

FAÇADE

2015
PRODUCT
GUIDE

WALL CLADDING
AND SUNSCREEN

Our identity

Inspired by the beauty and the natural qualities of terracotta for more than 150 years, TERREAL has always progressed and faced the challenges of its industry to become a key player in building materials.

Today, TERREAL is an innovative and responsible manufacturing company with over 2,700 employees across 10 countries.

Creating global solutions for building envelopes, TERREAL operates four main businesses: roofing, façade, structural and decorative. Our mission: to continually improve regional development and foster sustainable, aesthetic and functional architectural projects that respect both mankind and the environment.

We work with clay and let it inspire us to change daily life into something unique.

Terreal, building beauty

TABLE OF CONTENTS

12-59

CLADDING RANGE

Zéphir Evolution p.18

Piterak XS p.28

Piterak Slim p.36

Maestral p.44

V-Clip p.52

60-85

SUNSCREEN RANGE

Small Sunscreen p.70

Large Sunscreen p.72

Shamal p.80

86-97

CUSTOM PRODUCTS

98-113

COLOUR CHART

114-123

GLOBAL SOLUTIONS

TERREAL Façade,

A unique material for exceptional architectural designs.

Drawing on its 35-year expertise in façade products, Terreal has mastered the exceptional properties of terracotta and adapted them to the requirements of sustainable construction. Cooling in summer, regulating temperatures in winter, the solutions in our product range fit perfectly into external insulation systems and are suitable for new constructions and renovation projects.

As a true showcase of the building, the façade also represents a key element in its energy efficiency. With either ventilated or direct wall cladding, sunscreens or wall facing, Terreal Façade offers an extensive range of innovative solutions used to cover or insulate all types of buildings.



Born more than 20 years, through the meeting of terracotta experts and great architecture names such as Renzo Piano and Richard Rogers, TERREAL terracotta facade continues to reinvent itself to open new fields in architectural creation.

— CITÉ INTERNATIONALE DE LYON —

Owner : Le Grand Lyon

Architect : Renzo Piano Building Workshop

Installer : SMAC et Somiroc

Product : Maestral® and Harmattan® Red-orange



Timeless modernity

of an age-old material

Since ancient times, clay has been used for decoration, protection and appeal. Today, it takes new shapes that add style to your architectural designs.

Terracotta is a material with cutting-edge production techniques and industry leading performance in all requirements: manufacturing consistency, numerous colour variations, product customization, ease of installation, versatility, insulation performance and environmental responsiveness.

While other materials may challenge terracotta in some of these fields, few achieve all of the following qualities:

- Durable
- Perennial
- Modern
- Authentic
- Environmentally Friendly
- 100% Natural
- Fire Resistant
- Impact Resistant
- Recyclable
- Low Thermal Conductivity
- Creative
- Architectural
- Warm
- Light
- Living





External thermal insulation

for effective and long-lasting facades

Faced with today's environmental challenges, insulation is crucial to both new constructions and renovation projects.

As the World's specialist in terracotta based external wall insulation, Terreal provides expertise and high-performance technical solutions to meet the requirements of thermal regulations.



EXTERNAL WALL INSULATION : **A MUST FOR ENERGY EFFICIENCY**

- Improves **comfort during summer and winter**
- **Lowers heat loss** of the building envelope
- Helps to significantly reduce **energy consumption**
- Increased **habitable space**



Before

— RENOVATION OF 3 HOUSING TOWERS, —
TOURCOING, FRANCE

Architect : Hornoy Architectes

Owner : SA Villogia

Installer : Luc Daniel Couverture

Product : Piterak® Pearl Grey and Ebony

After

By placing a continuous 160mm insulation sheet between the framework's vertical profiles, energy consumption went down to 65 kW/m² from 232 kW/m² per year after renovation, qualifying the towers for the "Low-Energy Building" label.

Low-cost housing renovation, the terracotta signature

- Moderate long term **global costs**
- Durable and **maintenance free** for low operating costs
- Improved **thermal performance**
- **Protection** : Resistance to UV, impact, and wind
- Fast installation on **occupied sites**
- **Unique aesthetics** for architectural enhancement



Before

— RENOVATION OF HOUSING BUILDING, —
ACHÈRE, FRANCE

Architect : Alexandre Levandowsky

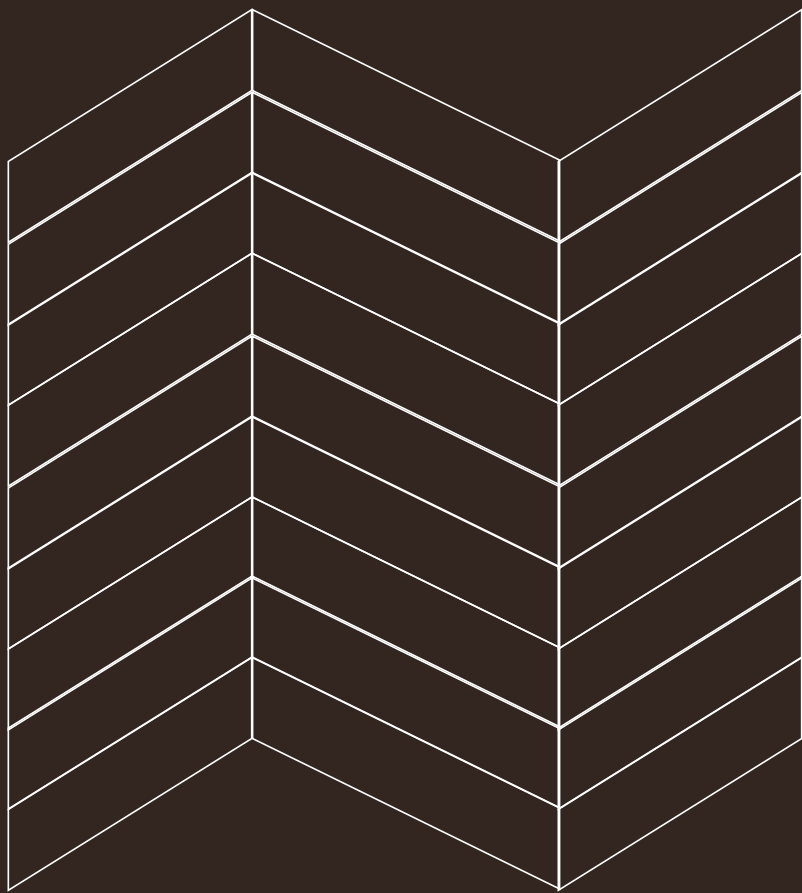
Owner : Domnis

Installer : Raymond SAS

Product : Maestral® Red-Orange

After

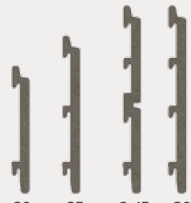
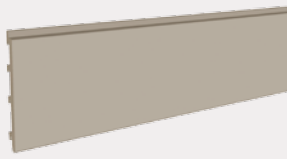
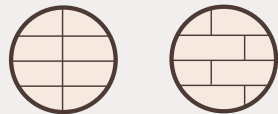
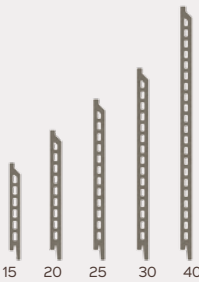
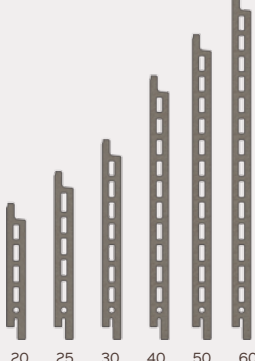


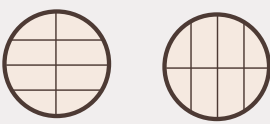
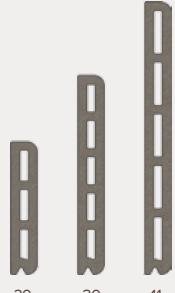

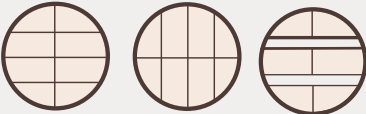




THE WALL CLADDING **PRODUCT RANGE**

Modern, authentic and environmentally friendly, the Ter-real wall cladding product range continually invigorates is application techniques and aesthetics. It offers highly effective solutions that meet the latest thermal, seismic and environmental regulations. It is resistant to impact, wind and frost, and is certified by technical assessments issued by the CSTB organization and other engineering organizations around the World. Durable, maintenance-free, and economical, our products are made from clay, a natural raw material, and benefit from the expertise of a major corporation to constantly progress.

