# FINEST WINDOWS AND DOORS

LIGNUM LIGNUM SECURE



#### »THE HISTORY OF ARCHITECTURE IS THE HISTORY OF THE STRUGGLE FOR THE WINDOW.«

Le Corbusier

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#### Editorial

It inspires us to build windows and doors for the most beautiful and functionally sophisticated homes in the world. No other building component can fulfil so many different home owner requests or permit such a variety of creative features to underline exclusive building design. With our KORN LIGNUM and KORN LIGNUM SECURE lines, we provide our clients quality products that are exceptional, both technologically and aesthetically. We have the expertise to meet the most exacting demands of our clients and their architects. Our unique product and service quality provide the foundation for this task.

This brochure provides an overview of what we think, what we do and what we have to offer.

We hope you enjoy reading!

Michael Müller & Christian Standke

INTERVIEW

## THE PERFECT INTERACTION BETWEEN BEAUTY AND TECHNOLOGY

#### HOW DID A JOINERY IN NORTHERN GERMANY BECOME AN INTERNATIONAL BRAND?

MM: We have always strived to achieve something special. Together with architects, we create truly unique settings and determine the ideal mix of technology and beauty for each individual project. That's what motivates us. Projects involving exclusive homes around the world are therefore a perfect fit for us.

#### WHAT DOES »BEAUTY« MEAN IN THIS CONTEXT?

CS: Windows used to be status symbols and expressions of good taste. This has often been forgotten in the past century and, as a result, many buildings have been renovated into eyesores. In response to this, KORN developed and patented its 'Sprosse 22', a beautiful, stylish and highly functional window construction for modernisation projects, which conform to 'listed buildings' regulations. In general, we are now observing a return to an appreciation of windows that offer convenience and style in sublime form.

#### ARE YOU REFERRING TO HOME OWNERS?

CS: Yes, but not exclusively. Home owners want to see their taste realised while also significantly increasing their quality of living. Windows play a major role in this. On the outside they have a protective and representative function. On the inside they are relished as fine and unique furnishings, which are a joy to use. We also see many architects returning to a conscious use of windows and doors in their designs. They achieve this, among other things, by setting accents within a home using different window types and materials. For example, they may design the main house with classic wooden windows and special finishes, while choosing slender metal elements for the annex.



Michael Müller (Managing Director)
Christian Standke (Marketing and Sales)

#### WHAT CAN ARCHITECTS AND HOME OWNERS EXPECT FROM KORN?

CS: Architects can expect a comprehensive service package from a single source, which is unrivalled in terms of quality and consists of consulting, implementation planning, products, installation and service for exclusive homes anywhere in the world. When working with KORN, they will be advised by experienced specialists who implement each of their ideas with the utmost quality, thus impressing their clients, even when it comes to lowering a window, weighing as much as a ton, into the ground. Home owners are provided with windows and doors that remain beautiful and functional, while retaining their value for generations.

#### HOW DOES KORN ENSURE ITS CLIENTS RECEIVE TRULY INDIVIDUAL SOLUTIONS?

MM: By showing them all that is possible right from the start. After all, there are countless variations in terms of design, choice of materials, security levels and acoustic insulation as well as mosquito and sun protection just to name a few. Then there are special finishes, opening variants and fittings. The list goes on and on. At KORN we have developed a sophisticated system to help find the perfect solution to an extensive range of requirements.

#### HOW DO YOU ENSURE THIS WITH YOUR PRODUCTS?

MM: We manufacture our KORN LIGNUM wooden windows in our own 5,000 square meter production facility in Wedel

near Hamburg. They are superior to our competitors' products not only in terms of design, but also material quality and craftsmanship. Following an intensive development phase, we are now presenting our new LIGNUM SECURE product line. We have once again succeeded in combining beauty and technology in a singular product line. To our knowledge, no other product in the world combines these two properties so well.

#### WHICH ARCHITECTS HAS KORN WORKED WITH?

CS: Among all the outstanding architects we have worked with, I would like to mention the following: Robert Stern; Frank O. Gehry; David Chipperfield; Gerkan, Marg and Partners; Francis Terry; Sebastian Treese; Ulrike Krages; Hans Kollhoff; Allan Shope; Randall Stofft and John Cooney.

