

# **WINDOWS**

Highlights of Architecture 2018/19



**3<sup>RD</sup> GENERATION** (f.l.t.r) Mag. Christian Klinger Mag. Anette Klinger DI (FH) Stephan Kubinger, MBA

# EUROPE'S NO. 1 WINDOW BRAND

### WE ARE A STRONG FAMILY BUSINESS!

Internorm has been a family business for 87 years having developed from a one-man blacksmith's shop to the largest internationally active window brand.

During this time we have manufactured over 24 million window and door units, all 100% made in our production facilities in Traun, Sarleinsbach and Lannach. From the creation of the UPVC window and the production of the timber/aluminium window to today's high tech and ultra-modern design innovations, our family company has been setting standards all over Europe. We are pioneers in our field and continue to further develop technology and innovative ideas.

Our staff, of over 1800 employees across Europe, are specialists who thrive on attention to detail and act with passion and integrity. Together with more than 1300 distribution partners in 21 countries we guarantee perfect product quality and the highest levels of service.

Internorm manufacturing sites (production exclusively in Austria)

Internorm offices

Internorm distribution partners



www.internorm.com

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# **Design**Styles

Highlights of architecture







### studio

Follows a very clear line in its design. This style with its cutting edge shapes and diminished appearance gives a contemporary and unconventional feel.

### home pure

Meets the demands for a modern and straight-lined style creating bright living environments.

### home soft

Feels friendly and cozy and offers many design varieties – from elegant to playful.

### ambiente

Stands out with its traditional shapes – timeless classical and elegant. Its composition is elaborately designed and conveys a homely feel.

### WINDOWS AND DOORS FOR YOUR DREAM HOUSE

Architecture is as diverse as the people who live in it. The style of a house is not only shaped by building design, especially windows and doors also underline its character considerably.

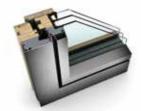
You can fulfill your personal idea of living with Internorm windows and doors. Internorm is offering you a suitable solution.

To help you find the window and door solutions which fulfill exactly your requirements for architecture, design and comfort among the multitude of possibilities in shape, colour and material, you can choose from the different Internorm design styles: studio, home pure, home soft and ambiente.

### TIMBER AND TIMBER/ALUMINIUM WINDOWS



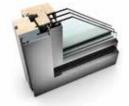
HF 310



HF 410



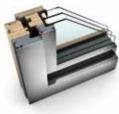
HV 350



HF 210



HF 310



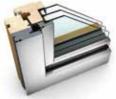
HF 410



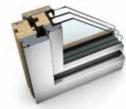
HV 350



HF 210



HF 310



HF 410



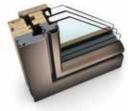
HV 350



HF 210



HF 310



HF 410



HV 350

### TIMBER/ALUMINIUM ENTRANCE DOORS



HT 410



HT 400

ambiente

### **ALUMINIUM ENTRANCE DOORS**











**AT 200** 

**AT 410** 

**AT 400** 

ambiente

**AT 310** 

ambiente

ambiente

**AT 305** 

ambiente









home pure



home soft



ambiente



### **UPVC WINDOWS**



**KF 220** 







### UPVC/ALUMINIUM WINDOWS







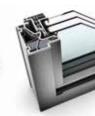
**KF** 500



**KV** 440



**KF 310 KF 410** 



**KF 500** 



**KV 350** 

**KV** 440







**KF** 410



**KV** 440



**KF 310 KF** 410



**KV 350** 



**KV** 440

# HF 210 TIMBER/ALUMINIUM WINDOW

# HF 310 timber/aluminium window

*	Thermal insulation	U <sub>w</sub> as low as 0.67 W/(m <sup>2</sup> K)
<b>%</b>	Sound reduction	up to 46 dB
	Security	RC2
	Locking	concealed
* *	Construction depth	85 mm
	Design style	home pure home soft ambiente

**PROPERTIES** 

I-tec Glazing

home pure







### HF 210

Timber, aluminium combination eliminates the need for exterior maintenance, due to the aluminium attachment clad which protects the timber from weather conditions. The square-edged aluminium profiles of frames and windows can be designed in many colours and facilitate countless design possibilities of the exterior facade. I-tec glazing, the continual all around bonding of the glass pane, offers excellent stability, security protection as well as thermal insulation and sound reduction. Concealed hardware on the inside of HF 210 ensures a continuous, comfortable timber surface.



### **PROPERTIES**

*	Thermal insulation	$U_w$ as low as 0.62 W/( $m^2$ K)
<b>9</b>  ((	Sound reduction	up to 46 dB
	Security	RC2
	Locking	concealed
**	Construction depth	85 mm
	Design style	studio home pure home soft



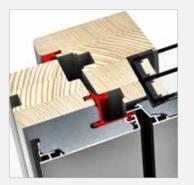
ambiente



Passive house certified







#### HF 310

A combination of timber/aluminium and highly insulating thermal foam in between the frame & sash. The HF 310 provides excellent thermal insulation values, natural timber refined with subtle paints, weather-resistant aluminium on the outside render the HF 310 the most attractive option among the timber/aluminium windows. Due to the same, flush design of the aluminium clad, HF 310 can be combined with UPVC window KF 410. All around bonding of the glass pane (I-tec glazing) ensures excellent stability and security protection. Triple continuous gaskets protect the interior area from exposure to the rain.



# HF 410 timber/aluminium window

### **PROPERTIES**

*	Thermal insulation	$U_w$ as low as 0.64 W/( $m^2$ K)
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Sound reduction up to 45 dB

Security

Locking

concealed

Construction depth 85 mm

studio home pure Design style home soft

I-tec Glazing

RC1N, RC2

ambiente

I-tec Core







### HF 410

Sustained materials and colours of the interior decoration underline your minimalistic living style and bring individual elements into the forefront. HF 410 adapts perfectly to your interior design. Different colours and timber types offer you countless possibilities for your individual colour design of your interior spaces. Grey Oak as interior colour agrees with the modern living style with clear forms, plain materials and modest colours. Made to order, opening and fixed glazed windows can be integrated to large areas.

### HV 350 timber/aluminium window with integrated blind

### **PROPERTIES**

*	Thermal insulation	U <sub>w</sub> as low as 0.60 W/(m <sup>2</sup> K)
<b>9</b>  (()	Sound reduction	up to 47 dB
	Security	RC2
	Locking	concealed
* *	Construction depth	85 mm
		studio

Design style

I-tec Glazing

home pure

home soft

ambiente

I-tec Shading









### HV 350

The sun and privacy protection integrates harmoniously into this flush window and offers quadruple protection all in one window with excellent thermal insulation and sound reduction values. Blinds, Venetian blinds or Duette® blinds are situated between the panes and therefore protected from dust. The energy self-sufficient I-tec shading does not require any external power source due to the photovoltaic module and batteries. Integrated automatic functions such as day/night recognition and intelligent heat protection can be activated simply via your tablet or Smartphone, I-tec Smart Window is also available.



