

WINDOWS | TERRACE DOORS | EXTERIOR DOORS | PVC

# CONTINUOUS

since 1994



Since 1994 DAKO has developed an unrivalled reputation for innovation, quality and workmanship as a manufacturer of a wide range of high-performance PVC, timber, aluminium and steel products that meet global Clients' needs.

The company's growing success can be attributed to its continually modernized production process, cutting-edge technologies and continuous adaptation to changing Client requirements. DAKO improves its employee competencies, continuously invests in company development and successfully expands into new markets. The company has sold millions of windows worldwide and boasts a record of strong Client satisfaction.

#### We currently work with the following countries:

Germany, Italy, Norway, Sweden, France, Belgium, Czech Republic, Slovakia, Poland, Luxembourg, Spain, Israel, Tunisia, Mexico, Japan and many others.

#### Comprehensive range of products - Find out more



















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# WAY TO QUALITY

Explore the way to DAKO quality. Learn how proceeds the process which aims at meeting the individual expectations of every single customer.

#### Analysis of technological opportunities

The technological progress gives the joinery producers an increasing number of possibilities. To meet growing expectations of customers the manufacturers must constantly follow technological innovations and modify the range of products by introducing the solutions that best meet the users' needs. DAKO company has a team of qualified and experienced engineers forming the Product Development Department, which is responsible for products development.

#### Selection of the best components

All products are made of components supplied by producers recognised by the worldwide markets. The highest quality PVC profiles, timber of optimum physical and mechanical properties and aluminium systems used in the most prestigious projects guarantee reliability and durability of DAKO products. Glasses and fittings from renowned suppliers ensure maximum energy saving, security and functionality of our products.

#### Innovative technological park

Combining components in the efficiently operating system requires cutting-edge machines. DAKO joinery is produced in the technological park which is one of the most innovative object of this type. The precise, numerically-controlled woodworking, milling, welding machines and saws operate in three production halls with total surface of 23 400 m<sup>2</sup>. The park also has a testing laboratory, powder paint shop and profile edge banding shop, ensuring full control over product finish quality.

#### **Experienced and qualified staff**

The production process is carried out and controlled by qualified specialists and engineers having long job seniority. Regular trainings and tests ensure a high level of competencies, required to construct complex windows, modern terrace doors with large glazing and other advanced solutions.

#### Adherence to stringent standards

In order to ensure the highest production standards, DAKO undergoes assessment, control and certification procedures. They result in authorisations, certificates and rights to use the marks confirming products quality. DAKO has, among others, Q-Zert certificate issued on the base of the audit carried by the IFT Rosenheim, the most important research centre in Europe. Additionally, DAKO products are compliant with the European Standard CE, and the authorisations from the suppliers of components confirm that they meet rigorous safety requirements.

#### **Quality control**

DAKO has a department responsible for quality control, that is an important link in the production process. Both received components and ready-made products undergo detailed controls. Each production line has its own controllers who supervise specialists' work. The additional control is carried out randomly by the patrols that inspect the production process on all lines.

#### Transport fleet

Windows, as the exceptionally sensitive products need to be appropriately treated during transport. The own vehicle fleet allows for complete control over the loading, transport and unloading of our products. Due to DAKO own vehicles we are certain our products reach the customers preserved intact. Additional benefit resulting from our own transport fleet are fixed, regular delivery times that influence the date of order completion.

#### Competent sales advisors in the showrooms

The final step in the way to DAKO quality is the showroom. Only professional guidance and correct assesment of the building situation can make the joinery fulfil its function and meet the customers' expectations. DAKO Commercial Partners are the experts with the extensive knowledge and experience that allow to meet the requirements of contemporary architecture.

















# WINDOWS

- COMFORT () INNOVATIONS (\*) AESTHETICS



# DPQ-82 thermoSecure Volume Unique energy efficiency, exceptional security

- Thermo-insulation technology available only in DAKO
- Anti-burglary protection available only in DAKO
- All advantages of DPQ-82 series

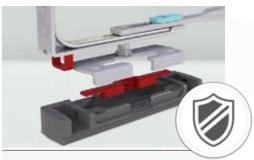
Flag series of DAKO windows constructed with the usage of unique thermal insulation and anti-burglary solution. The results of laboratory tests confirm excellent parameters of DPQ-82 thermoSecure windows.





#### **TERMAL INSULATION**

- 2 unique thermal inserts in frame
- 2 thermal inserts in sash
- Chromatech warm-edge
- FL-KA hinge with pressure adjustment



#### **SECURITY**

- 2 anti-burglary catches in each sash
- One of 2 catches in RU sashes is the unique doublelocking catch
- Secustik handle

<sup>\*</sup>The results of research conducted on the reference window at Laboratorium Techniki Budowlanej in Dąbrowa Górnicza.



# DPQ-82

### Warm dimension of innovation

- Energy efficiency
- Wide choice of additional options
- One system of windows and doors

Advanced solutions responding to the challenges of contemporary architecture. The series perfectly combines the innovations and full functionality what guarantees the residents very good thermal and acoustic insulation and enables to construct the windows, terrace doors and exterior doors.





#### **DPQ-82**

- 7-chamber profile
- 3 seals: 2 edge seals of EPDM (retractable), internal seal of TPE (heat-sealed)
- 3-glass packet  $U_{n}=0,5 \text{ W/m}^{2}\text{K}$



thermoSecure AL



#### **ALUMINIUM CLADDING**

- Increased resistance to atmospheric factors
- Additional thermal and acoustic insulation
- Wide choice of colours, textures and patterns



# DPP-70 Slime Line

### Maximum lighting of the interior

- ✓ Narrow sash and frame
- Lighting of the interior
- Modern visual effect

Innovative DPP-70 Slim Line system has been creted to meet the expectations of growing market requirements. As compared to classic DPP-70 line, the windows in Slim Line system are characterised by exceptionally narrow frame and sash what guarantees greater surface of the windowpane and allows more daylight to be transmitted to the interior. The room becomes more spacious and the large glazing allows us to enjoy the beauty of landscape.





#### **DPP-70 Slime Line**

- 5-chamber A class profile of 70 mm thickness
- double-glass packet
   1,0 W/m²K
- steel of closed cross-section in frame
- 4-stages tilting mechanism







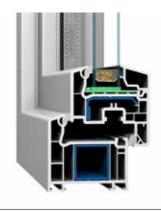
## DPP-70 WS

### Space, warmth, functionality

- ✓ Narrow sash
- Lighting of the interior
- High thermal insulation

Windows of DPP-70 WS series are a proven solution of high thermal insulation and full functionality. Innovative series of energy efficient windows that has been equipped with warm 5-chamber profiles of A class security and double-glass packets for optimal thermal insulation. Fittings with microventlation system influence proper air circulation of the interior. Possibility to choose the profile shape allows to perfectly adjust the window to the building elevation and the interior.





