



**AUTHORIZED LAMINATOR**

Authorization for Lamination of Saflex™ FlySafe™ 3D interlayers

Customer:	Doering Glass GmbH	Certification Date:	December 26, 2024
Plant Designation:	Radeburg		
Address:	Bahnhofstrasse 30   Radeburg     Germany		
Tracking ID:	FS-C24-359	Expiration Date:	<b>December 26, 2025</b>

Through this notice, Eastman Chemical Company (hereinafter "Eastman") is authorizing the laminator indicated above whom is producing laminated glass at the designated plant location, as authorized to supply laminated glass with Eastman Saflex FlySafe 3D interlayer into the laminated glass market.

<b>Doering Glass GmbH</b>
<b>Radeburg</b>
<b>Germany</b>
<b>Authorized to Lamine</b>
<b>Saflex FlySafe 3D PVB interlayer by Eastman</b>

This authorization expires on the date indicated above and may be renewed with proper submission and qualification of required specimens. Please consult your Eastman Sales Manager or Technical Service Representative for details.


The approval numbers refer strictly to use of the product in the manufacture of laminated glass consisting of two (2) or more lites of glass and the appropriate thickness and layering of interlayers produced by Eastman to meet the desired performance criteria. The glass shall meet minimum requirements as specified in ASTM C1036, C1048 and C1172.

The exact configuration of the glass (glass thickness, color and type, interlayer thickness color and type) shall appear on a removable label on each piece of glass to be installed or tested. This label shall be removed upon direction of the authority having jurisdiction regarding the occupancy of the building or qualification testing as appropriate. Laminated glass shall also be marked or identified as defined for the intended application. For bird-friendly applications the label shall contain verbiage such as "Glaze this Side Out", to ensure orientation of the shiny silver sequins toward the environment with bird-flight.

Authorization is granted solely for laminates manufactured at the plant location indicated. Alternate manufacturing locations must submit product for their own evaluation. Certifications are not transferrable between manufacturing plants or fabrication plants other than the point of original manufacture. This authorization does NOT extend to the KeepSafe™ and KeepSafe™ Maximum brands. Separate authorization for qualified partners must be received from Eastman for participation in those programs. Eastman Chemical Company reserves the right to issue, renew or repeal Saflex FlySafe 3D authorization at any time.

Should you have any questions regarding this authorization, contact Eastman via e-mail at [glazing@eastman.com](mailto:glazing@eastman.com).

Approved by:



Digitally signed for security

Notice: Although the information and/or recommendations as may be set forth herein (hereafter "Information") are presented in good faith and believed to be correct at the date hereof, Eastman Chemical Company and its subsidiaries and affiliates including Solutia Inc. (hereinafter "Eastman") make no representations or warranties as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Eastman be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information or the product to which information refers. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and Eastman makes no representation or warranty, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

© 2024 Eastman Chemical Company. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries. Non-Eastman brands referenced herein are trademarks of their respective owners.



## Laminate Analysis Report

Saflex® FlySafe™ 3D  
Lamination Quality Report

Laminator: Doering Glass GmbH  
Plant Designation: Radeburg

Tracking Designation: FS-C24-359

Laminates  
Manufactured: December 9, 2024  
Date of Report: December 26, 2024



## Laminate Analysis Report

Lamination Quality Check for Saflex FlySafe 3D PVB interlayer

**Laminator:** Doering Glass GmbH  
**Plant Designation:** Radeburg  
**Address:** Bahnhofstrasse 30 | Radeburg | Germany

**Tracking Designation:** FS-C24-359  
**Laminates Manufactured:** December 9, 2024  
**Report Date:** December 26, 2024

**Expiration Date:** December 26, 2025

**Number of Laminates received:** 3  
**Interlayer Type:** Saflex™ RB42: FlySafe™ 3D

<b>Summary of Evaluation:</b>	Qualified
-------------------------------	-----------

**Summary Data:**

Description	Requirements	Data for Submitted Set**
Minimum Interlayer thickness allowed (mm)*:	1.37	Minimum for set: <b>1.518</b>
Minimum adhesion via pummel allowed (PU)*:	4	Minimum for set: <b>4</b>
Maximum Interlayer moisture allowed (%):	0.48	Maximum for set: <b>0.417</b>
Boil test - 2 hours @ 100°C:	no bubble > 13 mm from edge of crack	<b>Pass</b>
Bake test - 16 hours @ 100°C:	no bubble > 13 mm from edge or crack	<b>Pass</b>
Progressive bake test max temperature (°C):	bubble formation > 13 mm from edge or crack	<b>140</b>

\* limits change based on interlayer type being evaluated.  
 \*\* Red font indicates deficiency

Notice: Although the information and/or recommendations as may be set forth herein (hereafter "Information") are presented in good faith and believed to be correct as of the date hereof, Eastman Chemical Company and its subsidiaries and affiliates including Solutia Inc. (hereinafter "Eastman") make no representations or warranties as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Eastman be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and Eastman makes no representation or warranty, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

© 2024 Eastman Chemical Company. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries. Non-Eastman brands referenced herein are trademarks of their respective owners.

### Detailed Saflex FlySafe 3D Laminate Submission Report

Laminator: Doering Glass GmbH  
 Plant Designation: Radeburg  
 Address: Bahnhofstrasse 30 | Radeburg | Germany

Tracking Designation: FS-C24-359  
 Laminates Manufactured: December 9, 2024      Report Date: December 26, 2024      Expiration Date: December 26, 2025

The data for the laminates submitted are detailed below.