#### CAN YOU ALSO TELL US ABOUT SOME OF THE HOME OWNERS YOU HAVE WORKED FOR?

CS: We have worked for numerous internationally renowned home owners, but discretion is an integral part of our business. Perhaps it suffices to say that, in the past 40 years, our clients have chosen KORN for their homes and follow-up projects based on the conviction that only our products can meet their exclusive requirements. During this time we have continually adapted to the changes in the markets and the increasing requirements of our clients and architects, even when it comes to providing the utmost security. Only in this way is it possible to implement the ideas of our clients and architects, and fulfil their wishes to the fullest.

#### KORN LIGNUM & LIGNUM SECURE

## THE RIGHT PRODUCT FOR YOUR HOME

#### THE FINEST TIMBER WINDOWS AND DOORS. FOR THE MOST EXACTING EXPECTATIONS.

For decades KORN wooden windows and doors have stood for individual design paired with unrivalled material quality and workmanship. Over the past 40 years, they have been continuously developed and improved by engineers, technicians and master craftsmen.

Today, architects can realise almost any idea or client requests in unique quality in terms of material, design, security or technical features using KORN LIGNUM products. This is now possible around the world. Over 100 different combinable design options are available for this purpose, most of which have been developed by KORN and can be procured exclusively from KORN.

#### CONSULTING, PLANNING, PRODUCTION AND EXECUTION

Design flexibility and quality of living for decades – KORN offers leading international window and door expertise from a single source for the construction of exclusive homes, comprising consultancy, implementation planning, products, installation and services.



#### KORN LIGNUM

#### Wood

- Inswing windows/doors
- Outswing windows/doors
- Vertical sliding windows
- Lift-and-slide doors/motor-driven
- Inswing folding doors
- Outswing folding doors
- Entry doors
- Post and rail facades
- Retractable systems



#### KORN LIGNUM SECURE

#### Wood

- Security classes RC2-RC4
- Inswing windows/doors
- Lift-and-slide doors/motor-driven
- Entry doors
- Post and rail facades
- Retractable systems





















#### KORN LIGNUM

## TIMBER WINDOWS AND DOORS

Our KORN LIGNUM line meets the highest standards of design, as well as material and workmanship quality. The custom-made windows and doors allow for a particularly wide range of element types, design features and additional components. The range includes inswing and outswing windows and doors, motorized transom windows, lift-and-slide doors, folding doors, vertical sliding windows, patio and entrance areas, crank outs, curved elements, retractable units, post and rail facades and other design variations.

Together with the architect and the home owner, we select the designs (elevations, profiles, visible fittings, finishings, etc.), materials (wood type, fittings, glass, etc.) and optional features (sun protection, acoustic insulation, insect protection, burglar resistance, etc.). Using premium materials and quality workmanship, we provide longevity and function of our products for decades.

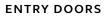
KORN LIGNUM is ideally suited to both historical and modern homes.

#### KORN LIGNUM OPENING TYPES

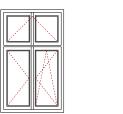
KORN LIGNUM offers a wide variety of products with different opening types and features, whether manually operated or motor-driven.

**INSWING TILT AND TURN** 

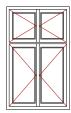
OUTSWING WINDOWS AND DOORS SLIDING DOORS (MANUALLY OPERATED AND MOTORIZED)



WINDOWS AND DOORS

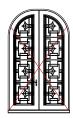






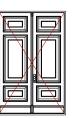












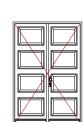
**CURVED PIVOT WINDOWS** 

**CURVED WINDOWS** 

POST AND RAIL FACADES







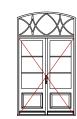








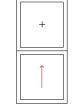




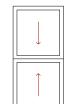


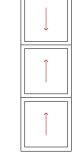
**VERTICAL SLIDING SASH WINDOWS** 





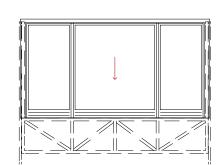
Single-hung







COMPATIBLE WITH RETRACTABLE UNITS



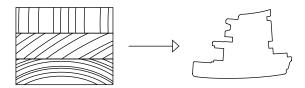
KORN entry doors: Made to measure in every size, shape and form

KORN LIGNUM

#### WOOD

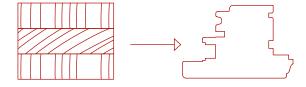
The materiality is an essential part of the aesthetics and durability of our windows and doors.