#### **DPP-70 WS**

- 5-chamber A class profile of 70 mm thickness
- double-glass packet
   1,0 W/m²K
- steel of closed cross-section in frame
- 4-stages tilting mechanism



# DPP-70, DPE-70 / DPE-70+

### Three versions of classic solution

- ✓ Warmth and low energy loss
- ✓ Wide range of equipment
- ✓ 3 visual variants

A proven solution guaranteeing good thermal insulation and full functionality. Windows are constructed of warm, 5-chamber profile of A class security and energy efficient double-glass packet as well as richly equipped fitting. Possibility to choose the profile shape allows to perfectly adjust the window to the building elevation and the interior.



**DPP-70**Clearly marked edge



**DPE-70**Modern, rounded edge





DPE-70+
Rounded edge
Sash semi-flushed with frame

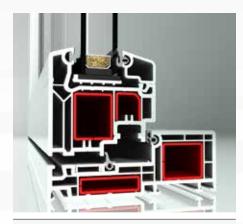


# DANLINE-70

### Window of outward opening

- Energy efficiency
- ✓ Maximum lighting of the interior
- ✓ Installation depth 116 mm

Traditional solution that enables outward opening of the window. Exterior sash provides window tightness in windy conditions. Narrow sash enables maximum transmission of the daylight to the interior. Steel reinforcement of the sash and frame provides security and stability of the construction.



#### **Opening types**

Top Swing

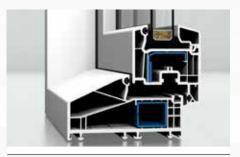


# DPP-70NL

### Warm dimension of innovation

- High reduction of heat loss
- ✓ Possibility to create non-standard constructions
- ✓ Installation depth116 mm

DPP 70 NL is an elegant and classic solution of clearly marked edge profile. Windows appearance and the way of their installation have been adjusted to the standards of Scandinavian and Benelux countries. Warm, 5-chamber profile of A class security with double-glass packet filled with noble gas provides very good thermal insulation properties.



- 4-stages tilting mechanism
- Microventilation
- Anti-burglary catch in RU sash and anti-burglary "mushrooms"





# 120, 140, 160 monoblock

### Energy efficiency, aesthetics, security

- Flexible installation
- Wide choice of options
- ✓ Ideal for your house

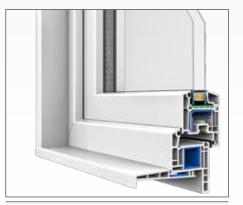
Proven solutions guaranteeing very good thermal insulation and full functionality. This type of installation allows to obtain maximum surface of the windowpane while keeping an excellent thermal insulation. Windows constructed of 5-chamber profile of A class security and energy efficient double-glass packet filled with noble gas have the functional fitting with microventilation option. Possibility to choose the profile shape allows to perfectly adjust the window to the building elevation.

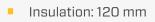


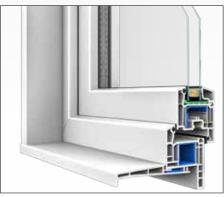
Insulation: 100 mm



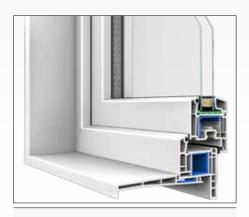
Uw up to **1,3 W/m²K** with double glazing







Insulation: 140 mm



Insulation: 160 mm





### DPB-73R58, DPP-70R65, DPP-70R35

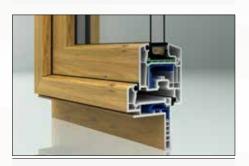
### Classic combined with modernity

- Simple installation
- Wide choice of external veneers
- Aesthetics and saving

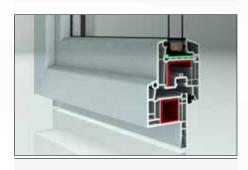
Renovation series of PVC joinery is a solution guaranteeing quick and simple installation that does not interfere with the interior and allows to keep the windowpane clean. The renovation element available in the following versions: 35 mm, 58 mm or 65 mm.



**DPB-73R58** 

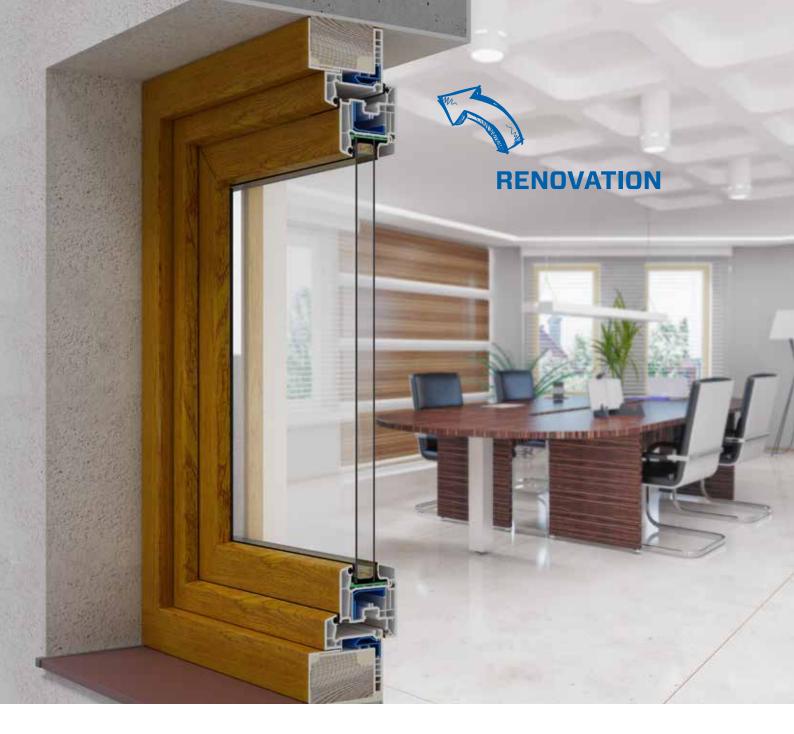


**DPP-70R65** 

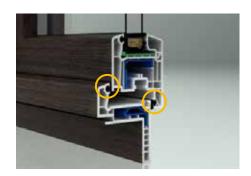


**DPP-70R35** 





#### Available in all systems



#### Insulation

Two seals, 1 in frame, 1 in sash for optimal sealing



#### Security

 Corner fitting in standard enables comfortable closing and increases tightness. The catches are placed every 80 cm (quantity - depending on the order)



#### **CENTRAL** handle

 Central handle 132 mm for double-sash windows (as an option)

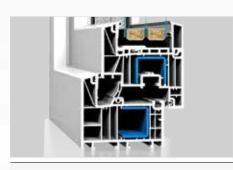


## DPB-82 Energy efficiency

- High thermal insulation
- Reduced price
- Wide range of glazing

The innovative series of energy-saving PVC windows, introduced to the market as the answer to growing market expectations.

