DANISH TECHNOLOGICAL INSTITUTE

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HS Hansen
Bredgade 4
6940 Lem

Order no. 0108/857182
Pages 3
Appendices 2
Initials MSVD/BTL

Calculation report – ITC (Initial Type Calculation)

CE 1235
EU notified body

Object: Calculation of energy data for product system

Millennium G40 Outward

System description was sent by the customer 2019-02-08

Input data: The calculations are based on the description of the product system submitted by the customer (Appendix 2) and the calculated cross section values (page 3).

See report from Danish Technological Institute:
0108/857182a: Calculation of energy data for frame/sash cross section

Method: EN14351-1:2006 + A1:2010; EN ISO 10077-1:2006; EN ISO 10077-2:2012; EN 673:2011 (appendix 1)

Period: The calculation was carried out on 2019-02-13

Results: See page 2-3

Terms: Excerpts of the report may only be used with approval from the Danish Technological Institute. Results are valid only for the treated subjects.

2019-02-13, Danish Technological Institute, Glass and Windows

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Energy data for product system (see Appendix 1 – calculation basis)

Millennium G40 Outward	**Aluminium**
Product system	Material

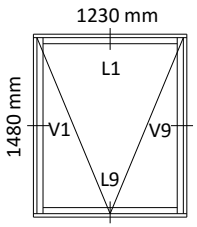
Planitherm Lux	**4-18-4-18-4**	**0.62**	**0.62**	**0.73**
Standard pane, hinged	Dimension	Ug-value	gg-value	LTg-value

-	-	-	-	-
Standard pane, fixed	Dimension	Ug-value	gg-value	LTg-value

TGI M	**0,40/0,31**	**-**	**-**
Standard spacer in standard pane	λk hinged	λk fixed	Width, standard door leaf

-	-	-
Standard spacer in standard glazing bar	λk glazing bar	Name, standard door leaf

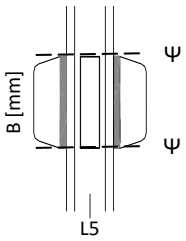
Hinged window with standard pane



CE

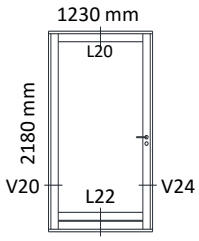
U_w [W/m^{2}K]	=	**1.00**
g_w	=	**0.5022**
F_f	=	**0.81**
Min.t_{oi} [°C]	=	**15.2**
E_{ref} [kWh/m^2]	=	**8.3**

Standard glazing bar



B [mm]	=	-
ψ [W/mK]	=	-
Min.t_{oi} [°C]	=	-

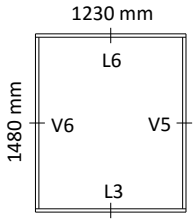
Framed door with standard pane



CE

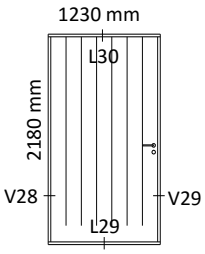
U_d [W/m^{2}K]	=	-
g_d	=	-
F_f	=	-
Min.t_{oi} [°C]	=	-
E_d [kWh/m^2]	=	-

Fixed frame with standard pane



U_w [W/m^{2}K]	=	-
g_w	=	-
F_f	=	-
Min.t_{oi} [°C]	=	-
E_w [kWh/m^2]	=	-

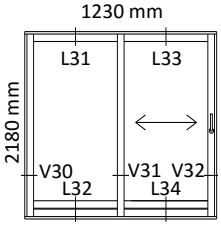
Leaf door with standard door leaf



CE

U_d [W/m^{2}K]	=	-
U_p [W/m^{2}K]	=	-

Sliding door with standard pane



U_d [W/m^{2}K]	=	-
g_d	=	-
F_f	=	-
Min.t_{oi} [°C]	=	-
E_d [kWh/m^2]	=	-

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Energy data for frame/sash cross section: Millennium G40 Outward

	Section [-]	Width [mm]	Uf [W/m2K]	Ψ [W/mK]	toi * [°C]	10077-2 [-]
Hinged	L9	69	2.03	0.039	15.2	X
	L1	69	2.03	0.039	15.2	X
	V1	69	2.03	0.039	15.2	X
	V9	69	2.03	0.039	15.2	X

*Appendix 1

The results above are from the report 0108/857182a, which have been made according to EN ISO 10077-2, 2nd edition:

1. The actual overlap for the pane has been used.
2. Length of the glazing gasket is included in the frame/sash length.
3. The linear thermal transmittance is calculated using the 2-box method in Guideline WA-08engl/1.
4. Uf is always specified with 2 decimals

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Calculations according to EN ISO 10077-2, 2nd edition

Calculations of the individual section values were performed using the PC-programme Flixo version 7.0.633.1.

