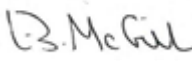



Report No	2371/8777667 Issue 2	This Report consists of 4 pages
Licence/Certificate No	Not applicable	
Client	CP Films Vertriebs GmbH Katzbergstraße 1a Langenfeld (Rheinland) 40764 Germany	
Authority & date	BSI Quotation reference: BSI 0000842087 Equipment Record Number 10172941	
Items tested	Specimens of 4.2mm clear Monolithic Glass with LLumar SCL SR PS13 film applied	
Specification	BS EN 356:2000 Glass in building – Security glazing – testing and classification of resistance against manual attack Issue 2 of this report supersedes all previous issues. The amendments on all pages giving rise to this issue can be ascertained by contacting the authorising signatory.	
Results	Pass: Classified in accordance with EN 356-P2A	
Prepared by	L McGill 	Senior Test Engineer
Authorized by	M Manito 	Team Manager
Issue Date	17 November 2017	
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of 'BSI Terms of Service'. The results contained herein apply only to the particular sample(s) tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of BSI, who reserve the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.	

TEST AND EXAMINATION OF GLASS IN BUILDING

INTRODUCTION

At the request of CP Films Vertriebs GmbH the glass samples detailed below, were tested and assessed against requirements of BS EN 356:2000 Clause 6.1 Hard body drop test, as indicated on the following pages of this Report. This request was made on BSI Quotation number BSI 0000842087. It is emphasized that assessments were not made against other clauses of the Specification.

Six samples were tested with a film that was applied to the inward surface of the glass, so that the hard body impacted the non-filmed side of the glass.

Date samples received: 07 July 2017

Date started: 05 September 2017

Date Completed: 06 September 2017

TEST ITEMS

1) 10 off 1100 x 900mm clear glass samples with a nominal thickness of 4.2mm

Model :- LLumar SCL SR PS13 Clear Safety Film

Manufacturer's stated nominal film thickness:- 325 Micron

SUMMARY OF RESULTS

The test samples were tested to the method described in BS EN 356:2000 Clause 6.1 Hard body drop test

The results of which are as follows:-

TEST ITEMS	Category	Drop height (mm)	ASSESSMENT
1)	P2A	3 000	Pass

Hard body drop test Category (P2A) 3000mm Drop height**Sample 1 (Impacted on 'no tin' glass surface)**

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

Sample 2 (Impacted on 'no tin' glass surface)

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

Sample 3 (Impacted on 'no tin' glass surface)

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

Hard body drop test Category (P2A) 3000mm Drop height**Sample 1 (Impacted on 'tin' glass surface)**

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

Sample 2 (Impacted on 'tin' glass surface)

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

Sample 3 (Impacted on 'tin' glass surface)

Impact point	Observation	Slippage (mm)	Assessment
1	Ball did not pass through glass	Nil	Pass
2	Ball did not pass through glass	Nil	Pass
3	Ball did not pass through glass	Nil	Pass

End of Report