## Façade systems



## OUTSTANDING HunterDouglas® Façades SUSTAINABLE PERFORMANCE

Hunter Douglas Architectural collaborates with architects and designers around the world to create architectural products that meet the needs of each individual project. The results end up in our Façades, Ceilings, Sun Control and Window Coverings, not to mention support, from design development to post-installation service.

Go ahead, judge a building by its cover. We'll help you specify rainscreen façades and cladding systems, making sure your project's first impression will be a lasting one.

#### **HISTORY HUNTER DOUGLAS**



16 SANDWICH WALL SYSTEMS Over the last 50 years, Hunter Douglas Architectural has been the name behind some of the biggest developments in the areas of Façades, Sun Control, Ceilings and Window Coverings.

Hunter Douglas Architectural products offer unparalleled design freedom. A wide range of choices are available with different materials, shapes, systems, coatings and colours, that can help turn design ideas into reality.

#### PRODUCT HISTORY

#### 1964 - Sandwich Wall 1973 - MPF 150 F 1975 - 70S/132S 1976 - MPF 300 T/U 1977 - MPF 200 F 1992 - QuadroClad® 36 1998 - QuadroClad<sup>®</sup> Europe

- 1999 MPF 600
- 2011 QuadroClad<sup>®</sup> Zinc
- 2014 QuadroClad<sup>®</sup> 200





specific project requirements. • Economic value - highly durable,

- fast and efficient installation. • Green characteristics - at the end of the façade lifecycle aluminium
- alloy is 100% recyclable. • Aesthetic product - colours, shapes, and details offer
- unparalleled design freedom. • Ease of use - demountable system that enables easy maintenance.



#### Our façades systems offer:

- Performance easy to adapt to

#### CONTENT

#### 2 QUADROCLAD® SYSTEMS

- 4 QuadroClad<sup>®</sup> QC50 >
  - 6 QuadroClad® QC100
- 8 QuadroClad<sup>®</sup> QC200 >
- 10 QuadroClad<sup>®</sup> QC300
- 12 QuadroClad® QC500 >
- 14 QuadroClad<sup>®</sup> Renovation >

#### **16 SANDWICH WALL SYSTEMS**

- > 18 Sandwich Wall Systems
- > 20 Sandwich Wall **Bi-Modular Systems**

#### **22 SINGLE SKIN**

- > 24 LinearClad<sup>™</sup>T/U
- > 26 LinearClad<sup>™</sup> F
- > 28 Single Skin Cassette

#### **30 OPEN STRUCTURE**

- > **32** 84R
- > 34 30BD
- > 36 70S/132S

#### **38 CUSTOMISED**

- > **40** AuraWeave<sup>™</sup>
- > 42 QuadroClad<sup>®</sup> Flex Fins
- > **44** QuadroClad<sup>®</sup> Special Honeycomb

#### **46 MATERIAL, FINISHES AND SURFACES**

#### **52 NBK® ARCHITECTURAL** TERRACOTTA

- > 54 NBK<sup>®</sup> Architectural Terracotta
- > 56 NBK<sup>®</sup> Baguette
- > 58 NBK<sup>®</sup> Architectural Terracotta Surface

#### **60 SERVICES**

Cover : Maastoren, Rotterdam, The Netherlands Architect: Dam en Partners Architecten Product : QuadroClad® QC300





Designed to work for you

# QUADROCLAD® SYSTEMS

Outstanding looks, excellent functionality



Project : Centre for Chemistry and Biomedicine, Innsbruck, Austria Architect : Din A4 Architecture Product : QuadroClad® QC300

\*Please refer to pages 48 - 51 for colour inspiration



High performance & made to measure

QuadroClad<sup>®</sup> QC50, our BASIC panel, is a high quality panel that can be fitted to almost any fascia of a building. It can be specified for both internal and external applications and fitted vertically or horizontally. QC50 is available in a range of natural materials, is lightweight and easy to install.

QC50 is not just a cut honeycomb sheet, it is a high performance made to measure cassette produced out of two folded aluminium layers with an aluminium honeycomb core glued inside. This manufacturing process allows Hunter Douglas to offer almost any thickness of panel.

#### OC50 Features

- Variable in thickness.
- Fits a stunning range of natural materials.
- Applicable for exterior and interior (walls, ceilings) applications.
- A high quality panel, designed for both vertical and horizontal application.
- It is easy to fix and suitable for mounting to a lightweight substructure.



<u>QC50</u> Two folded aluminium layers with honeycomb core inside





Above : Lario Centre - Bennet, Tavernola, Italy Architect : Progetto CMR Product : QuadroClad® QC50

Below : Crossroad Office Building, San Diego, USA Architect: Open Studio Architectur Product : QuadroClad® QC50





Coloured to create a more visual effect

QuadroClad® QC100 is our EASY panel, it's roll formed edge on two sides guarantees an easy installation when using the supplied fixing clamps. The clamp cover provides an optical 25 mm closed joint, which can be coloured to create an even more visual effect. The QC100 is both horizontal and vertical mountable and the unique combination of the roll formed edges and clamps makes QC100 ideally suited for projects with large self-supporting roofs.