In determining the U-value for frame/sash (Uf) an insulation panel is used with λp = 0.035 W/m K, with a dimension corresponding to the specified standard glazing unit and with an overlap in sash corresponding to the submitted drawings.

$$U_f = \frac{U_{tot}^{panel} \, x \, \ell_{tot} - U_p \, x \, \ell_p}{\ell_f} \quad \& \quad \Psi_g = U_{tot}^{panel} \, x \, \ell_{tot} - U_f \, x \, \ell_f - U_g \, x \, \ell_g$$ where:

U_{tot}^{panel}	=	thermal transmittance for total construction (W/m² K)
U_p	=	thermal transmittance for panel plate (W/m² K)
ℓ_{tot}	=	total length of construction (m)
ℓ_f	=	length of frame/sash (m)
ℓ_p	=	length of panel plate in m (lg = 0.19 m is generally chosen)
Ψ_g	=	linear thermal transmittance for spacer profile of IGU (W/m K)
U_f	=	thermal transmittance for frame/sash profile (W/m² K)
U_g	=	thermal transmittance at the centre of the IGU (W/m²K)
ℓ_g	=	length of IGU in m (lg = 0,19 m is generally chossen)

Linear thermal transmittance is determined using the ”box method” described in Guideline WA-08engl/1.

For the glazing bar applies Uf = Ug

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Formulas for determination of Eref, Ew, Uw and toi

The energy performance Eref for the hinged reference glazing unit (1.23 x 1.48 m) is calculated as:

Eref = 196,4 x Ff x gg – 90,36 x Uw kWh/m² per year

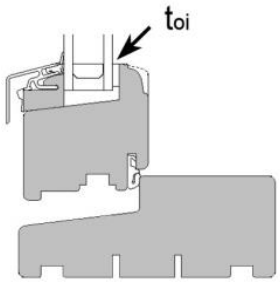
The energy performance Ew of a random window is calculated as:

Ew = 196,4 x Ff x gg – 90,36 x Uw kWh/m² per year

The U-value Uw for a window is calculated as:

$$U_w = \frac{A_g \times U_g + A_f \times U_f + \Sigma \ell \times \Psi}{A_w} W/m^2K$$

A_g	=	glazing area (m²)
U_g	=	U-value of glazing (W/m²K)
g_g	=	solar energy transmittance of glazing (-)
g_w	=	Ff x gg (-)
A_f	=	frame/sash area (m²)
A_w	=	Ag + Af (m²)
U_f	=	U-value of frame/sash (W/m²K)
Ψ	=	linear thermal transmittance (W/mK)
ℓ	=	linear thermal transmittance length (m)
F_f	=	glass share $\frac{A_g}{A_w}$



Lowest surface temperature on window sash (min.toi) is determined at the glazing edge (see figure above) in a cross sectional calculation according to EN ISO 10077-2, 2nd edition, see results and comments on page 3. The surface temperature can in special cases (e.g. at alu sills in doors and lock cases) be lower than the calculated cross section.

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Oplysningsskema til energiberegninger

TEKNOLOGISK INSTITUT

Navn på produktsystem	Materiale
Millennium G40 Udadgående/Millennium G40 Outward opening	Aluminium

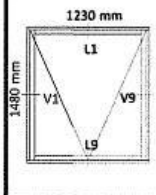
Beskrivelse af standardrude	Opbygning af rude	U_g-værdi*	g_g-værdi	LT_g-værdi
Planitherm Lux	4-18-4-18-4	0,62	0,62	0,73

Standardrude i fast karm	Opbygning af rude	U_g-værdi*	g_g-værdi	LT_g-værdi
-	-	-	-	-

Afstandsprofil i standardrude	Afstandsprofil i standardsprosse	Bredde på standardsprosse
TGI-M	-	- [mm]

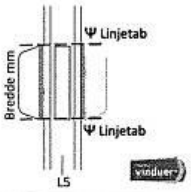
Standard dørplade	Tykkelse af standard dørplade
-	- [mm]

Oplukkeligt vindue med standardrude



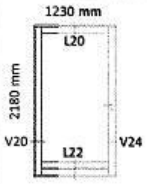
- **Beregnes** ☑
- **Indadgående** vindue ☐
- **Udadgående** vindue ☑

Standardsprosse



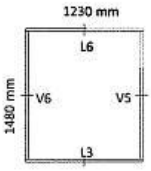
- Beregnes ☐

Rammedør med standardrude



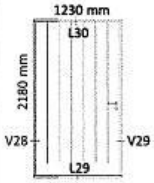
- Beregnes ☐
- Indadgående dør ☐
- Udadgående dør ☐

Fast karm med standardrude



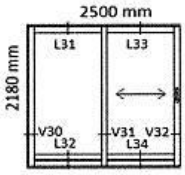
- Beregnes ☐

Pladedør med standard dørplade



- Beregnes ☐
- Indadgående dør ☐
- Udadgående dør ☐

Skydedør med standardrude



- Beregnes ☐

Firmanavn	Telefon
HSHansen a/s	96751100

Adresse	Postnummer	By
Bredgade 4	6940	Lem

Dato	Navn / Underskrift
07.02.2019	Pernille Kjær

*U_g-værdier skal angives med 2 decimaler.