#### **COMMON LAMINATES**



- Made of imported lamellae
- Unsorted
- A low-quality product

#### KORN PREMIUM LAMINATES



- Made from selected logs
- Air dried, then carefully machine-dried
- Cut according to our specifications
- Sorted and glued according to our specifications
- A unique high quality product

#### PREMIUM LAMINATE

Our wood lamination was developed to counteract warpage. Windows and doors are exposed to very different climatic conditions on their outer and inner sides, which results in very different wood moisture contents in the scantling cross-section and can cause warpage of the scantlings. The drier side of the wood naturally shrinks, whereas the side with a higher moisture content swells. If sashes are made of solid wood, this change in volume affects the entire cross-section, causing the sash to warp and thus severely impairing its function. To counteract this, we use our own process to laminate all our sash timbers using three lamellae. In the laminate, the difference in moisture content occurs in the two outer lamella surfaces. Furthermore, the bonded joints serve as barriers that prevent moisture from penetrating deep into the cross-section. Prior to lamination, we also hand pick vertically grained

(rift cut) wood for the outer lamellae to ensure minimal change in volume. This very elaborate process, the positive effects of which have been known historically for centuries, is implemented exclusively for KORN premium laminates. For cost reasons, no other manufacturer invests this amount of manual effort in the raw material, which plays a decisive role in ensuring the proper functioning of very large elements over time.

#### **SURFACE FINISHING**

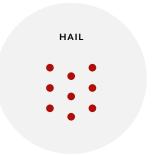
Our supplier Akzo Nobel has developed and continuously optimised a highly flexible surface product especially for KORN to provide lasting protection even in the most challenging climatic conditions. We have proven the uncompromising resilience of our finishing method in the most aggressive climates around the world, from tropical summers in Bermuda and Florida to winters in Moscow at minus 30 degrees Celsius.



Wood shrinks as it dries, but our flexible varnish finish does not crack.



Wood swells when it absorbs moisture. The flexible varnish expands, accommodates the movement and absorbs any resulting tension.



Improved flexibility reduces the formation of microscopic cracks.



UV light is absorbed by the translucent coating, which serves to ensure the coating and the wood remain undamaged.



Even at low temperatures, the varnish finish remains flexible and its permeability ensures an optimal moisture balance.

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KORN LIGNUM KORN LIGNUM

#### WOOD TYPES AND FINISHINGS

The extraordinary quality of KORN LIGNUM products can be seen and felt at first sight. We process only selected woods, primarily sipo mahogany. Other types of wood are available on request. It is also possible to choose different types of wood for the interior and exterior components.

Our products are coated using a high quality 3-layer varnish structure, whereby the choice of colours can be determined individually. It is possible to choose different colours for the inside and outside surfaces.

#### **EXTERIOR WOOD TYPES**





#### **INTERIOR WOOD TYPES**











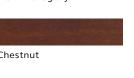
#### GLAZES

Bamboo

















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Interior and exterior can be composed of different wood and colour combinations.

#### **VISIBLE HINGES**

It is our aesthetic ambition to produce windows and doors that are suited to various architectural styles, whether modern or classic. This cannot be achieved using standard fittings. For this reason, we have developed fittings that are produced exclusively for KORN.

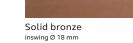
#### FINISHING OPTIONS

Exclusively manufactured KORN hinges Ø 16 mm



#### STANDARD





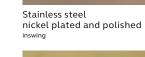
### OPTIONS



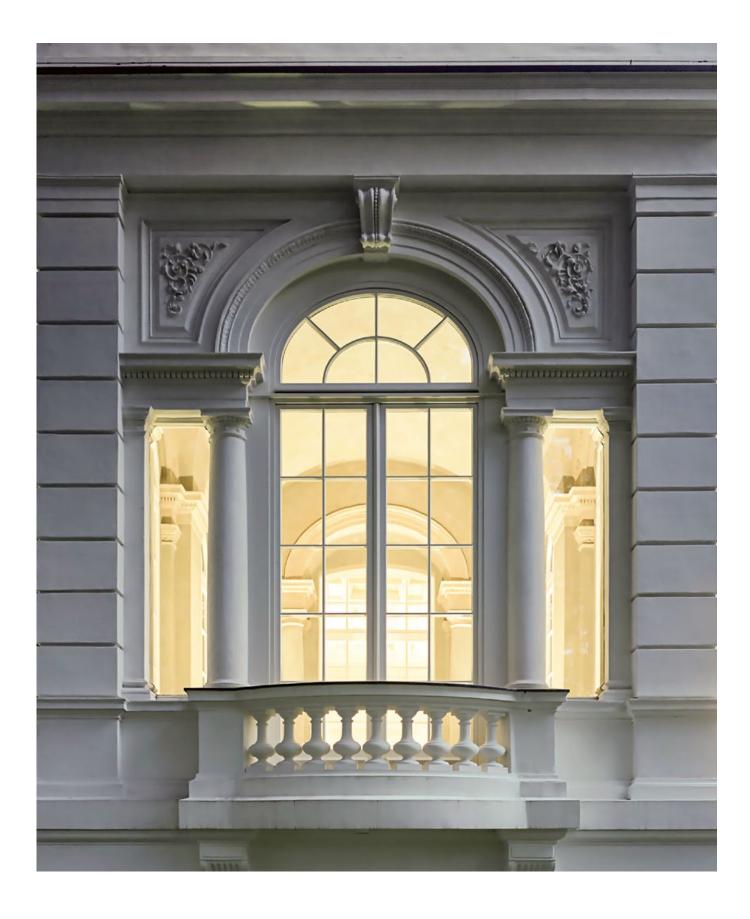
Stainless steel gold plated and polished