WALL CLADDING PRODUCT GUIDE

| PRODUCT | MODULE HEIGHT IN CM | MAXIMUM PRODUCT LENGTH IN CM | FIXING SYSTEM TYPES AND INSTALLATION |
|--|---|---|---|
| ZEPHIR® EVOLUTION |  <p>20 25 2x15 30</p> |  <p>Length up to 120 cm</p> | <p>Horizontal rail fixing system</p> <p>Joints</p>  <p>Straight Staggered</p> |
| PITERAK® XS PITERAK® SLIM |  <p>15 20 25 30 40</p>  <p>20 25 30 40 50 60</p> |  <p>Length up to 120 cm</p>  <p>Length up to 150 cm</p> | <p>Vertical support profile and clip fixing system</p> <p>Joints Fixing</p>  <p>Straight Vertical*</p> |
| MAESTRAL® |  <p>20 30 41</p> |  <p>Length up to 150 cm</p> | <p>Vertical support profile and clip fixing system</p> <p>Joints Fixing</p>  <p>Straight Vertical Open joints</p> |

* With the V-clip® fixing system : see p.52
 All module heights and lengths are available in imperial dimensional products

FIXING ACCESSORIES

Option available



ZVNP01
Rail Zéphir® Evolution



ZVNP02
1/2 Rail Zéphir® Evolution



Zephyr® Evolution EPDM
gasket for vertical
profile**



T profile
Zéphir® Evolution**



PITP01 Piterak®
Profile ridged main
course support



PITP02 Piterak®
Profile main
course support



PITP03 Piterak®
Profile ridged
angle support



PITP04 Piterak®
Profile angle
support



PITP05 Piterak®
Y profile



PITP04 Piterak®
Profile direct
mounting



PSLA01
Standard clip
Piterak® Slim



PXSA1
Standard clip
Piterak® XS



PITA03
upper clip
Piterak® Slim



PITA04
Clip for
movement joint



PITA05
Clip for
movement joint



PSLA02
Angle slim clip



MAEP01 Maestral®
Profile undirect
mounting



MAEP02
1/2 Profile direct
mounting



MAEP03
Maestral® profile



MAEP04
1/2 Maestral® profile



MAEA01
Maestral® left
Standard clip



MAEA02
Maestral® Right
Standard clip



MAEA03
Maestral® left
upper clip



MAEA04
Maestral® Right
upper clip



MAEA05
Maestral®
bottom clip



MAEA06
Maestral®
angle clip

| ZÉPHIR® EVOLUTION MAESTRAL® | PITERAK® XS PITERAK® SLIM | COLOUR CHART |
|--------------------------------|------------------------------|--------------------|
| • | | Stone colour |
| • | • | (03.) Champagne |
| • | | Dune Pink |
| | • | 06. Sand |
| | • | 04. Salmon |
| • | • | (02.) Red-orange |
| • | • | (01.) Red |
| | • | 07. Siena |
| • | | Violette |
| • | • | (11.) Sahara beige |
| • | | Pearl grey |
| • | | Dark grey |
| | • | 09. Coffee |
| • | | Chocolate brown |
| • | • | (16.) Ebony |
| | • | 10. Chalk white |
| • | | Clay grey |
| | • | 12. Light grey |
| • | • | (13.) Storm grey |
| | • | 15. Slate grey |

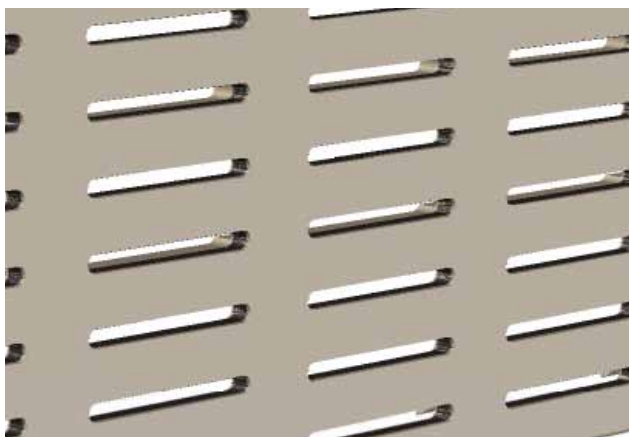
** Option for vertical profile/rail with EPDM gasket available. Please enquire via your local Terreal Contact.

STANDARD FINISHES



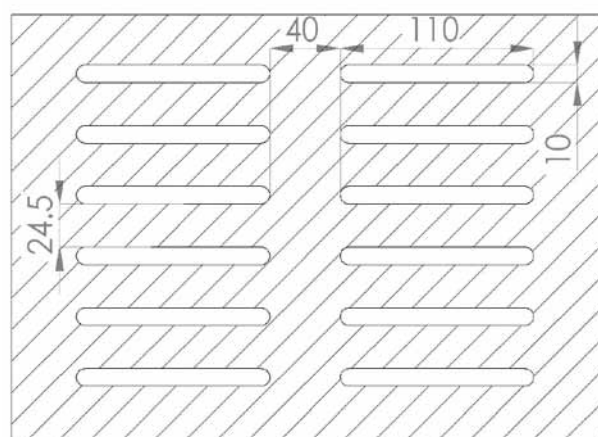
SANDED

Zéphir® Evolution, Maestral®, Autan® Droplet, Zonda® XL, Autan®, Harmattan®



PERFORATED

Zéphir® Evolution



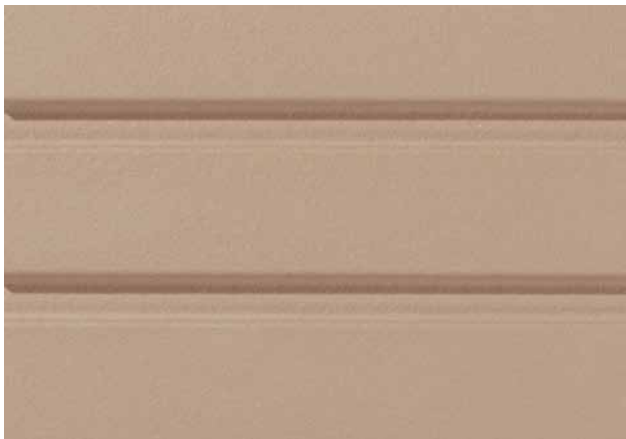
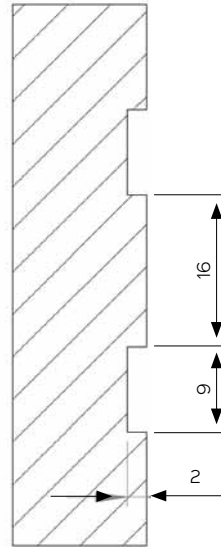
PATINATED

Piterak® Slim, Piterak® XS



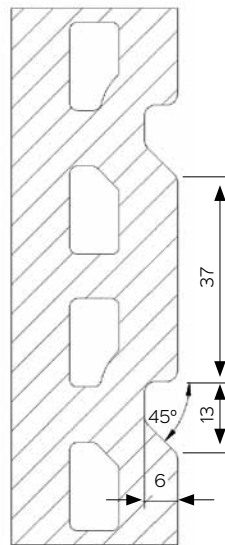
RIDGED 9.2

Zéphir® Evolution, Piterak® Slim, Piterak® XS
Ridged dimensions : H9 x P2 mm



GROOVED 13.6

Piterak® Slim
Grooved dimensions : H13 x P6 mm



Other Profiles Available Upon Request

ZEPHIR® EVOLUTION



Zephir® Evolution is a cost-effective wall cladding solution placed on horizontal rails, with a vertical rail with EPDM gasket option also available. Its simple and fast fixing system combined with its light weight and its flexibility make it particularly well adapted for renovation works. Its modern and linear look is emphasized by its length, which can reach 120cm.

— LES ETOUX SENIOR MEDICAL CARE CENTRE, —
BEAUJEU, FRANCE

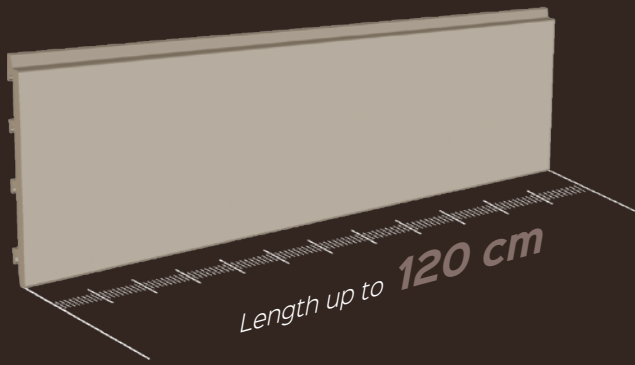
Architect : Mégard Architectes

Owner : Centre Hospitalier de Beaujeu

Installer : Somiroc

Product : Zephir® Evolution, Pearl Grey

ADVANTAGES



- Economical and light: 35kg/m²
- Fast and simple installation on rails
- Easy cuts made on-site
- Staggered or straight joints
- Modules as low as 15cm with the Twin version
- Vertical framework centre spacing up to 120cm
- High impact performance: for installation at ground level

