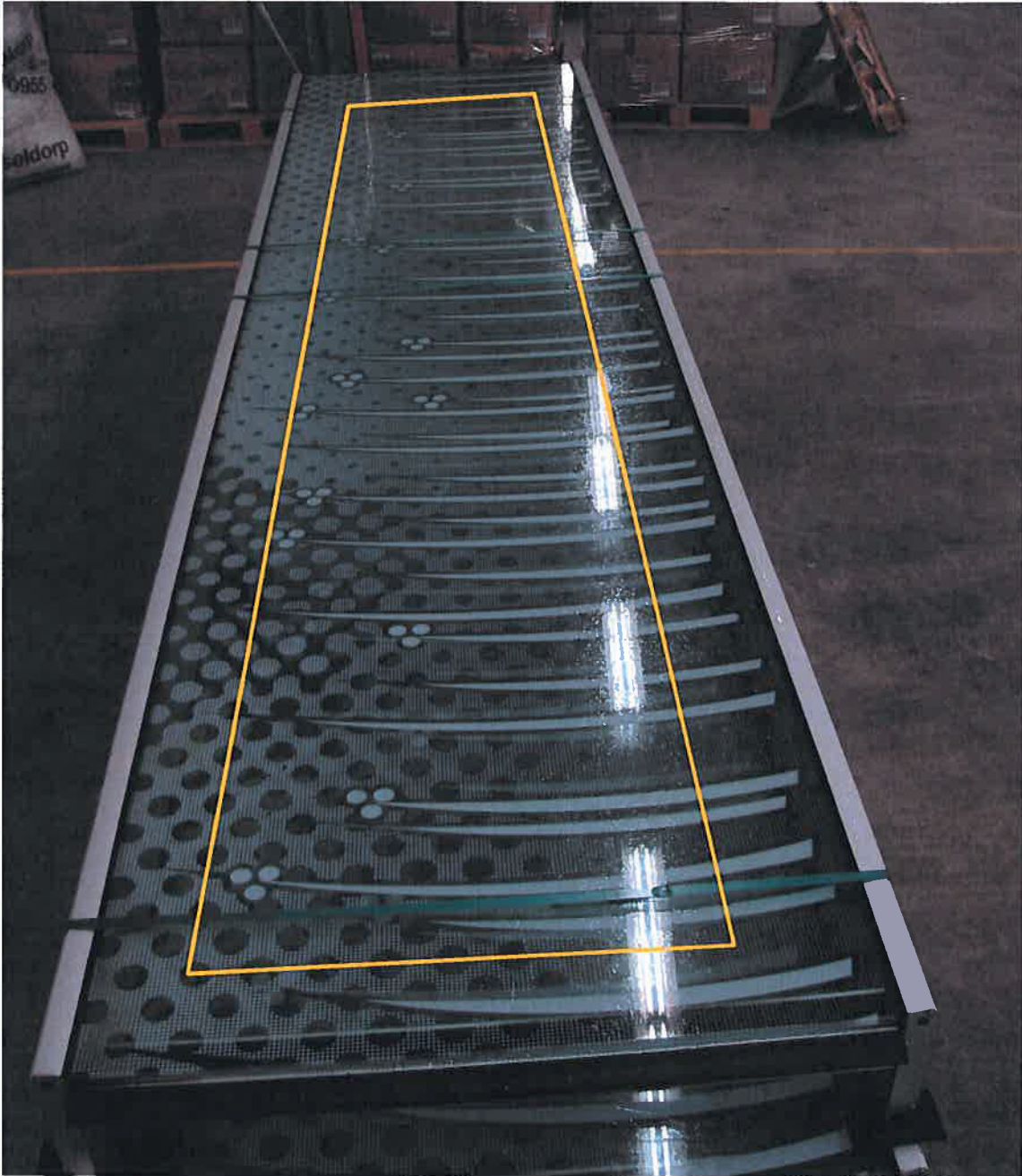
4 References

- 1 European standard EN 1794-1:2011 (E),
Road traffic noise reducing devices – Non acoustic performance – Part 1: Mechanical performance and
stability requirements,
European Committee for Standardization, January 2011.

