



# GARNICA

## ///MULTI WINDOW APPS™

*Innovative Applications in a Window Set Tool System.*

### TECHNICAL CATALOG



To win, choose your dive

# **///MULTI WINDOW APPS™**

## **TECHNICAL CATALOG**

*“CONFIDENTIAL”*

*ONLY FOR INTERNAL USE*

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## MULTI WINDOW APPS™

### IV 78

Multi Window aplikacije™ IV 78" je "SISTEM PROZORA" sa "CE" certifikatom izuzetno pouzdan, funkcionalna, siguran takođe sa svim tehnickim karakteristikama i dizajnom koji posjeduju najnovije generacije prozvodnje DRVENE STOLARIJE.

"IV 78" je nas bazni prvi modul više prozora Apps™ (kao sto možete vidjeti u nasoj prezentaciji).

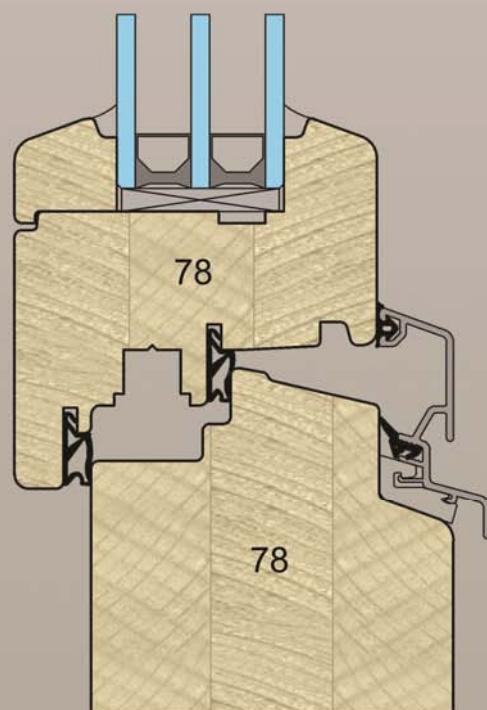
U bilo kojem trenutku i na jednostavan i precizan nacin , moguće je da se integrira s dodatnim modulima 2 i 3 ostvariti prozor debljine IV 92 mm , a takođe za realizaciju prozora drvo/allum sa upotrebom razliciti sistema.

Multi Window aplikacije™ IV 78 također omogućuje upravljanje promjenama s ekstremnim jednostavnost i fleksibilnost, korištenje stakla dvoslojnog, troslojnog , ovisno o toplinske i zvučne performanse koje zahtijeva kupac.

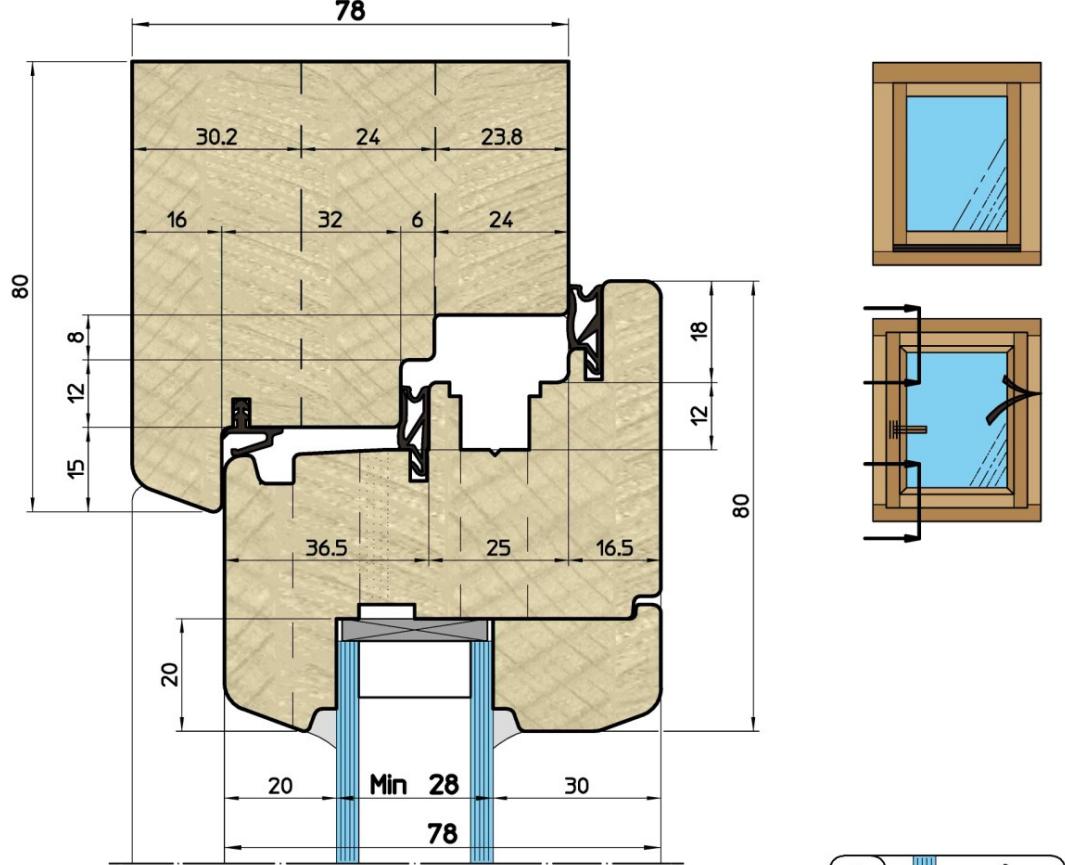


<i>Soft wood</i>	<i>Hard wood</i>
$U_f = 1,2 \text{ W(m}^2\text{K)}$	$U_f = 1,5 \text{ W(m}^2\text{K)}$
$U_g = 0,7 \text{ W(m}^2\text{K)}$	$U_g = 0,7 \text{ W(m}^2\text{K)}$
$\Psi_g = 0,04 \text{ W(mK)}$	$\Psi_g = 0,04 \text{ W(mK)}$
$U_w = 0,9 \text{ W(m}^2\text{K)}$	$U_w = 1,2 \text{ W(m}^2\text{K)}$