Technological optimization allowed the low-priced and high-parameter windows to be produced. The profile enables installation of wide scope of special glasses, i.e. advanced energy-saving glasses (to 52 mm thickness).



- 6-chamber profile of 82 mm thickness
- 3-glass packet 0,5 W/m<sup>2</sup>K
- 3 seals made of thermoplastic-elastomer TPE







# DPB-73 Thermo / DPB-73+ Thermo Increased thermal insulation in standard

- ✓ Thermal insert in frame
- ✓ Thermal insert in sash
- ✓ All advantages of DPB-73/DPB-73+ series

Modern solution of increased thermal insulation, constructed on the basis of DPB-73/DPB-73+ series. Characterised by the use of thermal insert system and rich standard equipment. Two visual variants allow to adjust windows aesthetics to the building elevation.



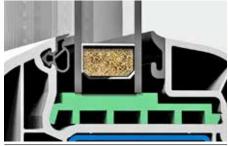
**DPB-73 Thermo**Clearly marked edge

Thermal inserts





DPB-73+ Thermo
Rounded edge
Sash semi-flushed with frame
Thermal inserts



Chromatech warm-edge spacer



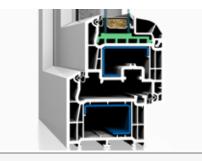


# DPB-73 / DPB-73+

### Advanced technology – low price

- Very attractive price
- Wide range of equipment
- 2 visual variants

Technological optimization of production process allowed for reduction of PVC windows manufacturing costs while keeping the highest DAKO quality. Two visual variants allow for adjusting the window aesthetics to the building elevation.



**DPB-73** Clearly marked edge





**DPB-73+** 

Rounded edge Sash semi-flushed with frame



# QUICK COMPARISON OF SERIES

4 THERMAL INSERTS

FEATURE	SYSTE	DPQ-82 thermoSecure	DPQ-82	DPP-70	DPE-70		
PROFILE							
NUMBER OF CHAMBERS IN FRAME Optimal number of chambers provides bet	ter thermal insulation	( <u>o</u> )	7	7	5	5	
PVC PROFILE THICKNESS Greater profile thickness allows to increas chambers of required dimensions	e the number of the		82 mm	82 mm	70 mm	70 mm	
PERIMETER-SEALS Greater amount of seals improves window	tightness		3	3	2	2	
CONSTRUCTION REINFORCEMENT Reinforcement of PVC profile provides incorprotection against possible jemmying.	reased stability and		full steel in frame	full steel in full steel frame frame		full steel in frame	
HANDLE							
HANDLE TYPE Handle influences the aesthetics of windo security of householders	ws and may increase the		Secustik	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium	
STANDARD GLASS PAC	KET						
TYPE OF GLASS PACKET Greater amount of chambers in glass packet provides better thermal insulation  U GLASS VALUE Lower U glass value provides better thermal insulation  FILLING WITH ARGON Argon gas in inter-pane voids improves thermal insulation  STANDARD FITTING  FITTING TYPE  Modern fittings are reliable and give the windows exceptionally elegant appearance			3-glass packet, 4x18x4x18x4 with Chromat- ech warm-edge spacer	3-glass packet 4x18x4x18x4	2-glass packet 4x16x4	2-glass packet 4x16x4	
			0,5 W/m²K	0,5 W/m²K	1,0 W/m²K	1,0 W/m²K	
			<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
			Standard Plus	Standard	Standard	Standard	
CHOOSEN FITTINGS							
SLOT VENTILATION	SLOT VENTILATION			<b>~</b>	<b>~</b>	<b>~</b>	
INVISIBLE HINGES			<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
TILT FIRST			<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
CHOSEN ENERGY EFFICIENT SPECIAL GLASSES							
3-glass packet 4/14/4/14/4 Increased thermal insulation	$(U_g = 0.6 \text{ W/m}^2\text{K})$	*	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	
<b>3-glass packet 44.4/14/4/14/4</b> Security and protection	$(U_g = 0.6 \text{ W/m}^2\text{K})$		<b>~</b>	<b>~</b>	×	×	
3-glass packet 4/14/4/14/33.1 Warmth and security	$(U_g = 0.6 \text{ W/m}^2\text{K})$		<b>~</b>	<b>~</b>	×	×	
3-glass packet 44.2/12/6/12/6 Silence and security	$(U_g = 0.7 \text{ W/m}^2\text{K})$		<b>~</b>	<b>~</b>	×	×	
4-glass packet 4/12/4/12/4 $(U_g = 0.3 \text{ W/m}^2\text{K})$ Maximum energy saving			<b>~</b>	<b>~</b>	×	×	

#### Key:

- 🗸 available option
- × unavailable option

2 THERMAL INSERTS	2 THERMAL INSERTS	THE PARTY OF THE P						
DPE-70+	DANLINE 70	DPP-70 NL	DPP-70R35 MB	DPP-70R65	DPP-70R35	DPB-82	DPB-73/73+ Thermo	DPB-73/ DPB-73+
5	5	5	5	3	5	6	5	5
U	U	Ü	U	U	J	U	J	J
70 mm	116 mm	70 mm	70 mm	70 mm	70 mm	82 mm	73 mm	73 mm
2	2	2	2	2	2	3	2	2
full steel in frame	full steel in frame	full steel in frame	full steel in frame	steel in frame	full steel in frame	steel in frame	steel in frame	steel in frame
standard, made of aluminium	made of aluminium, white or sliver	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium	standard, made of aluminium
2-glass packet 4x16x4	2-glass packet 4x16x4	2-glass packet 4x16x4	2-glass packet 4x16x4	2-glass packet 4x16x4	2-glass packet 4x16x4	3-glass packet 4x18x4x18x4	2-glass packet 4x16x4 with Chromat- ech warm-edge spacer	2-glass packet 4x16x4
1,0 W/m²K	1,0 W/m²K	1,0 W/m²K	1,0 W/m²K	1,0 W/m²K	1,0 W/m²K	0,5 W/m²K	1,0 W/m²K	1,0 W/m²K
~	~	~	~	~	~	~	~	~
Standard	PN Mila	Standard	Standard	Standard	Standard	Standard DPB-82	Standard DPB-73	Standard DPB-73
<b>~</b>	×	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	×	×	×
<b>~</b>	×	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	×	×	×
<b>~</b>	×	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	×	×	×
<b>~</b>	~	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	~
×	×	×	×	×	×	×	×	×
×	×	×	×	×	×	×	×	×
×	×	×	×	×	×	<b>~</b>	×	×
×	×	×	×	×	×	×	×	×