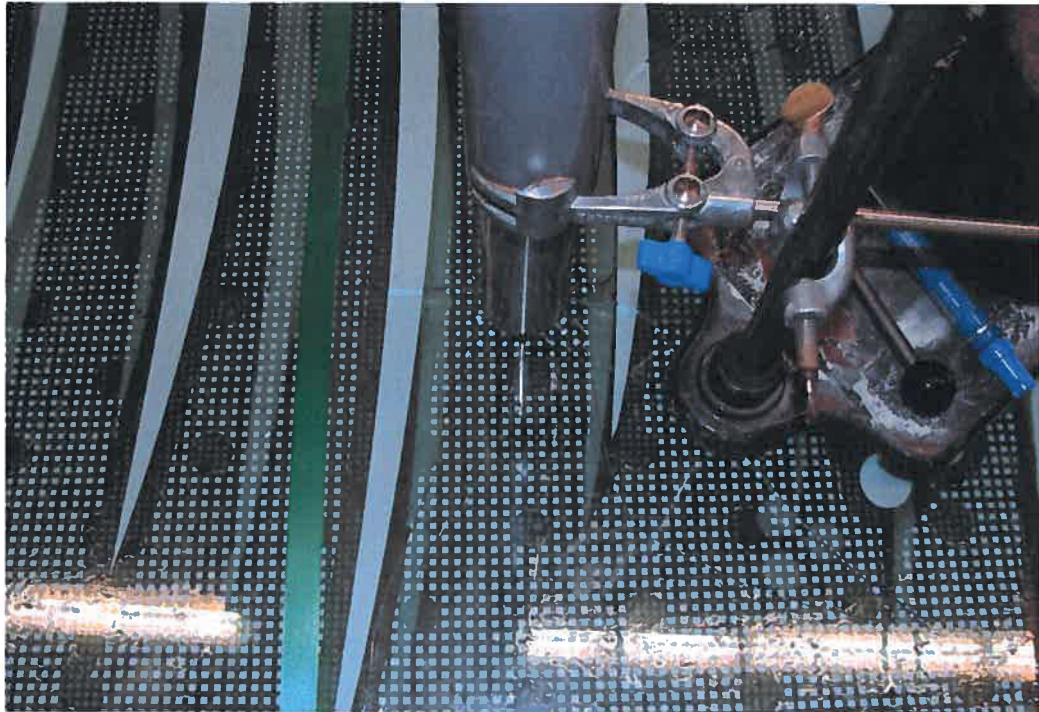
5 Signatures

Author Mr. M.A.A.M. Schets, B.Sc.	Signature 
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Specialist	
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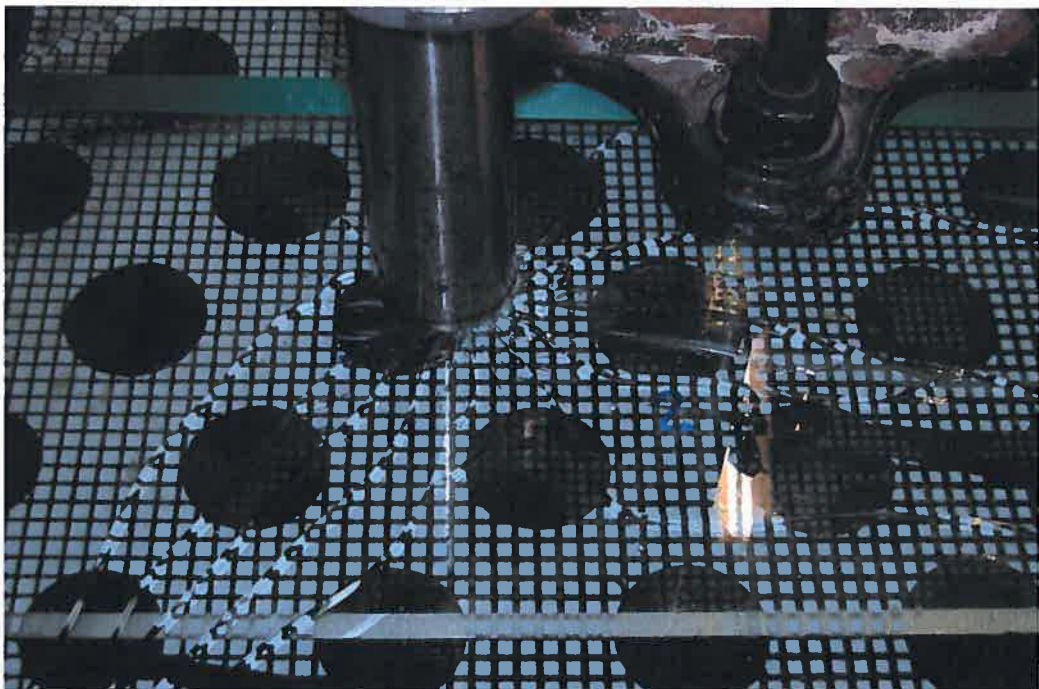
Appendix A, Pictures of the tested object(s)