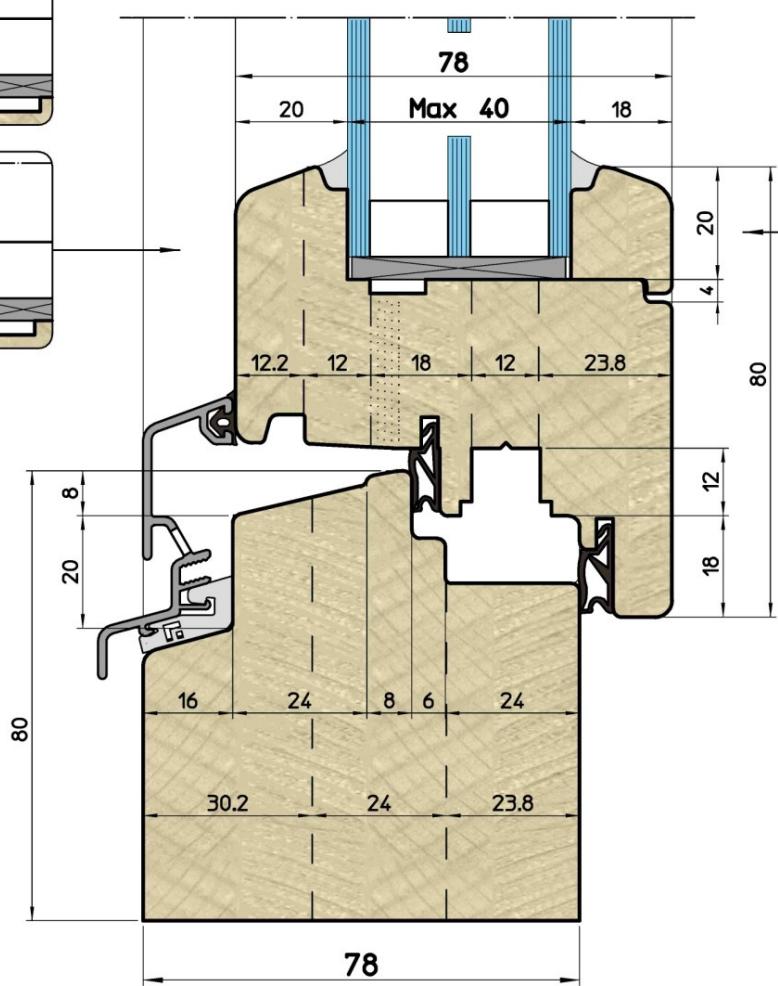
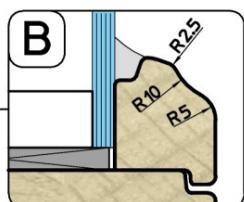
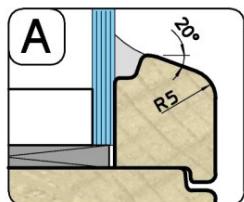
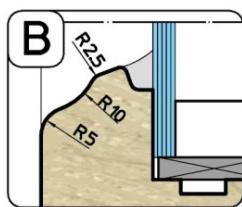
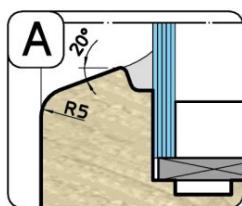
Material	Wood
Thermal insulation	$U_w = 0,9 \text{ W(m}^2\text{K)}$
Acoustic insulation	up to 41 $R_w$ (dB)
Insulating glass	Glazing thickness 28/40 mm
Security hardware	YES
Dimensions in mm.	
Thickness of sash	78 x 80 mm
Thickness of frame	78 x 75 mm
Section sash + frame	94,5 mm
Section of intersection 2 sashes	134 mm
Types of opening	
Fixed	-
Doors and windows with sash/wing	-
Transom window	-
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)	
Soft wood: $U_f = 1,2 \text{ W(m}^2\text{K)}$ Hard wood: $U_f = 1,5 \text{ W(m}^2\text{K)}$	
Acoustic insulation values are estimated, for a window with 1 sash, width by height 1230 x 1480 mm	



**MULTI WINDOW APPS™**



IV 78





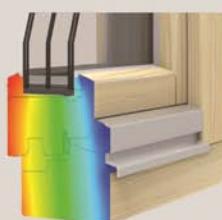
## MULTI WINDOW APPS™

### IV 92

Multi Window aplikacije™ "IV 92" je nas 2. modul s CE certifikatom što u kombinaciji s integriranim modelom IV78, omogućuje ostvarivanje visokih performansi prozora, imajući posebno elegantan dizajn i najnoviju tehnologiju.

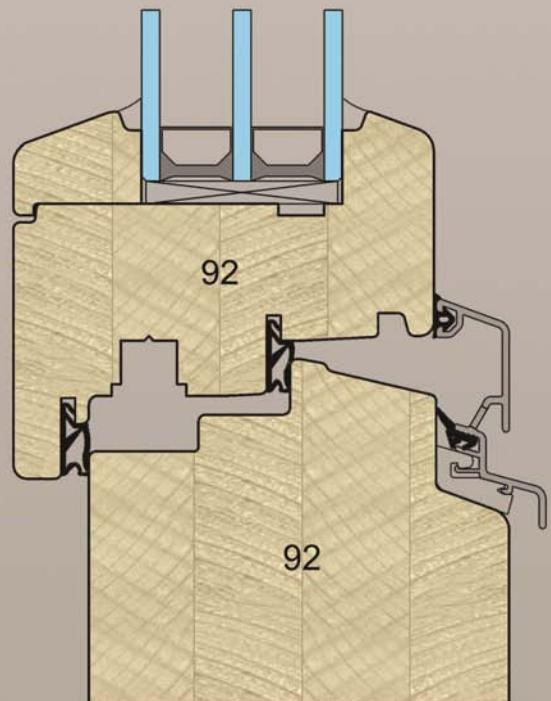
Multi Window Apps™ IV 92" može se realizirati kupnjom samo alata za 92 mm i onda mozete pristupiti proizvodnji prozora sa debeljinom 92 mm

Zbog debeljine i tehnoloških rješenja koji posjeduje to jeste : izvedbu zraka, vode i vjetra i prolaska topline su posebno visoka i stoga je cijenjen od najzahtjevnijih kupaca.