# RIBA HOUSE OF THE YEAR

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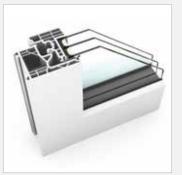


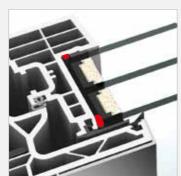
# KF 220 upvc & upvc/aluminium window

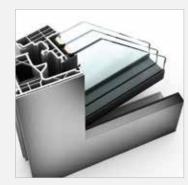
### **PROPERTIES**

* Thermal insulation	$U_w$ as low as 0.67 W/( $m^2$ K)
<b>⑨</b> Sound reduction	up to 43 dB
Security	RC1N, RC2
Locking	concealed
Construction depth	68/71 mm
Design style	studio





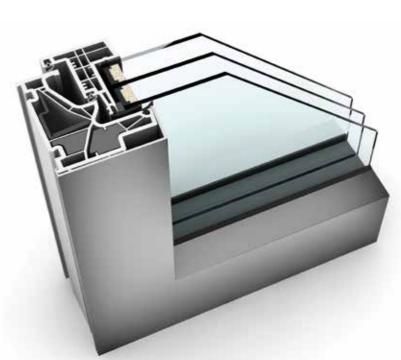




### KF 220

The innovative glass sash of the KF 220 gives the impression of fixed glazing, nevertheless it is an openable window. Whether in the classic white UPVC version or with aluminium attachment clad, the narrow, squareedged window frame underlines the reduced architecture of the design style studio. Three-sided rendering of the frame fulfills your dreams of almost frameless glass architecture. I-tec glazing ensures excellent stability, thermal insulation and security by all round bonding of the glass pane.

# KF 500 upvc & upvc/aluminium window

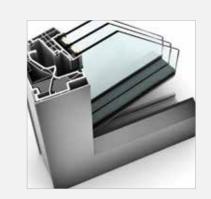


*	Thermal insulation	U <sub>w</sub> as low as 0.61 W/(m²K)
9 (	Sound reduction	up to 46 dB
	Security	RC2
	Locking	fully integrated
**	Construction depth	93 mm
	Design style	studio

**PROPERTIES** 

I-tec Glazing I-tec Locking I-tec Ventilation

home pure







### KF 500

KF 500 combines innovative design and technical know-how. The window sash is not visible from the outside due to its glass appearance and cannot be distinguished optically from fixed glazing. This sash also conceals the revolutionary I-tec locking which renders levering of the window impossible, unrivalled in the branch. Integrated coverings push on to the frame interior on all sides when locking and therefore offer maximum security protection. KF 500 can additionally be equipped with I-tec ventilation, a ventilation system integrated into the window

### UPVC | UPVC/aluminium

# KF 410 upvc & upvc/aluminium window

### **PROPERTIES**

Thermal insulation Uw as low a 0.62 W/(m²k²)	
--	--

Sound reduction	up to 45 dE
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Security RC1N, RC2		Security	RC1N, RC2
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<b>Locking</b> concealed
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1	Locking	concealed
* *	Construction depth	93 mm

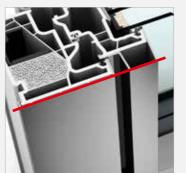
·	
	studio
Design style	home pure
Design style	home soft

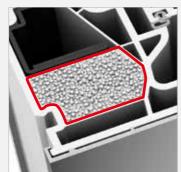


I-tec Ventilation

I-tec Insulation

studic



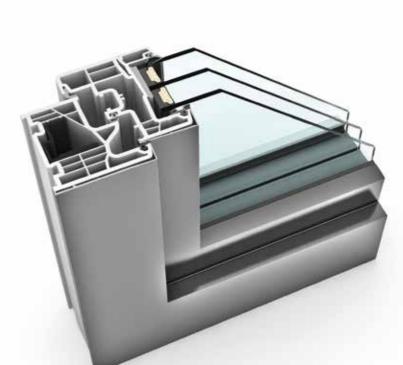




### KF 410

The completely flush transition of frame and sash combines KF 410 to one unit. Once the frame is rendered into the brickwork on three sides, only the narrow, square-edged sash frame remains visible. The frame is insulated seamless through the new insulation technology and thermal insulation is considerably improved. Technological advances with airing is provided by the I-tec ventilation. The ventilation system which is integrated in the frame ensures sufficient fresh air and ideal room climate 24/7.

# KF 310 upvc/aluminium window



### **PROPERTIES**

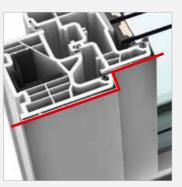
<b> </b>  *	Thermal insulation	$U_w$ as low as 0.69 W/( $m^2$ K)
<b>9</b>  (()	Sound reduction	up to 45 dB
	Security	RC1N, RC2
	Locking	exposed
**	Construction depth	74 mm
	Design style	home pure home soft ambiente

I-tec Glazing

home pure







#### KF 310

This sleek new window features the proven and reliable technology of all our Internorm windows. It is characterised by the best thermal insulation and sound reduction values, as well as all round bonding of the glass pane with the window sash. KF 310 is available in a large selection of colours, handles and glazing, as well as a balcony and patio door and now also as a French balcony. The square-edged exterior design of the frame and sash matches the design style home pure.

# KV 350 upvc/aluminium window with integrated blind

### **PROPERTIES**

* Thermal insulation	U <sub>w</sub> as low as 0.79 W/(m <sup>2</sup> K)
<b>᠀</b> ◎ Sound reduction	up to 44 dB
Security	RC1N, RC2
Locking	exposed
*** Construction depth	74 mm
Dosign style	home pure

Design style

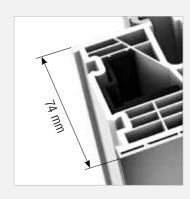


ambiente









### KV 350

The modern and narrow window KV 350, with integrated blinds, features four main advantages. As well as the best sound reduction and thermal insulation, sun and privacy protection are also integrated in the window directly between the glass panes. This helps with cleaning - the blind is protected by glass panes from wind, bad weather and dirt. Sun protection is now also available in refurbishments or on facades, even if they do not permit roller shutters. I-tec shading works fully self-sufficiently and offers many other useful functions.

# KV 440 upvc/aluminium window with integrated blind



Thermal insulation	U <sub>w</sub> as low as 0.64 W/(m <sup>2</sup> K)
<b>୭</b>   <b>®</b> Sound reduction	up to 45 dB
Security	RC1N, RC2
Locking	concealed
Construction depth	93 mm
Design style	studio home pure home soft ambiente

**PROPERTIES** 

I-tec Glazing

I-tec Shading

I-tec Ventilation

I-tec Insulation

studic







### KV 440

The window with integrated blinds KV 440, also offers all around comfort besides flush design. Sun and privacy protection is integrated between the panes and therefore protected from dirt. routine cleaning of individual slats is a thing of the past. I-tec shading also offers many advantages when it comes to performance. The sun protection can be controlled via photovoltaic module and batteries and does not need any external power source. I-tec SmartWindow enables convenient operation via your tablet or Smartphone.



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# AT 410 ALUMINIUM DOOR

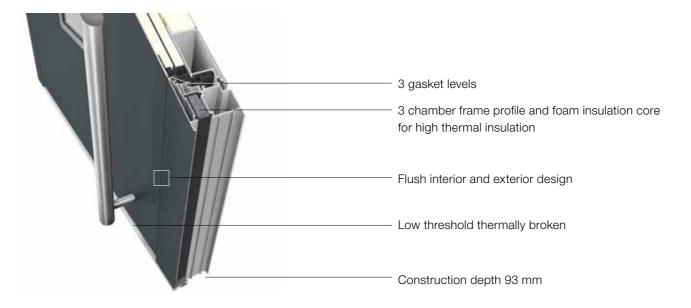
### COMPLETE IN FORM - FLUSH DESIGN IN PERFECTION

The flush design of frame and door leaf is perfected through concealed hardware, level key hole cover plates, sunken recessed handles and heavy duty joiners as well as flat glass surrounds.