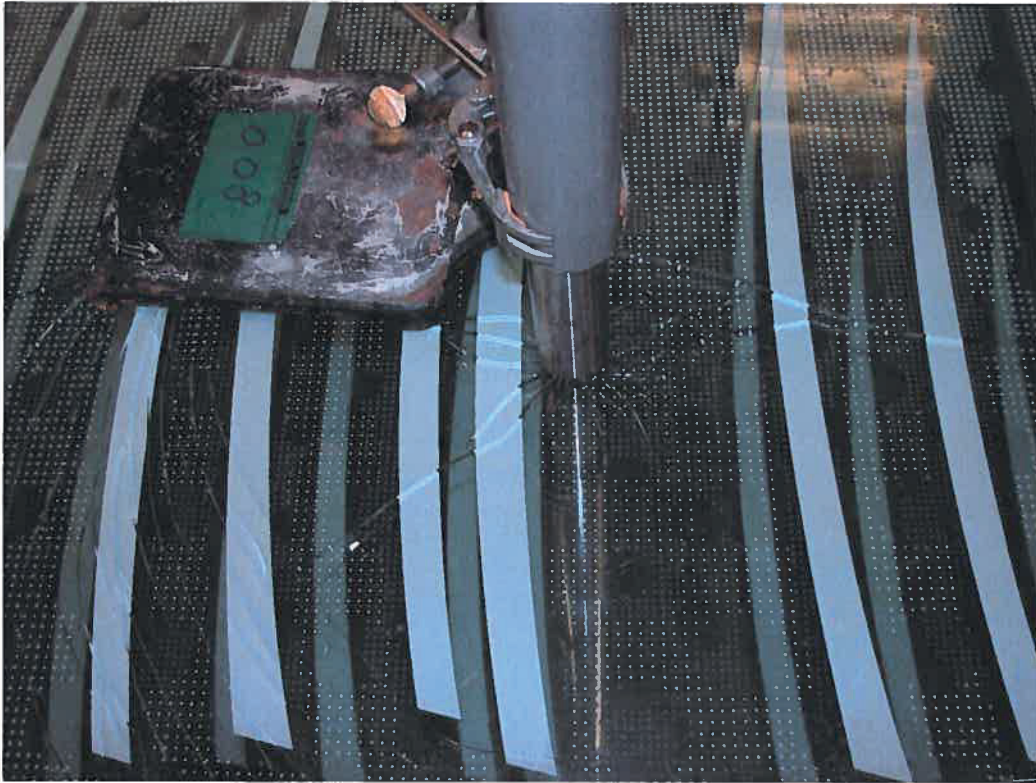
Tested element before impact tests. Test area is within orange frame.



After hit with striker in centre (1)



After hit with striker in corner (2)



After hit with striker random (3)

(This is the end of this report).