# FITTINGS FUNCTIONS

CHECK AND COMPARE FITTINGS FUNCTIONS			Standard DPB-82	Standard	Standard Plus	Slot ven- tilation	Invisible hinges	Tilt first
MICROVENTILATION Allows for gentle unsealing of the window and better air circulation	<b>(S)</b>	<b>~</b>	<b>~</b>	~	<b>~</b>	×	<b>~</b>	~
ANTI-BURGLARY "MUSHROOM" BOLTS ALONG THE ENTIRE SASH PERIMETER Prevent the window from being pried open		•	•	~	<b>~</b>	~	<b>~</b>	~
UNIQUE ANTI-BURGLARY CATCH IN RU SASH The catch with double lock prevents the window from being pried open		×	×	×	1	×	×	×
ANTI-BURGLARY CATCHES IN RU SASH Prevent the window from being pried open		×	1	2	1	4	2	2
ANTI-BURGLARY CATCH IN R or U SASH Prevent the window from being pried open		×	1	×	2	×	×	×
ADDITIONAL ANTI-BURGLARY CATCHES Greater amount of the catches makes the window more secure		×	×	•	•	•	•	•
REINFORCEMENT FOR THE SASH OF WEIGHT TO 150 KG Guarantees better and more secure functioning of big sashes		×	×	×	×	×	<b>~</b>	×
HANDLE ROTATION BLOCKADE Prevents the tilt sash from being opened		×	×	×	×	~	×	×
HANDLE ROTATION BLOCKADE WITH LIFT MECHANISM Prevents the tilt sash from being opened		•	<b>~</b>	<b>~</b>	<b>~</b>	×	<b>~</b>	~
BK BALCONY LATCH Maintains closed sash without using the handle	<b>3</b>	•	•	•	•	•	•	•
WINDOW LOCK  Makes the window opening impossible without key use (tilt only)		•	×	•	•	×	•	×
TURN-RESTRICTOR Prevents the sash from hitting the frame		•	•	•	•	×	×	×
WINDOW BRAKE Allows for stabilising the position of sash at any arrangement		×	×	•	•	×	×	×

Indication of sashes:

R - turn | U - tilt | RU - turn&tilt

- standard element

- optionally available element 💢 - unavailable element

Get to know how to take advantages of special fittings.

Take a look at what THE INDIVIDUAL CHOICE OF WINDOWS OFFERS is p. 34



#### FITTINGS FUNCTIONS



#### STANDARD PLUS

The fitting has been equipped with two anti-burglary catches in each sash. In turn&tilt sashes one of the anti-burglary catches is the unique anti-burglary blockade with double lock available only in DAKO.

Additionally, the handle rotation blockade with lift mechanism influencing easy operation of this elements has been applied in this fitting.



#### TILT FIRST

The handle set horizontally tilts the window, while full opening requires the handle to be set vertically. In connection with TBT handle it allows to restrict the possibility of sash opening. Without the key it can only be tilted what eliminates the risk of falling out.



#### INVISIBLE HINGES

When the sash is closed the hinges are invisible what gives the windows exceptionally elegant appearance and facilitates keeping them clean. A great advantage of the fittings is an easy regulation without using the tools.



#### SLOT VENTILATION

The system enables to achieve the distance of 6 mm between sash and frame what ensures efficient ventilation without radical cooling of the interior. During ventilation the fitting has an increased level of protection

against burglary and the vertical position of the handle does not show that the window is unsealed. The sash maintains stable position under wind pressure and the slot dimensions allow the interior to be ventilated during rain.

#### **MOVEMENT SENSORS**





The sensors integrated with the fitting transmit the information of window closing or opening to the selected systems activating them accordingly to the user's expectations.

#### USAGE

**Air-conditioning** – window opening causes automatic deactivation of the air-conditioners and gives savings resulting from limiting inefficient air-conditioning operation.

**Heating** – sash opening causes deactivation of the heater under the window, therefore, the costs of inefficient heating can be avoided. nic

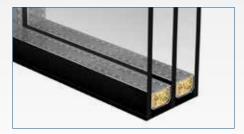
Alarm system - information of the window status is transmitted to

the alarm system, activating the alarm, if needed.

- Three-function sensors distinguish the closed, tilted and opened window so the alarm system can be protected during ventilation.
- Sensors do not react to movement what allows them to be active when residents and animals are at home.
- Sensors are invisible from the outside and, therefore, the burglars cannot prepare themselves for attempting to disarm them.



# GLASSES



3-glass packet 4/14/4/14/4 **INCREASED THERMAL INSULATION** 

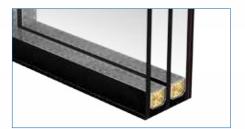
Improves thermal insulation of windows. Total thickness of glass packet allows for its installation in all windows, regardless of the profile thickness.



Total solar energy transmittance: g=51%

Light transmittance: Lt=72%

Thermal permeability: U<sub>g</sub> = 0,6 W/m²K



3-glass packet4/14/4/14/33.1 WARMTH AND SECURITY



Internal glass is covered by foil, therefore, broken glass does not disintegrate what excludes the risk of injury.

#### TECHNICAL PARAMETERS -

Safety class: B2B

Total solar energy transmittance: g=47%

Light transmittance: Lt=70%

Thermal permeability: U<sub>a</sub> = 0,6 W/m<sup>2</sup>K

#### WARM-EDGE SPACERS



Warm-edge spacer improves thermal performance of the window.



Chromatech (standard for DPQ-82 thermoSecure, DPB-73 Thermo, DPB73+ Thermo series)



3-glass packet 4/18/4/18/4 WARMTH AND EXTRA LIGHTING

Provides greater permeability of solar energy and light as well as improves heating and lighting of the interior.

#### TECHNICAL PARAMETERS

Total solar energy transmittance: g=50%

Light transmittance: Lt=70%

Thermal permeability: U<sub>g</sub> = 0,5 W/m²K



3-glass packet 44.2/12/6/12/6 SILENCE AND SECURITY



Glass construction ensures high level of protection against burglary and increased acoustic insulation.

#### TECHNICAL PARAMETERS -

Safety class: P2

Acoustic insulation coefficient: R<sub>w</sub>=39dB

Thermal permeability: U<sub>a</sub>= 0,7 W/m<sup>2</sup>K



3-glass packet 44.4/14/4/14/4 SECURITY AND PROTECTION



Characterised by high impact resistance. It is equipped with a filter protecting against high-energy fractions of sunlight and UV radiation.

