

4.4. Reaction on fire impact

In accordance with *EN 13986* standard, fire impact classes may be determined using *EN 13501 - 1* standard or expressed in values set by Table 8 of *EN 13986* (here Table 4.8).

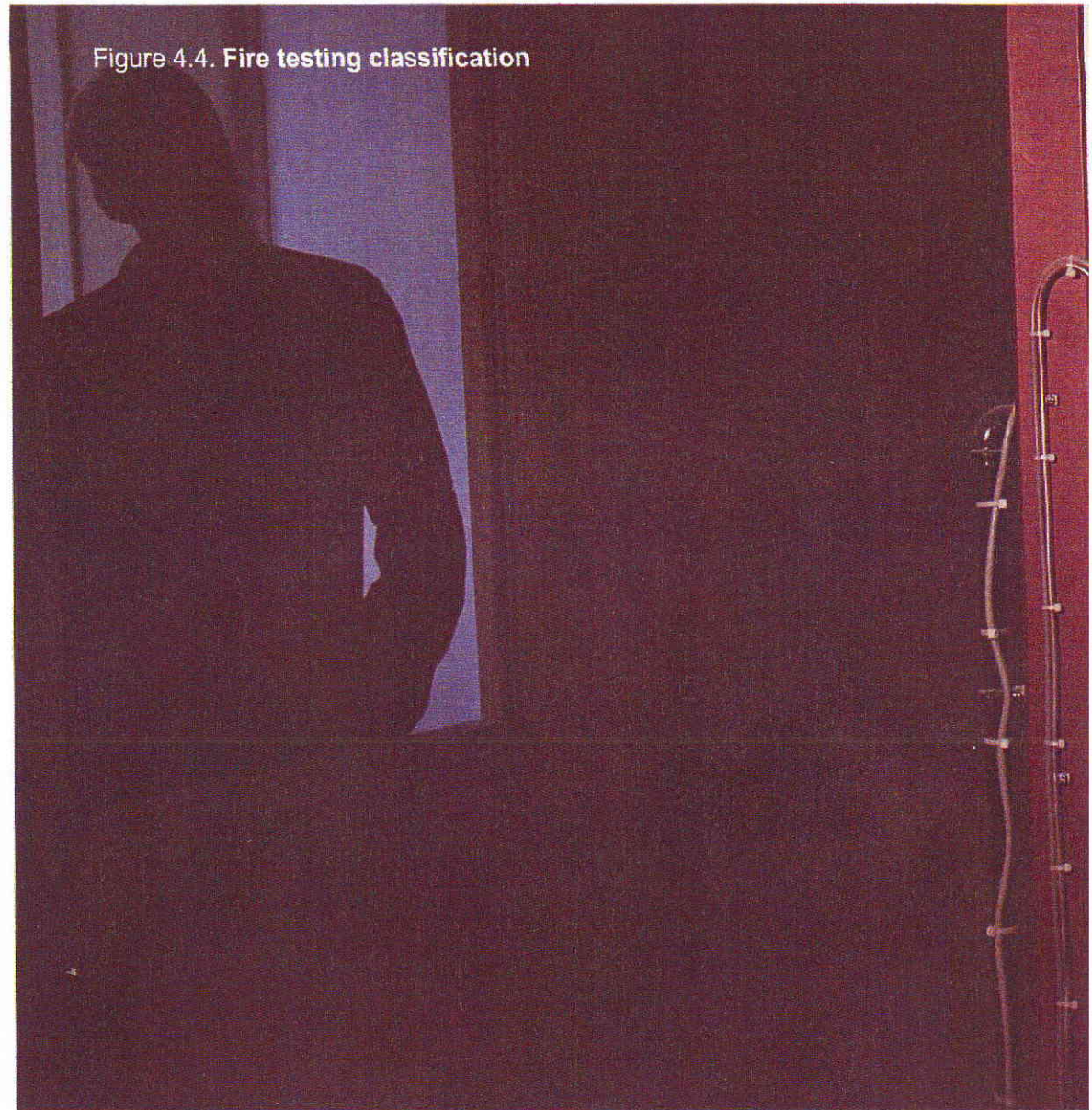


Table 4.8. Extract from Table 5.8 of *EN 13986*

Wood based panel	Minimum density, kg/m ³	Minimum thickness, mm	Class ^b , with the exception of floor	Class ^c , for floor
Plywood	400	9	<i>D - s2, d0</i>	<i>D_{FL} - s1</i>

^b class, as set by Commission Decision 2000/147/EC Annex Table 1

^c class, as set by Commission Decision 2000/147/EC Annex Table 2

Standard birch plywood *Riga Ply* 4 mm is of **E class** reaction to fire.

Standard plywood *Riga Ply* 6.5 mm is of **D class** reaction to fire.

Additional classification of 6.5 mm plywood concerning smoke formation is in accordance with **s2 class**.



Additional qualification of 6.5 mm plywood concerning smoke formation is in accordance with **d2 class**.

Standard plywood *Riga Ply* 6.5 mm classification is **Dfl class**.

Additional classification of *Riga Ply* 6.5 mm plywood concerning smoke formation is in accordance with **s1 class**.