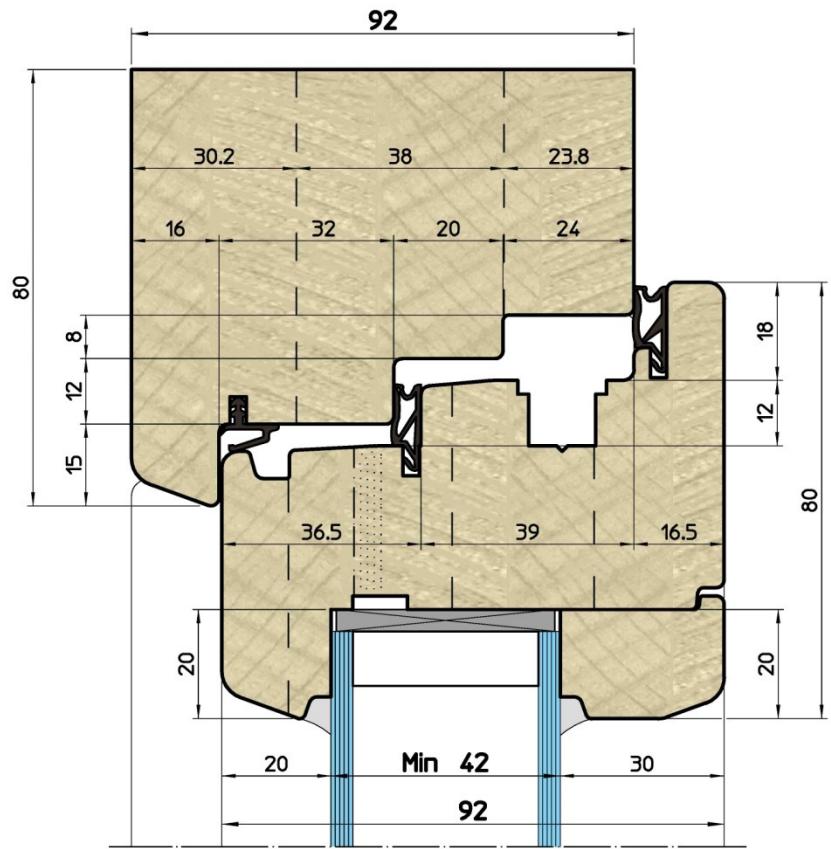


	<i>Soft wood</i>	<i>Hard wood</i>
$U_f = 1,0 \text{ W(m}^2\text{K)}$	$U_f = 1,3 \text{ W(m}^2\text{K)}$	
$U_g = 0,6 \text{ W(m}^2\text{K)}$	$U_g = 0,6 \text{ W(m}^2\text{K)}$	
$\Psi_g = 0,04 \text{ W(mK)}$	$\Psi_g = 0,04 \text{ W(mK)}$	
$U_w = 0,8 \text{ W(m}^2\text{K)}$	$U_w = 1,0 \text{ W(m}^2\text{K)}$	

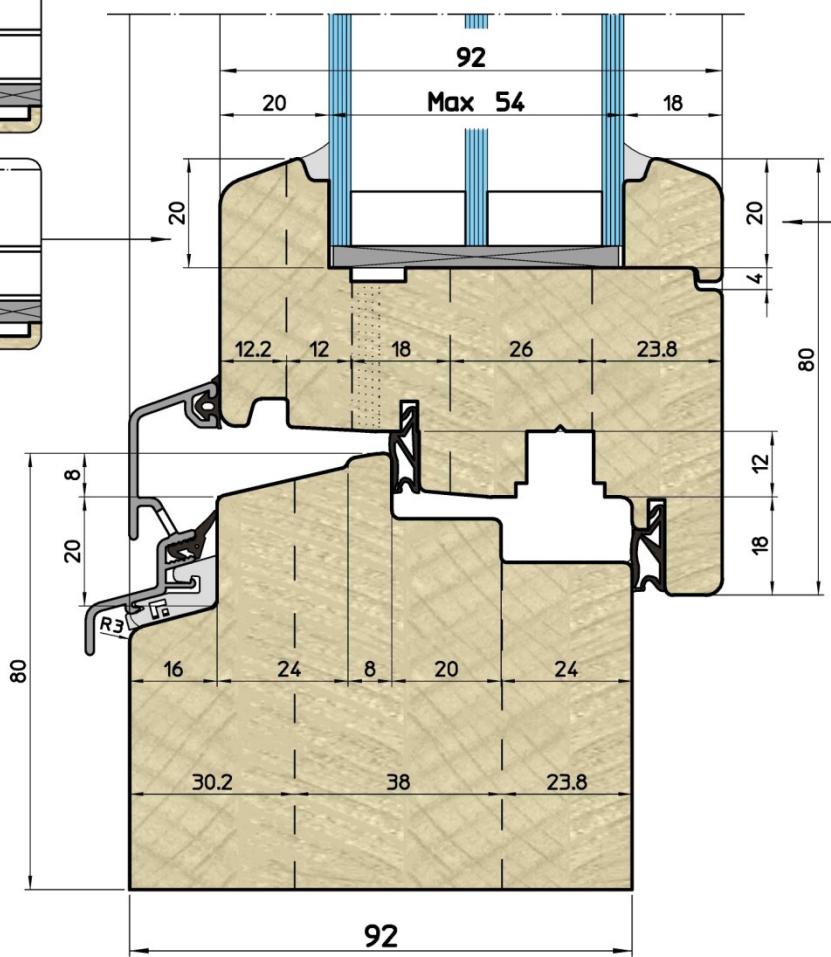
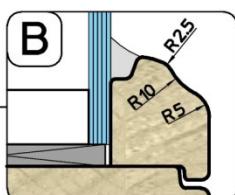
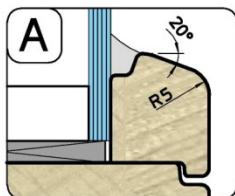
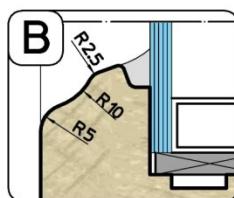
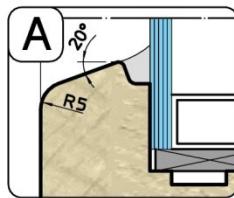
Material	Wood
Thermal insulation	$U_w = 0,8 \text{ W(m}^2\text{K)}$
Acoustic insulation	up to 42 $R_w$ (dB)
Insulating glass	Triple glazing Thickness 40/54 mm
Security hardware	YES
Dimensions in mm.	
Thickness of sash	92 x 80 mm
Thickness of frame	92 x 75 mm
Section sash + frame	108,5 mm
Section of intersection 2 sashes	134 mm
Types of opening	
Fixed	-
Doors and windows with sash/wing	-
Transom window	-
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007	
Measurement UNI EN ISO 12567-1 2002	
LxH (1230x1480mm 1 sash window)	
Soft wood: $U_f = 1,0 \text{ W(m}^2\text{K)}$	
Hard wood: $U_f = 1,3 \text{ W(m}^2\text{K)}$	
Acoustic insulation values are estimated, for a window with 1 sash, width by height 1230 x 1480 mm	



**MULTI WINDOW APPS™**



IV 92





## MULTI WINDOW APPS™

### Zero System Rigorous and Minimal Design

Sistem Zero je izraz arhitektonskog minimalizma, bez odustajanja dobre izvedbe toplinske izolacije.