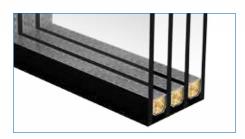
#### TECHNICAL PARAMETERS

Safety class: P4

Total solar energy transmittance: q=45%

Light transmittance: Lt=69%

Thermal permeability: U<sub>a</sub>= 0,6 W/m<sup>2</sup>K



#### 4-glass packet 4/12/4/12/4/12/4 MAXIMUM ENERGY SAVING

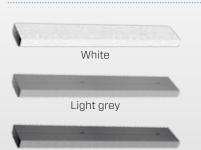
Three chambers of 4-glass packet guarantee maximum thermal insulation making this packet an ideal product for passive houses.

#### TECHNICAL PARAMETERS -

Thermal permeability: U<sub>a</sub> = 0,3 W/m<sup>2</sup>K

Total solar energy transmittance: g=33%

Light transmittance: Lt= 48%



Dark grev



# HANDI FS







1007 HANDLE



1009 HANDLE



Vigilant HANDLE



1030 HANDLE



1033 HANDLE



SECUSTIK® LUKSEM-**BURG HANDLE** 

Protected by the mechanism preventing the window from being opened from the outside.



SECUSTIK® **NEW YORK HANDLE** 

Protected by the mechanism preventing the window from being opened from the outside.



SECUSTIK® LUKSEMBURG HANDLE WITH KEY

Opening Secustik® handle with key requires the key to be used what reduces the risk of accident and prevents the window from being opened from the outside.



Mila HANDLE

Opening Secustik® handle with key requires the key to be used what reduces the risk of accident and prevents the window from being opened from the outside.



1006 HANDLE WITH BUTTON

Window opening requires the lock release with the button what reduces the risk of an accident and prevents the window from being opened from the outside.

#### **COLOURS**



White



Brown - RAL 8019 (does not apply to secustik handles)



F9 - Titanium



F1 - Silver matt



Brown - RAL 8707 (only for secustik handles)



F4 - Old gold



RAL 7016 (dark grey) (2)



RAL 9005 (black) (2)



F2 - Champagne (3)

<sup>(1)</sup> handle 1006 available also in colours: RAL 7016 (dark grey). RAL 9005 (black)

<sup>(2)</sup> available only for handle 1006 (standard) and 1006 with key

<sup>(3)</sup> available only for secustic luksemburg and new york handles



# INDIVIDUAL CHOICE OF WINDOWS





### **EACH HOUSE IS DIFFERENT**

# INDIVIDUAL CHOICE OF WINDOWS - WHAT IS IT?

In order to apply the Individual Choice of Windows to the building we take into account the most important factors that influence the choice of technological solutions suitable for each interior. The floor, insolation, location of noise sources and interior type are those most important to be taken into account.

#### **FLOOR**



According to the police statistics, the ground-floor windows are more susceptible to burglary than the windows located on the higher floors. It concerns mainly the balcony windows. On the other hand, the windows located higher may put at the risk of falling the youngest members of the household.

Carefully selected window fittings and accessories may help to reduces these risks by improving the householdres' security.

#### INSOLATION



Depending on the floor, the windows are subject to greater or lesser sunlight exposure. This has an impact on the quantity of light and UV radiation transmitted to the interior as well as on their heating up. As a result, the interior that are less sun-filled requires heating and lighting by the artificial light, whereas staying in those more sun-filled may be very uncomfortable during summer.

A solution to the problem with the level of insolation is the installation of the glass that regulates the quantity of the daylight transmitted to the interior.

#### NOISE



The noise of busy streets and other sources may significantly affects the comfort of living in a dream house. It deteriorates the quality of sleep and has a bad impact on our general condtion. In case of the elevation exposed to the acoustic waves activity, the weakest link that transmits the sound are windows.

Due to the installation of the acoustic glasses, the sound transmitted to the interior is reduced what improves the householders' comfort.

#### **INTERIOR TYPES**



Each interior has its own character resulting from its function. From the bedroom we expect an ideal microclimate during the rest, and the children's room should be free from any risks. The living room is a representative place where the aesthetic plays a key role, while the bathroom and kitchen are particularly exposed to moisture.

Careful selection of the window allows to improve the comfort of living and to eliminate the inconveniences typical for a particular room.



# Windows for the children's room Maximal security



Floor: 1ST FLOOR





#### WE USE: -

Fitting - Tilt first Glass - 4/14/4/14/33.1 | Handle - TBT with key

- Protection against falling out
- Protection against injury
- In the applied fitting, the handle rotation allows sash tilting but not its opening. In order to open the sash, the handle needs to be set in vertical position.
- Additional protection is the handle with key: when the window is closed with the key, only the function of sash tilting is available.
- In case of glass breaking, internal glass of the warm, welded packet protects against injury.

# Windows facing the street Silence and calm



Floor:
GROUND FLOOR





#### WE USE: -

Fitting - Slot ventilation Glass - 44.2/12/6/12/6

- Effective absorption of solar heat
- Natural lighting
- Slot ventilation system applied in the window allows to safely and comfortably eliminate the moisture resulting from the kitchen works.
- During ventilation, the applied fitting maintains an increased anti-burglary class. Ventilation requires neither opening nor tilting the sash what makes the transmission of noise to the inside impossible.
- The acoustic glass of high P4 anti-burglary class provides the protection against the noises of the surrounding.



# Windows for the living room

Exceptional class and elegance



Floor:
GROUND FLOOR





## WE USE:

Fitting - Invisible hinges Glass - 44.4/14/4/14/4



Exceptional aesthetics



Increased security

- Innovative fitting with invisible hinges providing the exceptional aesthetics of the interior has been applied in the window.
- For increased security, the fittings have been equipped by additional anti-burglary catches. Glass in this packet is of high P4 anti-burglary class.
- The applied glass packet filters the high-energy fractions of solar radiation and UV radiation.



# Windows for the bedroom

Comfortable and healthy sleep



Floor:





WE USE: -

Fitting - Slot ventilation Glass -4/18/4/18/4



Silent and energy-efficient ventilation



Natural heat and light

- The slot ventilation system applied in the window allows for quiet and economical ventilation of the interior. It is particularly important in case of the bed room, where the possibility to provide the appropriate microclimate is a factor influencing the sleep quality.
- The applied glass allows to use the solar energy and transmits much more daylight. It is important in case of the northern exposure that is characterised by less lighting.



# 5 TERRACE DOORS

◆ SPACE (1) ELEGANCE 😭 COMFORT

# Lift-sliding

# HST doors

# Space, prestige, comfort

- ✓ Comfortable opening and closing
- ✓ Threshold flush aligned with floor
- ✓ Modern elegance

The door operates on the basis of the innovative lift-sliding opening system that gently raises the sash moving on special rollers. Therefore, the door sliding is effortless. The door threshold can be flush aligned with the floor surface from inside. The system enables exceptionally large glazing to be constructed what allows for maximal lighting of the interior making it spacious and prestigious in character.