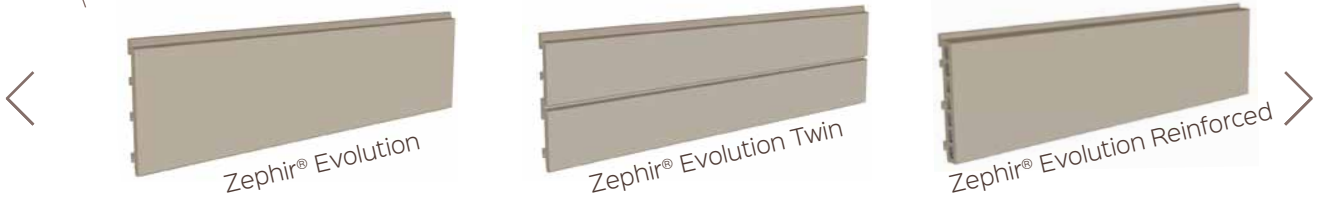
13 COLOURS



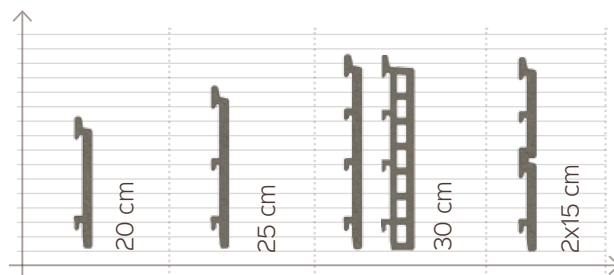
5 FINISHES



3 SHAPES



4 MODULES



All module heights and lengths are available in imperial dimensional products

CHARACTERISTICS



STANDARD SIZES AND PERFORMANCES

| PRODUCT | MODULE HxLxTh mm | DIMENSIONS HxLxTh mm | WEIGHT PER M ² | IMPACT RESISTANCE* | WIND RESISTANCE SPACE BETWEEN VERTICAL SUPPORTS | | |
|-------------------|------------------------|----------------------------|------------------------------|-----------------------|---|--------------|--------------|
| | | | | | 120 cm | 60 cm | |
| ZEPHIR® EVOLUTION | 20 | 200 x 600 to 1200 | 210 x 595 to 1195 x 14 | 35 | Q3 | V2 (1200 Pa) | V3 (1785 Pa) |
| | 25 | 250 x 600 to 1200 | 260 x 595 to 1195 x 14 | 35 | Q4 | V2 (1200 Pa) | V3 (1785 Pa) |
| | 30 | 300 x 600 to 1200 | 310 x 595 to 1195 x 14 | 35 | Q4 | V1 (1036 Pa) | V3 (2183 Pa) |

H = Height ; L = Length ; Th. = Thickness

* Maximum resistance reached with a reinforced installation: see technical approval.

All Module Heights and Lengths are available in Imperial Dimensional Products

INSTALLATION PROPERTIES

- Under Technical Assessment
- **Substrate type** : concrete wall, coated masonry and framed walls.
- **Primary framework** : metal or timber.
- **Panels supported** by rails, installed sequentially from bottom to top.
- **Vertical profile with EPDM gasket** option also available
- **Straights or staggered joints fixing**
- **Product secured** at the bottom using two mastic points (type: Sikaflex Pro 11FC).
- **Very easy** replacement of one broken panel.
- **Air gap for ventilation** : 20mm or more.
- **45° mitre cut** available from factory.
- **5mm vertical joints**.
- **Seismic performance** : Approved in zone 4, for buildings type IV, with insulation up to 200mm.
- **Frost resistance** : Complies with standard NF EN 539.
- **Worldwide compliance and testing certificates** have been achieved



