

CONTRAFLAM 60-3 CLIMAPLUS

Intended to be used in buildings and construction works

NB: 0336,0497,0679,0757,0809,1116,1136,1154,1174,1234,1322,1694,1717,1750,1751

EN 1279-5:2018 - 2007 / ZY005045

Essential characteristics	Unit	AVCP systems	Performance
Safety in case of fire			
Resistance to fire		1	EI 60
Reaction to fire		3,4	B-s1, d0
External fire performance		3,4	NPD
Safety in use			
Bullet resistance		1	NPD
Explosion resistance		1	NPD
Burglar resistance		3	P1A
Pendulum body impact resistance		3	1(B)1/NPD
Resistance against sudden temperature changes and temperature differentials	[K]	3	NPD
Wind, snow, permanent and imposed load resistance	[mm]	3	NPD
Protection against noise			
Direct airborne sound insulation	[dB]	3	NPD
Thermal properties			
U-value	[W/m2K]	3	1.1
Radiation properties			
Light transmission	τ_L	3	76%
Light reflection	ρ_L / ρ'_L	3	13% / 13%
Solar energy properties			
Solar energy transmission	τ_e	3	48%
Solar energy reflection	ρ_e / ρ'_e	3	28% / 13%
Solar factor g-value		3	0.6
Durability		3	NPD
Release of dangerous substances			NONE

NPD: No Performance Declared

The performance of the product identified is in conformity with the declared performance above. This declaration of performance is issued under responsibility of the manufacturer. Signed for and on behalf of the manufacturer by:

Name and Position

Guillaume Le Gavrian, CEO

Place and Date

Flamatt 27.02.2018

Signature



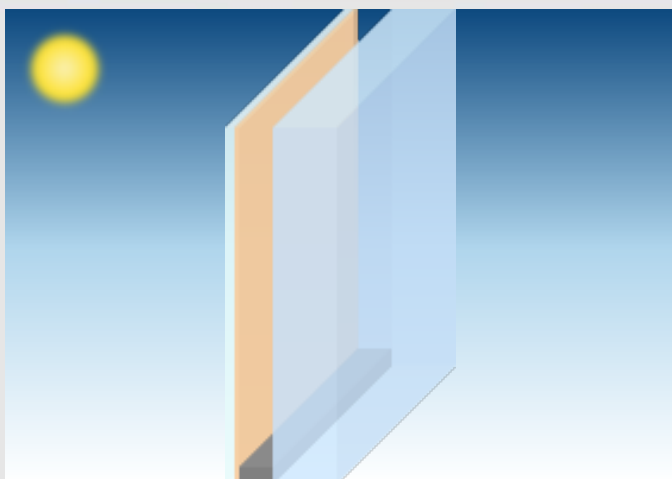
Vetrotech Saint-Gobain International AG
Bernstrasse 43
3175 Flamatt
Switzerland

www.vetrotech.com



Certificate Number 0336-CPR-5
064D





Pane 1 PLANICLEAR (4 mm)
PLANITHERM XN

Cavity 1 ARGON (90%) / AIR (10%) / 14 mm

Pane 2 CF60-3 5445 (27 mm)

Vetrotech Steyr

Marlies Bramel

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LUMINOUS FACTORS

CIE (15-2004)

Light transmission (TL %)	75 %
Outdoor reflection (RLe %)	13 %
Indoor (RLi %)	13 %



SOLAR FACTORS

EN410 (2011-04)

Solar factor (g)	0,59
Shading Coefficient (SC)	0,67



COLOR RENDERING

CIE (15-2004)

Transmission (Ra)	95,4
Reflection (Ra)	95,2



ENERGY FACTORS

EN410 (2011-04)

Transmission (Te)	47 %
Reflection (Ree)	26 %
Indoor (Rei)	13 %
Absorption (AE1)	14 %
Absorption (AE2)	13 %



THERMAL TRANSMISSION

EN673 (2011-04)

Ug	1,1 W/m².K
0° related to vertical position	



MANUFACTURING SIZES

Nominal thickness	45,0 mm
Weight	69 kg/m²



Verified Results
EN 410
EN 673
www.tuv.com
ID: 0000036859

Calumen III calculates the photometric characteristics and thermal transmission of glass using calculation algorithms which comply with the following standards: the European standards EN 410 and EN 673, the international standard ISO9050, the Japanese standard JIS R 3106/3107 and the Korean standard KS L 2514/2525. The functional output and calculation rules of Calumen for standards EN 410 and EN 673 have been validated by TÜV Rheinland (report 89212153-01). The technical performances obtained according to these standards are provided for information only and are subject to amendment. Only the values entered in the performance declaration available on the CE marking site of Saint-Gobain Glass are official. The sound attenuation indices are measured under laboratory conditions according to the standards EN ISO 10140 and EN 12758. The calculated indices are provided for information only. The accuracy for Rw index lies within a range of +/-2dB. The glass thickness calculations comply with the 2012 version of the DTU39-P4 description. The USER is responsible for ensuring that the correct calculation hypotheses are entered and the DTU39 is applied appropriately for the project concerned.