Izvana, nestane krilo ostaje samo stok na zidu i omogućuje maksimalnu svjetlo u sobama, jedinstven i pravog protagonista ovog rješenja.

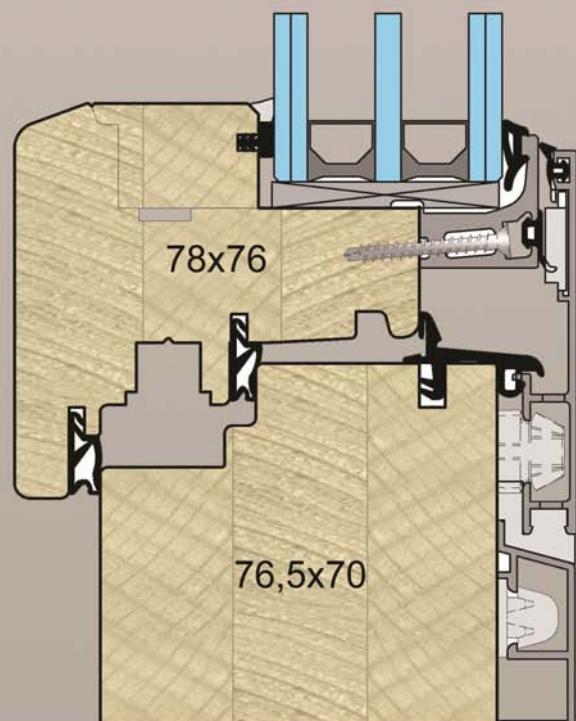
Sistem Zero strog dizajn i linearno dopušta korištenje ovog prozora drvo / aluminij u stambenim i poslovnim okruženjima.

Ravan dizajn površine omogućuju svi elementi fasade neprimjetno integrirati u kontinuitet.



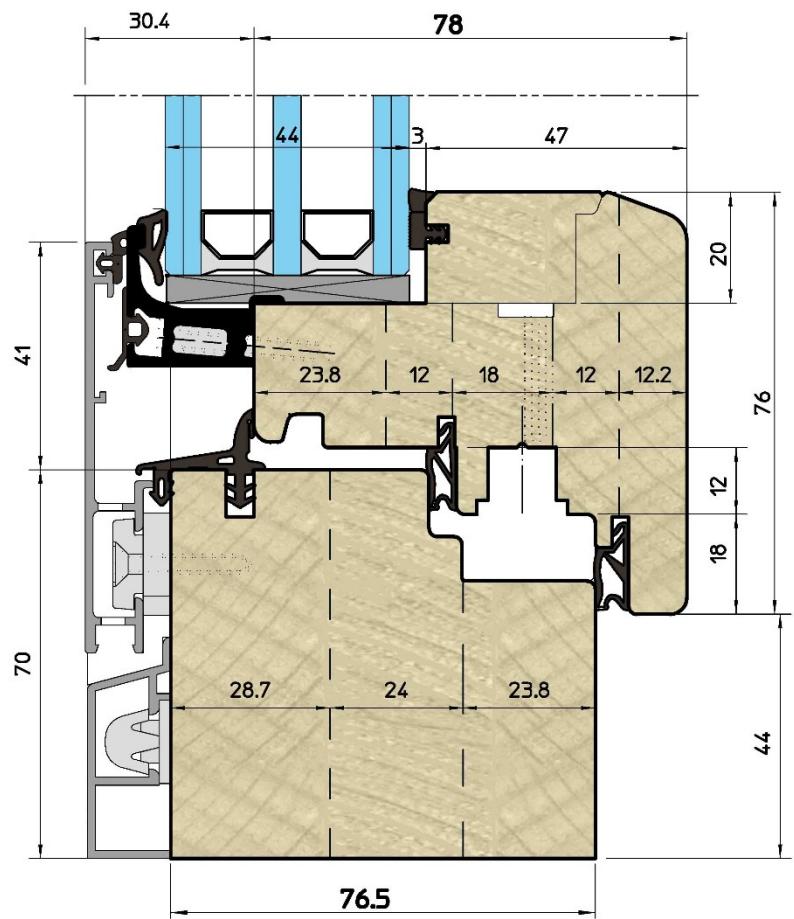
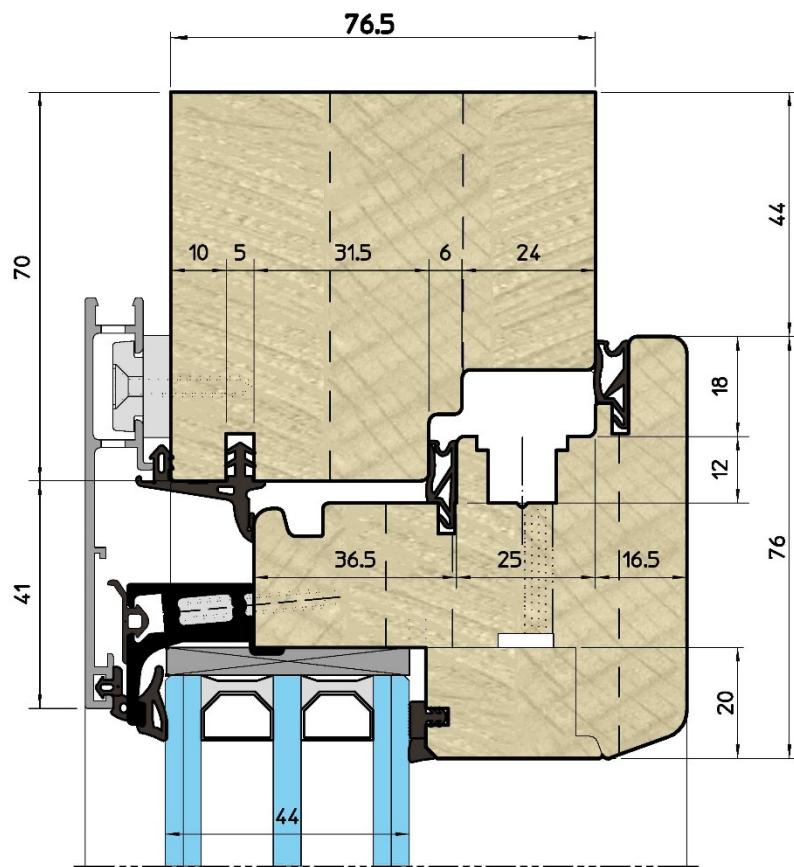
<i>Soft wood</i>	<i>Hard wood</i>
$U_f = 1,1 \text{ W(m}^2\text{K)}$	$U_f = 1,3 \text{ W(m}^2\text{K)}$
$U_g = 0,6 \text{ W(m}^2\text{K)}$	$U_g = 0,6 \text{ W(m}^2\text{K)}$
$\Psi_g = 0,04 \text{ W(mK)}$	$\Psi_g = 0,04 \text{ W(mK)}$
$U_w = 0,9 \text{ W(m}^2\text{K)}$	$U_w = 1,1 \text{ W(m}^2\text{K)}$