- Alle relevante tegninger samt datablade på ruder og døre vedhæftes.
- Tegninger navngives i henhold til ovenstående skitser.

Version: 22.05.2015

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CalumenLive

04 Feb 2019

SGG CLIMATOP 4 (18 ARGON 90) 4 (18 ARGON 90) 4
PLANITHERM LUX F2 PLANITHERM LUX F5

Pane 1	PLANICLEAR 4 mm
Coating 2	PLANITHERM LUX
Cavity 1	18 ARGON 90%
Pane 2	PLANICLEAR 4 mm
Cavity 2	18 ARGON 90%
Coating 5	PLANITHERM LUX
Pane 3	PLANICLEAR 4 mm

Name :
Country : Denmark

Notes: Millennium Udadgående

LUMINOUS FACTORS	EN410 (2011-04)
Light Transmittance (TL)	73%
Outdoor Reflectance (RLe)	17%
Indoor Reflectance (RLi)	17%

THERMAL TRANSMISSION	EN673-2011
Ug	0.62 W/(m^2 .K)
0^O related to vertical position	

MANUFACTURING SIZES	
Nominal Thickness	48.00 mm
Weight	30 kg/m^2

UV FACTORS	EN410 (2011-04)
TUV	22%

SAFETY CLASS	EN 12600
Pendulum Body Resistance	NPD

ENERGY FACTORS	EN410 (2011-04)
Transmittance (TE)	54%
Outdoor Reflectance (Ree)	22%
Indoor Reflectance (REi)	22%
Absorptance A1(AE1)	13%
Absorptance A2	4%
Absorptance A3	6%

SOLAR FACTORS	EN410 (2011-04)
Solar Factor (g)	62%
Shading Coefficient (SC)	0.71

COLOR RENDERING	
Ra Light Transmittance	98
Ra Outdoor Reflectance	93

ANTI-BURGLARY	EN356
Burglar Resistance	NPD

These values are calculated according to EN410 (2011-04) and EN673-2011 standards, the international standard ISO 9050, the Japanese standard JIS R 3106/3107, the Korean standard KS L 2514/2525 and the NFRC-2010 standards. For European norms, tolerances are defined according to EN1096-4 standard. Nevertheless, user must check the feasibility of the combination of glazing, particularly in terms of thickness and color. Furthermore, it is the user's responsibility to check that the resulting combination of glazing meets regulatory requirements at national, local or regional level. Computed values standards are indicative. Please use NFRC certified software for certified values. Calculation rules for EN410 (2011-04), EN673-2011, ISO 9050 (2003) m1.5 and ISO 9050 (1990) m1.0 standards and functional output of Calumen Live use Calumen 1.2.4 calculation engine, and have been validated by TUV Rheinland Quality Report 11923R-11-33705. Sg Values are calculated according to the French thermal regulation 2012 (RT2012). Acoustic indexes are representative of performances tested in laboratory conditions of a glazing of size 1.23x1.48m (EN ISO 10140-3 and EN 12758). In situ measurements may differ depending on the glazing size, environment, quality of the window frame, of the installation, source of noise, etc. The accuracy of the given indexes is in the range +/- 1dB (EN 12758).All glazing images are illustrative.

SAINT-GOBAIN

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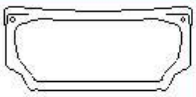
October 2013 – No. W20 – Revision index 2-10/2018 'WARM EDGE' WORKING PARTY

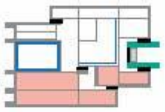
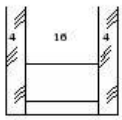
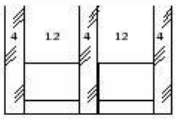
Data sheet Psi values for windows

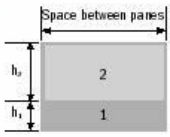
based on determination of the equivalent thermal conductivity of spacers by measurement

TECHNOFORM GLASSINSULATION

Technoform Glass Insulation GmbH
Matthäus-Merian-Str. 6
D - 34253 Lohfelden

	Product name	Space height in mm	Material	Thickness d in mm
Cross-section	**TGI Spacer M** 	6.85	Stainless steel Plastic	0.09 0.6/0.8