STANDARD INSTALLATION DETAILS



Standard sub-frame support profile*

Self-drilling screw or rivet*

Zephyr® Evolution rail

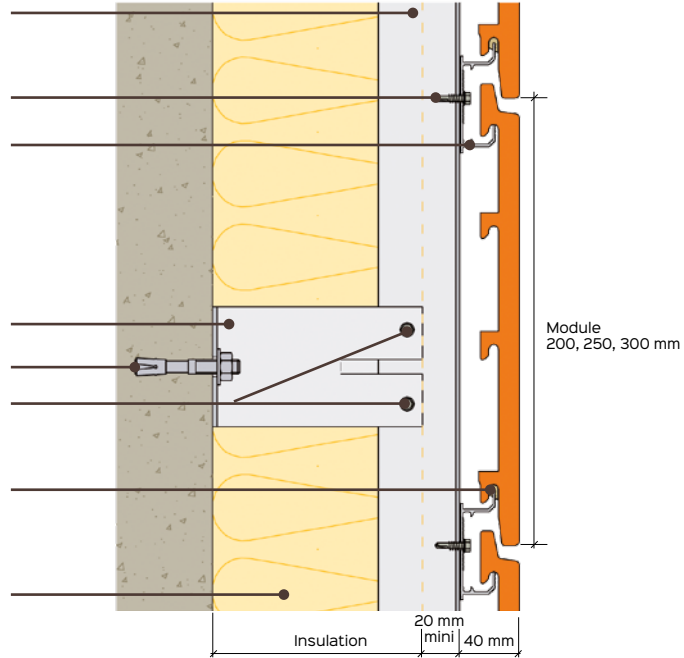
Standard fixing bracket*

Metal anchor*

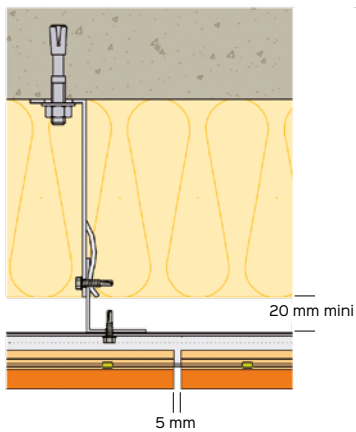
Two self-drilling screws per panel*

Two mastic points*

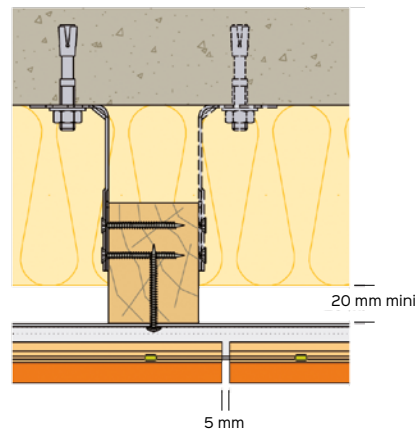
Semi-rigid insulation*



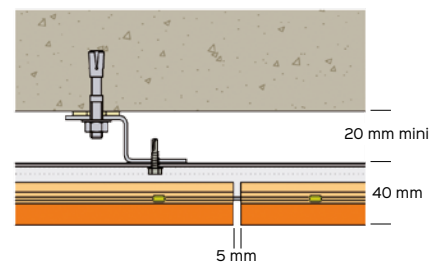
STANDARD FIT



FITTING ON WOODEN STRUCTURE



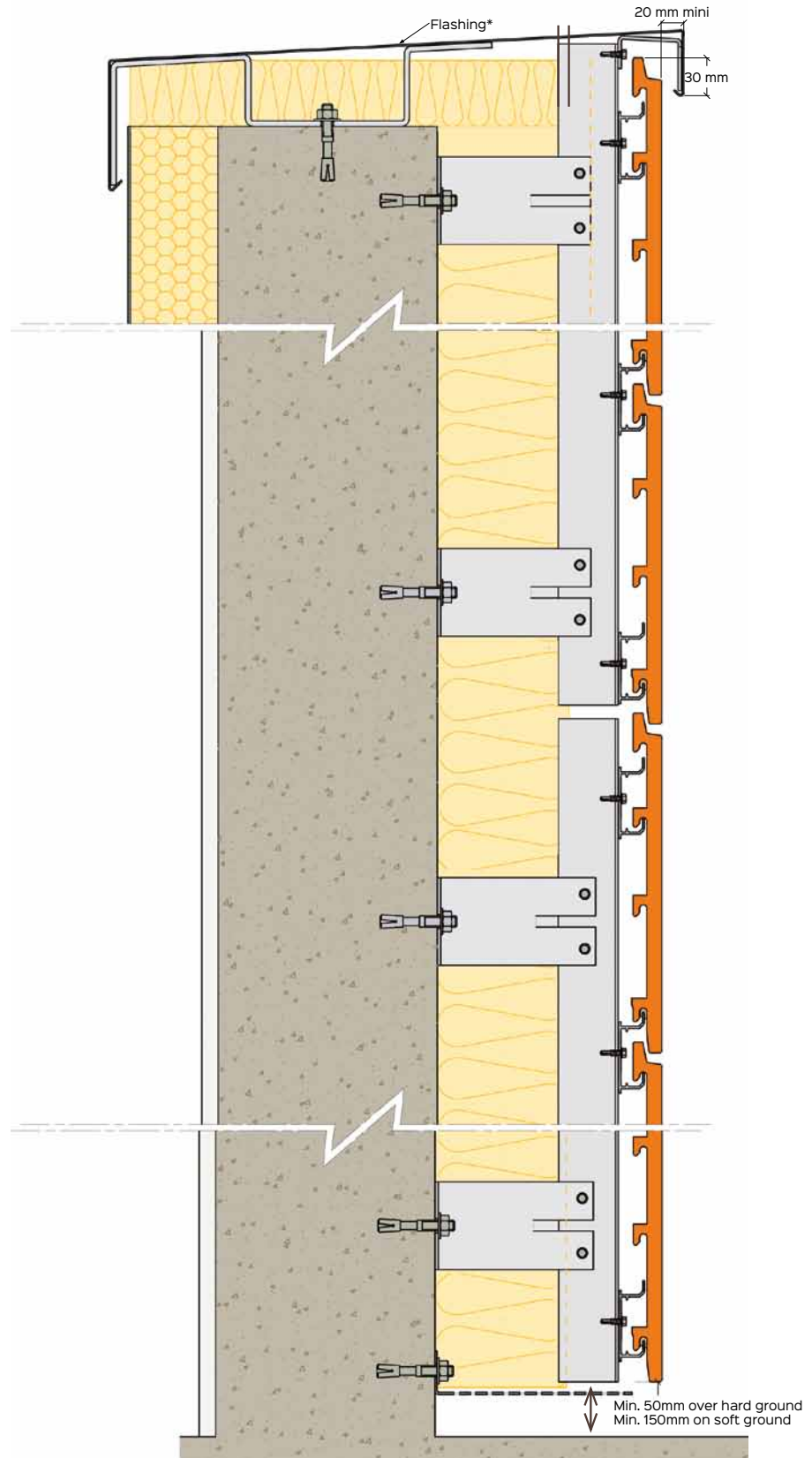
DIRECT FIT



* Not furnished by Terreal

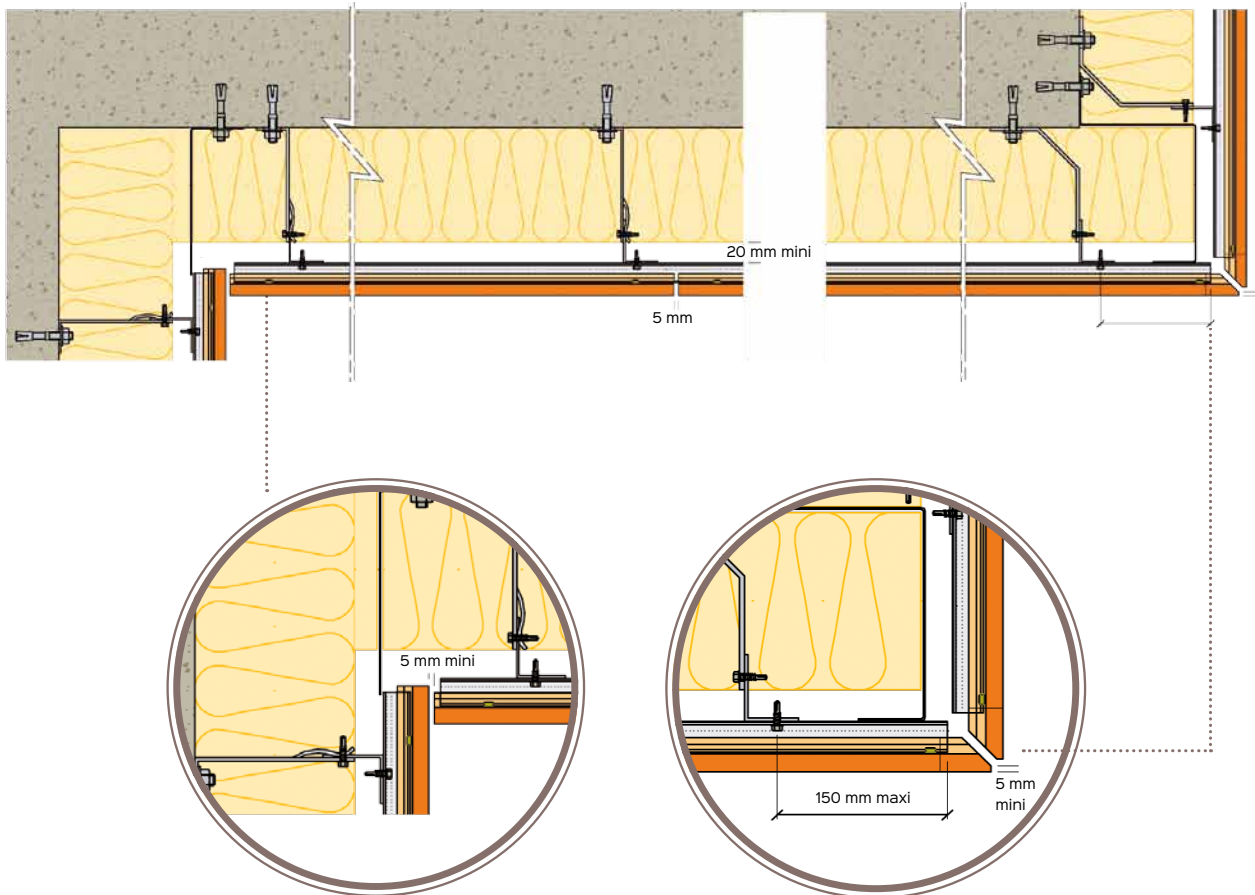


DETAIL :
WALL BASE AND PARAPET



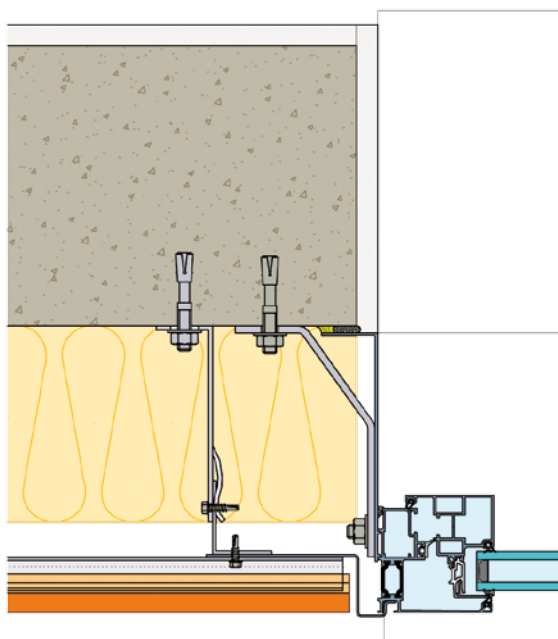
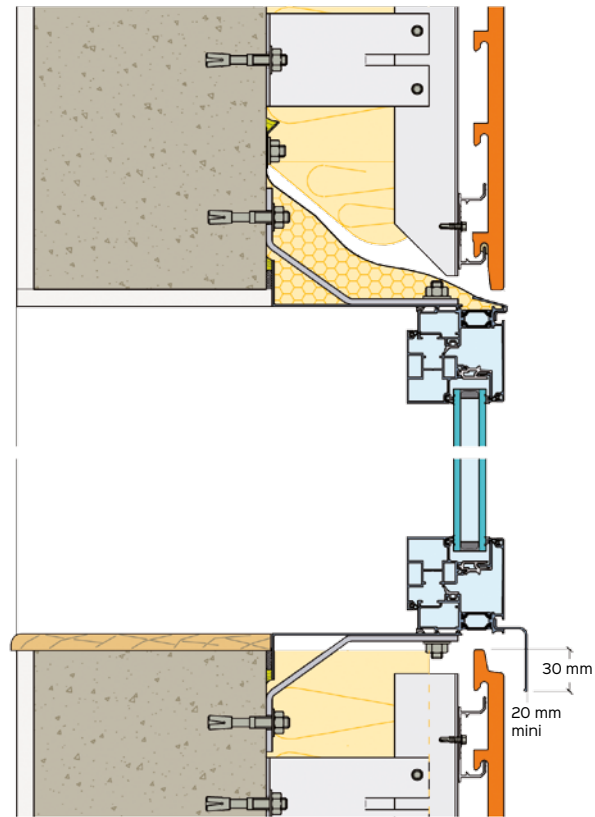
*Not furnished by Terreal

DETAIL : CORNERS



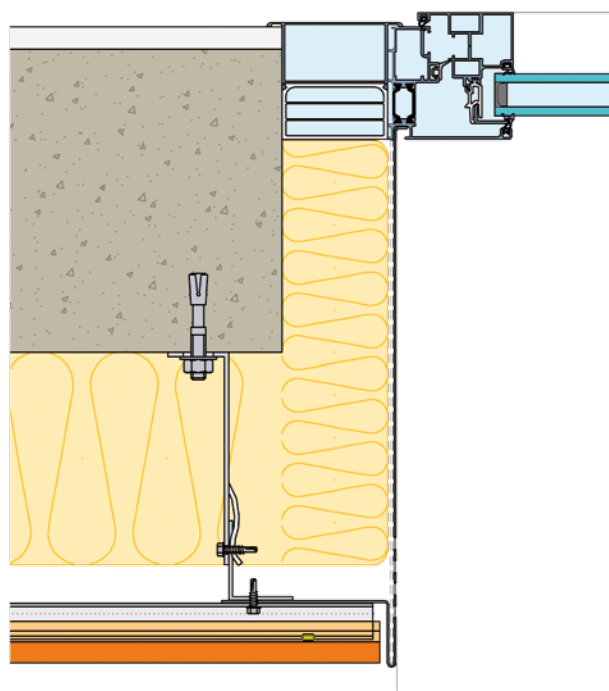
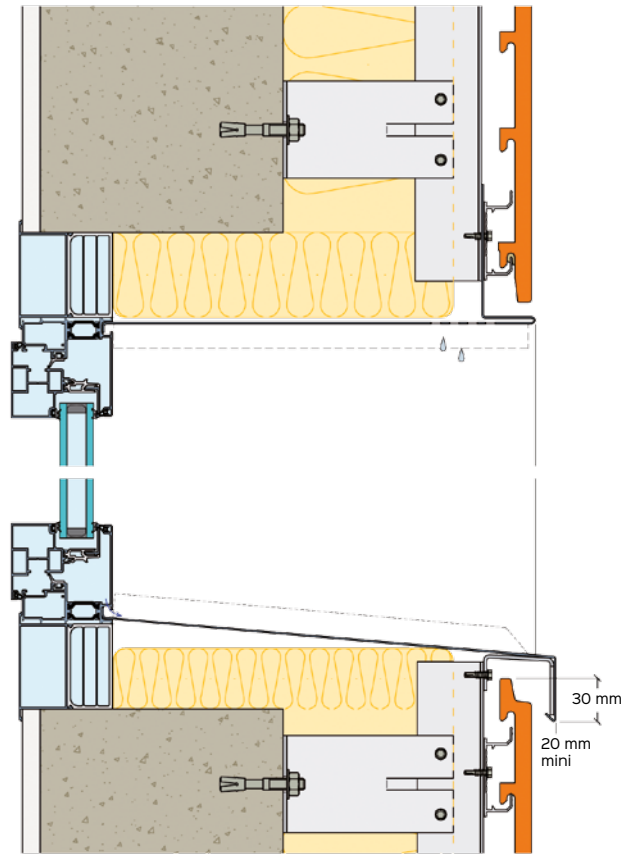