Material		Wood/Aluminium
Thermal insulation	🏡	$U_w = 0,9 \text{ W(m}^2\text{K)}$
Acoustic insulation	🏡	up to 41 $R_w$ (dB)
Insulating glass	玱	Triple glazing thickness 44/52 mm
Security hardware	🏡	YES
Dimensions in mm.		
Thickness of sash		101 x 76 mm
Thickness of frame		91,5 x 70 mm
Section sash + frame		108 mm
Section of intersection 2 sashes		126 mm
Types of opening		
Fixed	-	
Doors and windows with sash/wing	-	
Transom window	-	
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)		
Soft wood: $U_f = 1,1 \text{ W(m}^2\text{K)}$		
Hard wood: $U_f = 1,3 \text{ W(m}^2\text{K)}$		
Acoustic insulation values are estimated, for a window with 1 sashes, width by height 1230 x 1480 mm		



# MULTI WINDOW APPS™

## ZERO SYSTEM





## Termoscudo Easy-Flat Passive Window

Sistem Termoscudo Easy-Flat sa karakteristikam ostrih ivica uklapa se u sve stambeno poslovni potrebe, izrazen je suvremeniji dizajn sa strogim ostrim linijama. Njegova ravnost-complanarnost donosi drvo-aluminij okvir prozora za bilo koje moderne zgrade, gdje su bitne izrazitost cistih linija i jednostavnost linija. Izolacija je osigurana sistem Termoscudo okrenut je konceptu izvedbe okvira, s UW vrijednostima između 0,78 i 0,74 W / m<sup>2</sup>. Površine profila također omogućuje savršenu zavarivanje svih elemenata koji učestvuju u Termoscudo sistem, a on nalaze se između drva i aluminijskog okvira i vrata i XPS gdje može doći do iznimno niske propuštanja vrijednosti toplinske.

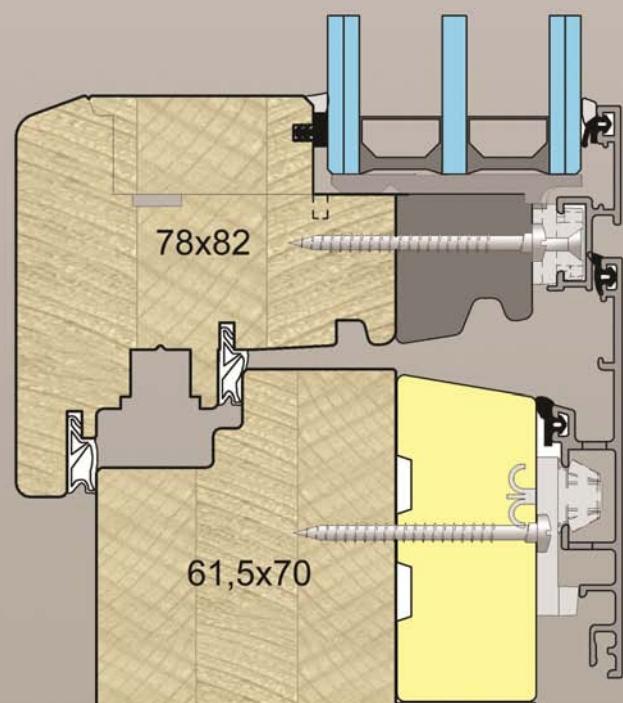
Nova tehnologija omogućuje Termoscudo zadržati estetiku prozora.

Dimenzije su stoga vrlo niska, a rezultat je savršena ravnoteža između estetike i energetske provodljivosti odnosno ustede toplinske energije.