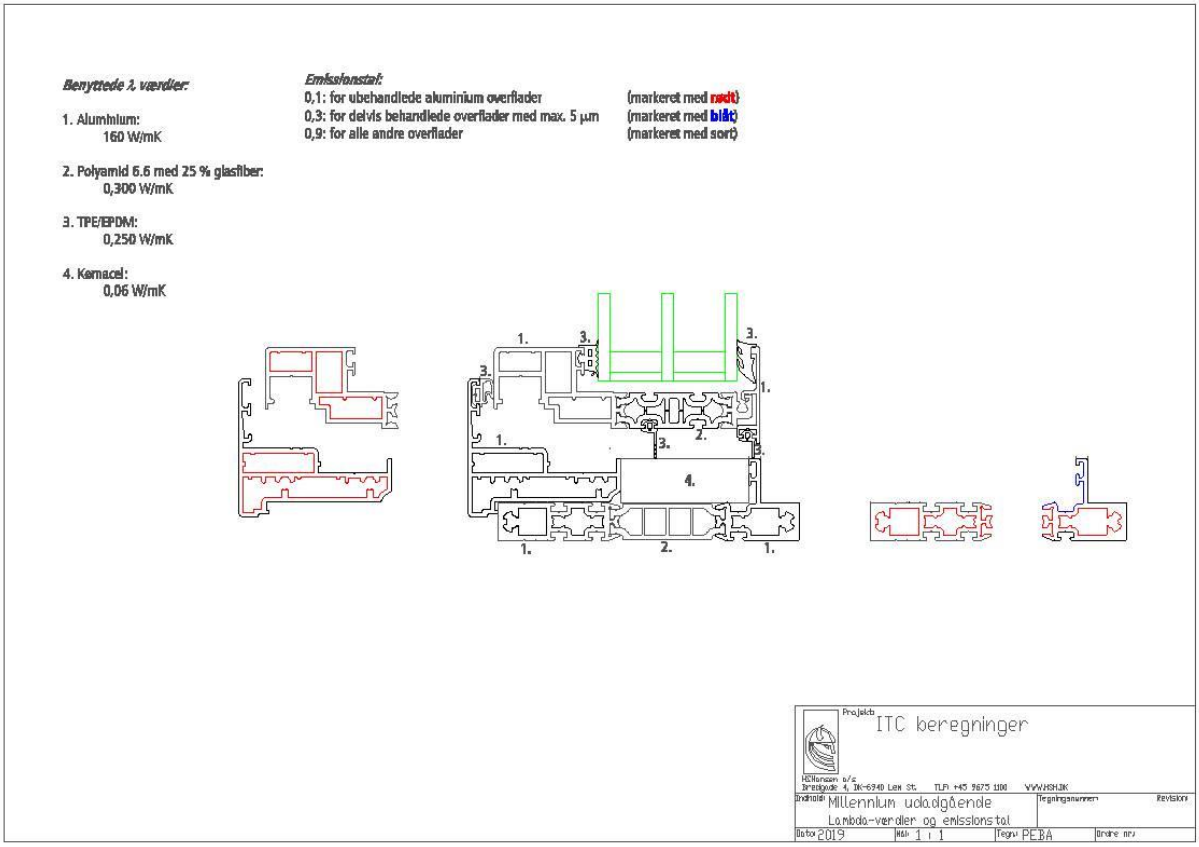
	Representative glass constructions	Metal with thermal break	Plastic	Wood	Wood/Metal
Representative frame profile					
Representative psi value double-sheet thermally insulating glass W/mK	 Double-sheet insulating glass U_g=1.1 W/m²K	0.049	0.040	0.040	0.044
Representative psi value triple-sheet thermally insulating glass W/mK	 Triple-sheet insulating glass U_g=0.7 W/m²K	0.044	0.038	0.039	0.042

Two Box model Characteristic values		Space between panes in mm	$\lambda_{eq,2B}$ in W/mK	
			Box 1 · h_1 = 3 mm	Box 2 · h_2 = 6.9 mm
		Can be used for all spacer widths	0.40	0.31

Explanations

The equivalent thermal conductivity has been determined in accordance with the ift guideline WA-17en g/ 1 'Thermally improved spacers – Determination of the equivalent thermal conductivity by measurement'. The representative linear heat transfer coefficients calculated in this way (representative psi values) apply to typical frame profiles and glazing for the determination of the heat transfer coefficient U_w of windows. They have been determined under the boundary conditions (frame profiles, glazing, glass mounting depth, back covering, primary and secondary sealant) defined in the ift guideline WA-08engl/3 'Thermally improved spacers – Part 1: Determination of the representative Psi value for window frame profiles'. This guideline also governs the area of validity and application of the representative psi values. In order to avoid rounding errors, the psi values in the data sheet have been given at 0.001 W/mK. The method for the arithmetical determination of the psi values has an accuracy of ± 0.003 W/mK. Differences of less than 0.005 W/mK are not significant. For further information, refer to the Bulletin 004/2008 'Guide to Warm Edge' of Bundesverband Flachglas.