PVD black bronze







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#### KORN LIGNUM SECURE

## SECURITY WINDOWS AND DOORS MADE OF TIMBER

We specialize in international home construction with its high standards and exceptional requirements. To fully meet these, we had to revise hardware manufacturer specifications with their licence folders and develop our own product. Our engineers have managed to realise this project following intense development work including in-house tests using our own testing facility. The external tests were carried out by an independent, certified testing institute and passed with excellence.

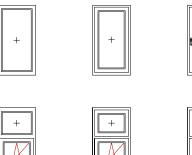
Combining highly developed security technology with sophisticated aesthetics, KORN LIGNUM SECURE is in a class of its own worldwide. The windows and doors meet the security classes for burglar resistance, including RC4, and offer exclusive detailed solutions that extend beyond the limits of DIN standards. Our products can also be designed to be bullet-resistant.

Multiple variants had to be tested so that we may provide the finest homes of all building styles with LIGNUM SECURE, while ensuring architecturally desired element layouts and features. We have developed a holistic design solution for our clients by selecting wood sections in combination with aesthetically appealing hinges, special bronze ground sills, concealed hardware and motorised transom windows. This even meets the requirements of security class RC4.

#### KORN LIGNUM SECURE OPENING TYPES (RC3 - RC4)

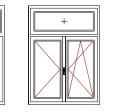
KORN LIGNUM SECURE offers a wide variety of products with different opening types and features, whether manually operated or motor-driven.

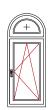
#### WINDOWS (RC3 AND RC4)