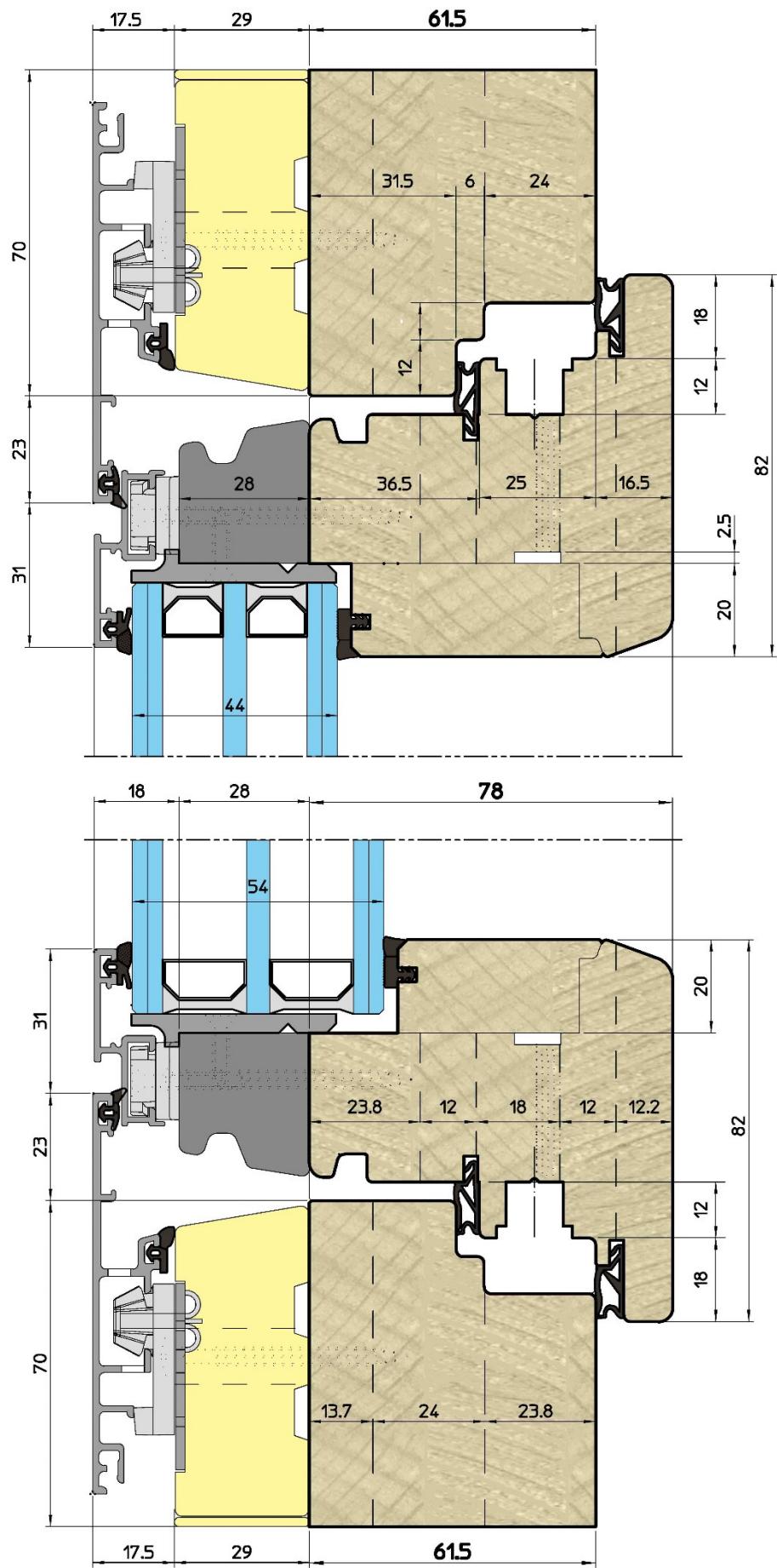


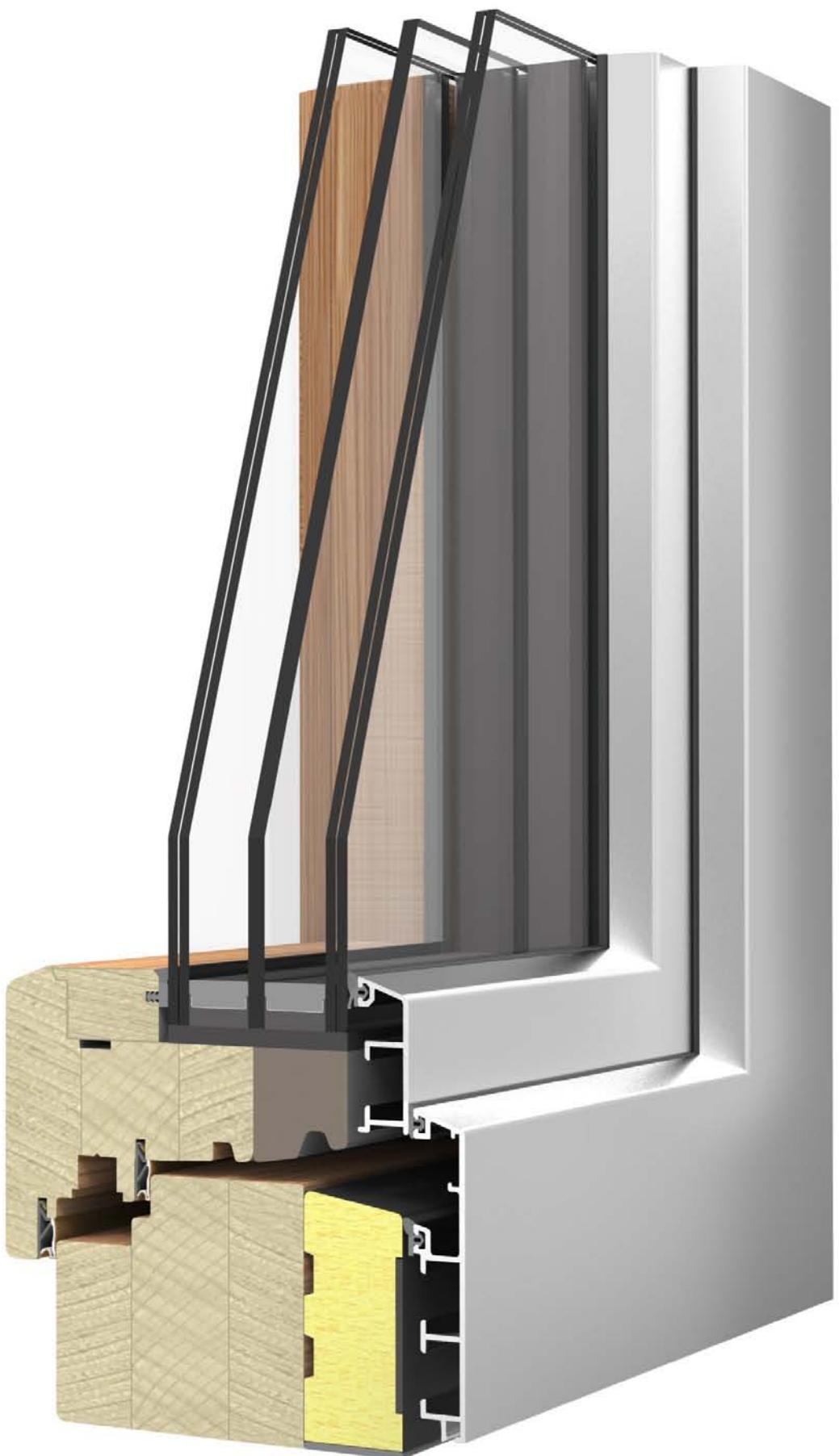
	<i>Soft wood</i>	<i>Hard wood</i>
Uf =	0,8 W(m <sup>2</sup> K)	Uf = 0,9 W(m <sup>2</sup> K)
Ug =	0,6 W(m <sup>2</sup> K)	Ug = 0,6 W(m <sup>2</sup> K)
Ψg =	0,04 W(mK)	Ψg = 0,04 W(mK)
Uw =	0,74 W(m <sup>2</sup> K)	Uw = 0,84 W(m <sup>2</sup> K)