Characteristic values determined by:
Hochschule Rosenheim University of Applied Sciences
ift ROSENHEIM


Benyttede λ værdier:
1. Aluminium:
160 W/mK
2. Polyamid 6.6 med 25 % glasfiber:
0,300 W/mK
3. TPE/EPDM:
0,250 W/mK
4. Kernacel:
0,06 W/mK
Emissionstal:
0,1: for ubehandlede aluminium overflader (markeret med rødt)
0,3: for delvis behandlede overflader med max. 5 µm (markeret med blåt)
0,9: for alle andre overflader (markeret med sort)
1.
2.
3.
4.
Projekt
ITC beregninger
Indhold
Millennium udadgående
Lambda-værdier og emissionstal
Dato 2019
Mål 1 : 1
Tegnet PEBA

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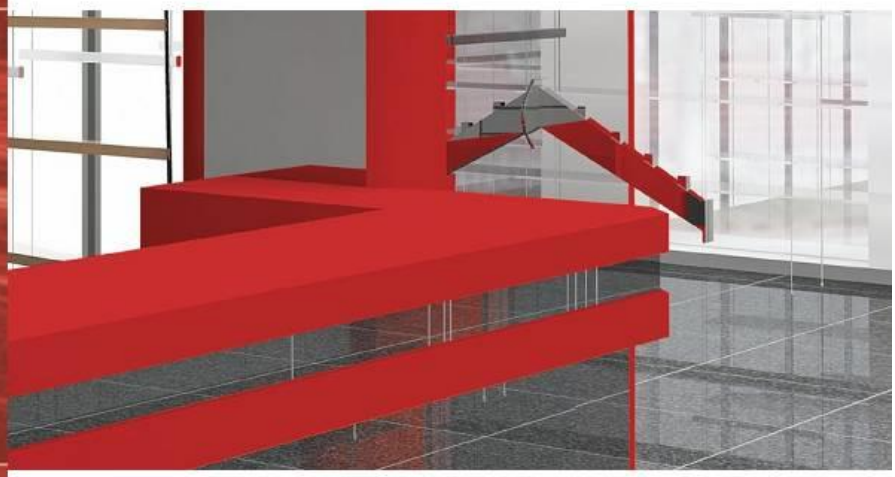
KÖMACEL®
painting. laminating. cladding.

KÖMACEL® integral foam sheets — with outstanding extraneous and intrinsic values



Trade information for:

- Advertising technicians
- Digital printers
- Design & advertising agencies
- Exhibition stand builders
- POS fitters
- Sign makers
- Interior decorators
- Cabinet makers
- Window manufacturers
- Fitters
- Rollershutter manufacturers
- Conservatory manufacturers

KÖMMERLING®
Business Unit Sheets

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KÖMACEL® — the integral foam sheet for universal application!

"It's the combination that does it"

KömaCel is the world's No. 1 plastic sheet made using the Celuka extrusion process. Thirty years' experience with this process and this material have enabled KÖMMERLING to create an integral foam sheet that is perfectly matched to the requirements of the market. KömaCel owes its unique product properties to the combination of a solid top coat and a cellular core, both made of the same material and manufactured in one single operation.

The surface has a solid, smooth outer skin that gives the sheet a silk-gloss finish. This means KömaCel sheets are ideally suitable for screen printing and also for film-laminating. But the advantages of this material are also well known in all branches of industry and the building trade. The sheets boast low thermal conductivity and therefore offer good thermal and sound insulation. Good flexural strength and excellent working properties make these sheets the ideal material for a hugely diverse range of indoor and outdoor applications.

Characteristics:

- Fine-celled foam structure
- Solid, closed and smooth outer skin
- Surface with silk-gloss finish
- Homogeneously dyed throughout

Many applications — one material!

KömaCel PVC-U integral foam sheets are ideally suitable for:

Advertising

For example, for signs, billboards, lettering boards, displays, shop-window displays, large letters, exhibition stands

Building sector

For example, for shopfitting, interior decorating, zones of high humidity (e.g. bathrooms), cladding, roller-shutter boxes, door panels, heat and sound insulation, window elements, non-transparent spandrel infill panels

Miscellaneous

For example, for models, furniture industry, thermoformed parts, photograph lamination, traffic signs for roadworks, chemical, laboratory, fitting out goods vehicles/ships

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KÖMACEL

Characteristics to be proud of!