Table 4.9. Reaction to fire of birch standard plywood *Riga Ply* samples at single-flame source test in accordance with *EN ISO 11925-2:2002*

Test method	Sample description	Place of flame application	Does ignition take place?	Does flame runs as high as 150 mm mark?	During what time does flame run as high as 150 mm, s
<i>EN ISO 11925-2</i> Bottom side and surface fire resistance to 30s flame application	<i>Riga Ply</i> 4 mm	Bottom side	Yes	No	-
	<i>Riga Ply</i> 4 mm	Surface	No	No	-
	<i>Riga Ply</i> 6.5 mm	Bottom side	Yes	No	-
	<i>Riga Ply</i> 6.5 mm	Surface	No	No	-

Table 4.10. Reaction to fire of birch standard plywood *Riga Ply* 6.5 mm samples at single-flame source test in accordance with *EN 13823* – for construction materials (except floor structures)

Test method	Sample description	Parameters	Testing parameters (m)	Allowed parameters
<i>EN 13823</i>	<i>Riga Ply</i> 6.5 mm	FIGRA _{0.2MJ} (W/s)	530	(-)
		FIGRA _{0.4MJ} (W/s)	530	(-)
		LFS < edge	(-)	Yes
		THR _{600s} (MJ)	67.0	(-)
		SMOGRA (m ² /s ²)	9	(-)
		TSP _{600s} (m ²)	101	(-)
		Liesmas daja	(-)	Yes

Table 4.11. Results of birch plywood samples testing in accordance with *EN ISO 9239-1* for floor structures

Product	Wood grain direction of sample	Duration of ignition HF-30 (kW/m ²)	Critical combustion before go out (kW/m ²)	Obscuration integral of smoke formation
<i>Riga Ply</i>	L - lengthwise	-	5.59	113
	C - transversal	-	3.27/3.45/3.1	56/57/49
	C - transversal	-	Average 3.27	Average 54

Fire reaction of plywood samples with different overlays in accordance with *EN 11925-2:2002*, single-flame source test.

Samples:

- Riga Form* (Colour - Dark brown, Weight - 120 g/m²); 6.5 mm;
- Riga Form* (Colour - Dark brown, Weight - 220 g/m²); 6.5 mm;
- Riga HPL*; 12 mm;
- Riga Tex* (Colour - Dark brown, Weight - 120 g/m², grade - large); 6.5 mm;
- Riga Tex* (Colour - Dark brown, Weight - 120 g/m², grade - small); 6.5 mm;
- Riga Preprime* (Colour - Preprime film, Weight - 390g/m²); 6.5 mm;
- Riga Paint* (Colour - Paint film, Weight - 215 g/m²), 6.5 mm;
- Riga Lacquer* - (Acryl - coloured); 12 mm.

Products of AS Latvijas Finieris with reference to EN 13501-1:2002, in accordance with EN 11925-2:2002:

Riga Form (Colour - Dark brown Weight- 120 g/m²); 6.5 mm;

Riga Form (Colour - Dark brown, Weight - 220g/m²); 6.5 mm;

Riga HPL; 12 mm;

Riga Tex (Colour - Dark brown, Weight - 120 g/m², large mesh); 6.5 mm;

Riga Tex (Colour - Dark brown, Weight - 120 g/m², small mesh); 6.5 mm;

Riga Preprime (Colour - Preprime film, Weight - 390 g/m²); 6.5 mm;

Riga Paint (Colour - Paint film, Weight - 215 g/m²), 6.5 mm;

Riga Lacquer - (Acryl - coloured); 12 mm - are at least of **E class** fire resistance.

Table 4.12. During testing of plywood samples overlays no sample run as high as 150 mm mark

Sample description	Flame application place	Duration of flame application, s	Does ignition take place?	Does flame run as high as 150 mm mark?	How fast does the flame run as high as 150 mm mark?
<i>Riga Form</i> 120 g/m ²	Bottom side	30	Yes	No	-
<i>Riga Form</i> 120 g/m ²	Surface	30	No	No	-
<i>Riga Form</i> 220 g/m ²	Bottom side	30	Yes	No	-
<i>Riga Form</i> 220 g/m ²	Surface	30	No	No	-
<i>Riga HPL</i>	Bottom side	30	No	No	-
<i>Riga HPL</i>	Surface	30	No	No	-
<i>Riga Tex</i> large mesh	Bottom side	30	Yes	No	-
<i>Riga Tex</i> large mesh	Surface	30	No	No	-
<i>Riga Tex</i> small mesh	Bottom side	30	Yes	No	-
<i>Riga Tex</i> small mesh	Surface	30	No	No	-
<i>Riga Preprime</i>	Bottom side	30	Yes	No	-
<i>Riga Preprime</i>	Surface	30	No	No	-
<i>Riga Paint</i>	Bottom side	30	Yes	No	-
<i>Riga Paint</i>	Surface	30	No	No	-
<i>Riga Lacquer</i>	Bottom side	30	Yes	No	-
<i>Riga Lacquer</i>	Surface	30	No	No	-