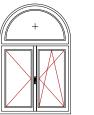


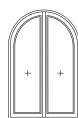


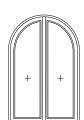


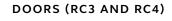


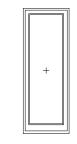


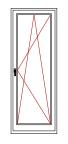


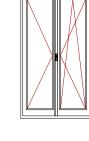








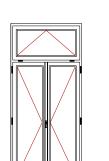




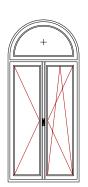


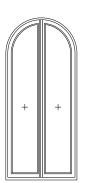








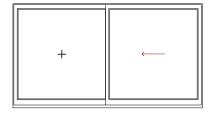


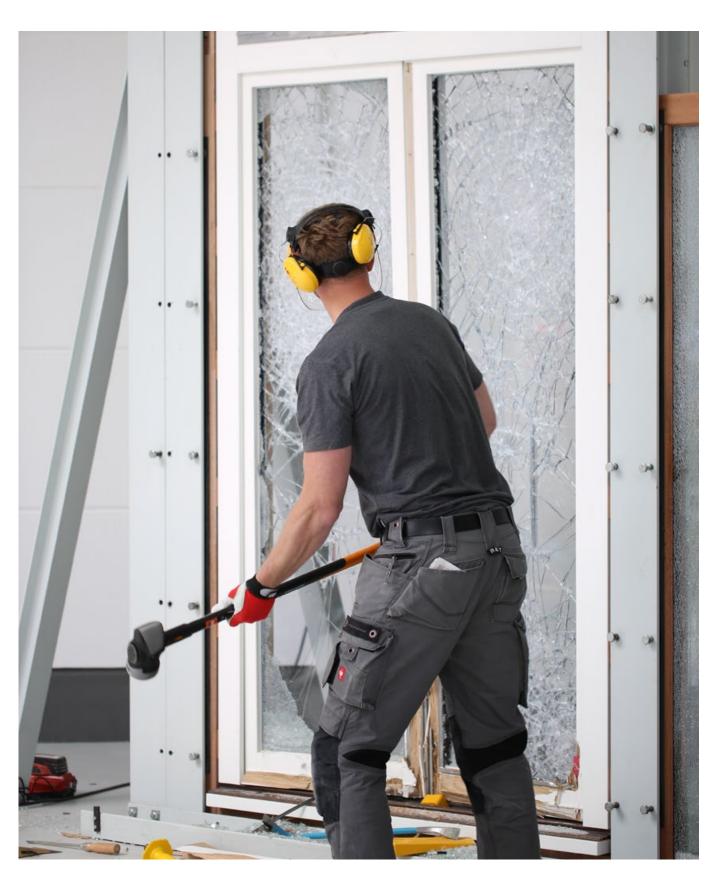






LIFT AND SLIDING DOORS (RC3)





Burglary test at KORN's in-house testing facility

#### KORN LIGNUM SECURE

#### **BURGLAR RESISTANCE**

Our certified custom-made security windows and doors provide highly effective mechanical resistance against burglary. The DIN EN 1627 standard specifies the requirements for the properties and installation of burglar-resistant elements.

Windows and doors are assigned to corresponding resistance classes (RC) according to their burglary protection properties. The resistance classes differentiate between types of perpetrators as well as their criminal behaviour and are defined according to the duration that an element can resist the burglary attempt, which burglary tools and methods are used, and the intensity of the attack during the burglary attempt.

Based on our engineers' intensive development work, our product portfolio covers the spectrum from RC2 products to the highly complex products of resistance classes RC3 and RC4. The burglary test for classes RC3 and RC4 were carried out and certified by an independent testing institute.

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KORN LIGNUM SECURE KORN LIGNUM SECURE

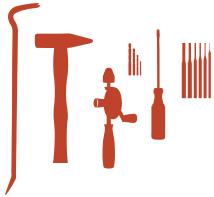
#### **RESISTANCE CLASSES**





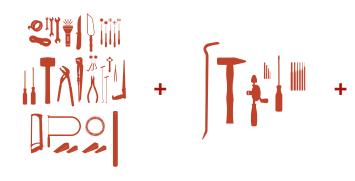
RC2

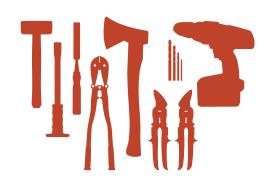




**20 MIN** 

RC3





**30 MIN** 

RC4

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#### RESISTANCE CLASS RC2

Threat level: low

Perpetrator type: amateur burglars

#### DIN EN 1627-1630 TESTING METHODS

STATIC TEST

Load per locking point: 300 kg

DYNAMIC TEST

Load: 3 x 50 kg from 450 mm

MANUAL TEST

Total test time: 15 min Tool contact time: 3 min

#### MATERIAL

Sipo mahogany or oak

#### GLAZING

Throw-through-resistant P4A glazing in compliance with DIN EN 356. Glass protection by bonding the pane to the glazing rebate

#### DRILLING PROTECTION

optional

#### CONSTRUCTION TYPES

Entry doors, direct glazed frames, fixed sashes, inswing turn or tilt and turn windows with symmetrical style, inswing turn patio doors with symmetrical style, bronze thresholds, panels, transoms with concealed motors, shutter boxes, lift-and-slide doors, post and rail facades

#### RESISTANCE CLASS RC3

Threat level: medium

Perpetrator type: advanced burglars

#### DIN EN 1627-1630 TESTING METHODS

STATIC TEST

Load per locking point: 600 kg

DYNAMIC TEST

Load: 3 x 50 kg from 750 mm

#### MANUAL TEST Total test time: 20 min

Tool contact time: 5 min

#### MATERIAL

Ouk

#### GLAZING

Break-through-resistant P6B glazing in compliance with DIN EN 356, which is the minimum requirement for RC4, but is also used at KORN for RC3 elements. Glazing rebate reinforcement with stainless steel brackets, which are used identically in our RC4 elements

#### DRILLING PROTECTION

optional

#### CONSTRUCTION TYPES

Entry doors, direct glazed frames, fixed sashes, inswing turn or tilt and turn windows with symmetrical style, inswing turn patio doors with symmetrical style, bronze thresholds, panels, transoms with concealed motors, shutter boxes