- .Highly suitable for bonding
- .Highly suitable for printing
- .Suitable for film-laminating
- .Highly suitable for lacquering
- .Easy to work
- .Good thermal insulation
- .Good sound insulation
- .Good flexural strength
- .Resistant to chemicals and corrosion
- .Low thermal conductivity
- .Flame-resistant (in thicknesses to 10 mm)
- .Weather-resistant
- .Low water absorption

Delivery programme

Sizes in mm	White 652 thicknesses (mm)	White 654 thicknesses (mm)	Pieces/packaging unit	Pieces/pallet	Versions with protective film*
2440 x 1220		4	5	125	
3050 x 1220		4	5	125	
2440 x 1220		5	4	100	
3050 x 1220		5	4	100	
2440 x 1220		6	3	75	
3050 x 1220		6	3	75	
3000 x 1250	8		3	60	
2000 x 1000	10	10	5	60	652 only, film on one side
2500 x 1000	10	10	5	60	
3000 x 1000	10	10	3	60	
4000 x 1000	10			40	
3000 x 1250	10	10	2	50	652 only, film on one side
4000 x 1250	10			30	652 only, film on one side
3000 x 1560	10		2	40	652 only, film on one side
4000 x 1560	10			30	652 only, film on one side
3000 x 1250	13	13	2	40	652 only, film on one side
3000 x 1250		15	2	34	
3000 x 1250		17		30	film on both sides
3000 x 800		19	2	30	
3000 x 1250		19	1	30	film on both sides
4000 x 1250		19		20	film on both sides
3000 x 1560		19	1	20	
4000 x 1560		19			film on both sides
3000 x 1250		24	1	20	film on both sides
3000 x 1250		30	1	15	

Non-standard lengths and other film-laminated formats are available on request. Each thickness is packaged in small cardboard packaging units.
* Film-laminated sheets are available only as complete pallets.

Exceedingly easy to work!

Machining
Cutting, sawing, turning, filing, drilling, planing, milling, grinding and screwing

Forming
KömaCel sheets can be bent and folded when heated. Thermo-forming is possible only up to a certain degree

Printing, lacquering and film-laminating
All familiar printing, laminating and lacquering processes are possible

Subject to change without prior notice

DANISH TECHNOLOGICAL INSTITUTE

KÖMACEL

Technical data

Properties	Test method	Unit	Thickness (mm) 4, 5, 6	Thickness (mm) 8, 10, 13	Thickness (mm) 19, 24, 30
Mechanical properties					
(Apparent) Density*	DIN 53479/ISO 1183	g/cm³	0.65–0.80	0.55–0.60	0.50–0.60
Tensile stress at yield (tensile strength)	DIN 53455/ISO 527	MPa	≥ 20	≥ 13	–
Elongation at tear	DIN 53455/ISO 527	%	≥ 30	≥ 15	–
Flexural strength	DIN 53452/ISO 178	MPa	≥ 30	≥ 20	≥ 20
Compressive strength (range of elasticity per Hooke)	DIN 53421 (based on)	MPa	> 8	> 3	> 3
Compressive stress at 30%	DIN 53421 (based on)	MPa	> 14	> 7	> 7
Modulus of elasticity	DIN 53452/ISO 527-2/1A/50	MPa	~ 1100	~ 800	~ 800
Impact strength +20 °C	DIN 53453/ISO 179 (based on)	kJ/m²	AV 15*	AV 20*	AV 25*
0°C	DIN 53453/ISO 179 (based on)	kJ/m²	AV 13*	AV 15*	AV 20*
–20 °C	DIN 53453/ISO 179 (based on)	kJ/m²	AV 10*	AV 10*	AV 15*
Ball indentation hardness (132 N/30 s)	DIN 53456/ISO 2039-1	MPa	≥ 15	≥ 12	≥ 25
Shore hardness D	DIN 53505		~ 55	~ 75	~ 77
AV* = average value. Values not stated cannot be measured in accordance with the relevant standards.					
Thermal properties					
Vicat softening temperature	DIN 53460/ISO 306 (process A50)	°C	≥ 75	≥ 75	77
Deflection temperature	DIN 53461/ISO 75 (process Ae)	°C	~ 56	~ 63	–
Coefficient of linear thermal expansion α (from –30 °C to +50 °C)	DIN 53752	mm/mK	≤ 0.08	≤ 0.08	≤ 0.08
Thermal conductivity λ (from 0 °C to +60 °C)	DIN 52616	W/mK	0.10	---------- 0.05–0.07 ----------	
U-value* (heat transfer coefficient)	DIN EN 674 (based on)	W/m²K	4 mm: 3.1	10 mm: 2.5	13 mm: 2.4 / 19 mm: 2.0 / 24 mm: 1.7 / 30 mm: 1.4
Values not stated cannot be measured in accordance with the relevant standards.					
Electrical properties					
Surface resistance	DIN VDE 0303 T3/ DIN IEC 93	Ω	10^{14}	10^{13}	10^{13}
Volume resistivity	DIN VDE 0303 T3/ DIN IEC 93	Ω · m	10^{14}	10^{12}	10^{12}
Dielectric strength (sample thickness 4 mm)	DIN VDE 0303 T21	kV/mm		≥ 12	
Comparative figure of tracking	DIN IEC 112		CTI 600	CTI 600	CTI 600
Other properties					
Weighted sound reduction index $R_{w,P}$	DIN 52210/84	dB	–	10 mm: 28 / 19 mm: 31 / 24 mm: 33 / 30 mm: 34	
Water absorption after 7 days	DIN 53495	%	< 0.2	appr. 0.2	appr. 0.2
Fire behaviour	DIN 4102 (D)		B 1 (colour 654, thicknesses 4, 5, 6, 10 mm)		
	NFP 92-501 (F)		M 1 (colour 654, thicknesses 4, 5, 6, 10 mm)		
	UL 94 (USA)		V0	V0 (10 mm)	
	Brandkennziffer (fire charac.) (CH)		5.3	5.3	5.3
	CSE-RF2/75 A (I)		Class 1 (colour 654, thicknesses 4, 5, 6, 10 mm)		
	CSE-RF3/77 (I)				
Physiological evaluation			---------- generally recognised as safe ----------		
Components used to prevent falls	TRAV**		–	–	Category C requirements met