Online door designer







Colour: HFM05 Handle: RGS01 Order no.: 18-003



FG
Colour: HM716
Handle: MGSE10
Designer elements: Heavy duty joiners
Order no.: 18-084



Colour: HM716
Handle: TEG15
Glass: Satinato white
Designer elements: Heavy duty joiners
Order no.: 18-020



### FK

Colour: Frame HM716, sash SD03 Art-Beton Handle: SG13 Glass: Satinato white Designer elements: Heavy duty joiners

Order no.: 18-007

PN
Colour: Frame HM907,
sash HM907, M916
Handle: EGS06
Glass: Satinato white
Alunox glass surround
Order no.: 18-021

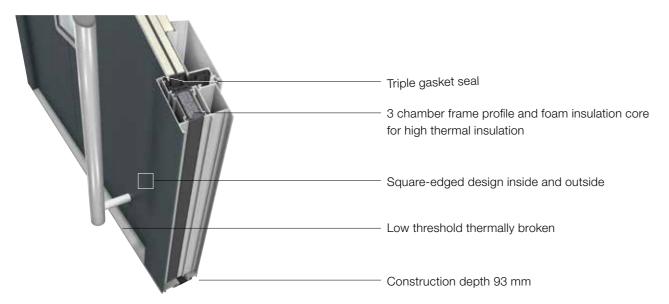


# AT 400 ALUMINIUM ENTRANCE DOOR

### PURISTIC - CREATES CLEAR LINES

The smooth door leaf and the square-edged frame creates clear lines which are further emphasized through straight-lined designer elements or glass cut-outs, bar handles as well as raised or flat heavy duty joiners.







Colour: Frame HM704, sash HM704, M916 Handle: KGS03 Order no.: 18-008



FK
Colour: HM716
Handle: SG13
Designer elements: Heavy duty joiners
Order no.: 18-005



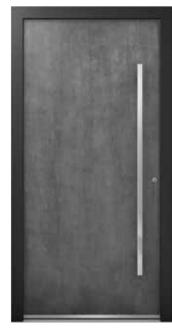
Colour: HFM03 Handle: EGS01 Glass: Satinato white Order no.: 18-010



Colour: Frame HFM12, sash HFM12, M916 Handle: MGSE6 Glass: Satinato white Order no.: 18-026



PK
Colour: M916
Handle: RGS03
Glass: Satinato white
Order no.: 18-034



FA
Colour: Frame HM716,
sash SD06 Art-Steel
Handle: KGS03
Order no.: Available on technical request

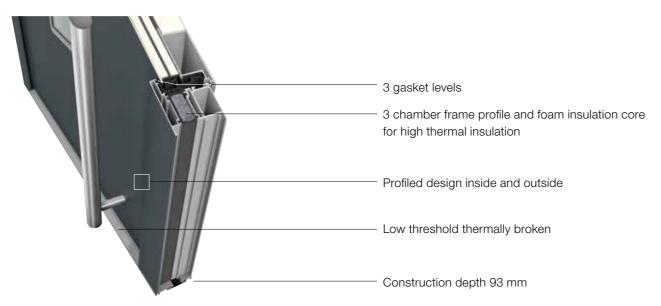
 $Not all \ designs \ are \ illustrated \ in our \ brochure. \ Please \ visit \ our \ website \ www.internorm.com \ to \ access \ our \ door \ designer.$ 

# AT 310 ALUMINIUM ENTRANCE DOOR

### STRAIGHT-LINED - STUNNING DESIGN FEATURES

The combination of flush door leaf outside and profiled door leaf inside offers numerous design possibilities. The clear shapes are underlined by millings, glass cut-outs and designer frames.







SA
Colour: HFM05
Handle: HS30
Glass: MDNL
Order no.: 18-037



SJ
Colour: HFM22
Handle: MGSE6
Glass: Satinato white
Order no.: 18-038



Colour: RAL5010 Handle: MGSE6 Glass: Satinato white Alunox glass surround Order no.: 18-029



FK
Colour: HM716
Handle: SG13
Designer elements: Heavy duty joiners
Order no.: 18-005



PM Colour: HF113 Handle: HS10 Glass: Satinato white Order no.: 18-033



PK Colour: M916 Handle: RGS03 Glass: Satinato white Order no.: 18-034

# AT 305 ALUMINIUM ENTRANCE DOOR

### LINEAR LINES - PURISTIC DESIGN

The intelligent plate construction with insulation glass core ensures excellent thermal insulation and sound reduction as well as maximum stability. Standard triple-point locking with two bolts and one main bolt render these entrance doors additionally secure.







### Colour: HFM12 Handle: RGS05 Glass: Satinato white Order no.: 18-030



Colour: HFM11 Handle: RGS02 Glass: Satinato white Order no.: 18-032



GD
Colour: HFM05
Handle: KGS04
Glass: Satinato white
Order no.: 18-012



DA Colour: HDS08 Handle: HS40 Glass: Satinato white Order no.: 18-016



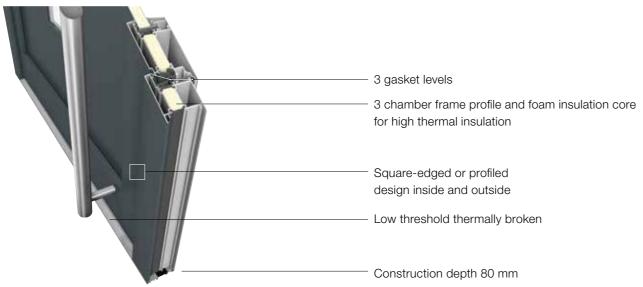
GA Colour: Frame HM716 Handle: HS42 Glass: Satinato white Order no.: 18-015

### AT 200 - ENTRY MODEL

### WITH MANY VARIATIONS - FROM TRADITIONAL TO CONTEMPORARY

This entrance door can be designed in many ways with beaded sash, designer ornaments and Georgian/feature bar solutions. AT 200 features a profiled door leaf inside and outside which can alternatively be square-edged.