Laminate Configuration (Nominal Thicknesses)      Glass 1 (Labeled) Thickness (mm) - Color | Interlayer Thickness (mm) - Type | Glass 2 Thickness (mm) - Color  
 4 Clear | 1.52 Saflex™ RB42: FlySafe™ 3D | 4 Clear

Glass Orientation @ PVB interface	
Laminate 1	Tin / Air
Laminate 2	Tin / Air
Laminate 3	Tin / Air N/A / N/A

Glass thickness (mm)			
	Glass 1	Glass 2	Average Glass Thickness
Laminate 1	3.79	3.81	<b>3.80</b>
Laminate 2	3.79	3.81	
Laminate 3	3.79	3.81	
	N/A	N/A	

Interlayer Thickness			
	Section A	Section D	Average Interlayer Thickness
Laminate 1	1.52	1.52	<b>1.52</b>
Laminate 2	1.52	1.52	
Laminate 3	1.52	---	

Interlayer Moisture			
	Section A	Section D	Average Interlayer Moisture
Laminate 1	0.42	0.41	<b>0.42</b>
Laminate 2	0.42	0.42	
Laminate 3	0.42	---	

Laminate Adhesion (PU)			
	Section A	Section D	Average Pummel Adhesion
	IB/OB	IB/OB	
Laminate 1	6 / 5	7 / 6	<b>6.0</b>
Laminate 2	7 / 4	7 / 6	
Laminate 3	---	---	

High Temperature Evaluation			
	Boil - 2 hr. @ 100°C	Bake - 16 hr. @ 100°C	
Laminate 1	Pass	<b>Pass</b>	
Laminate 2	Pass		
Laminate 3	---		

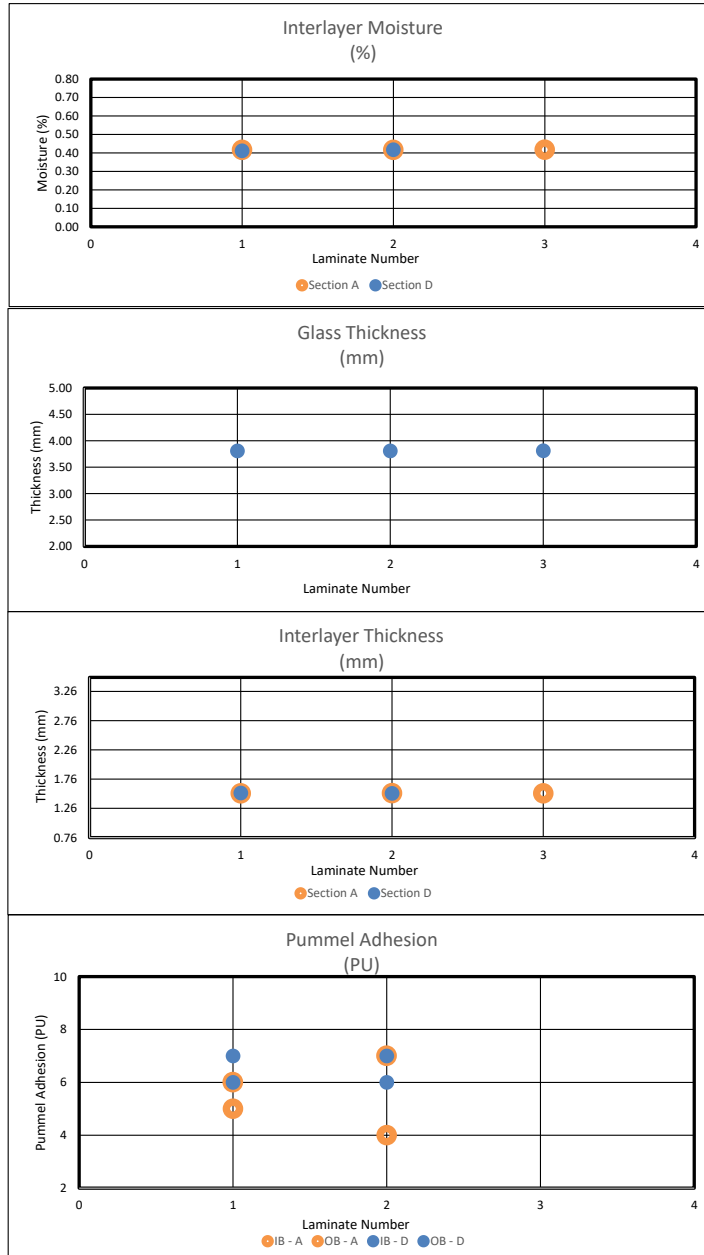
Bake - Progressive - Bubble Formation °C
140

Notice: Although the information and/or recommendations as may be set forth herein (hereafter "Information") are presented in good faith and believed to be correct as of the date hereof, Eastman Chemical Company and its subsidiaries and affiliates including Solutia Inc. (hereinafter "Eastman") make no representations or warranties as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Eastman be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and Eastman makes no representation or warranty, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

The following graphs indicate the spread of the data for the hurricane set as tested.

Laminator: Doering Glass GmbH  
 Plant Designation: Radeburg  
 Tracking Designation: FS-C24-359

Laminates Manufactured: December 9, 2024  
 Report Date: December 26, 2024  
 Expiration Date: December 26, 2025



Notice: Although the information and/or recommendations as may be set forth herein (hereafter "Information") are presented in good faith and believed to be correct as of the date hereof, Eastman Chemical Company and its subsidiaries and affiliates including Solutia Inc. (hereinafter "Eastman") make no representations or warranties as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Eastman be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information or the product to which Information refers. Nothing contained herein is to be construed as a recommendation to use any product, process, equipment or formulation in conflict with any patent, and Eastman makes no representation or warranty, express or implied, that the use thereof will not infringe any patent. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

© 2024 Eastman Chemical Company. Eastman brands referenced herein are trademarks of Eastman or one of its subsidiaries. Non-Eastman brands referenced herein are trademarks of their respective owners.