### QC100 Features

- Easy installation due to the roll formed edges and fixing clamps.
- Suitable for large cladding projects (where same sizes are desirable).
- Closed (contrasting) joints possible for special effects.
- Ideal for vertical application.
- Suitable for self-supporting roofs.

Above : University of Gdansk Library, Polska Architect : ARCHICO Projekt, Warsaw Product : QuadroClad® QC100



<u>QC100</u> Roll formed edges for easy installation





Above : Piata Charles de Gaulle, Bucharest, Romania Architect: Westfourth Architecture Product : QuadroClad® QC100

7

Accentuate the positive

QuadroClad<sup>®</sup> QC200 is our ULTIMATE panel, it is a fully engineered panel with aluminum extrusion frames on four sides. Our specially designed extrusion top profile ensures easy screw fix installation on every substructure. The visual closed joint of the QC200 lays deeper, which creates a lifting effect and one that accentuates the visual appearance of each panel even more. Integrated channels provide ventilation that enable rain and condensation to drain behind the cladding surface, ensuring a much cleaner façade with lower maintenance costs.



## QC200

#### Features

- Low installation depth.
- Fewer parts needed.
- Provided with a top profile for easy screw fix installation.
- A closed, ventilated joint.
- Individually removable.



<u>QC200</u> Fully engineered extruded top profile

Above : Fire Department, Bornem, Belgium Architect : Studio Klein Brabant Product : QuadroClad® QC200





Hunter Douglas Façades



The most complete façade solution

QuadroClad<sup>®</sup> QC300 is our COMPLETE system and as its name suggests is our most complete façade solution. It is an ideal external wall finish for larger elevated buildings such as high rise residential buildings and skyscrapers exposed to extreme weather conditions. QC300 features free hanging panels with a ventilated cavity, with open joints that are designed to reduce surface wind loads. Tall buildings by their very nature require a different level of technical specification and Hunter Douglas Architectural have developed a unique patented method of installation (including wall brackets, support rails and fixing plates) to meet these building's requirements.

### OC300 Features

- High rise unitised panels.
- Complete package, saves time in the building chain.
- Easy installation due to our patented substructure.

QC300

profile

Specially designed aluminium extruded

- Suitable for extreme technical requirements (windload).
- Individually removable.

Above : Helicon Education, 's-Hertogenbosch, The Netherlands Architect: SP Architecten / Architecten aan de Maas Product : QuadroClad® QC300



Above : Sberbank of Russia, Moscow, Russia Architect : Design Erick van Egeraat Product : QuadroClad® QC300





An architect's dream

INFINITY, that's the word, which best describes our QuadroClad® QC500 panel. By using triangular and diamond shaped panels combined with a specially engineered integrated fixing system it is the perfect solution for dome shaped buildings.

This exceptional ventilated façade system allows designers to create stunning visual shapes that follow the contours and profile of a building's exterior.

### QC500

Features

- The solution for dome shaped buildings.
- Easy installation due to our corner fixed substructure.
- Can be walked on for ease of maintenance.
- Suitable where extreme technical specification is required.
- Follows every contour of the building.



<u> QC500</u> Extruded profiles encased between two folded aluminium layers





Above : Shell Museum, Dalian, China Architect: The Design Institute of Civil Engineering & Architecture of DUT Product : QuadroClad® QC500



## RENOVATION

*QuadroClad<sup>®</sup>* The perfect partner for renovation projects

Hunter Douglas Architectural is recognised throughout the world as an innovator of architectural products. This is particularly true in the development of new external wall façade systems where our QuadroClad<sup>®</sup> range has been specifically designed for use on renovation and refurbishment projects. Façade renovation of existing buildings is always an interesting topic and the new cost effective lightweight QuadroClad<sup>®</sup> range provides architects with the extra freedom to attractively upgrade and modernise a building's façade.



Old situation



New situation



#### **Crossroads Renovation**

The Mission Valley Crossroads project is a building exterior renovation project that replaces a failing 1970's brick tile cladding. The architect designed a new building exterior with both QC50 and ceramic cladding system. A new brand identity was created using the 404 address in combination with the vibrant orange colour.



3D Impression

Project : Crossroad Office Building, San Diego, USA Architect : Open Studio Architecture Product : QuadroClad® QC50



#### Kras Chocolate Company

The Kras Chocolate company wanted to renew their Headquarters in Zagreb Croatia by over cladding it's outdated 60's style building. The designers of Kras together with the team at Hunter Douglas designed a new layout with QC300, windows and external blinds. The signature red color which reflects the Kras brand color will identify the chocolate factory for many years to come.