# Technical parameters:

Max. weight of sash: 250 kg

N

Max. surface of sash: **6,5** m<sup>2</sup>

Max. height of door in colour: **2,5 m** | white: **2,7m** 

(\*\*\*\*)

Max. width of door: 6,5 m

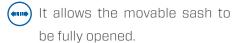
Doors can be constructed in various opening schemes.

Doors available in DPQ-82 and DPP-70 systems.

# Opening types:



## Sliding in horizontal plane





## Threshold flush aligned

Threshold flush aligned with the interior floor level eliminates an obstacle in air circulation providing the residents with maximum comfort.



## **Option:** automatic doors

Remote-controlled door opening and closing.





# Hoist-sliding PAS donrs

# Warmth, security, comfort

- Safe and energy-efficient ventilation
- Comfort regardless of the weather conditions
- Light and quiet door operation

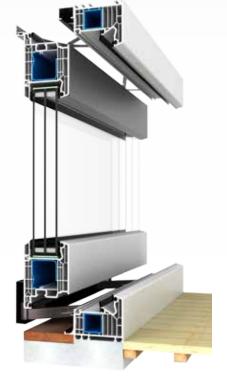
The system of slot ventilation that has been applied in this doors enables to achieve the distance of 6 mm between sash and frame. The system has an increased anti-burglary class of the fitting during ventilation. Small dimensions of ventilation slot enable efficient ventilation during rainfalls and stable position of the sash prevents it from hitting the frame under wind pressure.

# Technical parameters:

Max. weight of sash: 160 kg	Max. surface of sash: 3 m²
Max. height of door <b>2,4 m</b>	Max. width of door: 3 m

Doors can be constructed in various opening schemes.

Doors available in DPP-70, DPE-70, DPE-70+, DPQ-82, DPQ-82 thermoSecure, DPQ-82AL, DPQ-82 thermoSecure AL.



# **Opening types:**



#### Sliding in horizontal plane

It allows the movable sash to be fully opened.



Gas actuators guarantee comfortable door operation.



#### Disengagement

It disengages the movable sash from the frame.



It ensures ventilation without unnecessary heat loss.





# Tilt-sliding HKS doors

# Comfort and elegance at the reasonable price



Possibility to tilt the movable sash



Very attractive price

Full functionality and comfortable door operation results from the possibility to easily slide and tilt the movable sash. Simplicity of the system operation allows to obtain very attractive price what makes the elegant and fashionable large glazing affordable to each house.

# Technical parameters:



( Max. weight of sash: 160 kg



Max. surface of sash: 3m2



Max. height of door 2,4 m



Max. width of door: 3 m

Doors can be constructed in various opening schemes.

Doors available in DPB-73. DPB-73+. DPB-73 Thermo. DPB-73+ Thermo. DPP-70. DPE-70. DPE-70+, DPB-82, DPQ-82, DPQ-82 thermoSecure, DPQ-82AL, DPQ-82 thermoSecure AL.



# Opening types:



## Sliding in horizontal plane



It allows the movable sash to be fully opened.



## **Tilting**



( ) It enables to tilt the movable sash along the top edge. It enables the interiors to be vented.





# **6** EXTERIOR DOORS WITH ATTACHMENT PANEL

MODERNITY (A) SECURITY



🔅 WARMTH





# Exterior doors with attachment panel







# Exterior doors with attachment panel





06.01 LILA



06.02 STELLA



06.03 LIGIA



06.04 **GLORIA** 



06.05 NIMFA



06.06 **OFELIA** 

# **DAKO DOOR CONFIGURATOR**

YOUR POSSIBILITIES



- ✓ Visit www.dako.eu and click door configurator in door section
- Design the door of your dream
- Make your dreams come true

Presented pictures are for reference only. Due to the differences in usage of particular materials (aluminium, timber, PVC), the same models made of different materials may vary and differ from presented



# Construction

Due to the attachment panel, the sash of the door forms the unitary surface.



<sup>\*</sup>The results of research conducted on the door of standard dimensions 1100x2015 mm at Laboratorium Techniki Budowlanej in Dąbrowa Górnicza.

# Standard equipment

The advanced equipment is a solid base of carefully refined aesthetics of DAKO doors - it provides the householders with warmth, security and perfect door functioning for many years.





**✓ 3-POINT**LOCK SYSTEM

Two closing elements with double pin.

Massive hook pin provides high level of security.

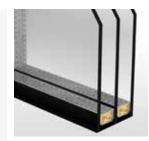
Additional pin guarantees the optimal adjustment of the sash to the frame.

Automatic closing

Security without the need to close the door with key.

Installation of the lock system along the entire height of sash.

Fitting notch is invisible what guarantees the opened door and elegant look.



**3-GLASS PACKET**4x20x4x20x4
U₂=0,5 W/m²K



✓ HANDLEON DIVIDED HANDLE PLATEWITH ROSETTE

## Standard colours:

white or silver (depending on door colour)

#### Optional colours:

brown, silver (F1), old gold(F4), stainless steel



✓ INSERT

insert of C antiburglary class with key ring



SURFACE HINGE

Standard colours: white

Optional colours: brown, silver, old gold, RAL 7016

(dark grey), RAL 9005 (black)



# Optional





# ✓ 'DAY AND NIGHT' FUNCTION OF LOCK SYSTEM

This function allows the day or night door protection option to be chosen.

## **✓**

#### HANDLE ON LONG HANDLE PLATE WITH ROSETTE

#### Colours:

• white, silver (F1), old gold (F4), stainless steel, brown









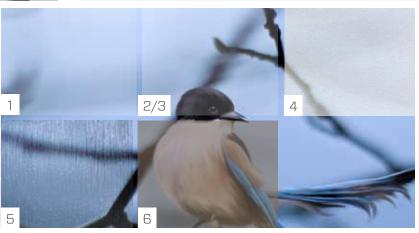
#### GRIPS

- P-10 | Available length [mm]: 580, 800, 1000,
   1200 | 1400, 1500, 1600, 1800 |

#### ✓

#### **GLASSES**

- 1. 2/B/2 safe glass with foil
- 2. P2 of increased protection against burglary
- 3. P4 anti-burglary glass
- 4. Sandblasted
- 5. Ornamental
- 6. Reflective
- 7. With warm-edge spacer
- \* Do you need different glass? Contact us via www.dako.eu we will be delighted to help you.