Material	Wood/Aluminium
Thermal insulation	Uw= 0,74 W(m <sup>2</sup> K)
Acoustic insulation	up to 43 Rw (dB)
Insulating glass	Triple glazing Thickness 44/52 mm
Security hardware	YES
Dimensions in mm.	
Thickness of sash	124 x 82 mm
Thickness of frame	108 x 70 mm
Section sash + frame	124,5 mm
Section of intersection 2 sashes	138 mm
Types of opening	
Fixed	-
Doors and windows with sash/wing	-
Transom window	-
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)	
Soft wood: Uf= 0,8 W(m <sup>2</sup> K) Hard wood: Uf= 0,9 W(m <sup>2</sup> K)	
Acoustic insulation values are estimated, for a window with 1 sash, width by height 1230 x 1480 mm	



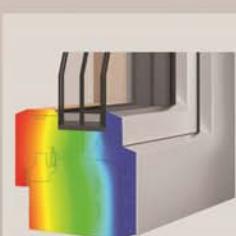
**MULTI WINDOW APPS™**  
**TERMOSCUDO EASY-FLAT**





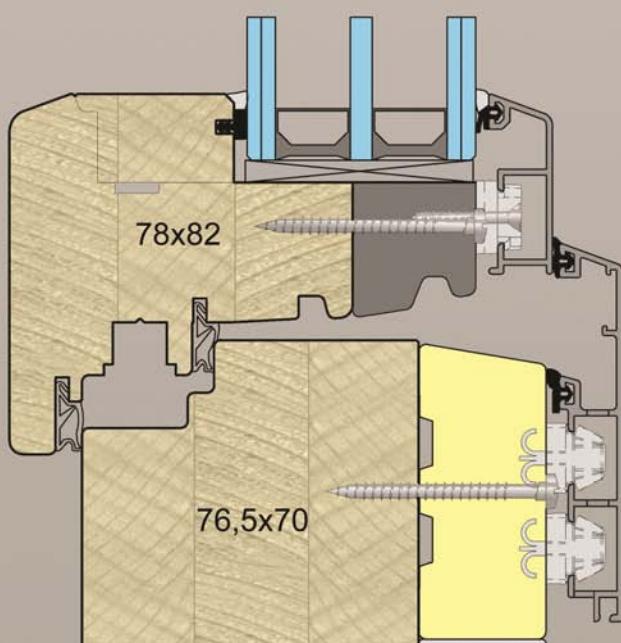
## Termoscudo Easy-Line Passive Window

Sistem Termoscudo Easy-Line, sa svojim tradicionalnim dizajnom i njegova klasična linija je pogodno za stvaranje klasični okvir, ali s visokim sadržajem performansi. Toplinska provodljivost, zajamčeno tehnologije Termoscudo javlja se vrijednosti izolacije (UW) između 0,77 i 0,74 W / m<sup>2</sup> K. U Termoscudo sistema, nalaze se između drveta i aluminijskog okvira i vrata u XPS da može doći do iznimno niske propuštanja vrijednosti toplinske. Nova tehnologija omogućuje Termoscudo zadržati estetiku prozora. Dimenzije su stoga vrlo niska, a rezultat je savršena ravnoteža između estetike i energetsku učinkovitost.



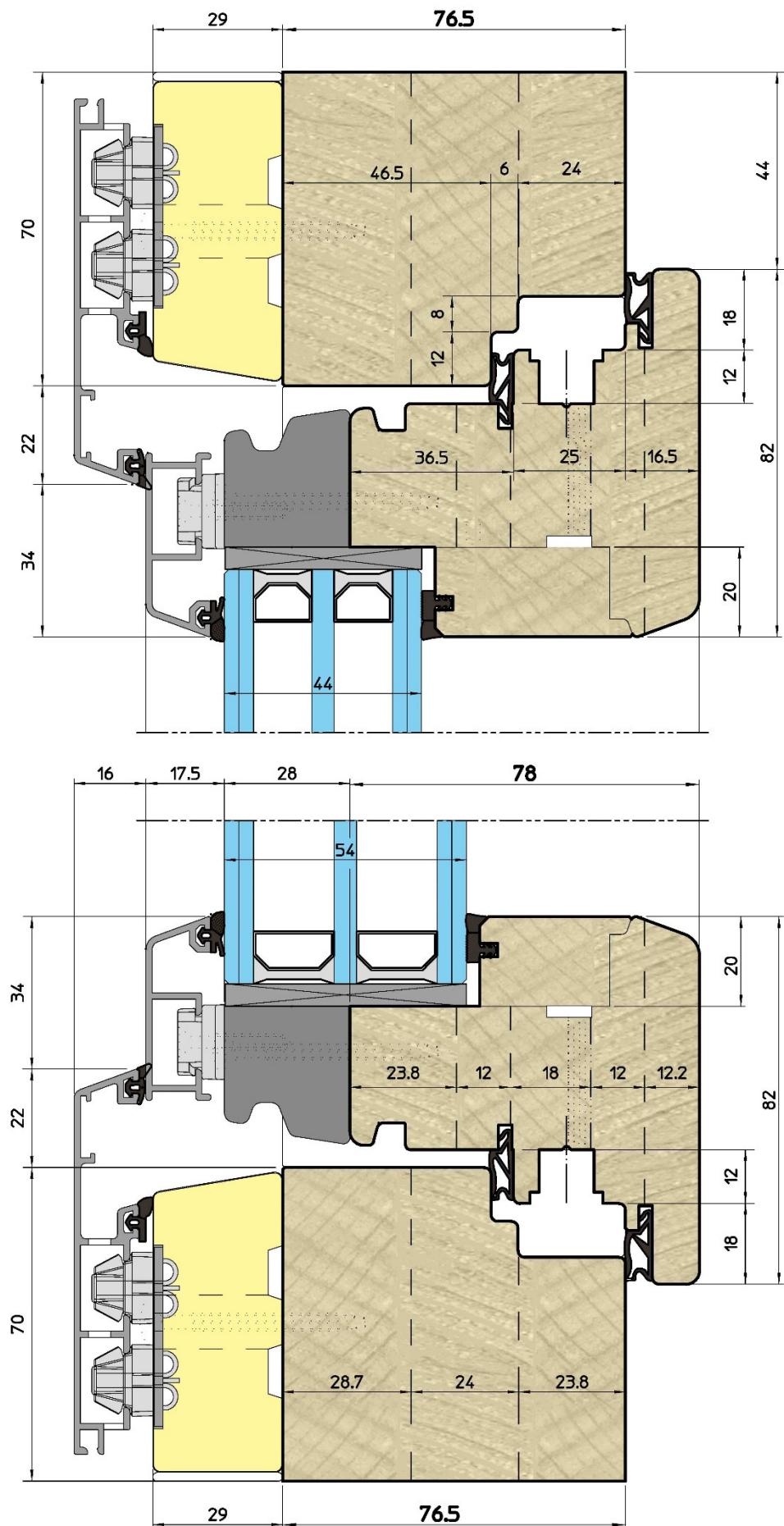
	<i>Soft wood</i>	<i>Hard wood</i>
Uf =	0,8 W(m <sup>2</sup> K)	Uf = 0,9 W(m <sup>2</sup> K)
Ug =	0,6 W(m <sup>2</sup> K)	Ug = 0,6 W(m <sup>2</sup> K)
Ψg =	0,04 W(mK)	Ψg = 0,04 W(mK)
Uw =	0,74 W(m <sup>2</sup> K)	Uw = 0,84 W(m <sup>2</sup> K)