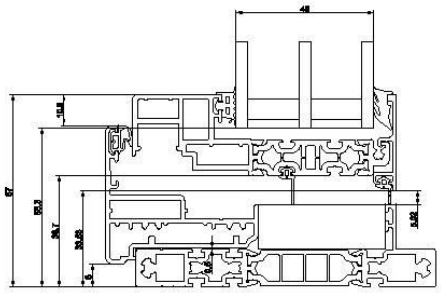
* These are standard values that apply to an average density. **Technical Rules for the Use of Safety Glazing.
Minor variations are possible depending on the sheet thickness.

Permissible colour deviation in accordance with DIN 6174, White ≤ 1.1 CIELAB units.

Tolerances:
Thickness (s): ± (0.1 + 0.05 x s) Example at 10 mm = ±0.6 mm
Width: 0 + 2.5 mm Length: 0 + 10 mm
Rectilinearity: max. 1.5 mm/m Angle at saw notch: 0.5° Levelness: max. 1.5 mm/m

profine GmbH - KÖMMERLING KUNSTSTOFFE/Business Unit Sheets - PO Box 21 65 - 66929 Pirmasens - Germany
Phone +49 (0)6331 56-0 - Fax +49 (0)6331 56-2006 - info@komasheets.com - www.komasheets.com

Order No. 202 170053 – 09.12.SRD



Materials:

Frame/sash:	**Aluminium**
Thermal break:	**Polyamid 6.6 with 25% glass fibre**
Gaskets:	**TPE**

Projekt: ITC calculations

H.Hansen a/s
Brøndgade 4, DK-6940 Lem St. TLF: +45 9675 1100 WWW.HSH.DK

Indhold: Millennium G40 Udadgående
Millennium G40 Outward opening

Tegningsnummer | Revision

Dato: 2019 | Mål: 1 : 1 | Tegnr: PEBA | Ændre nr:

Teknologisk Instituts almindelige vilkår for rekvirerede opgaver gælder i deres fulde udstrækning for den ved Teknologisk Institut udførte tekniske prøvning og kalibrering samt for udfærdigelsen af prøvningsrapporter hhv. kalibreringscertifikater i forbindelse hermed.
Teknologisk Institut står inde for, at medarbejdere der udfører prøvning til brug sammen med harmoniserede standarder under notificering nr. 1235, i henhold til EU-forordning 305/2011, artikel 43, opfylder alle de stillede krav om kapabilitet, integritet og uvildighed. Se næste side.

Byggevareforordningen – EU 305/2011 – Artikel 43:
Krav vedrørende notificerede organer.

1. I forbindelse med notifikation skal et notificeret organ opfylde kravene i stk. 2-11.

2. Et notificeret organ skal oprettes i henhold til national lovgivning og være en juridisk person.

3. Et notificeret organ skal være et tredjepartsorgan, der er uafhængigt af den organisation eller den byggevare, det vurderer.

   Et organ, der er medlem af en erhvervssammenslutning eller et erhvervsforbund, der repræsenterer virksomheder, der er involveret i konstruktion, fremstilling, levering, samling, brug eller vedligeholdelse af de byggevarer, som det vurderer, kan, hvis det kan påvises, at det er uafhængigt, og at der ikke er nogen interessekonflikt, anses for at være et sådant organ.

4. Et notificeret organ, dets øverste ledelse og det personale, der er ansvarligt for at udføre tredjepartsopgaver i processen med vurdering og kontrol af ydeevnens konstans, må ikke være en konstruktør, fabrikant, leverandør, montør, køber, ejer, bruger eller reparatør af de byggevarer, som det vurderer, eller bemyndiget repræsentant for nogen af disse parter. Dette forhindrer ikke anvendelsen af vurderede varer, der er nødvendige for det notificerede organs drift, eller anvendelse af varer i personligt øjemed.

