



## TECHNICAL REPORT

Technical evaluation of Vertical Retractable Walls according to DIN 18032-3.

Skyfold systems by Railtech.

Report Number **R14504CAN-A1**

**Jack Zagorski P.Eng**  
**RAILTECH Ltd.**

Client 325 LEE AVENUE  
MONTREAL, QUEBEC  
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*This report contains 4 pages in total.*

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**DESCRIPTION OF THE PRODUCT TESTED**

Description of the product tested	VERTICAL RETRACTABLE WALLS
Name of the products	I-PANEL FOR STC 48 TO STC 50 (Rw 47 TO Rw 49) AND NR SKYFOLD SYSTEMS.
	II-PANEL FOR STC 51 TO STC 55 (Rw 51 TO Rw 54) SKYFOLD SYSTEMS
	III-PANEL FOR STC 56 TO STC 60 (Rw 56 TO Rw 59) SKYFOLD SYSTEMS.
Date of the tests	NOVEMBER 2014

**REPORTED BY:**

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**I-SCOPE OF WORK**

Labosport has been commissioned by Railtech (Jack Zagorski) to carry out ball impact resistance testing on vertical retractable walls.

**II-TECHNICAL DATASHEETS**

This information has been provided only for Labosport's records.

**III-RESULTS - I-PANEL FOR STC 48 TO STC 50 (RW 47 TO RW 49) AND NR SKYFOLD SYSTEMS.**

Property	Test method	Test	Inspection	Results	Class according EN 13964
Ball impact resistance	DIN 18032-Part 3	Ceiling*	The strength, function, and safety of the ceiling not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A
		Wall*	The strength, function, and safety of the wall not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A

**IV-RESULTS – II - PANEL FOR STC 51 TO STC 55 (Rw 51 TO Rw 54) SKYFOLD SYSTEMS**

Property	Test method	Test	Inspection	Results	Class according EN 13964
Ball impact resistance	DIN 18032-Part 3	Ceiling*	The strength, function, and safety of the ceiling not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A
		Wall*	The strength, function, and safety of the wall not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A

**V-RESULTS – III - PANEL FOR STC 56 TO STC 60 (Rw 56 TO Rw 59) SKYFOLD SYSTEMS.**

Property	Test method	Test	Inspection	Results	Class according EN 13964
Ball impact resistance	DIN 18032-Part 3	Ceiling*	The strength, function, and safety of the ceiling not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A
		Wall*	The strength, function, and safety of the wall not adversely affected.	Pass	1A
			Appearance not changed to any great degree.	Pass	1A

**\*Ceiling**

A handball is thrown 36 times against the test ceiling at a velocity of  $16.5 \pm 0.8$  m/s. The shots are thrown 2 × 12 times at an angle of 60° and 1 × 12 times at an angle of 90°.

**\*Wall**

A handball is thrown 54 times against the test wall at a velocity of  $22.5 \pm 1.2$  m/s. The shots are thrown 2 × 12 times at an angle of 45° and 1 × 30 times at an angle of 90°.