#### RESISTANCE CLASS RC4

Threat level: high

Perpetrator type: professional burglars

#### DIN EN 1627-1630 TESTING METHODS

STATIC TEST

Load per locking point: 1000 kg

DYNAMIC TEST Load: omitted

MANUAL TEST

#### Total test time: 30 min

Tool contact time: 10 min

#### MATERIAL

GLAZING

Break-through resistant P6B glazing in compliance with DIN EN 356. Glazing rebate reinforcement with stainless steel brackets

#### SPECIAL STRUCTURAL FEATURES

Drill-through protection included in handle area, rebate reinforcement

#### CONSTRUCTION TYPES

Entry doors, direct glazed frames, fixed sashes, inswing turn or tilt and turn windows with symmetrical style, inswing turn patio doors with symmetrical style, bronze thresholds, panels, (transoms with concealed motors in RC3 design combined with RC4 elements below)

#### KORN LIGNUM SECURE

#### **BULLET RESISTANCE**



We provide the ultimate level of security and are the perfect partner when it comes to realizing even the most unique requirements and special designs. As such, the KORN LIGNUM SECURE product spectrum extends to include the highest bullet resistance classes.

We can supply you with custom-made wooden windows and doors up to bullet resistance class FB5. Higher resistance classes must be developed for the specific project.

### CLASSIFICATIONS AND TESTING CONDITIONS OF BALLISTIC STANDARDS

			APPLICABLE TESTING CONDITIONS		
CLASS ACC. TO DIN EN 1522	GLASS ACC. TO DIN EN 1063	WEAPON TYPE	CALIBER TYPE OF AMMUNITION	Target Witness plate Indicator distance Test temperature	500±5 × 500±5 mm 0.02 mm aluminium foil (54 g/m²) 500±10 mm behind the plate 18±5 °C
FB1	BR1	Smith & Wesson M&P 22 LR Handgun	.22 Long Rifle (LR) L/RN	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	5.6 × 15 mm 2.6±0,1 g 10±0.5 m 3 360±10 m/s 120±10 mm
FB2	BR2	Baretta 9 mm Parabellum Handgun	9 mm Luger FJ¹/RN/SC	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	9 × 19 mm 8.0±0.1 g 5±0.5 m 3 400±10 m/s 120±10 mm
FB3	BR3	Smith & Wesson .357 Magnum Handgun	.357 Magnum FJ/CB/SC	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	9 × 33 mm 10.2±0.1 g 5±0.5 m 3 430±10 m/s 120±10 mm
FB4*	BR4	Colt .44 Magnum Handgun	.44 Remington Magnum FJ <sup>2</sup> /FN/SC	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	10.9 × 33 mm 15.6±0.1 g 5±0.5 m 3 440±10 m/s 120±10 mm
FB5	BR5	Colt M16 (AR15 Semi), 5.56 NATO AP Rifle	.223 Remington FJ <sup>2</sup> /PB/SCP1	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	5.56 × 45 mm 4.0±0.1 g 10±0.5 m 3 950±10 m/s 120±10 mm
FB6*	BR6	Heckler & Koch Model G3 7.62 NATO Rifle	.308 Winchester FJ¹/PB/SC	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	7.62 × 51 mm 9.5±0.1 g 10±0.5 m 3 830±10 m/s 120±10 mm
sнотс	UN				
FSG	SG2	Benelli 12 GA Shotgun	12 gauge slug (Brenneke)	Caliber Bullet mass Test range Number of hits Bullet velocity Shot spacing	12 × 70 mm 31.0±0.5 g 10±0.5 m 3 420±20 m/s 125±10 mm

L: lead | SC: soft core (lead) | SCP1: soft core (lead) with steel penetrator (type SS109) | HC1: steel hard core, mass 3.7±0.1 g, hardness greater than 63 HCR FJ¹: full metal (steel) jacket bullet, plated | FJ²: full metal (copper alloy) jacket bullet | RN: round nose bullet | CB: coned bullet | PB: pointed bullet | FN: flat nose bullet

 $<sup>\,^{\</sup>star}$  To be classified as FB4 or FB6, the specimen has to be tested with the two calibers listed.

#### KORN CONSULTING

## INTERNATIONAL CONSULTING EXPERTISE

A valuable consulting basis for architects and a guarantee for highly individual solutions. Our well thought-out system for identifying sophisticated client requirements.



