

### Friedmann & Kirchner [Gesellschaft für Material- und Bauteilprüfung mbH]

# Test Report

	Number:	2022-08-5319-04	
Client:	Armolan Europe GmbH Alter Postweg 1 67346 Speyer Germany	· · ·	
Commission:	Classification of glass with safety film according to DIN EN 356		
Product:	6 mm annealed glass with ARM Safety clear 12 mil		
Number of pages	4		

Underlying guidelines and test methods:

DIN EN 356: 2000-02

Glass in Building – Security glazing – Testing and classification of resistance against manual attack

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und Bau

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The test results mentioned in this test report exclusively refer to the test material as indicated in this report. Reprinting this test report requires our written approval. Publishing this test report - even only extracts - is strictly prohibited

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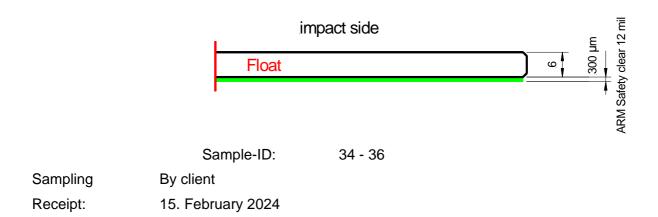
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## 1 Test Material

Basic material:	Floatglass (annealed glass) according to DIN EN 572-2		
Transformed to:	Flat glass with safety film		
Samples:	3 pc. Glass panes 1100 x 900 mm	Nominal thickness 6 mm	

Glass composition: 6 Float with ARM Safety clear 12 mil



#### 2 Test Equipment

The following test equipment was used:

- P085 digital calliper
- P023 digital micrometre
- P126 steel ruler
- P128 temperature and humidity measuring device
- P141 support apparatus DIN EN 356
- P143 impactor DIN EN 356

The test equipment used is subject to test equipment surveillance.

### 3 Tests and Results

The tests were carried out on 15. February 2024 in our laboratories.

Room climate prevailed during the tests. The sample material was stored under these conditions for a sufficiently long time before testing.

The tests led to the following results:

Sample: 34	Category: P1A	Drop height: 1500 mm	
Impact 1:	No damage		
Impact 2:	Breakage of glass, no penetration		
Impact 3:	Further damage, no penetration		
Sample: 35	Category: P1A	Drop height: 1500	
Impact 1:	Breakage of glass, no penetration		
Impact 2:	Further damage, no penetration		
Impact 3:	Further damage, no penetration		
Sample: 36	Category: P1A	Drop height: 1500	
Impact 1:	No damage		
Impact 2:	No damage		
Impact 3:	No damage		

# 4 Classification

The tested product is to be classified as follows:

Product	Class
6 mm Float glass with safety film ARM Safety clear 12 mil	EN 356 P1A