# equipment



## **✓** EXTERNAL ROSETTES



Anti-burglary 33KZ-1

Colours: white, F1, stainless steel



Anti-burglary 33KZ-2

Colours: white, F1, stainless steel



'Eye' rosette

Colours: stainless steel



Standard or with butterfly



 Causes automatic and controlled sash back of door to the closed position.





## Roller hinge

The hinge is available in following colours:

 white, brown, stainless steel, RAL 1036 (resembling old gold), RAL 7016 (dark grey)







#### FINGERPRINT READER

The doors opened with a fingertip provide exceptional convenience. They are completely safe, warm and reliable. High security of the lock is confirmed by A class certificate of German VdS organization.

Convenience – opening with fingertip

Comfort – keys, codes and opening cards are unnecessary

**Economy** – duplicating of keys and changing of locks are unnecessary

**Security** – resistance to shorting wires of scanner and other manipulations

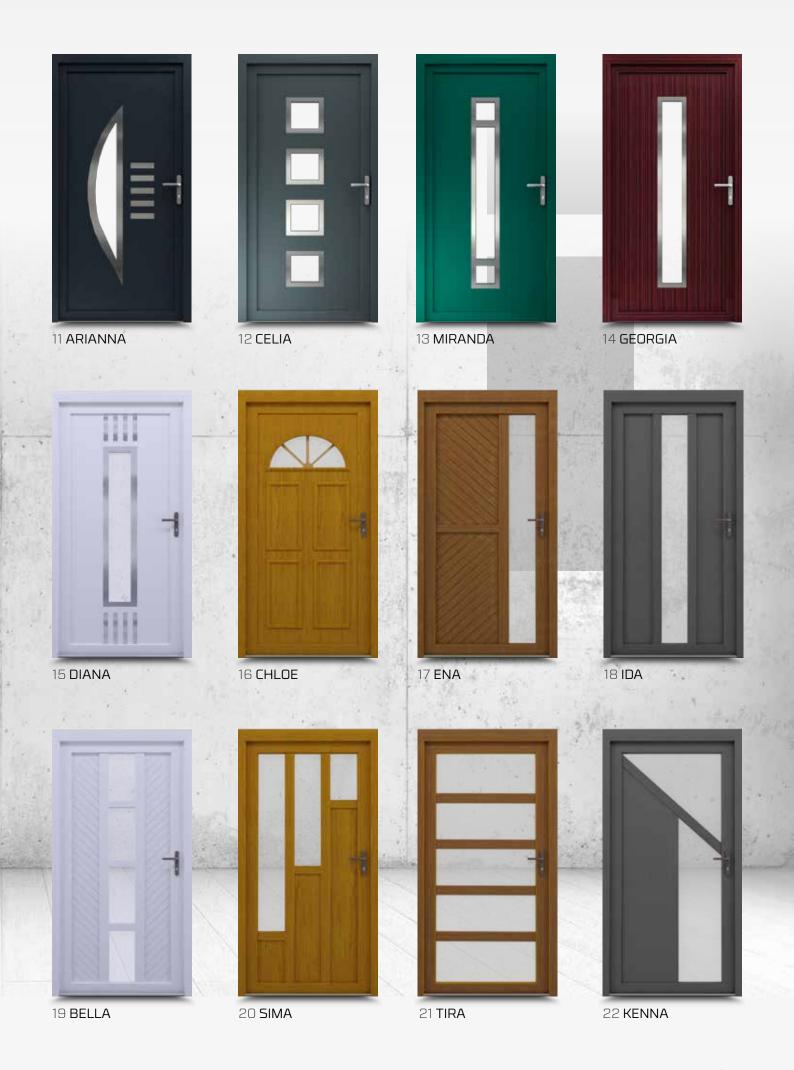
Reliability - correct operation from -40°C to 85°C

Warranty - 24-month manufacturer's warranty



# Exterior doors with insert panel

# **EXTERIOR** DOORS WITH INSERT PANEL 1 AMADEA 2 GEMMA 5 GALLA 6 TARSYLIA 3 AUREA 4 NONNA 7 FLORA 9 RAISA 8 ADARA 10 TEONA





# Construction

The construction of doors with insert panel ensures the ideal visual balance between classic and modernity.

# Sash



Elegant insert panel

# Frame



## **STABILITY AND PROTECTION AGAINST** COLD

Energy-efficient DPQ-82 profile or warm DPP-70 profile



# Panel



#### **THERMAL INSULATION**

Filling made of thermo-insulation foam

## **PROTECTION AGAINST** COLD

Aluminium threshold of 20 mm height with thermal insert.

# **THRESHOLD STABILIZATION**

Broadening of 30 mm height that reinforces threshold construction.

# Standard equipment

The equipment of doors with insert panel provides the householders with warmth, security and perfect door functioning for many years.





**✓ 3-POINT**LOCK SYSTEM

Two closing elements

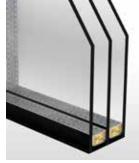
Massive hook pin provides high level of security.

Automatic closing

Security without the need to close the door with key.

 Installation of the lock system along the entire height of sash.

Fitting notch is invisible what guarantees the opened door and elegant look.



# ✓ LOW-EMISSION PACKET

Composite glass packet filled with noble gas, of construction depending on the installation depth (82 mm or 70 mm) and panel choice.



✓ HANDLE
ON FULL HANDLE
PLATE WITH ROSETTE

## Standard colours:

white, brown or silver (depending on door colour)

#### Optional colours:

silver (F1), old gold (F4), stainless steel





#### **INSERT**

with key or butterfly



✓ SURFACE HINGE

Standard colours: white

Optional colours: brown, silver, old gold, RAL 7016

(dark grey), RAL 9005 (black)



# Optional





## ✓ 'DAY AND NIGHT' FUNCTION OF LOCK SYSTEM

This function allows the day or night door protection option to be chosen.

# **V**

#### HANDLE ON FULL HANDLE PLATE WITH ROSETTE

#### Colours:

white, silver (F1), old gold (F4), stainless steel, brown,
 RAL 7016 (dark grey), RAL 9005 (black)







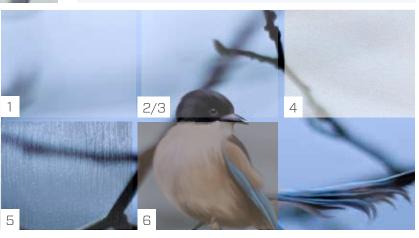


#### **✓** GRIPS

- P-10 | Available length [mm]: 580, 800, 1000, 1200 | 1400, 1500, 1600, 1800 | ○
- **Q-10** | Available length [mm]: 580, 800, 1000, 1200 | 1400, 1500, 1600, 1800 |

## GLASSES

- 1. 2/B/2 safe glass with foil
- 2. P2 of increased protection against burglary
- 3. P4 anti-burglary glass
- 4. Sandblasted
- 5. Ornamental
- 6. Reflective
- 7. With warm-edge spacer
- \* Do you need different glass? Contact us via www.dako.eu we will be delighted to help you.