Old situation



3D Impression



*Project* : Kras Chocolate Museum, Zagreb, Croatia Architect : H2L2 Urban Concept Product : QuadroClad® QC300

15

# SANDWICH WALL SYSTEMS

Build up your energy efficiency

Project : The 38th Research Institute of CETC, China Architect : The Architectural Design & Research Institute of ZheJiang University Co., Ltd. Product : Bi-Modular Sandwich Wall Panel Façade

\*Please refer to pages 48 - 51 for colour inspiration



Below : Changchun Manufacturing Base of FAW-Volkswagen Automobile, China Product : Sandwich Wall Panel Facade



# SANDWICH WALL SYSTEMS

Outstanding design, functionality and comfort

The SANDWICH WALL system features a vertical Omega profile joint with horizontal mounting edges for fixing wall panels.

#### SANDWICH WALL SYSTEMS Features

- Prefabricated in factory, up to 1200mm x 12000mm.
- According to the wall surface thermal insulation. requirements, the thickness is available in 50/75/100mm.
- High-density thermal insulation rock wool compound presents high panel flatness and large strength.
- A variety of panel material options: aluminum alloy, stainless steel, copper, titanium zinc alloy, etc.
- Thermally improved PVC joint profile and reduced thermal bridge effect for excellent overall thermal insulation.
- The installation structure and fasteners are completely hidden, ensuring a uniform and aesthetically pleasing facade.
- System installation seams can be customized according to design requirements.
- A wide variety of panel shapes allow for creating of curved surfaces, corners, etc.
- Fire performance and curtain wall performance certification.
- Suitable for external walls or internal walls partitions.

#### Sandwich Wall Panel

It is composed of an outer layer and an inner layer that are aluminium sheets, and intermediate layer that is high-density rock wool.





Above : Changchun Railway Station, China Architect: The Third Railway Survey and Design Institute Group Corporation (TSDI for short) Product : Sandwich Wall Panel Facade



Above : GE Medical Service Wuxi, China Product : Sandwich Wall Panel Facade



Above : GE Medical Service Wuxi Phase II, China Architect: Wuxi Industrial Construction Design & Research Institute Product : Sandwich Wall Panel Facade

Below : Xian Base of Janssen Pharmaceuticals, China Product : Bi-Modular Sandwich Wall Panel Façade



# SANDWICH WALL **BI-MODULAR SYSTEMS**

Unified joints, neat and uniform

The SANDWICH WALL Bi-Modular system allows the panels to use the same joints in the horizontal and vertical directions and the four sides can be connected to each other so that the windows, doors and the shading system can be combined with the wall organically: No fasteners are visible on the building surface. It has high technical content and is beautiful and practical.

### SANDWICH WALL **BI-MODULAR SYSTEMS**

Features

- Prefabricated in factory, up to 1200mm x 12000mm.
- According to the wall surface thermal insulation requirements, the thickness is available in 50/75/100mm.
- High-density thermal insulation rock wool compound presents high panel flatness and large strength.
- A variety of panel material options: aluminum alloy, stainless steel, copper, titanium zinc alloy, etc.
- Thermally improved PVC joint profile and reduced thermal bridge effect for excellent overall thermal insulation.
- The installation structure and fasteners are completely hidden, ensuring a uniform and aesthetically pleasing facade.
- The system installation seam is 25mm.
- A wide variety of panel shapes allow for creating of curved surfaces, corners, etc.
- Fire performance and curtain wall performance certification.
- Suitable for external walls or internal walls partitions.

#### Bi-Modular Sandwich Wall Panel

It is composed of an outer layer and an inner layer that are aluminium sheets, and intermediate layer that is high-density rock wool.



Panel shape diagram



Above : Phase II of Beijing Corning, China Architect: QunYu Design Consultancy Co., Ltd Product : Bi-Modular Sandwich Wall Panel Façade



Above : Novo Nordisk Tianjin Phase II, China Architect: Spaceframe Shanghai Construction Engineering Co., Ltd Product : Bi-Modular Sandwich Wall Panel Façade



Above : TianJinTuoPuCuiHuaJinYiQi, China Architect: Bi-Modular Sandwich Wall Panel Façade

## SINGLE SKIN

Fast and cost effective cladding solution

Project ∶Tesco Superstore, Sheffield, UK Architect: Saunders Architecture + Urban Design Product ∶LinearClad<sup>™</sup>T

\*Please refer to pages 48 - 51 for colour ins



## LINEARCLAD<sup>TM</sup> T/U

Perfect balance of style and performance

From high-rise structures to single story buildings LinearClad<sup>™</sup> T/U provides a robust exterior solution. The flatness of the panels creates a beautiful smooth uninterrupted appearance achieved by adopting either a visually closed T joint or a punctuated U joint. The system resists high wind loads and includes cranked corners that are precisely integrated with the support systems. This unique façade system is available in a wide range of colours, materials and finishes. The panels are made to measure and can be supplied in any length from 800 up to 6000 mm.

### LinearClad<sup>™</sup> T/U

#### Features

- Flat modules from 200 up to 450 mm.
- Roll formed tongue-in-groove system.
- Practical system solutions to suit many facade designs.
- Endless possibilities for combining colours, materials and finishes.
- Horizontal, vertical and diagonal applications.