DETAIL:
**WINDOW FRAME FLUSH
WITH OUTSIDE WALL**





DETAIL :
**WINDOW FRAME FLUSH
WITH INSIDE WALL**



ACOUSTIC PRODUCT RANGE



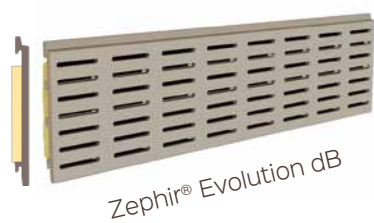
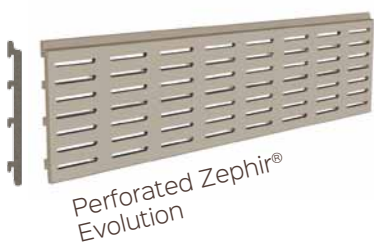
— ALSTOM C3 OFFICES,
SAINT-OUEN, FRANCE —

Architect : REICHEN & ROBERT et Associés

Installer : GCEB

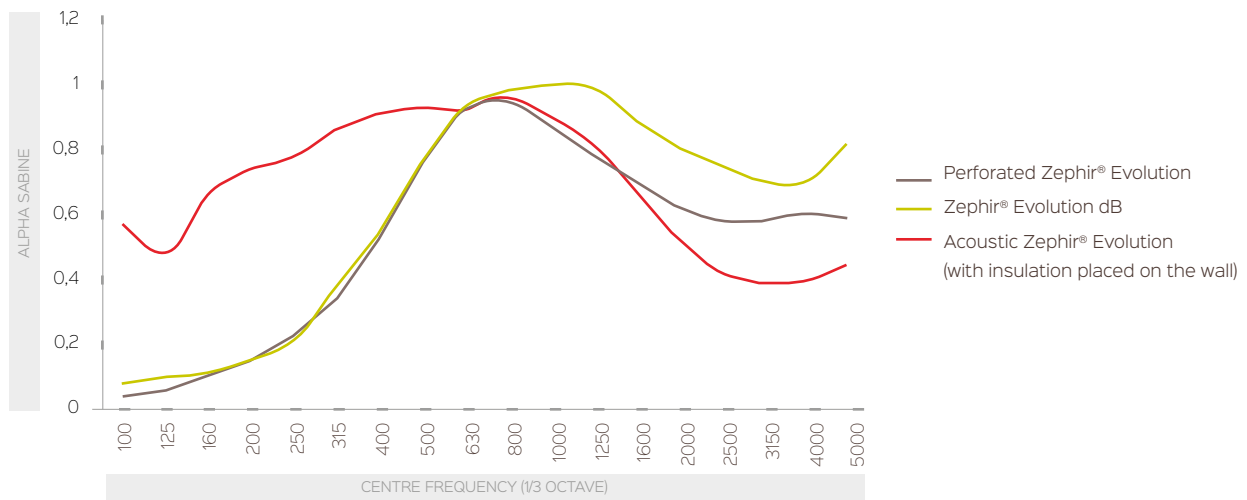
Product : Custom acoustic cladding

Terreal offers three solutions based on Zephir® Evolution to reduce sound distortions in open environments.



SOUND ABSORPTION

COEFFICIENT (SABIN)



| PRODUCT | <i>Perforated Zephir® Evolution</i> | <i>Zephir® Evolution dB</i> | <i>Acoustic Zephir Evolution</i> |
|-------------------------------|---|---|--|
| Perforation ratio | 20% | 20% | 20% |
| Sound absorption (α) | $\alpha_w = 0.55$ (LM) | $\alpha_w = 0.5$ (M) | $\alpha_w = 0.5$ (M) |
| Characteristics | Single skin product perforated horizontally, without insulation. Sound absorption is achieved by insulation placed on the wall. | Single skin product perforated horizontally, insulated using 20mm glass wool batt with a black layer on the visible side. | Double skin product perforated horizontally. The hollows contain 30x60cm glass wool insulation with a black layer on the visible side. |
| Usage | Very effective on low and medium frequencies. For public venues and industrial premises. | For public venues, industrial premises. | For public venues, industrial premises, noise barriers. |
| Impact resistance | NA* | NA* | Q3 |

* Not applicable

CHARACTERISTICS OF THE INSULATION MATERIAL

- **Thin, strong, high-density insulation** made of glass wool, covered with black fibreglass on one side.
- **Density** : 53kg/m².
- **Thickness** : 20mm for Perforated Zephir® Evolution, 30mm for Acoustic Zephir® Evolution.
- **Black coloured fibreglass fabric** : 60g/m.
- **Fire rating** : A2 S1 D0.

ADVANTAGES

- Perfect for low and medium frequencies.
- Large choice of colours.
- Good fire resistance.

* Installation locations should be studied for impact requirements

PITERAK® XS



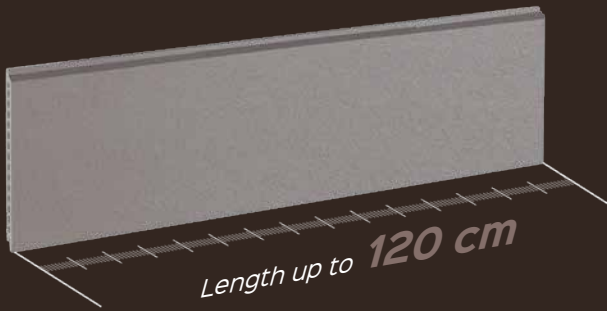
Piterak® XS is a cost-effective ventilated wall cladding product installed with clips fixed to vertical profiles. Its light weight allows for easy handling on site and reduced transportation costs. Aesthetical and modern, Piterak® XS is available up to 120cm-long.



— TORREJÓN HOSPITAL, SPAIN —

Architect : Argola Arquitectos
Product : Piterak® XS 03. Champagne

ADVANTAGES

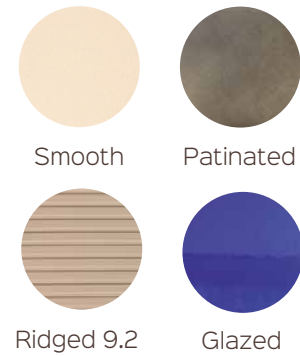


- Cost-effective double skin cladding
- Incomparable lightness (30kg/m²)
- Optimisation of the transport cost (size and weight)
- Choice of installation: horizontal, vertical (with V-Clip® system, see p52)
- Simple and fast installation using clips

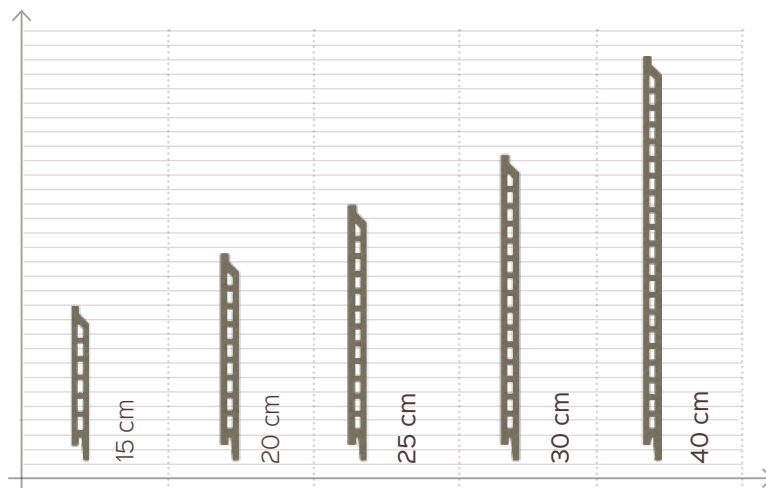
13 COLOURS



4 FINISHES



5 MODULES



All module heights and lengths are available in imperial dimensional products

CHARACTERISTICS



STANDARD SIZES AND PERFORMANCES

| PRODUCT | MODULE H x L mm | DIMENSIONS H x L x Th mm | WEIGHT U per Kg | WEIGHT /m ² per Kg | IMPACT RESISTANCE* | WIND RESISTANCE | |
|-------------|-----------------------|--------------------------------|-----------------------|-------------------------------------|-----------------------|--------------------|---------------|
| PITERAK® XS | 15 | 150 x 1200 | 159 x 1200 x 18 | 5,5 | 30 | - | - |
| | 20 | 150 x 1200 | 209 x 1200 x 18 | 7,4 | 30 | - | - |
| | 25 | 250 x 1200 | 259 x 1200 x 18 | 9,2 | 30 | Q3* | V3* (2059) |
| | 30 | 300 X 1200 | 309 X 1200 X 18 | 11 | 30 | Q3 | V3* (1716 PA) |
| | 40 | 400 X 1200 | 409 X 1200 X 18 | 14,8 | 30 | Q3 | V2* (1287 PA) |

H = Height ; L = Length ; Th. = Thickness

* Maximum resistance reached with a reinforced installation (reinforcement with intermediate profile)