   Et notificeret organ, dets øverste ledelse og det personale, der er ansvarligt for at udføre tredjepartsopgaver i processen med vurdering og kontrol af ydeevnens konstans, må ikke være direkte involveret i konstruktion, fremstilling, markedsføring, installering, anvendelse eller vedligeholdelse af disse byggevarer eller repræsentere parter, der er involveret i disse aktiviteter. De må ikke deltage i aktiviteter, som kan være i strid med deres objektivitet og integritet i forbindelse med de aktiviteter, som de er blevet notificeret til at udføre. Dette gælder navnlig rådgivningstjenester.

   Et notificeret organ skal sikre, at dets dattervirksomheders eller underentreprenørers aktiviteter ikke påvirker fortroligheden, objektiviteten og uvildigheden af dets aktiviteter inden for vurdering og/eller kontrol.

5. Et notificeret organ og dets personale skal udføre tredjepartsopgaverne i processen med vurdering og kontrol af den deklarerede ydeevnes konstans med den størst mulige faglige integritet og den nødvendige tekniske kompetence på det specifikke område og må ikke påvirkes af nogen form for pression og incitament, navnlig af økonomisk art, som kan have indflydelse på dets afgørelser eller resultaterne af dets vurderings- og eller kontrolaktiviteter, særlig fra personer eller grupper af personer, som har en interesse i resultaterne af disse aktiviteter.

6. Et notificeret organ skal kunne udføre alle de tredjepartsopgaver i processen med vurdering og kontrol af den deklarerede ydeevnes konstans, der er overdraget til det i henhold til bilag V, og for hvilke det er blevet notificeret, uanset om disse opgaver udføres af det notificerede organ selv eller på dets vegne og på dets ansvar.

   Til enhver tid og for hvert system til vurdering og kontrol af ydeevnens konstans, og for hver art eller kategori af byggevarer, væsentlige egenskaber og opgaver, som det er notificeret for, skal et notificeret organ råde over følgende:

   a. det nødvendige personale med teknisk viden og tilstrækkelig og passende erfaring til at udføre tredjepartsopgaver i processen med vurdering og kontrol af ydeevnens konstans.
   b. den nødvendige beskrivelse af procedurer i henhold til hvilke ydeevnevurderingen udføres, således at disses gennemsigtighed og reproducerbarhed sikres. Det skal have en passende politik og passende procedurer, der skelner mellem opgaver, det udfører som notificeret organ, og andre aktiviteter.
   c. de nødvendige procedurer til at udføre sine aktiviteter, der tager behørigt hensyn til en virksomheds størrelse, den sektor, den opererer inden for, dens struktur, den pågældende vareteknologis kompleksitet, og om der er tale om en fremstillingsproces med masse- eller serieproduktion.

   Et notificeret organ skal have de fornødne midler til at udføre de tekniske og administrative opgaver i forbindelse med de aktiviteter, som det er notificeret til at udføre, på en hensigtsmæssig måde og skal have adgang til alt nødvendigt udstyr og alle nødvendige faciliteter.

7. Det personale, der er ansvarligt for udførelsen af de aktiviteter, som organet er notificeret for, skal være i besiddelse af følgende:

   a. en solid teknisk uddannelse og erhvervsuddannelse, der omfatter alle tredjepartsopgaver i processen med vurdering og kontrol af ydeevnens konstans inden for det relevante område, som organet er notificeret for.
   b. tilfredsstillende kendskab til kravene vedrørende de vurderinger og den kontrol, de foretager, og den nødvendige bemyndigelse til at udføre sådanne opgaver.
   c. passende kendskab til og forståelse af de gældende harmoniserede standarder og de relevante bestemmelser i denne forordning.
   d. den nødvendige færdighed i at udarbejde de attester, redegørelser og rapporter, som dokumenterer, at vurderingerne og kontrollen er blevet foretaget.

8. Det skal sikres, at det notificerede organ, dets øverste ledelse og vurderingspersonalet arbejder uvildigt.

   Aflønningen af det notificerede organs øverste ledelse og vurderingspersonalet må ikke være afhængig af antallet af foretagne vurderinger eller af resultatet af disse vurderinger.

9. Et notificeret organ skal tegne en ansvarsforsikring, medmindre medlemsstaten er ansvarlig i henhold til national lovgivning, eller medlemsstaten selv er direkte ansvarlig for den udførte vurdering og/eller kontrol.

10. Det notificerede organs personale har tavshedspligt med hensyn til alle oplysninger, det kommer i besiddelse af ved udførelsen af dets opgaver i henhold til bilag V, undtagen over for de kompetente administrative myndigheder i den medlemsstat, hvor aktiviteterne udføres. Ejendomsrettigheder skal beskyttes.

11. Et notificeret organ skal deltage i eller sikre, at dets vurderingspersonale er orienteret om de relevante standardiseringsaktiviteter og aktiviteterne i den koordineringsgruppe af notificerede organer, der er nedsat i henhold til denne forordning, og skal som generelle retningslinjer anvende de administrative afgørelser og dokumenter, som er resultatet af den nævnte gruppes arbejde.