<u>LinearClad<sup>™</sup> T/U</u> Two different joint types possible. Roll formed tongue-in-groove



Above : Villa Materada, Istria, Croatia Architect : Mr Davor Matekovic Product : LinearClad<sup>™</sup>T and Folding Shutters



Above : TatraCity, Bratislava, Slovakia Architect : Ľubomír Závodný Product : LinearClad™ U

Below : Holesovicky Pivovar, Prague, Czech Republic Architect : CMC architect Product : LinearClad<sup>™</sup> T - perforated



## $\mathsf{LINEARCLAD}^{{}^{\scriptscriptstyle{\mathsf{M}}}}\mathsf{F}$

Lightly crowned panel

The LinearClad<sup>™</sup> F Façade System is a low cost panel that is ideal for projects where budget is an overriding factor. LinearClad<sup>™</sup> F panels are lightly crowned and slightly thinner than their T/U counterparts. They consist of 150 mm and 200 mm wide roll formed panels with a tight joint. The panels are made to measure and can be supplied in any length from 800 up to 6000 mm (longer on request).

## LinearClad<sup>™</sup> F

#### Features

- Light crowned modules from 150 and 200 mm.
- Roll formed tongue-in-groove system.
- Perfect for low rise and interior projects.
- Optimised system for medium wind load.
- Large choice of colour possibilities.



Above : Taman Dayu Residence, Indonesia Architect: Samuel A. Budiono & Associates Product : LinearClad™ F



Above : Bw@Country Damansara Height, Malaysia Architect: Essential Design Integrated Product : LinearClad<sup>™</sup> F

Below : Vanachai Office Building, Thailand Architect: Open Box Co., Ltd Product : LinearClad<sup>™</sup> F



<u>LinearClad<sup>™</sup> F</u> Lightly crowned roll formed tongue-in-groove Below : Empire City Sale Gallery & Show Units, Vietnam Architect: An Phong Construction Company Limited Product : Single Skin Cassette Facades



## SINGLE SKIN CASSETTE

Create outstanding visual impressions

Available in highly durable Luxacote, PPC or anodised aluminium, stainless steel, weathered steel, zinc or copper, and in a range of shapes and sizes, the Single Skin Cassette Facade has been developed to meet architect's demands for options to add features, accents and diversity of appearance to solid or perforated facade applications which create outstanding visual impressions. For high performance solutions in a range of metal facades which can be integrated with other Hunter Douglas and NBK facade systems.

Typically using a Hook-on Cassette secret-fix solution that can be installed in either a landscape or portrait orientation. Large cassettes can be fabricated due to the structural design, with various joint widths and Installed onto the appropriate railing system consisting of vertical mullions, locating clips and fixings.

### Single Skin Cassette Features

- Install vertically or horizontally.
- Large-size, large-format applications with materials such as aluminum, steel, zinc or
  - copper.
  - Drilled or randomly perforated using CNC technology according to design.
  - Crisp joint design.
  - Individual panel demountability.

Single Skin Cassette A variety of perforated veneer form, flexible installation system.



Above : Quang Ninh Stadium, Vietnam Architect : SAMOO Architects & Engineers Product : Single Skin Cassette Facades



Above : RMIT University Vietnam Architect : Pentago SPOWERS International Product : Single Skin Cassette Facades

## OPEN STRUCTURE

Aesthetically strong and highly functional



## **84R** An elegant and light appearance

The Hunter Douglas Architectural panel system 84R consists of 84 mm wide roll formed round edge panels, which can be simply clicked to the carrier system to form eye catching horizontal or vertical lines.

84R are roll formed panels made of aluminium, with smooth round edges that provide an elegant and light appearance. Depending on the chosen carrier there is an open joint between the panels, which can be closed using reverse panels or joint profiles to create a visually closed façade.

### 84R Features

- Made to measure from 800 mm up to 6000 mm, panels can be joined by using the panel slice.
- A range of standard carriers to create different appearance.
- Open joint system can be created for profiles requiring open areas for ventilation and acoustics.
- Curved facades can be achieved using 84R curved panels.
- Wide range of Luxacote finishes.



Above : IBIS Style Batam, Indonesia Architect: **fx** architect s+udio Product : 84R

<u>84R</u>

Roll formed aluminium with a strong aesthetic appearance



H3 carrier

SLR10 rail with brackets



Above : Suzlon One Earth Corporate HQ, Pune, India Architect : CCBA Product : 84R

Below : Pestech Office Factory, Malaysia Architect : Peter Lau Architect Product : 84R



V6 carrier

*Below* : Explora Business Centre, Prague, Czech Republic Product : 30BD



## 30BD Straight and smooth lines

The Hunter Douglas Architectural panel system 30BD consists of 30 mm wide roll formed round edge panels, which can be simply clicked to the carrier system to form eye catching horizontal or vertical lines.

