

DMF Srl

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Italy

Hengelo (ov), 9-6-2015

Test specimen:	Specimen:	Colour:	Client reference number:
	A.	Black	Fabric

Examination:	Test number:	Test name:
	1.	Solar/Light/UV transmittance.

Results See following pages

Laboratory Quality Control

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Test : 1. Solar/Light/UV transmittance.
Norm : EN 410 / DIN EN 13363-1 / DIN EN 14501

Analysis content:

- (1) Remission and transmission in the visible light range in accordance with DIN EN 410: 2011.
- (2) Remission and transmission in the global radiation range in accordance with DIN EN 410: 2011.
- (3) Calculation of total energy permeability degree g_t of window system, following DIN EN 13363-1 October 2007 and approximated calculation of reduce factor F_c following DIN EN 14501 February 2006.

Conditions for optical tests:

Test parameter	symbol	Range of radiation
Light transmission degree	$\tau_{v,n-h}$	380....780 nm (standard light D65)
Light remission degree	$\rho_{v,n-h}$	380....780 nm (standard light D65)
Light absorption degree	α_v	380....780 nm
UV-transmission degree	τ_{UV}	280....380 nm (UV-radiation)
Solar transmission degree	$\tau_{e,n-h}$	280....2500 nm (global radiation)
Solar remission degree	$\rho_{e,n-h}$	280....2500 nm (global radiation)
Solarabsorptions degree	α_e	280....2500 nm

Equipment: spectral photometer Lambda 900, PERKIN – ELMER Corp., USA 150 mm sphere.

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Test results:

(1) Light range

UV-range

Results test 1	light transmission degree	light remission degree	light absorption coefficient	UV-transmission degree
	$\tau_{v,n-h}$	$\rho_{v,n-h}$	α_v	τ_{UV}
A.	0.6450	0.0427	0.3123	0.6197

(2) Global radiation range

Results test 1	solar transmission degree	solar remission degree	solar absorption coefficient
	$\tau_{e,n-h}$	$\rho_{e,n-h}$	α_e
A.	0.6677	0.0557	0.2766

(3) Total energy permeability degree g_t and reduce factor F_c

Results test 1		
	g_t	F_c
A.	0.66	0.94

F_c and g_t results are valid for the following presumptions in accordance with DIN EN 13363-1:

- * Double glass with thermal protective covering, thermal permeability degree $U = 1,6 \text{ W/m}^2\text{K}$ and total energy permeability degree $g = 0,70$
- * sun protective material inside, closed.

The test results are referring to the submitted sample.

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