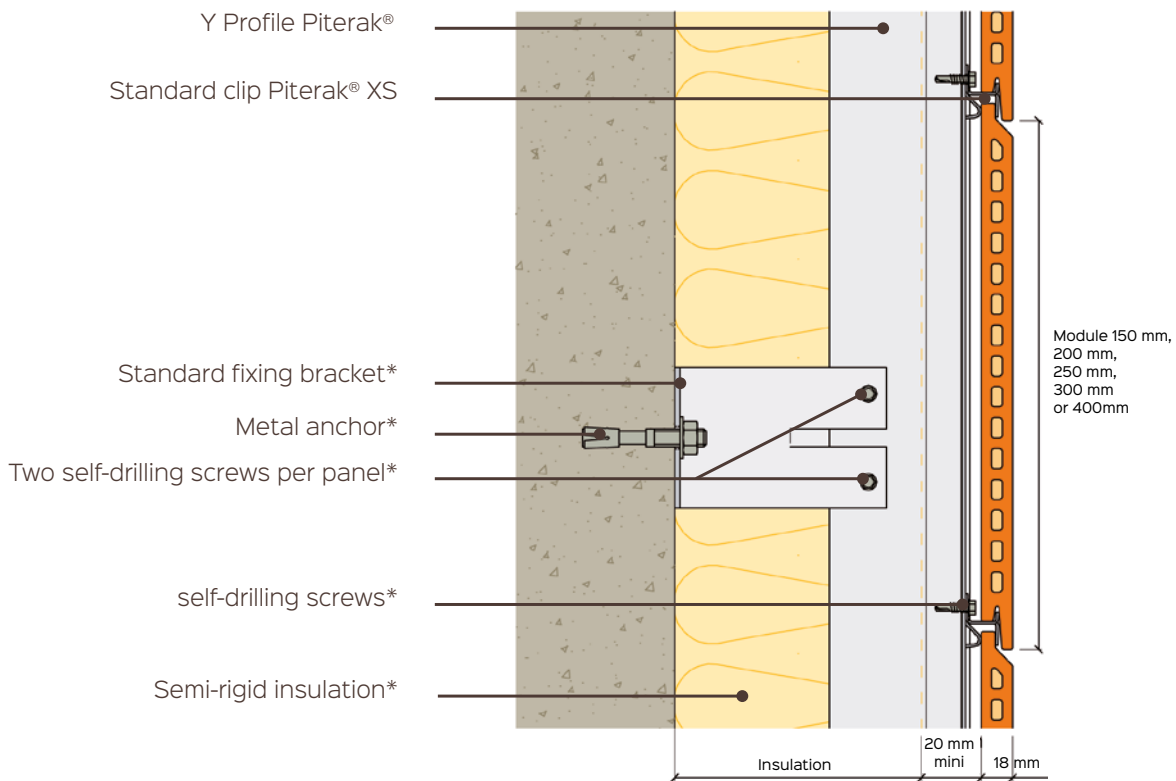
All Module Heights and Lengths are available in Imperial Dimensional Products

INSTALLATION PROPERTIES

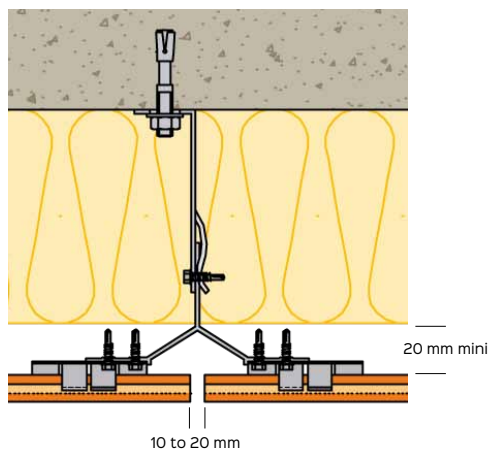
- **Substrate type** : Concrete wall, coated masonry, and framed walls
- **Primary framework** : Metal
- **Panels installed with clips** on a metal vertical framework fixed to the wall.
- **The vertical uprights are aligned with the open joints.** Their shape drains rainwater in order to protect both the wall and the insulation.
- **Air gap for ventilation** : minimum 20mm.
- **45° mitre cut** available from factory.
- **Frost resistance** : Complies with standard NF EN 539-2.
- **Worldwide compliance and testing certificates** have been achieved