### SE-E2B

Colour: Frame M916, sash M916, HM735 Handle: HS10 Glass: Satinato white Order no.: 18-053



EC-A3B

Colour: HM907 Handle: EGS05 Glass: MR3 Alunox glass surround Order no.: 18-054



RA-A1B

Colour: DM01 Handle: CS100 Glass: D72 Order no.: 18-055



### VA-K2B

Colour: HM704 Handle: TEG14 Glass: Satinato white Order no.: 18-056



### LU-B3B

Colour: Frame HM716, sash HM716, M916 Handle: GD10 Glass: Satinato white Order no.: 18-065



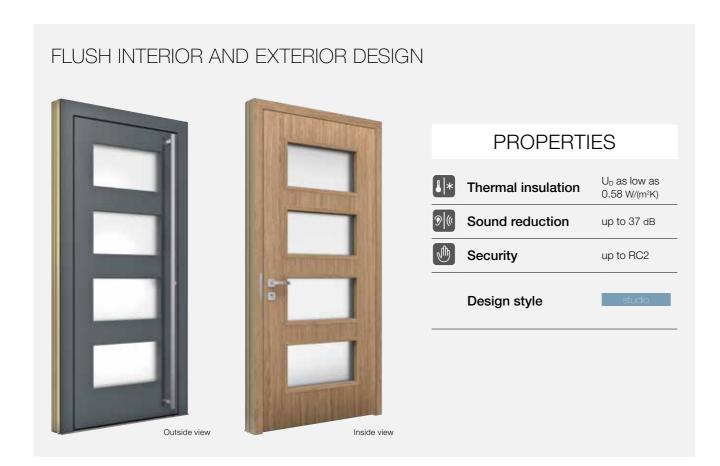
### SE-R0B

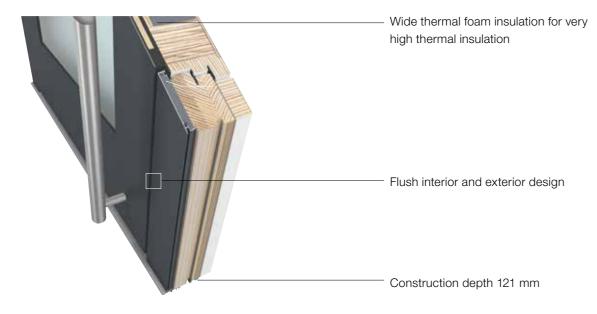
Colour: HFM02 Handle: TEG10 Glass: Linea Order no.: 18-049

# HT 410 timber/aluminium entrance door

### FLUSH DESIGN

The smooth flow from frame and door leaf, concealed hardware, level key hole cover plates, recessed handles and millings as well as flat glass surrounds create the perfect design.







# FJ Colour: HFM14 Handle: MGSE8 Designer elements: Heavy duty joiners Order no.: 18-004



FD Colour: Frame HM716, sash HM716, HM907 Handle: RGS05 Order no.: 18-009



Colour: HFM05 Handle: KGS04 Glass: Satinato white Order no.: 18-012



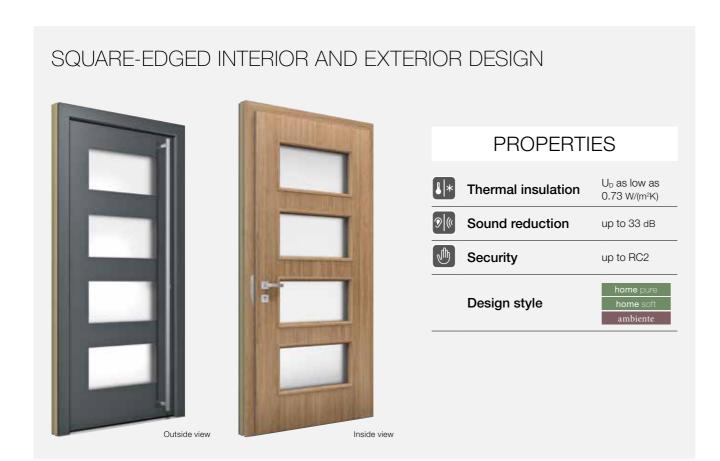
### DG

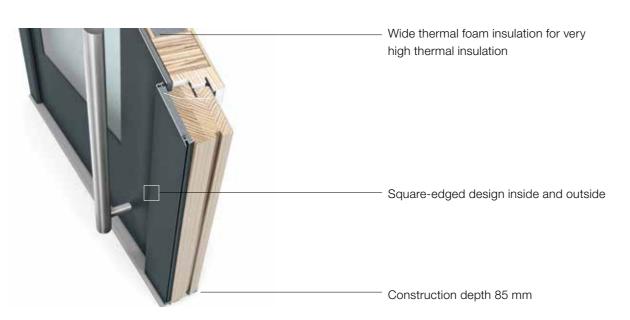
Colour: M916 Handle: SG17 Glass: Satinato white Alunox glass surround Order no.: 18-013

# HT 400 timber/aluminium entrance door

### PURISTIC LINES

The smooth door leaf and the square-edged frame create clear lines which are emphasized by continuous glass layers, straight-lined designer elements, bar handles as well as stainless steel attachments.







### FL Farbe: Rahmen HM716, Flügel HM716, HM735 Griff: SG13 Bestellnr: 18-006



PE
Farbe: HFM03
Griff: EGS01
Glas: Satinato weiß
Bestellnr: 18-010



GJ
Farbe: Rahmen HF735,
Flügel HF735, HF716
Griff: MGSE10
Glas: Satinato weiß
Bestellnr: 18-011



FK
Farbe: Rahmen HM716,
Flügel SD03 Art-Beton
Glas: Satinato weiß
Griff: SG13
Zierteile: Lisenen
Bestellnr: 18-007



FM
Farbe: Rahmen HM704,
Flügel HM704, M916
Griff: KGS03
Bestellnr: 18-008



PDD
Farbe: HM716
Griff: TEG15
Glas: Satinato weiß
Zierteile: Lisenen
Bestellnr: 18-020

 $Not all \ designs \ are \ illustrated \ in \ our \ brochure. \ Please \ visit \ our \ website \ www.internorm.com \ to \ access \ our \ door \ designer.$ 



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EXTREMELY STABLE CORE



SLIM SIGHT LINES FOR EXTRA LIGHT



HIGH LOAD-BEARING CAPACITY



RESOURCE-SAVING AND SUSTAINABLE



INDIVIDUAL COLOUR DIVERSITY
AND TIMBER VARIETY

# REVOLUTIONARY

# NEW STANDARDS FROM INTERNORM.

Under the melodius title of "I-tec", Internorm has been developing a series of revolutionary technologies to meet the rising demands on design, technology, quality and comfort.

- · I-tec Core
- · I-tec Ventilation
- · I-tec Locking
- · I-tec Shading
- · I-tec Glazing
- I-tec InsulationI-tec SmartWindow

Discover Internorm's innovative technologies on the following pages and be amazed!



# STABLE CORE

# SOLID. RESOURCE-SAVING. SUSTAINABLE.

The strength of timber is unrivalled. Therefore, we have used this proven and natural material and developed a new revolutionary technology for the window industry to create an even more sustainable and individual window for you.

With the new I-tec Core we are processing thin, bonded timber layers, for the core of the timber/aluminium window HF 410. This timber is considerably more resisitant to humidity, durable and extremely strong. This new high-tech material is sustainable and allows larger sizes through its particular load-bearing capacity. The narrow frame design shows more aesthetics to this window.



### NEW!

High-quality layered timber composite encased in solid spruce and walnut. Especially resource-saving and available at an attractive price/performance ratio.





# SHADING WITH SELF-SUFFICIENT ENERGY

# INTEGRATED. INDEPENDENT. AUTOMATIC.

All Internorm windows with integrated blinds can be powered by a self-suffcient photovoltaic module. I-tec shading works without an external power source and the decorative feel of the window is fully retained.

The intelligent automatic mode with day/night recognition allows automatic opening and closing of the blinds at sunrise and sunset. Measuring solar radiation and temperature prevents overheating of the rooms. In winter the automatic control keeps the blinds open and enables maximizing of solar gains and therefore a reduction in heating costs.