## 30BD

#### Features

- Panel width: 30mm.
- Standard length: 1000mm- 6000mm.
- Material thickness: 0.6mm.
- Installation module: three standard modules, i.e. 50/60/100mm, others customizable.

#### <u>30BD</u>

30BD facade system has three standard modules of 50mm, 60mm and 100mm, and other modules can be freely selected according to customer needs.





*Above* : Sato Pharmaceutical, Japan Product : 30BD



*Above* : Meiko Construction Co., Ltd Product : 30BD

## **70S/132S** A crisp façade or Sun Louvre feature

The 70S/132S system consists of sturdy Z-shaped panels that can be combined together to create a stunning visual line to a building's exterior façade or sun louvre feature. Both 70S/132S panels incorporate a range of carrier systems with special brackets and spacers. Clever specification of colours and depths allow the designer to create unusual running lines and shading angles across a building's external envelope.

## 70S/132S

#### Features

- Z shaped panel 70/132 mm high.
- Optimised support structure allowing a variable panel pitch.
- Extremely light roll formed panel.
- Highly flexible corner solutions.
- Optimum shading performance.



Above : USJ Height Residence, Malaysia Architect : Sime Darby inhouse Product : 70S





Above : Nestle Warehouse Tanauan Batangas, Philippines Architect : AIDEA Philippines Inc Product : 132S

Below : Once Offices, Toledo, Spain Architect : Luis Davila Product : 132S





## CUSTOMISED

An opportunity to set the trend in wall finishes

Salar Colora de Coloradores

Left : Shanghai World Expo Cultural Center, China Architect : East China Architectural Design & Research Institute Product : QUADROCLAD<sup>®</sup> Special Honeycomb Panel

\*Please refer to pages 48 - 51 for colour inspiration

 Right
 : Shanghai World Expo Chinese National Pavilion, China

 Architect : China Pavilion Joint Design Team

 Product
 : QUADROCLAD® Special

18.25

\*Please refer to pages 48 - 51 for colour inspiration

------

## AURAWEAVE™

Endless design possibilities

AuraWeave<sup>™</sup> is a unique facade system that integrates metal, strips, pressings and perforated panel designs into one unitised element. This style of facade panel is particularly suited to buildings such as, car parks, stadium, arena and other open air environments where natural ventilation is required. The panels give the appearance of being optically closed when in fact they can be designed to be over 50% open. This flexibility in the design process allows architects to create amazing finishes to stale or unimaginative buildings such as concrete or structural steel edifices.

## AuraWeave™

#### Features

- Design Create your own façade.
- Made to measure ensures optimum performance with no waste and time-consuming processes on site.
- Create a unique and timeless appearance.
- Endless possibilities for combining colours, materials and finishes.
- Resistant to extreme high windloads.



Above : MET 3, Miami, USA Architect: Nichols Brosch Wurst Wolfe & Associates Product : AuraWeave<sup>™</sup> - Customised



Above and right : 18A Fort Road, Singapore Architect : Richard Ho Architects Product : AuraWeave™ - Customised







.....

TTT



## QUADROCLAD® FLEX FINS

The Hunter Douglas range of QuadroClad® Flex Fins are exceptionally strong, flat and lightweight. They comprise of pre coated aluminium skins bonded to an expanded aluminium honeycomb core and can be manufactured in a variety of thickness, size and shape which can be curved and folded.

QuadroClad® Flex Fins are extremely rigid, they may be spanned horizontally and vertically and can be fixed to a variety of sub frames. Installation can also be independent of the façade construction with fins engineered to be fitted during or after the build process.

### QC Flex Fins Features

- Quick installation methods with minimum fixings to the building structure.
- Inherent strength of honeycomb panel requires limited number of supports.
- Large sun-shade fins can be created.
- High strength capable of withstanding high wind loads.
- Available in a range of standard and customised colours.
- No thermal bow in fins by solar radiation due to honeycomb construction.

: Osijek Civil Engineering University, Osijek, Croatia Architect: Arhitektonska Radionica Peracic & Studio Normala Product : QC Flex Fins





Above : La Liberté, Groningen, The Netherlands Architect: Dominique Perrault Architecture Product : QC Flex Fins

## QUADROCLAD®

Unified joints, neat and uniform

## SPECIAL HONEYCOMB PANEL

By virtue of advanced equipment, superb craftsmanship, strong R&D strength and rich industry experience, Hunter Douglas goes beyond imagination and continues to make breakthroughs, providing customers with a wide range of customized products and metal deep processing services, including: profiled panels, single-curve/ double-curve arc panels, perforated panels, etc., fully meeting the diverse and individual needs of customers.

Appearance design of the Chongqing Guotai Arts Center originated from the "Ticou" construction method that was commonly used in the Han Dynasty. The special honeycomb panel of Hunter Douglas depicts such expressive "Chinese Red" makeup for the building.

Lilacs International Commercial Center below outdoor columns are covered by special honeycomb panels. The double-curved drop-shaped columns on the south and north facades are matched with Roman travertine stone and lilac petal curtain walls.

The curtain wall of Hangzhou International Conference Center opposite is made of Hunter's gold honeycomb panels. The entire building is like a golden sun.



Above : Chongqing Guotai Arts Center, China Architect : China Architecture Design & Research Group/My Chien Chung-Wei Workshop

Product : QUADROCLAD<sup>®</sup> Special "Chinese Red" honeycomb panel



Above : Lilacs International Commercial Center, China Architect : East China Urban Architectural Design & Research Institute Product : QUADROCLAD<sup>®</sup> Special double curved honeycomb panel



Project : Hangzhou International Conference Center, China Architect : China United Engineering Co., Ltd./US GS Company Product : QUADROCLAD<sup>®</sup> Custom single curved honeycomb panel

## MATERIAL, FINISHES

Colour the skyline with a sparkling finish

AND SURFACES

Buildings are defined by form and design. Often they are the product of an architects inspirational vision. At Hunter Douglas our mission is to help designers realise that vision, by providing them with a palette of colours, materials and surface finishes that will inspire their creativity.

### The LUXACOTE® system... more than a coating!

From 1981 Hunter Douglas has produced over 600 million m2 with the LUXACOTE<sup>®</sup> system. Despite the large range of colours, including metallic finishes, Hunter Douglas has not received a recorded failure of the coating system due to fading, chalking or peeling.

First used, in 1981, on aluminium strip for window shutters, it soon became clear that many more applications were suitable for this coating system. Hunter Douglas now uses LUXACOTE® as the preferred system for all of their exterior products. These include Facade Cladding (QuadroClad, Sandwich wall and Single Skin wall cladding systems), Sun Louvers, Exterior Ceilings and Soffits, Outside Blinds and Shutters.



### The Superior Qualities Of The LUXACOTE<sup>®</sup> system

Although all kinds of accelerated erosion-tests can be executed in a laboratory, they all suffer from deficiency; the correlation to reality is one not reliable, and it needs a proven correlation to be able to make a reliable interpretation.

46

For this reason, many years have been spent searching for the natural circumstances that is representative of natural weathering. Florida, USA, is the location where materials are tested and set out at an angle of 45° facing to the south. Relative to other locations in the world, the circumstances here provide for a very tough testing environment.







Test panels of the LUXACOTE® system have proved that after 5 years in Florida, no colour or gloss differences worth mentioning have occurred, and that the exposed materials look hearly as good as the original new test panel. These results qualify for the highest category when tested in accordance with the EN 1396 standard.

Similar characteristics can only be matched by the better of the PVDF coating-systems, with at least 75% Kynar 500 or equivalent. All other coating-systems, which were tested th is way in Florida\*, failed within 1, 2, or, the very strong ones, after just 3 years, with complete colour fading and chalking, often culminating in a fully Cracked Surface and with h0 gloss remaining.



High scratch resistance

When compared to other metal-coatings, the

LUXACOTE® system has a superior resistance

against scratches. The slightly textured topcoat

surface hides eventual minor damages effectively.

During installation, this characteristic is

LUXACOTE<sup>®</sup> Colour

especially important.

options

Since Hunter Douglas does not always know where the material will be applied, the use of the right aluminium substrate is the key to the corrosion performance of the end product. By very carefully testing for many years we have succeeded in laying down specifications for a reliable product that, both for durability and corrosionresistance, can achieve the highest category of the EN 1396 standard. Even in swimming pools where the PH develops between 4 and 8, the LUXACOTE® system will perform well.

The highest category for corrosion, within the EN 1396 tested according to ECCAT19, states that, if exposed on the ECCA-site in Hoek van Holland, corrosion after 1year should not be more than 1 mm, and after 3 years not more than 2 mm.

The LUXACOTE® coating system meets this requirement.

Due to the composition, the LUXACOTE® system can be produced in plain and vivid exciting colours together with a full range of metallic colours. The standard range of colours is supplemented by a service to achieve a colour match to any client chosen colour- subject to quantity and technical feasibility.

### Corrosion resistance

It is known that aluminium, in spite of its good properties, can corrode in several ways. Therefore the guality of the aluminium plays a decisive role in the pre-treatment, the type of coating and the coating process, Besides this, building designs sometimes have an adverse effect on the development of corrosion (e.g.crevice and contact corrosion). Even more important is the environment in which the material will be used. Aluminium will, for example, perform perfectly in a clean area where rain continuously removes corrosive substances from the surfaces. But, when applied in an industrial and polluted area under an overhang on the coast, even aluminium could corrode.



Exposed according to ECCA, ilustrating edge corrosion

## Solid Colours

Take 5 seconds to imagine a world without colour. Aluminium can be coated in any (RAL, BS, NCS) colour. Colours are available in different gloss units as well as high gloss and matt finishes. At Hunter Douglas Architectural we aim to lead the way in colour trend development.



### Sparkling Mica

This range is tailored to create distinctive buildings, which attract attention. These innovative dual-tone finishes contain "mica" coating pigments, which reflect their own colour or the basecoat colour. This reflection and refraction of light causes a colour variation that changes upon viewing angle and incidence of light which can create a myriad of fascinating colours.



Pyrite

Pyrite

Onyx White Purple

Onyx

White Blue Gold Silver Red Green Purple Red



Above : Tesco Superstore, Sheffield, UK Architect: Saunders Architecture + Urban Design Product : LinearClad<sup>™</sup>T

48



Above : MRT, Malaysia Architect: Veritas and PDP Product : QuadroClad® QC100

### Natural - Anodised aluminium

Anodising is an electrochemical process that converts the metal surface into a decorative, durable corrosion resistant finish. It is ideally suited to aluminium and the Hunter Douglas range of anodised colours are designed to enhance this finish. Available in a number of colours, ranging from silver and champagne to bronze and black, this enduring treatment improves the strength and aesthetics of aluminum cladding. It also provides easy maintenance and long life in any condition.







Above : Maastoren, Rotterdam, The Netherlands Architect : Dam en Partners Architecten Product : QuadroClad® QC300



## **Amazing Metallic**

Hunter Douglas and their partners are at the forefront of developing a wide range of exciting metallic gloss finishes. Delivering these stunning finishes encourages designers to create an amazing visual appearance to any building's façade.





Dark

Metallic

Pearl



Beige

Metallic



Dark Copper Metallic



## Designs and specials

If none of the existing colours match the ideas or design criteria, then our finishing department will work with the architect to create a custom colour, finish or special effect that will deliver the finish they require.



Classic







Carbon Zoom

Perforated Metal



Above : Distributie Centrum The Sting, Tilburg, The Netherlands Architect : Van Oers Weijers Architecten Product : QuadroClad® QC300

### Zinc

Architects are increasingly turning to zinc for its, maintenance-free long life and adaptability to various design styles. Hunter Douglas Architectural have a standard range of natural zinc, preweathered zinc and engraved zinc. The latest development allows the designers to experiment with almost any colour on zinc, whilst still maintaining the structural appearance of the material.



Zinc

Tache

Pigmento Red Anthra Pigmento Zinc Blue



### Copper

Copper was one of the first metals used by man. It is one of our oldest building materials, with unique properties and characteristics. Copper has earned a respected place in the related fields of architecture and is gaining great popularity in world architecture. The natural development of copper patina is one of its unique characteristics.





Above : Residential 209 Sullivan Street, New York, USA Architect: Rawlings Architects PC Product : QuadroClad® QC200



Above : Canadian Embassy, Bucharest, Romania Architect: Westfourth Architecture Product : LinearClad™T

### Stainless steel

Stainless steel offers the ideal combination of high strength, excellent corrosion resistance and a modern, progressive image. Stainless steel has a unique aesthetic advantage when specified on a project as it will remain in perfect condition throughout the buildings life.









Above : Dane Residence, California, USA Architect: Marmol and Radziner Architecture + Construction Product : QuadroClad® QC200



### Weathering steel

Weathering steel, better known as Corten, is a beautiful cladding material that naturally rusts over time. Corten offers superior resistance to atmospheric corrosion because of its protective layer, which develops and regenerate.











0.5 months 1.5 months 6 months 5 Years

20 Years 40 Years





Above : Residential, Santiago, USA

Architect : Boza Arquitectos + Durruti-Vergara Arquitectos'

Product : LinearClad<sup>™</sup>T

# NBK® ARCHITECTURAL TERRACOTTA

Uncompromising Quality



# NBK<sup>®</sup> ARCHITECTURAL

## TERRACOTTA

The NBK<sup>®</sup> Architectural Terracotta System from Hunter Douglas is a new type of curtain wall system based on the principle of rain curtain and decorated with ceramic panels. Characterized by systematic, functional and large panels, it is an ingenious and perfect combination of traditional materials and modern architecture. Architectural Terracotta products can be freely designed and customized according to customer needs, and provide a large number of special-shaped products. Surface design of the Architectural Terracotta offers numerous options. In addition, a unique curtain wall effect can be designed by using individual components and finishes.

## NBK<sup>®</sup> Architectural Terracotta

#### Features

- Extruded terracotta, very rich in cross-section.
- Diverse colors, available for glazing.
- High degree of freedom in mounting system, panels can be disassembled separately.
- Various corner handling options.
- Ventilation curtain system, dry and durable.



Above : GIIS, Singapore Architect: Architect Team 3 Pte Ltd (AT3 Pte Ltd) Product : NBK® Architectural Terracotta



<u>NBK® Architectural Terracotta</u> Natural terracotta as raw material, made by extrusion process and roller kiln firing at high temperature.



Above : Shanghai International Dance Center Architect : STUDIOS architecture Product : NBK® Architectural Terracotta



Project : Mount Sophia, Singapore Architect: Consortium 168 architects pte ltd Product : NBK® Architectural Terracotta

*Below* : Andino Shopping Center, Colombia Architect: Cure MDDG Ltda Product : NBK<sup>®</sup> Baguette



## NBK<sup>®</sup> BAGUETTE

Innovative working together

The Baguette is an essential part of the NBK product line and has a wide range of applications. There are many types of cross-sections such as square, rectangle, circle, triangle, diamond, etc. for options. The installation method is also very diversified. It can be used as an external shading unit for curtain wall to reduce direct sunlight and improve the comfort and aesthetics of the building, but it can also be applied to interior decoration to make the building more artistic.

