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Warrington Fire Test for Determination of the Burning Behaviour of Floorings

Part 1 Determination of the Burning Behaviour Using a Radiant Heat Source BS EN ISO 9239-1 2010

Objective: To Determine the performance of the following product when tested in accordance with BS EN ISO 9293-1: 2010

Generic Description	Product reference	Thickness	Weight per Unit Area of density
Rubberised floor covering For use in railway coaches & metro coaches adhered to a birch plywood substrate	"ICF/MD/SPEC-354" (Flooring Only)	14.89mm*	9.80kg/m^2*
Individual Components used to manufacture composite			
Rubber Flooring	"ICF/MD/SPEC-354"	2mm	2.5-3.4kg/m^2
Adhesive	"Adhesive Fevicol SR 998 1S & Fevicol Hardner C"	Unwiling to provide	Unwilling to provide
Plywood	"Birch Plywood (WBP grade)'	12mm	Unwilling to provide
*determined by Warrington Fire			

Test Results:

Orientation of test specimens: No direction

Average critical radiant flux: 8.05 W/M^2

Average smoke development: 28.92% Min

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Part 2 Determination of Optical Density by a Chamber Method and "T11:02 (Gas Analysis in the Smoke Box ISO, Using FTIR Technique)

EN 45545-2: 2013 + A1: 2015

Objective: To assess the results of tests performed in accordance with methods T04, T10.03 and T11.02 as defined in EN 45545-2: 2013 + A1: 2015 at an irradiance level of 25W/m^2 with a pilot flame, on specimens of a product and to provide an opinion of compliance with the requirements, as defined in EN 455545-2: 2013 + A1: 2015.

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Generic Description	Product reference	Thickness	Weight per Unit Area of density
Rubberised floor covering For use in railway coaches & metro coaches adhered to a birch plywood substrate	"ICF/MD/SPEC-354" (Flooring Only)	14.89mm*	9.80kg/m^2*
Individual Components used to manufacture composite			
Rubber Flooring	"ICF/MD/SPEC-354"	2mm	2.5-3.4kg/m^2
Adhesive	"Adhesive Fevicol SR 998 1S & Fevicol Hardner C"	Unwiling to provide	Unwilling to provide
Plywood	"Birch Plywood (WBP grade)'	12mm	Unwilling to provide
*determined by Warrington Fire			

Opinion: We consider the results of the tests confirmed in reports referenced 413221 and 413222 to the test methods detailed above demonstrate that the product as tested, complies with requirements, R10 (detailed in table 5 of EN 45545-2: 2013 + A1: 2005) for a HL1, HL2 hazard level classification

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Part 2 Determination of Optical Density by a Chamber Method and "T11:02" (Gas Analysis in the Smoke Box ISO. Using FTIR Technique)

EN 45545-2: 2013 + A1: 2015

Test Methods T10.03 & T11.02

Objective: To determine the toxic fume and optical density produced from the following product when tested in accordance with methods T10.03 and T11.02 as defined In BS EN 45545-2:2013 + A1: 2015 at an irradiance level of 25kW/M^2 with a plot flame.

Generic Description	Product Reference	Thickness
Rubberised floor covering For use in railway coaches & metro coaches adhered to a birch plywood substrate	"ICF/MD/SPEC-354" (Flooring Only)	14.89mm*
Individual Components used to manufacture composite		
Rubber Flooring	"ICF/MD/SPEC-354"	2mm
Adhesive	"Adhesive Fevicol SR 998 1S & Fevicol Hardner C"	Unwiling to provide
Plywood	"Birch Plywood (WBP grade)'	12mm
*determined by Warrington Fire		

Summary of Test Results:

The average Ds(max) value determined within 10 minutes was 137.

The average CIT value at four minutes was 0.10.

The average CIT value at eight minutes was 0.23.