### I-tec Shading



INTEGRATED SUN AND PRIVACY PROTECTION



AUTOMATIC HEAT PROTECTION IN SUMMER



AUTOMATIC
DAY/NIGHT RECOGNITION



NO EXTERNAL POWER SOURCE NECESSARY



MANUAL CONTROL AVAILABLE



USE OF ENERGY GAIN IN WINTER

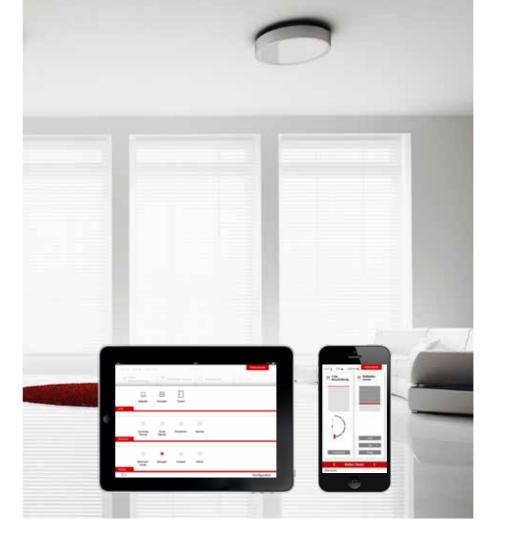


SIMPLE AND CONVENIENT CONTROL VIA SMART WINDOW



CONTROL WITH LOXONE SMART HOME AVAILABLE





# I-TEC SMARTWINDOW

### INTELLIGENT, SIMPLE, CONVENIENT,

Internorm's intelligent building control I-tec SmartWindow makes it easy for you to operate your ventilation and shading simply and conveniently using a smartphone or tablet. No matter if you are at home or away, you can remotely control your I-tec ventilation, I-tec shading, sun protection and fanlight opener via the Internorm app or check the status of your windows via opening sensors.

You can download the I-tec SmartWindow app for free in the app store or in Google play with its associated installation instruction. A few taps with your finger on the user interface are enough to move blinds up or down, adjust the light guidance or regulate the air volume for the ventilator. Also fanlights can be easily opened, closed & tilted.

### I-tec SmartWindow



FREE APP
WITH INSTRUCTIONS



EASILY EXTENDABLE



SIMPLE DEFINITION OF REQUIREMENTS



MANUAL CONTROL AVAILABLE



CONTROL VIA TASKS ALSO ON HOLIDAY



INDIVIDUAL SETTINGS

Free download of Internorm App I-tec SmartWindow:















AIRING OF THE FUTURE

INDIVIDUAL, AUTOMATIC, HEALTHY.

Thanks to Internorm you do not need to remember airing any

longer. Because Internorm is offering you windows, where the

windows this ensures fresh air 24/7 and optimum room climate.

Fresh air is important for our health. It ensures wellbeing, good

airing humidity, CO<sub>2</sub> or other air impurities remain in the room and

can cause considerable damage. The building structure can be damaged by mould and humidity, your health is compromised by

You could use a decentral ventilation system. It ensures fresh air,

mould, pollen and house dust, heat is also lost.

sleep, high concentration and high performance. With wrong

Why is airing so important?

How do you air correctly?

which will be individual for each room.

ventilator is completely integrated into the frame. Even with closed

### I-tec Ventilation



FRESH AIR WITHOUT **BIG HEAT LOSS** 



FRESH AIR WITHOUT



FRESH AIR WITHOUT DUST



AGAINST MOULD



FRESH AIR FOR



FRESH AIR WITH INCREASED SECURITY



FOR EACH ROOM



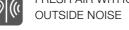
FRESH AIR WITHOUT DRAUGHTS



SIMPLE AND CONVENIENT













**HEALTHY LIVING** 



FRESH AIR INDIVIDUALLY



FRESH AIR WITHOUT WORRIES: AUTOMATIC FUNCTION

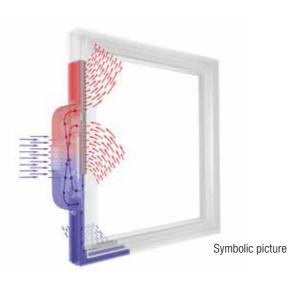




CONTROL VIA SMART WINDOW



CONTROL WITH LOXONE SMART HOME AVAILABLE







LOW VIEWING HEIGHT FOR MORE LIGHT



**FRAMELESS** GLASS ARCHITECTURE



SASH WEIGHTS UP TO 130 KG



DISCREET DESIGN WITH CLEAR LINES



EASY-TO-CLEAN **FRAME** 



NO VISIBLE KEEPS FOR AN ATTRACTIVE LOOKING APPEARANCE



SAME OUTSIDE APPEARANCE OF FIXED ELEMENT AND SASH

# FEEL SAFE

### NO COMPETITION. PRECISE. UNDERSTATED.

Instead of conventional locking cams, flaps ensure secure and precise locking of the window sash to the frame. When locking, flaps which are positioned in short distances on all four sides of the sash, press directly against the interior of the frame and make levering of the window virtually impossible.

Contrary to systems with locking cams which need regular adjusting, the I-tec locking needs no counter piece in the frame. The flaps always lock precisely and with total power.

I-tec locking is integrated as standard in the UPVC or UPVC/ aluminium window KF 500 and achieves security class RC2N. Contrary to conventional mushroom shaped locking pins, the function of KF 500 is not restricted in any way despite the high security class.





# I-tec Insulation



GRANULATE
INSTEAD OF FOAM



IMPROVED
THERMAL INSULATION



GAPLESS CHAMBER FILLING

# P 4

The welded sash frame is tensioned from corner to corner.



The glass pane is set into the frame and centred.



The remaining gap between glass and frame is filled with glue all around.



By fitting glazing beads or cover beads the glue joint is covered.

# I-tec Glazing





MAXIMUM BURGLARY PROTECTION



INCREASED STABILITY



INCREASED
THERMAL INSULATION



IMPROVED SOUND INSULATION

# INNOVATION ALL AROUND

# CONTINUOUS. SECURE. STABLE.

Many window panes are only connected to the frame in very few positions. Internorm uses FIX-O-ROUND technology as standard for a continuous all around fixing.

The advantage of this technology lies in the continuous connection of the window frame with the glass pane. This improves stability, thermal insulation and sound reduction, security protection and functioning of the window for its entire lifespan.

Special bond ensures not only a tight connection from glass to frame, but also allows easy exchange of the glass pane.



I-tec glazi

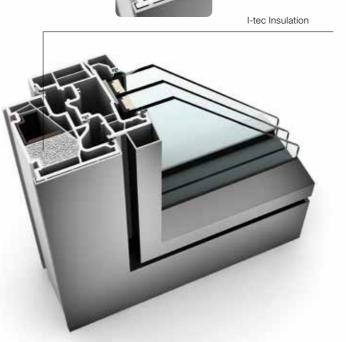


# NEW INSULATING TECHNOLOGY

### CONTINUOUS. EFFICIENT.

Internorm windows are reknown for best thermal insulation values. A significant factor for this is the HCFC-, HFC- and FC-free insulation which is inserted into the frame profiles.

The new I-tec insulation is inserted with pressure as granulate into the inside of the frame of the UPVC/ aluminium windows KF 410 and KV 440. This new insulation technology fills the chambers all around evenly and improves the thermal insulation considerably.





### INDIVIDUAL

# INTERNORM'S DESIGN POSSIBILITIES.

The design of your house is as individual as you are. Let your taste decide on straight-lined, modern, classical or traditional design styles and allow your home to be as individual as you are. By choosing Internorm you can be sure to get the perfect windows for your house style. With almost unlimited design possibilities will we gladly fulfill your exact requirements.

Internorm windows can support the design of your home with a wide range of design styles including:

- · Attractive handles in aluminium, chrome and brass
- · A multitude of glazing from Satinato to Linea
- Security glazing as well as highly thermally insulating glazing
- Numerous colours for UPVC, timber and aluminium surfaces
- · Sun and insect protection systems





# PANORAMA HX 300

### OPEN. BRIGHT. FREE.

Large-scale glazings which can be completely integrated into the brickwork, create unlimited freedom for your home. They bring light to the inside and at the same time offer full view to the outside. Innovative solutions such as glass joints where the transition between the glass panes is virtually invisible, offer many possibilities in the modern, large-scale glass architecture. You can set optical highlights with integrated windows in the style of your house.

### Enjoy far-reaching views

- · Frameless glass architecture
- · Open bright living environment
- · Create unlimited freedom



Frameless appearance and technologically optimized construction connection





The new UPVC or UPVC/aluminium lift-sliding door KS 430 creates light-flooded rooms and enlarges your home beyond its real borders. Without any effort the large-scale sliding elements can be opened to make even more space.

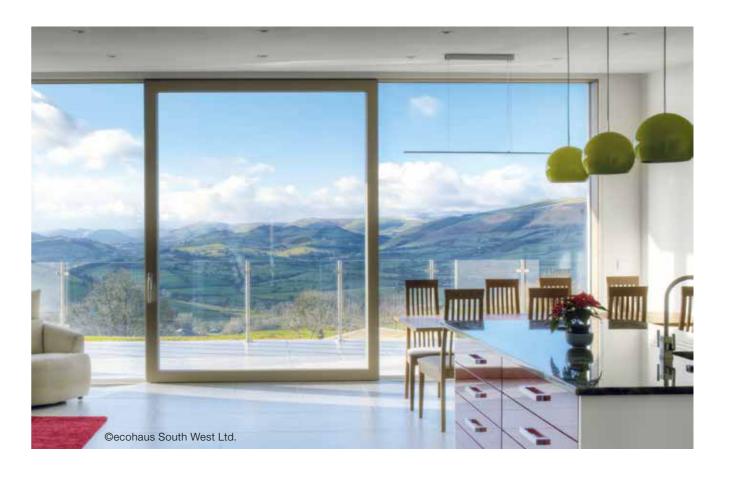
The KS 430 offers modern design and excellent comfort combined with high-quality technology:

- · More light through large-scale glazings
- · Soft/lift as standard for easy operation
- · Available up to 6500 x 2800 mm
- · Narrow sliding frames and frameless side elements
- · Easy operation of sash up to 400 kg sash weight
- · Energy efficient and heating cost saving
- · No tripping hazard due to low threshold height
- · Attractive colours for individual design requests
- · Better stability due to glass fibre low threshold
- Thoughened panes protect from injuries when glass breakages
- Can be perfectly combined with all other Internorm window systems



### PROPERTIES

*	Thermal insulation	U <sub>w</sub> as low as 0.64 W/(m <sup>2</sup> K)
9 ((	Thermal insulation	up to 43 dB
	Security	RC1N, RC2



# HS 330 timber/aluminium lift-sliding door

The timber/aluminium lift-sliding door HS 330 makes the borders between inside and outside disappear almost magically. It connects the inside space with the surrounding nature and creates a new, awareness of space.

The HS330 offers unique design and exceptional comfort, combined with high-quality technology:

- · More light through large-scale glazings
- · Available up 11 m wide x 3.2 m height
- · Narrow sliding frame and frameless side elements
- · Easy lifting and sliding of sash up to 400 kg sash weight
- · Energy efficient and heating cost saving
- · Low heat emission due to triple glazing
- · No tripping hazard due to low threshold height
- · Attractive colours for individual design requests
- Better stability due to glass fibre low thresholdThoughened panes protect from injuries
- Can be perfectly combined with all other Internorm window systems



### **PROPERTIES**

\* Thermal insulation U<sub>w</sub> as low as 0.73 W/(m<sup>2</sup>K)

Thermal insulation up to 40 dB











# PERFECT COMBINATIONS

### TRUE TO STYLE. INDEPENDENT OF MATERIALS. MATCHING.

The demands on design, energy effciency and comfort of the windows increase with individual architecture. Function and design are no contradiction with Internorm. UPVC/ aluminium and timber/aluminium systems can be perfectly combined.

### Outside same design - choose between UPVC or timber for the inside

If you would rather have a UPVC/aluminium window in the bathroom because of the high humidity, but would not like to miss the timber/aluminium window in the living room, then you can combine these two materials without any problems with Internorm. The design of your window and therefore the exterior design of your house always remains the same. Inside of each room you have the possibility to create your window

according to your requirements - either in UPVC or in timber.

### Uniform appearance for architecture true to its style

No matter in which design style you create your house - if avant-garde, modern, elegant, playful or timeless - Internorm is offering you perfect combinability for each of these styles in the materials UPVC and timber.

### Can also be combined with lift-sliding doors

You do not have to miss large-scale glazing and more light in your rooms. We are offering you lift-sliding doors in the materials UPVC/aluminium and timber/aluminium, matching the window style.

### **OUTSIDE - THE SAME**

### Aluminium

The aluminium clad on the outside adapts to the design style of your house.

### INSIDE - YOUR CHOICE

### UPVC

UPVC ist long-lasting, extremely easy to care for and also perfectly suitable for rooms with high humidity such as e.g. the bathroom.



### Timber

Timber conveys warmth, is cozy, provides a pleasant athmosphere and is therefore perfectly suitable for living rooms and bedrooms..









©ecohaus South West Ltd.

# SAFE WITH SECURITY

RELIABLE. EFFECTIVE. PATENTED.



#### Security locking elements

All Internorm window systems are equipped with standard security. Solid, attractive, yet discreet designer locking elements in silver together with the hexagonal mushroom shaped closing bolt in the window frame lock the window.



### I-tec glazing

Thanks to Internorm's patented glazing technology, the glass pane cannot be pushed out. The glass pane is glued all around into the window frame and therefore stays securely and tightly. Almost all Internorm window systems are equipped with this I-tec innovation as standard.



### Concealed hardware

Concealed hardware ensures that windows cannot be levered out of their hinges and serves for discreet protection. When locking the appearance and easy cleaning.



### I-tec locking

Internorm's revolutionary locking technology guarantees maximum window, flaps open and press on to all sides directly inside the frame. The window cannot be levered any longer.

Optimum security protection and maximum security for children are main requirements to be able to feel at ease within your own four walls. A considerable contribution to this feeling of comfort comes from the windows. You can protect your family effectively with Internorm's sophisticated technologies und make it difficult for intruders to gain access to your house.



#### Security handle

The Secustik handle with safe screening offers highest security. The patented locking mechanism protects absolutely secure against moving the lock from the outside (standard with UPVC and UPVC/ aluminium window KF 500).



#### Lockable handles

Lockable handles offer optimum security for children and perfect burglary protection in one. The window is locked via key or push button and cannot be opened, the inside.



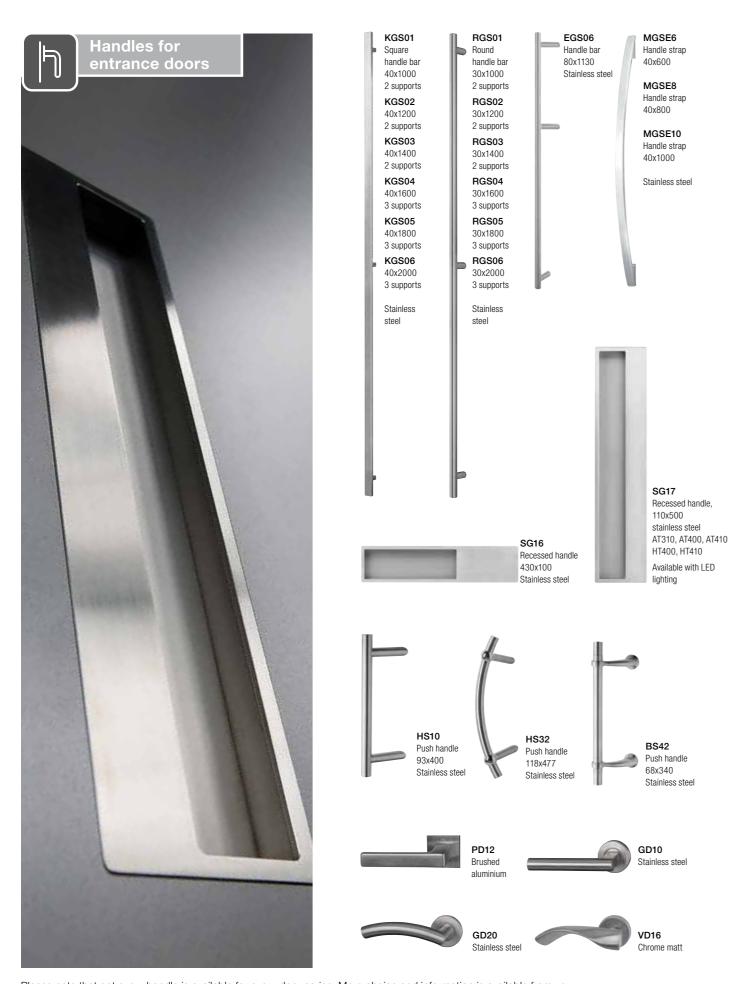
#### Electronic sensor

Locking sensors report reliably and inconspicuously via the I-tec SmartWindow App if and which windows or window doors are open, tilted or locked. The sensor neither from the outside, nor from can also be wired upon request and can then be combined with any customary alarm systems.



### Laminated glass

Contrary to conventional window glass which splinters when broken, laminated glass does not break apart. Tear-resistant foils keep the panes together, the glass stays in the window frame and danger of injury is averted.



Please note that not every handle is available for every door series. More choice and information is available from your Internorm distribution partner.





### **GLASSES**



Satinato weiß

Chinchilla



Satinato grün (only for Doors)



(only for Doors)



Linea









Kathedral großgehämmert Altdeutsch K

Masterpoint



Drahtglas



Mastercarré



There is a comprehensive selection

Variable glass cut-outs are available upon

request and after technical inspection.

available for every door series. Due to

printing and manufacturing technology colour and structure deviations between illustrations in this brochure and original

Your Internorm [1st] window partner / distribution partner will gladly show you

Please note that not every glass is

of glasses available matching the respective window and door series in

the different design styles.

products may occur.

original colour samples.

Ornament 504

### EXTERNAL SIDE OF WINDOWS AND DOORS

### SD-FARBEN (ONLY FOR DOORS)













\*Available on technical

### **UPVC**



Please note that not every colour is available for every window and door. Due to printing and manufacturing technology colour deviations between illustrations in this brochure and original products may occur.

Your Internorm [1st] window partner / distribution partner will gladly show you original colour

### ALUMINIUM ATTACHMENT CLAD

#### STANDARD COLOURS\*



### NEW DUDAWALCOLOUDO

NEW: DURAxal COLOURS			
	HXC 31	HXC 32	HXC 33
	HXC 34	HXC 38	HXT 05
3	HXT 07	HXS 21	HXS 26
	HXS 27		

### SPECIAL COLOURS

A variety of design possibilities are offered by the Internorm RAL colour range (facade quality). These are the colours available for aluminium attachment clads outside and timber inside.

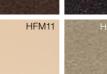
- \* Highly weather-resistant, except M916 (facade quality).
- \*\* Intensive colour appearance, however colour tolerances possible.
- \*\*\* A special highly weather-resistant powder coating is used for surface versions **HM** (highly weather $resistant\ standard\ colour),\ \textbf{HF}\ (highly\ weather-resistant\ fine\ structure),\ \textbf{HFM}\ (highly\ weather-resistant$ fine structure metallic), and HDH (highly weather-resistant timber decor colour).
- \*\*\*\* HDH colours have a vibrant timber appearance being hand-finished with structure coating, however colour tolerances are possible.

### hirest-COLOURS\*\*\*

HITEST-COLOURS		
HF916	HF304	
HF113	HF605	
HF735	HFM01	
HF704	HFM02	
HF716	HFM03	











### HDS COLOURS\*\*



### TIMBER DECOR COLOURS\*\*\*\*



### METALLIC DECOR **COLOURS**



### STAINLESS STEEL COLOURS







### INTERNAL VIEW OF WINDOW

### UPVC



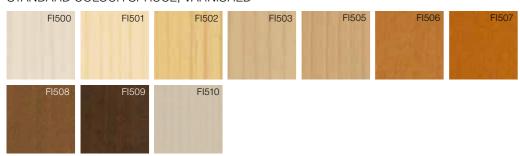
### **DECOR FOILS**



- $^{\star}\,$  Available for KF 500, KF 410 and KV 440 in studio and home pure as well as KF 310 and KV 350 in all available design styles
- \*\* Available for KF 410, KF 200 and KV 440 in home soft and ambiente as well as KF 310 and KV 350 in all available design styles
- \*\*\* Only for KF 310 and KV 350

### TIMBER

### STANDARD COLOUR SPRUCE, VARNISHED



STANDARD COLOUR SPRUCE, OPAQUE



STANDARD COLOUR LARCH, VARNISHED







COLOURS HF 410 – additionally to timber standard colours available

### OAK





NEW: Even timber types not usually used in window construction can be used for timber/aluminium window HF 410 as well as timber/aluminium lift-sliding door HS 330.



# **GLAZING**

### TOUGHENED AND INSULATING GLASS

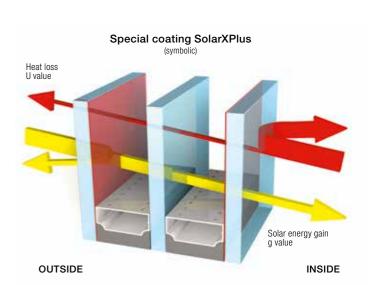
All insulating and toughened glass which is fitted into Internorm products comes from in-house production. We are independently promoting progress and aiming to satisfy the trend for innovative and highly thermally insulating glass solutions.