## NBK<sup>®</sup> Baguette

#### Features

- Extruded terracotta, very rich in cross-section.
- Diverse colors, available for glazing.
- Standard length up to 1800mm, ultra long specification customizable.
- Install vertically or horizontally.
- End socket and back bolt installation.
- High degree of freedom in mounting system.
- Various corner handling options.









Above : Hwa Chong Institution, Singapore Architect: Surbana Jurong Pte Ltd Product : Terrart® Baguette



Above : Center for Inclusive Education, Konya, Turkey Architect: Teget

Product : Terrart<sup>®</sup> Baguette

## NBK<sup>®</sup> ARCHITECTURAL Dedicated to innovation

# TERRACOTTA SURFACE

## Natural Colors

Natural Color is the true color of clay, the color scheme is rich and provides multiple choices, and the color is pure and gentle. Polishing color is processed by honing based on the natural surface of the Terracotta, providing a smooth and delicate appearance.





### Textures

The textures can be freely combined to create richer surface effects, and thanks to a special 3D design, a pleasing 3D embossing effect can be achieved. Each panel is custom-made.





## Glazings

Provide more color and gloss options, modern stylish architectural elements, and good surface self-cleaning function.







### **Special Glazings**

According to customer needs, a variety of special glazed effects can be custom-made to make the building surface glow in more color changes.

glaze 3



alaze 1



Color particle Color particle Color particle Zirconium white Red fancy glaze 2



Blue fancy

alaze



glaze 1





crack glaze



Transparent Silver white Silver white Kiln glaze

metal glaze 1 metal glaze 2

The use of Double Fired glazes is commonly regarded as the supreme discipline in the field of creative façade ceramics. With the doublefiring technique, façade elements of the highest quality, particularly thanks to the edge glaze created by this additional process, can be created. In addition, the glaze has a particularly brilliant, expressive colour effect.



glaze



14-179-228

## HUNTER DOUGLAS ARCHITECTURAL

Hunter Douglas is a publicly traded company with activities in more than 100 countries with over 150 companies. The origin of our company goes back to 1919, in Düsseldorf, Germany. Throughout our history, we have introduced innovations that have shaped the industry, from the invention of the continuous aluminium caster, to the creation of the first aluminium Venetian blinds, to the development of the latest high-quality building products.

Today we employ more than 22,750 people in our companies with major operation centres in Europe, North America, Latin America, Asia and Australia.





▲ WINDOW COVERINGS

SUN CONTROL **V** ▲ CEILINGS



Not only are the world's architects and designers our partners, they are our inspiration. They continue to raise the bar for excellence. We create products that help bring their visions to life: Window Coverings, Ceilings, Sun Control Systems and Façades.

# Designed to work for you

® Registered trademark - a HunterDouglas® product Pats. & Pats. Pend. - Technical data subject to change without notice. © Copyright Hunter Douglas 2017. No rights can be derived from copy, text pertaining to illustrations or samples. Subject to changes in materials, parts, compositions, designs, versions, colours etc., even without notice. MX012F00









products manufactured by Hunter Douglas Architectural Products (China) Co., Ltd. meet the requirements of "Green Building Product Selection Guide Directory Management Method". They are allowed to use selected green building products certification marks and are listed in the CTC "Green Building Product Selection Guide Directory.





and solutions are designed to improve indoor environmental quality and conserve energy, supporting built environments that are comfortable, healthy, productive, and sustainable.

standards.



Hunter Douglas Façades

#### HunterDouglas 🛟 Architectural

#### **ARCHITECTURAL SERVICES**

We support our business partners with a wide range of technical consulting and support services for architects, developers, and installers. We assist architects and developers with recommendations regarding materials, shapes and dimensions, colours and finishes. We also help create design proposals, visualisations, and installation drawings. Our services to installers range from providing detailed installation drawings and instructions to training installers and advising on the building site.

### **Learn More**

■ Contact our Sales office www.hunterdouglas.asia

As a member of the USGBC Association, Hunter Douglas has participated in the development and draft of many LEED

Hunter Douglas products



ISO 9001 Quality Management System Certification.



ISO 14001 Environmental Management System Certification.



Our paint and aluminium melting processes are considered to be one of the industry standards in terms of clean production processes. All aluminium products are 100% recyclable at the end of their lifecycle.













China Cambodia Hong Kong India Indonesia Japan Korea Malaysia Phillipines Singapore Taiwan Thailand Vietnam

Australia / New Zealand Europe Latin America North America



Copyright by Hunter Douglas. Technical data Subject to change without notice. 201006-4-1.0

www.hunterdouglas.asia