# equipment



# **EXTERNAL ROSETTES**



## Anti-burglary 33KZ-1

Colours: white, F1, stainless steel



## Anti-burglary 33KZ-2

Colours: white, F1, stainless steel



Insert of C anti-burglary class (standard or with butterfly)



## ✓ SELF-CLOSER

Causes automatic and controlled sash back of door to the closed position.



#### **ROLLER HINGE**

The hinge is available in following colours:

• white, brown, stainless steel, RAL 1036 (resembling old gold), RAL 7016 (dark grey)

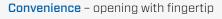


# FINGERPRINT READER

The doors opened with a fingertip provide exceptional convenience. They are completely safe, warm and reliable



High security of the lock is confirmed by A class certificate of German VdS organization.



Comfort - keys, codes and opening cards are unnecessary

Economy - duplicating of keys and changing of locks are unnecessary

Security - resistance to shorting wires of scanner and other manipulations

Reliability - correct operation from -40°C to 85°C





# COLOURS



Durability and aesthetisc

# **COLOURS OF DOORS WITH ATTACHMENT PANEL**











RAL3011



RAL5011

RAL7015



RAL6009

RAL7012









RAL9016

RAL8017

RAL9007

RAL9001

# COLOURS OF WINDOWS AND DOORS WITH INSERT PANEL

## Standard colours



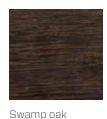


Nut



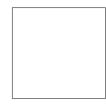






Golden oak





Winchester



Sheffield oak (3)

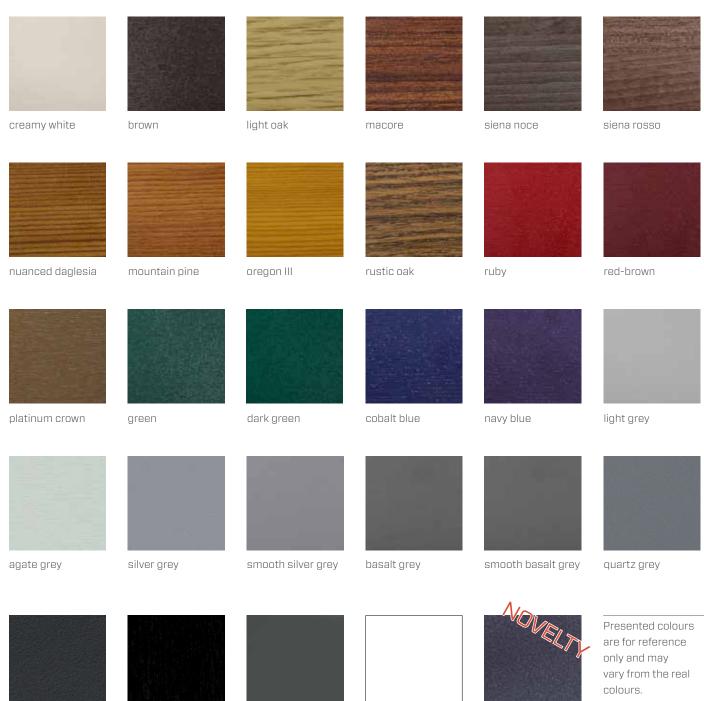
Tabasco (1)

Anthracite

White

# COLOURS OF WINDOWS AND DOORS WITH INSERT PANEL

# Special colours (1)



White -9152.05 (1)

dark grey ALUX (2)

dark grey ultramat<sup>(4)</sup>

black (2)

dark grey silk

<sup>(1)</sup> In DPB-82, DPB-73 i DPB-73+ systems only standard colours, except for tabasco and white - 9152.05. are available.

<sup>(2)</sup> Colour available only for DPP-70, DPQ-82/thermoSecure /AL series.

<sup>(3)</sup> Sheffield oak colour unavailable only for DPE-70 i DPE-70+ series.

<sup>(4)</sup> Available only for DPQ-82 series (only in exterior version)



# DREAMS NEED AN IDEA...

That is why we created HarmonyLine - the idea whereby your dream of a beautiful home becomes a reality.

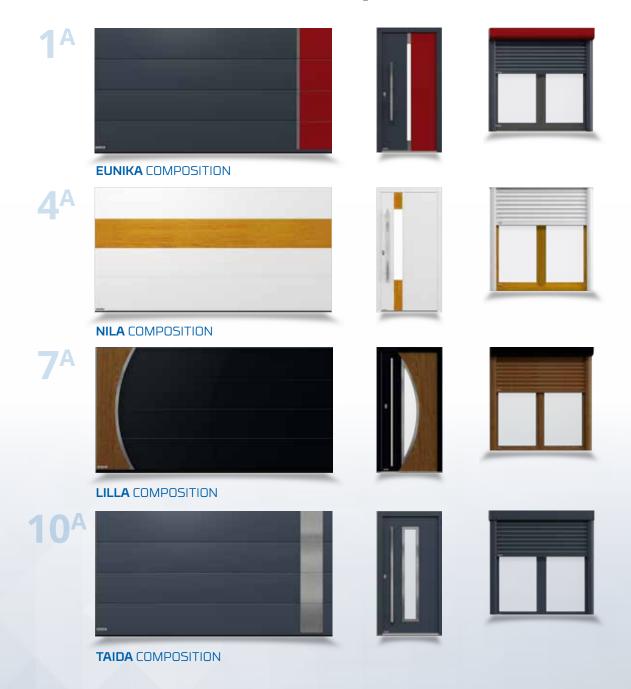
Visit our website and download HarmonyLine folder www.dako.eu



**HarmonyLine** is a unique idea of a common design of windows, doors, garage doors and roller blinds. This idea allows our clients to find a solution matching the individual character of the building.



# THE EXEMPLARY COMPOSITIONS OF HarmonyLine



# ...DEFINITE STEPS MAKE IDEAS AI |\/F

Therefore, we designed 12 COMPLETE CARPENTRY SETS of HarmonyLine,

- 12 ready-made compositions prepared by DAKO designers
- 5 colour variations of each set
- 3 materials: PVC, ALUMINIUM, TIMBER.

# WINDOWS | ROLLER BLINDS | DOORS | GARAGE DOORS

PVC | TIMBER | ALUMINIUM



# Every single day around the world...

thousands of people test DAKO products in the most demanding testing ground – the laboratory of the real life. DAKO products are used, among others, by people of modern and exotic Japan or living in historical capitals of Europe as well as cold, far north and hot regions of Southern America.





DAKO°

Find out more: