

Customer

Plywood Plant "Vlast Truda", JSC
Pereulok Shirokiy 31
442150, Nihiniy Lomov, Penza region
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Summary report no. P60-18-8119en**Fire testing**

Order number: 60-18-0470
Date: 26.10.2018
Editor: Dr. Brehme
Documentation: bs

This report consists of
3 page(s) and 0 enclosure(s).

Fon: 03302 49982 60

Delivery date specimen: 24.09.2018

Test date: 18.10.2018 to 24.10.2018

Test specimen: Sound insulation fire-retardant plywood represented under the brand "Plyguard Phon" Thickness 16 mm to 28 mm

Test specification: Test methods of requirement set R10 according to DIN EN 45545-2 (02/2016) „Railway applications – Fire protection on railway vehicles – Part 2: Requirements for fire behavior of materials and components“

Objective: Evaluation according to DIN EN 45545-2 (02/2016)
Requirement set R10 (see table 5 – Set of material requirements)

Test results: The sound insulation fire-retardant plywood represented under the brand "Plyguard Phon" achieved the following results for requirement R10:

Thickness 16 mm: Hazard Level 3 (HL3)

Thickness 28 mm: Hazard Level 3 (HL3)

Based on these results, the material fulfills requirement **R10** with **Hazard Level 3 (HL3)** for all thicknesses in between the tested ones.

Remark:

The classification is valid only in conjunction with the test reports listed on page 2. Please refer to the test reports for details.



Stefan Harder
Head of Fire Lab

The results refer only to the specimens mentioned above.

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1 Details about the specimens

Material or combination of materials:

Plywood produced with glue based on phenol-formaldehyde resin with industrial cork inside.
Flame retardant impregnation of veneers.
Thickness 16 mm to 28 mm

Manufacturer:

Plywood Plant "Vlast Truda", JSC
Pereulok Shirokiy 31
442150, Nihiniy Lomov, Penza region
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Dimensions of sample:

1051 mm × 230 mm × approx. 16 mm and 1050 mm × 231 mm × approx. 28 mm
75 mm × 75 mm × 16 mm and 75 mm × 75 mm × 23,9 mm (reduced to maximum testable thickness)

Side of specimen to be tested by flame:

sides identical

2 Summary of results

The Sound insulation fire-retardant plywood represented under the brand "Plyguard Phon" was tested for use in railway vehicles, requirement set R10 (Table 5 DIN EN 45545-2).

Thickness 16 mm:

Test report no.	Ref. test method	Standard	Parameter	Unit	Result	HL
P60-18-0662en	T04	EN ISO 9239-1	CHF	kWm ⁻²	≥ 11,0	3
P60-18-4364en	T10.03	EN ISO 5659-2	Ds (max)	dimensionless	42	3
P60-18-3462en	T11.02	EN ISO 5659-2	CIT	dimensionless	0,18	3
Classification		EN 45545-2				3

Thickness 28 mm:

Test report no.	Ref. test method	Standard	Parameter	Unit	Result	HL
P60-18-0663en	T04	EN ISO 9239-1	CHF	kWm ⁻²	≥ 11,0	3
P60-18-4365en	T10.03	EN ISO 5659-2	Ds (max)	dimensionless	31	3
P60-18-3463en	T11.02	EN ISO 5659-2	CIT	dimensionless	0,24	3
Classification		EN 45545-2				3

The Hazard Level HL depends on the operation category and design category according to DIN EN 45545-2 Table 1.

Operation category	Design category			
	N: Standard vehicles	A: Automatic vehicles having no emergency trained staff on board	D: Double decked vehicle	S: Sleeping and couchette cars double decked or single deck
1	HL1	HL1	HL1	HL2
2	HL2	HL2	HL2	HL2
3	HL2	HL2	HL2	HL3
4	HL3	HL3	HL3	HL3