KORN CONSULTING

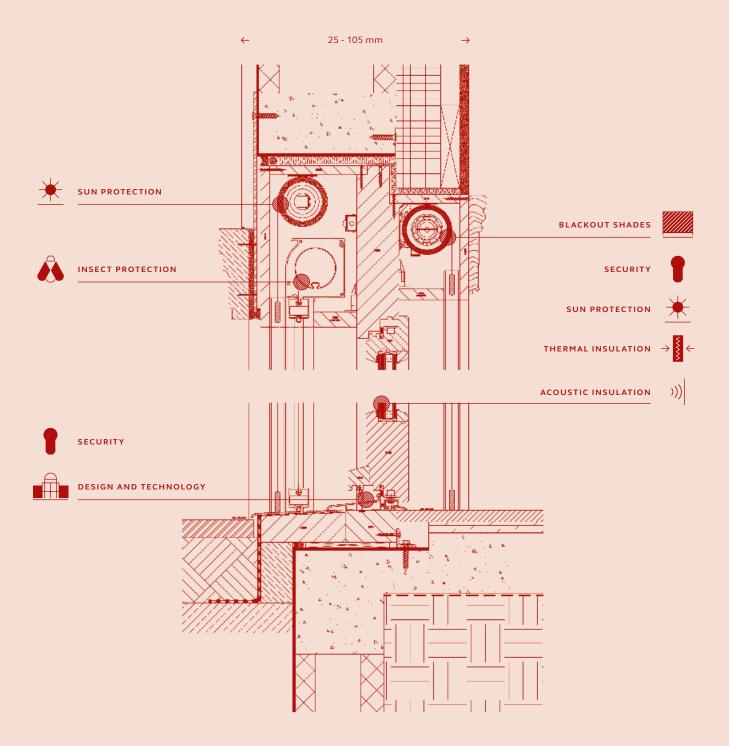
#### **FULFILLING CLIENT REQUESTS**

We can design and equip our wooden windows and doors in various ways to meet our demanding clients' technical and aesthetic requirements.

Based on the requirements of each home owner or architect, we develop our window designs for a wide range of historical and modern buildings. The windows and doors can be equipped with additional features including added security, ventilation options, blackout shades, sun and insect protection as well as acoustic and thermal insulation. By combining these features, we create a perfect product for the home owner, which not only meets their requirements, but guarantees them a pleasant living experience.

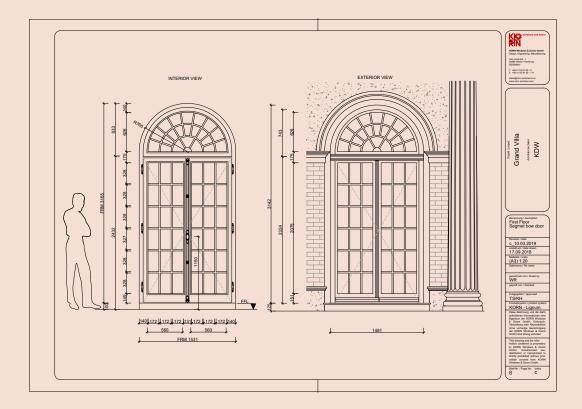
In the best case scenario, the architect involves us early in the consulting and planning process to include individual client requirements right from the start.

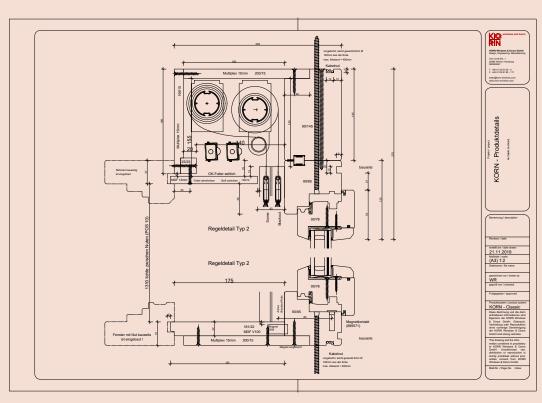
DESIGN AND TECHNOLOGY	SECURITY	VENTILATION OPTIONS
<ul><li>Hinges</li><li>Views</li><li>Materials</li><li>Products</li><li>Profiles</li></ul>	<ul> <li>Alarm components</li> <li>Hardware components</li> <li>Folding shutters</li> <li>Roller shutters</li> <li>Glass</li> </ul>	<ul><li>Tilt and turn</li><li>Retractable</li><li>Motorised</li><li>Folding</li><li>Sliding</li></ul>
<ul> <li>SUN PROTECTION</li> <li>Ext. shading roller blinds</li> <li>Folding shutters</li> <li>Roller shutters</li> <li>Glass</li> </ul>	<ul><li>INSECT PROTECTION</li><li>Sliding screens</li><li>Fixed screens</li><li>Screen doors</li><li>Roller screens</li></ul>	ACOUSTIC INSULATION  - Installation situation - Roller shutters - Seal - Glass
<ul><li>LIGHT</li><li>Retractable systems</li><li>Large openings</li><li>Sliding elements</li></ul>	<ul><li>BLACKOUT SHADES</li><li>Int. shading roller blinds</li><li>Folding shutters</li><li>Roller shutters</li></ul>	THERMAL INSULATION  - Installation situation - Folding shutters - Roller shutters - Glass