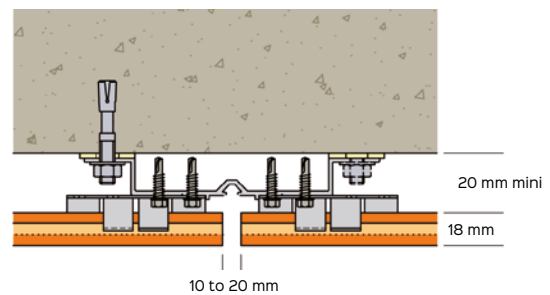
STANDARD INSTALLATION DETAILS



STANDARD FIT



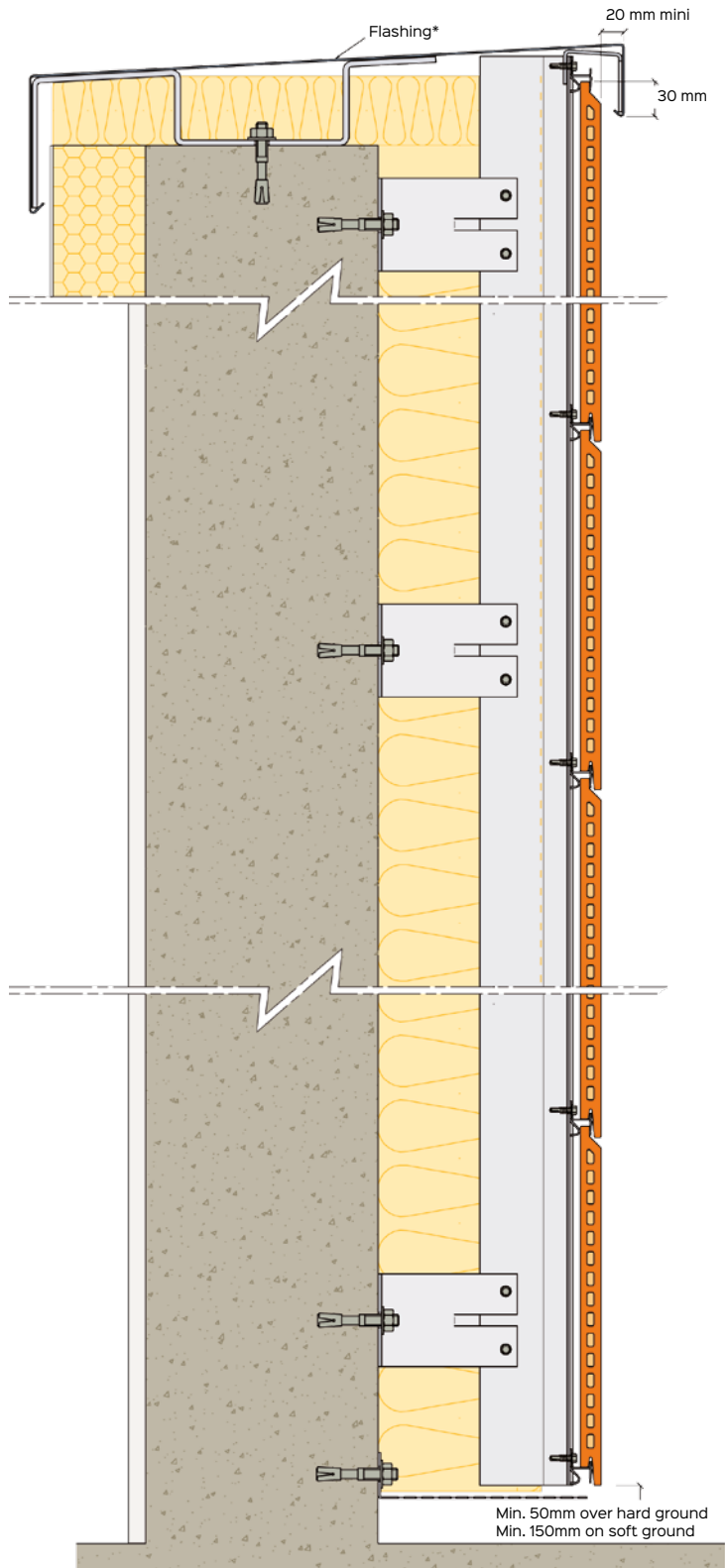
DIRECT FIT



* Not furnished by Tereal



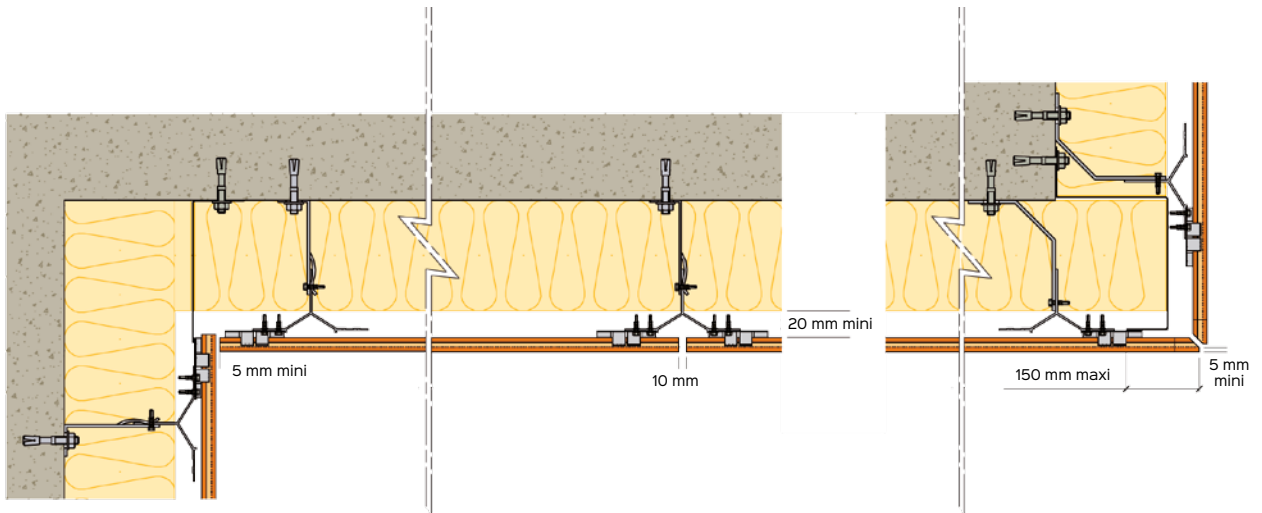
DETAIL :
WALL BASE AND PARAPET



*Not furnished by Terreal



DETAIL:
CORNERS

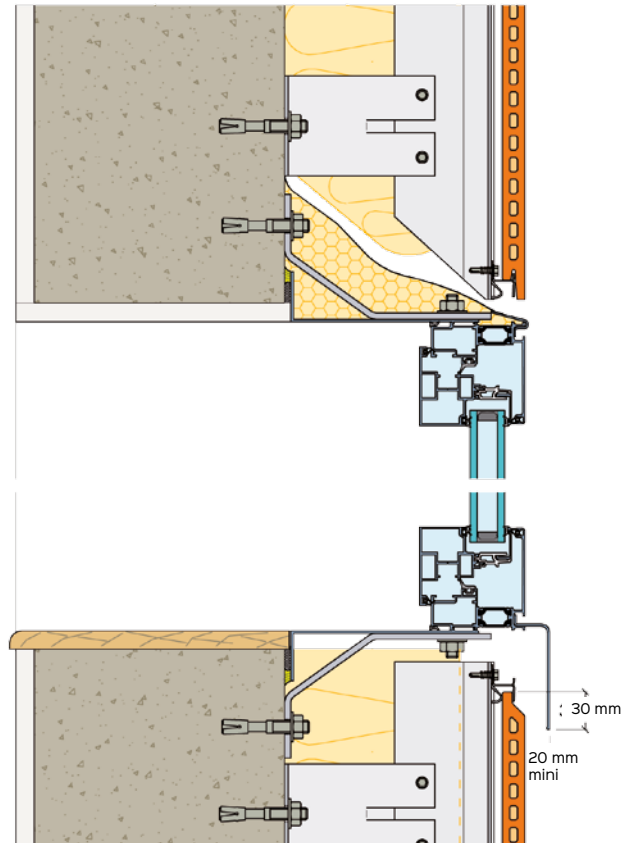




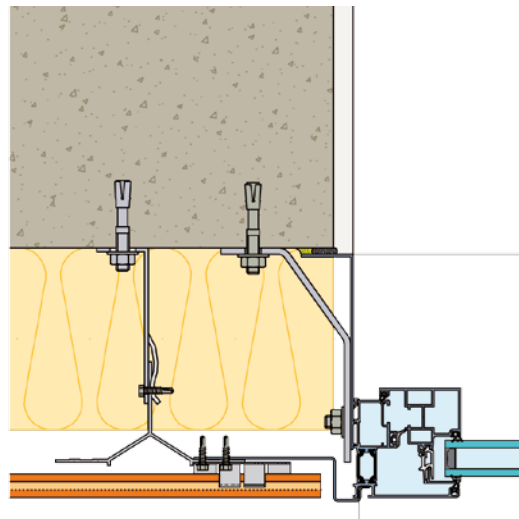
DETAIL :
**WINDOW FRAME FLUSH
WITH OUTSIDE WALL**



Lintel



Window sill



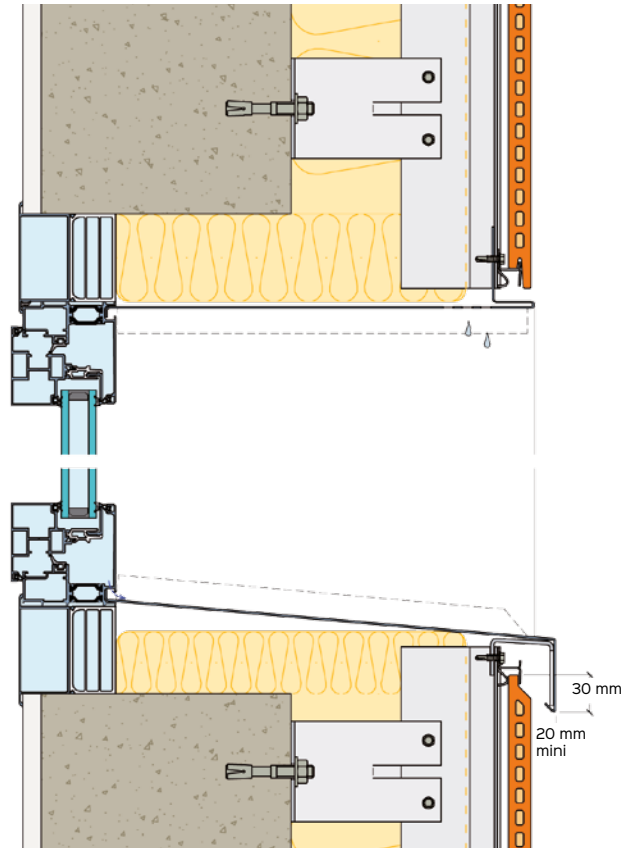
Jambs



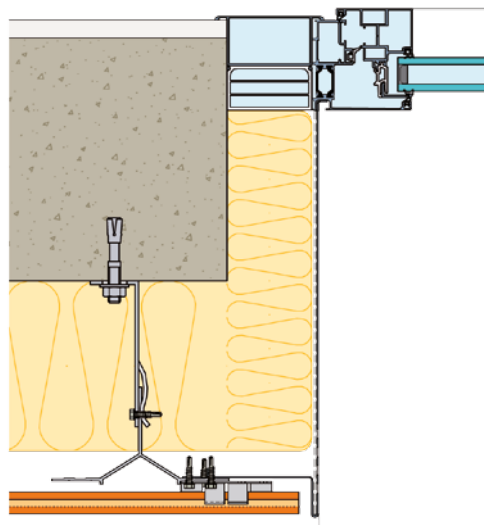
DETAIL :
**WINDOW FRAME FLUSH
WITH INSIDE WALL**



Lintel



Window sill



Jambs

PITERAK® SLIM

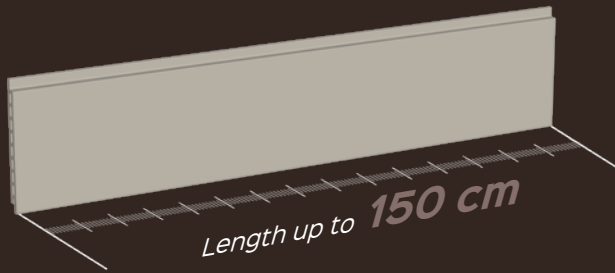


Piterak® Slim is a large format terracotta cladding system with overlapping horizontal joints. It is installed with clips fixed on vertical profiles. Used with the V-Clip® system from LABEL Façade, it is officially approved for vertical installation. Piterak® Slim is tough, rated Q4 for impact resistance, and can be used at ground level even in public spaces.

— LUC BESSON'S CINEMA CITY, —
SAINT-DENIS, FRANCE

Architect : Reichen & Robert et Ass.
Owner : Vinci Immobilier
Installer : SFB
Product : Custom Piterak® Slim, Ebony

ADVANTAGES



- Many customization possibilities : colours, finishes, shapes, sizes
- Choice of installation : horizontal, vertical (with V-Clip® system, see p52)
- Simple and fast installation using clips
- High impact performance : for installation at ground level