Material	Wood
Thermal insulation	Uw= 0,74 W(m <sup>2</sup> K)
Acoustic insulation	up to 43 Rw (dB)
Insulating glass	Triple glazing thickness 44/52 mm
Security hardware	YES
Dimensions in mm.	
Thickness of sash	123,5 x 82 mm
Thickness of frame	123 x 70 mm
Section sash + frame	139,5 mm
Section of intersection 2 sashes	138 mm
Types of opening	
Fixed	-
Doors and windows with sash/wing	-
Transom window	-
Thermal transmittance values are calculated according to UNI EN ISO 10077-1/2007 Measurement UNI EN ISO 12567-1 2002 LxH (1230x1480mm 1 sash window)	
Soft wood: Uf= 0,8 W(m <sup>2</sup> K)	
Hard wood: Uf= 0,9 W(m <sup>2</sup> K)	
Acoustic insulation values are estimated, for a window with 1 sash, width by height 1230 x 1480 mm	



# MULTI WINDOW APPS™

## TERMOSCUDO EASY-LINE



**MULTI WINDOW APPS™**

## The characteristics of the system

Multi Window Apps™ je ključ uspjeha, te je sinonim za konkurentnost i fleksibilnost: To vam omogućuje da stvorite prozorske sisteme za izvedbu i dizajn za sami vrh europskog tržišta.

Zahvaljujući 3 modula, investicija je proporcionalan vašoj sposobnosti i potrebe, u bilo koje vrijeme, možete kupiti ujedinjenje alata za kompletan asortiman rješenja koje ćete željeti ponuditi svojim klijentima.

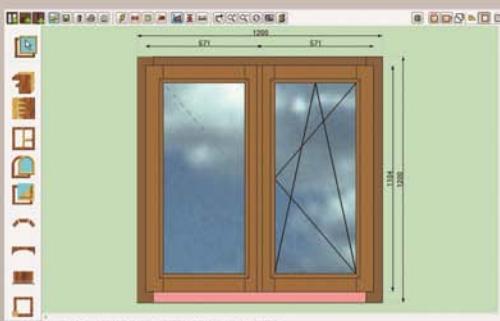
1. modul IV 78
  2. modul IV 92
  3. modul IV 78 DRVO ALUMINIJ SISTEM

To je kompletan SISTEM , uz set alata omogucavamo Vam potpisati ugovor za korištenje CASCADINGA i sva potrebna dokumentaciju za Mercatura Windows CE.

Uz certifikacije C.E.nudimo jednostavan program za izračun rezanja krojne liste, dimenzije stakla i prolaska topline prema standardu 10077-2.

Vjerujte našem iskustvu, Garniga 45 godina je među igračima referenca europskom tržištu.

## **SOFTEV ZA C.E CERTIFIKAT**



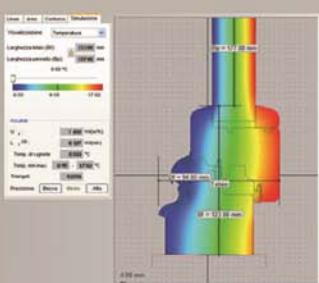
### **Projekt prozora**

Cutting List					
Order	4	Item	Reference	Quantity	Date
One item can be change below - min.					
<b>Sash</b>					
<b>Qty</b>	<b>RowLang.</b>	<b>Finished</b>	<b>Sett.</b>	<b>Thickness</b>	<b>Description</b>
2	1,120	1,100	50	63.0	HORIZONTAL SASH
2	1,120	1,090	50	63.0	HORIZONTAL SASH
2	467	440	50	63.0	TRIPIED SASH
2	467	440	50	63.0	TRIPIED SASH
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	
<b>Frame</b>					
<b>Qty</b>	<b>RowLang.</b>	<b>Finished</b>	<b>Sett.</b>	<b>Thickness</b>	<b>Description</b>
2	1,224	1,200	50	63.0	HORIZONTAL SASH
2	1,224	1,180	50	63.0	HORIZONTAL SASH
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	
<b>Cutter</b>					
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	
<b>Total piece</b>		<b>Total piece</b>		<b>Total piece</b>	

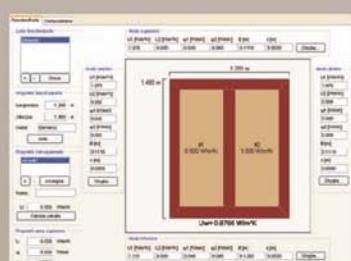
## **Lista rezanja (krojna lista)**

<b>PANE</b>		
Comments <sup>a</sup> Elements Delete Project	PRN A12 Dk24	
<hr/>		
<b>PRN A12 Dk24</b>		
Veto		
<hr/>		
<b>Table 1</b>		
	Coordinate System	WGS 84
	Coordinate Input	Coordinate Result
	X	0.0
	Y	0.0
	Z	980.0
	Easting	427.0
	Northing	427.0
	Altitude	0.0
<hr/>		
<b>Table 2</b>		
	Coordinate System	WGS 84
	Coordinate Input	Coordinate Result
	X	0.0
	Y	0.0
	Z	980.0
	Easting	427.0
	Northing	427.0
	Altitude	0.0

## **Dimenzijs stakla**



Uw Faktor



**Uw Faktor**



C.E. znak  
Certifikat





Thanks to the partners who have participated to this project:

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Company who represents Garniga in your country:



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