KORN CONSULTING

#### IMPLEMENTATION PLANNING





#### **PROJECT MANAGEMENT**

From the start of planning, we offer architects, interior designers and home owners expert consulting and planning support with regard to technical and design execution. We then perform implementation planning to document the jointly developed results. Our project managers coordinate and monitor the construction process. Following project completion, we offer to provide the home owner an individual maintenance contract for their windows and doors.

#### DESIGN

- The perfect mix between consulting and a sample presentation of a conceptual design of the finished project
- Engineering expertise (comparative analyses, structural design of oversized units)
- Presentation of working drawings

#### PLANNING

- Dedicated project managers
- Collaboration with architect to create working drawings and sectional drawings with in-house CAD team
- Coordination of delivery and installation within the home owner's timeline

#### **PRODUCTION**

- Manufacturing under strict quality control guidelines
- Management of all third-party suppliers, e.g. hardware manufacturers

#### INSTALLATION

- Coordination of the installation manager responsible for delivery including a site survey prior to installation
- Installation and quality inspection by in-house service technicians
- A dedicated project manager oversees final adjustments

#### ONGOING MAINTENANCE

- Comprehensive warranty and supplementary maintenance inspection during the warranty period
- Continual maintenance package and fast service after the warranty period has expired

#### KORN WINDOWS AND DOORS

#### SIX REASONS

Why our clients in Germany, Europe, the USA and around the world choose KORN Windows and Doors.

#### PREMIUM MATERIALS

KORN uses only the highest quality materials. This extends from the desired types of wood, glazes and varnishes to the glass, fittings and equipment components. We thus create a solid foundation for meeting the high expectations of demanding home owners and architects.

#### **QUALITY WORKMANSHIP**

For more than 40 years, we have been accompanying exclusive construction projects in Germany, Europe, the USA and Russia. Our employees draw on a wealth of experience. They manufacture windows and doors with the utmost craftsmanship using precision machines. We take nine steps just to create the brilliant and durable finishings for our wooden frames.

#### FORM AND ARCHITECTURE

KORN engineers develop windows and doors in close collaboration with architects and home owners. The finished products meet the respective desired architectural and functional criteria. Transom windows with highly efficient security technology integrate seamlessly into a classic facade. The large window fronts of the modern urban home can be completely retracted into the ground.

#### **FUNCTION**

We have developed hurricane-proof windows and doors, for example, for use in the most beautiful and often climatically extreme places on earth. Technically sophisticated security and alarm systems, electric drives as well as insect and sun protection are integrated with the highest aesthetic standards. Security systems remain completely invisible to the onlooker.

#### PLANNING AND CONSTRUCTION

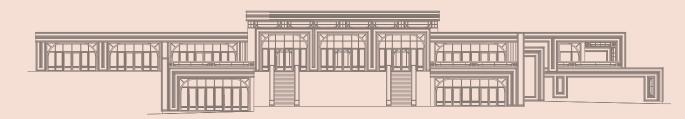
KORN serves as a competent and reliable partner to its clients throughout the entire construction project. Starting in the planning phase, we support architects with our special know-how. We conduct detailed implementation planning for the windows and doors that are to be manufactured. Experienced representatives and an on-site installation and service team ensure smooth project execution.

#### DEVELOPMENT

Based on continuous research and development, we can always offer you products that are both exclusive and unique. We are inspired by the demanding wishes of our clients and architects as well as by cutting-edge technical achievements and special climatic conditions. The perfect interplay between functionality and design is always a special concern for us.

#### INTERNATIONAL PROJECTS

Our international clients continually inspire us to create the extraordinary.



Russia



USA



Germany



Russia



Switzerland



USA



Russia



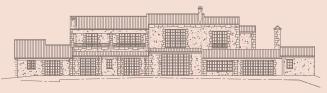
Spain



Switzerland



Germany



France

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