### Thermal insulation glazing

Extremely thin precious metal coatings and precious gases such as argon or krypton are used in the cavity between the panes and ensure perfect thermal insulation. Choose triple thermal insulation glazing instead of double glazing and you can plan up to 40 % more glazing areas with the same heating costs.

### NEW! SolarXPlus

The new type of coating of the glass panes lets more light and energy into your interior than other special glazing. This renders your living spaces even more appealing and lighter, it also offers excellent thermal insulation. The heat loss is therefore minimal and you can enjoy even more daylight – a key benefit especially in the Winter months.







# SUN AND INSECT PROTECTION

### COMBINABLE, INTEGRATED, MANY VARIATIONS.

Pull-down flyscreen

The sun and insect protection systems complement the windows to a functional unit and support the design of the house facade. Combine your sun protection products with I-tec SmartWindow and enjoy the comfort of automatic functions as well as the convenient control via Smartphone or tablet.

Turn or fixed frame

Sliding frame

**OPTIMA-Window shutter** 

**Windows with integrated blinds:** Integrated sun and privacy protection between the panes – choose between blinds, Venetian blinds or Duette® blinds, upon request with energy self-sufficient shading (I-tec shading).

**Venetian blinds:** Optimum control and guidance of light and warmth through adjustable slats, upon request with day light guidance RETROLux. Can be combined with insect protection.

**Attachment Venetian blinds:** Optimum control and guidance of light and warmth through adjustable slats. Can be combined with insect protection.

**Exposed and mini exposed roller shutters:** Delivered separately or completely fitted on to the window. Can be combined with insect protection.

Insect protection: Fixed, turn, sliding or pull-down flyscreen. Can be combined with sun protection.

Window shutters: Made of aluminium, with many design possibilities. Can be combined with insect protection.



Inside blind

# SIDE ENTRANCE DOORS

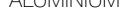
Side entrance doors serve to close off unused, unheated rooms (e.g. garage, basement storage rooms etc.).

Current statistics show that intruders predominantly gain access to a house via side entrances. It is therefore all the more important to consider relevant security features – Internorm offers different security systems upon request.

Side entrance doors are available in, timber/aluminium, aluminium and UPVC and offer a wide range of individual design possibilities.

### TIMBER/ALUMINIUM ALUMINIUM







UPVC



HF 210

HF 310



AT 150



**KF 200** 

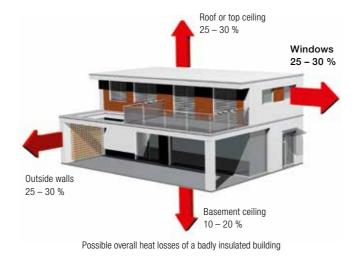




# ENERGY EFFICIENT. WELCOMING, WARM.

Highly thermally insulating window systems ensure comfort and warmth within your own four walls. In connection with a special coating for using solar radiation they virtually becomes free additional heating.

As a building can lose approximately 25 to 30 % of its energy through the windows, the thermal insulation of the windows is especially important. Through careful planning, correct positioning of the window areas (large window areas south-facing) can positively influence the energy balance of the building. The thermal insulation of the window depends on the frame material, the insulating glass and the tightness of the window. The parameter for the insulating capability of the window is the U value. The lower the value, the better the thermal insulation. Additional features such as roller shutters and window shutters can improve the U value.





# SOUND REDUCTION

### CALM. COMFORTABLE. QUIET.

Interference of noise is unpleasant and can, given the right intensity and duration, affect the human body in a negative way. Noise is perceived through the human ear and passed on to the brain.

Sound reduction of a window is measured in decibels. The higher the value, the better the sound reduction. Sound reduction states how much sound energy from the original sound energy is allowed to pass through. At an insulation of 10 dB 1/10 of the original sound energy passes through, at 20 dB 1/100, at 30 dB 1/1000 etc. Humans perceive a reduction of 10 dB as halving the noise. Sound reduction of a window is dependent on frame material, insulating glass, tightness of the window and the construction connection.

VOLUME	NOISE EFFECT	TYPE OF SOUND
10 dB		Pin dropping
20 dB	very quiet	Leaves rustling, clock
30 dB	quiet	Whispering
40 dB		Quiet talking
50 dB		Residential street, birds
60 dB	loud	Talking, radio
70 dB		Loud talking, street
80 dB	vorvloud	Heavy traffic
90 dB	very loud	Shouting, hooting
100 dB		Circular saw
110 dB	unbearable	Pneumatic hammer
120 dB	unbearable	Jet plane
> 150 dB		Explosion, rocket

### WARRANTIES

# WE GUARANTEE YOU MANY YEARS OF PLEASURE WITH YOUR INTERNORM WINDOWS.

As Europe's leading and largest active international window brand, Internorm looks back on 87 years of experience in trendsetting window and door solutions of exceptional reliability and longevity. This, we can guarantee you.

#### Warranty



- No unnatural colour changes or cracked surfaces due to weather influences for white window and door profiles made of UPVC, with the exception of mitre cracks
- No unnatural colour changes or cracked inside surfaces due to weather influences for foil-coated window and door profiles made of UPVC, with the exception of mitre cracks.
- No unnatural colour changes or cracked surfaces due to weather influences for anodised or powder coated window and door profiles made of aluminium.
- · No condensation between the panes of insulating glass.
- The function of the timber, thermal foam and aluminium profile compounds is guaranteed for all Internorm timber/aluminium window systems, provided that the Internorm installation and maintenance guidelines have been adhered to.
- The function of the adhesive and the sealing of insulation glass panes with the window profiles is guaranteed for all Internorm timber/aluminium window systems, provided that the Internorm installation and maintenance guidelines have been adhered to.
- · The glue connection of glued Georgian/feature bars.

### Warranty



- PVD coated door handles are guaranteed against corrosion if there is no mechanical change.
- No unnatural colour changes or surface cracks due to weather influences in door fllings. There is no guarantee for changes in the surface appearance as a result of dirt.

### Warranty



- No unnatural colour changes or surface cracks due to weather influences for roller shutter profiles made of UPVC.
- No unnatural colour changes or surface cracks due to weather influences for anodised or powder coated roller shutter and blind profles made of aluminium.
- The function of the window or door fitting is guaranteed, provided that the Internorm installation and maintenance guidelines have been adhered to.

### WARRANTIES/EXCERPT:

The full wording of our warranty conditions, the exact preconditions for the application of the warranty, and what you should do in the event of a claim, can be found in the Internorm Maintenance Care and Warranties Manual. You will receive this booklet when your Internorm products are delivered. In addition, it is obtainable from any Internorm [1<sup>st</sup>] window partner / distribution partner.

# NATIONAL AND INTERNATIONAL CERTIFICATIONS CONFIRM THE HIGH QUALITY OF OUR PRODUCTS.

Our know-how gives you the security that you receive best service for your money. The most modern production facilities and strictest quality controls ensure quality which is setting standards all over Europe. Awards of independent test institutes from all over Europe are confirming this.



Austrian State Au
Emblem



Austrian Quality Label



CE Certification



Technology Rosenheim



v Plus X











Federal Ministry for Traffic, Innovation and Technology



Technical University Minergie® Certificate



Austrian Society for Environment Simulation

ÖGUS



Certificate for Sustainable Forest Management



KlimaHaus Certificate



Energy Globe (Projekt Schiestlhaus)



Climate Association Town Traun







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