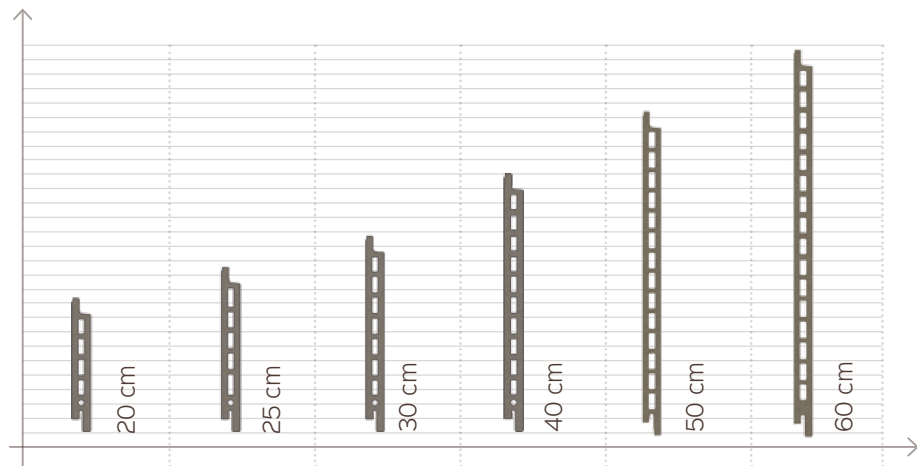
13 COLOURS



5 FINISHES



6 SHAPES



All module heights and lengths are available in imperial dimensional products

CHARACTERISTICS



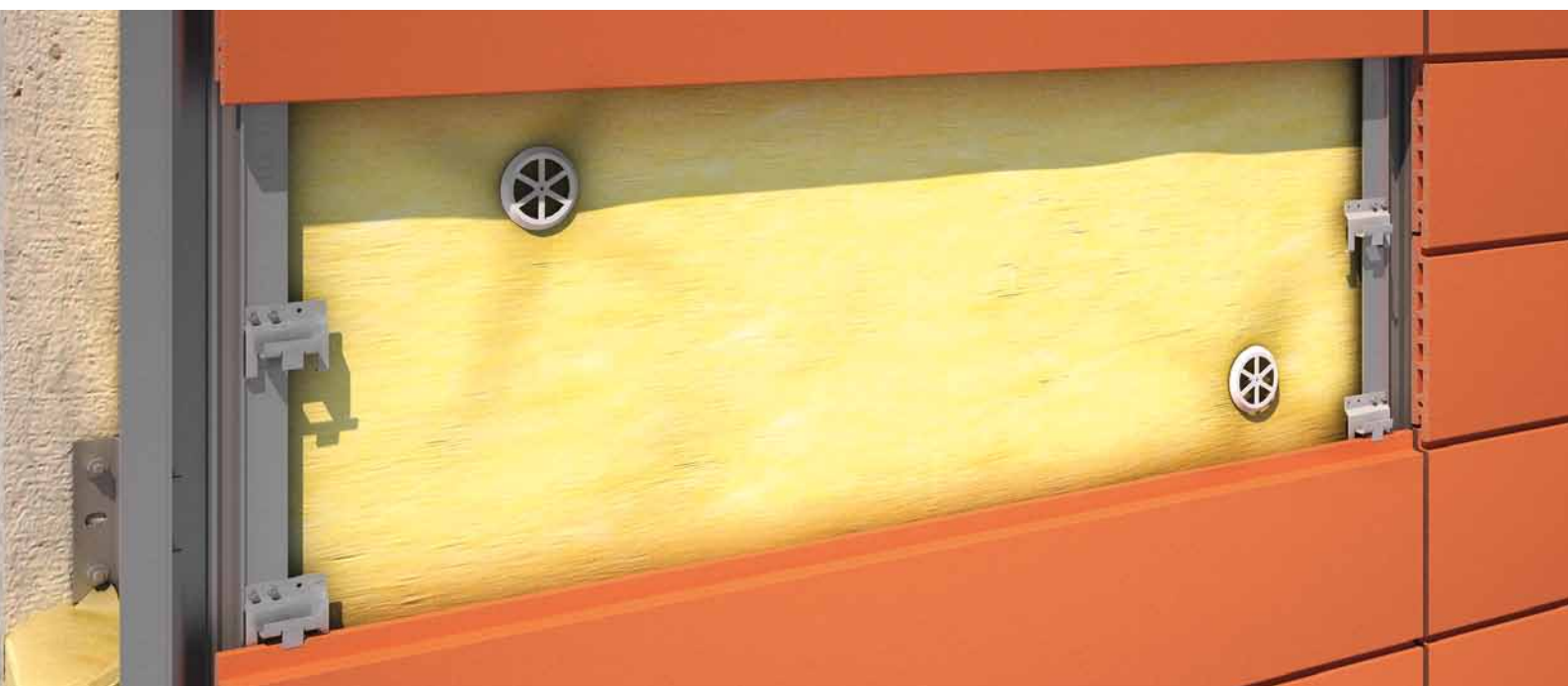
STANDARD SIZES AND PERFORMANCES

| PRODUCT | MODULE H x L mm | DIMENSIONS HxLxTh mm | WEIGHT /U per Kg | WEIGHT per M ² | IMPACT RESISTANCE* | WIND RESISTANCE | |
|---------------|-----------------------|----------------------------|------------------------|------------------------------|-----------------------|--------------------|--------------|
| PITERAK® SLIM | 20 | 200 x 1520 | 214 x 1520 x 30 | 14,6 | 48,5 | Q4 | V3 (1936 Pa) |
| | 25 | 250 x 1520 | 264 x 1520 x 30 | 18,2 | 48,5 | Q4 | V3 (2219 Pa) |
| | 30 | 300 x 1520 | 314 x 1520 x 30 | 21,8 | 48,5 | Q4 | V4 (2359 Pa) |
| | 40 | 400 x 1520 | 414 x 1520 x 30 | 29,5 | 48,5 | Q4 | V2 (1465 Pa) |

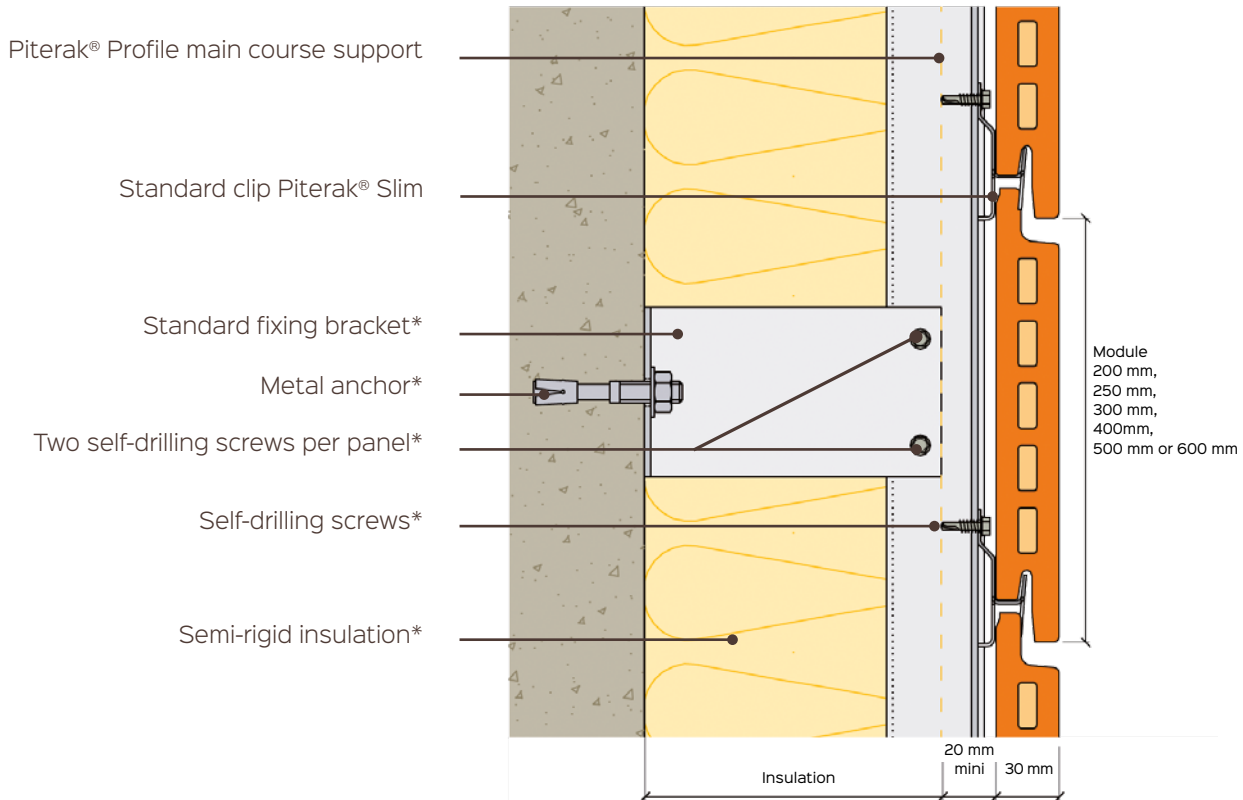
H = Height ; L = Length ; Th. = Thickness
All module heights and lengths are available in imperial dimensional products

INSTALLATION PROPERTIES

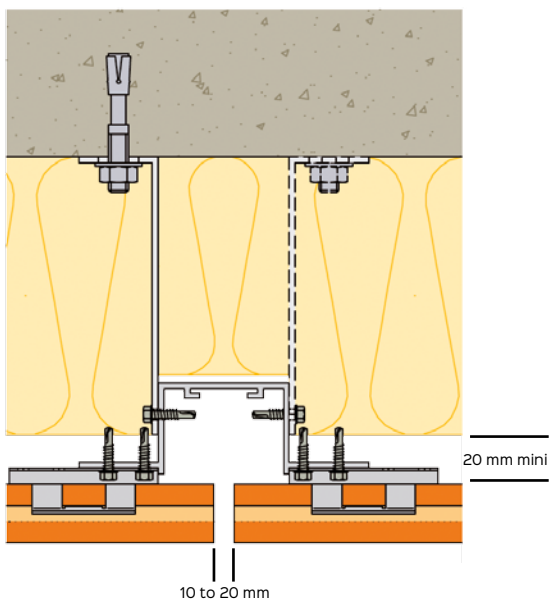
- Under Technical Assessment No. 2/10-1429.
- Substrate type : Concrete wall, coated masonry, masonry, framed walls.
- Primary framework : Metal
- Panels installed with clips on a metal or timber vertical framework fixed to the wall.
- The vertical uprights are aligned with the open joints. Their shape drains rainwater in order to protect both the wall and the insulation.
- Very simple to replace one broken panel.
- Air gap for ventilation : minimum 20mm.
- 45° mitre cut available from factory.
- Seismic performance : Approved in zones 4, for buildings types II, with insulation up to 100 mm.
- Frost resistance : Complies with standard NF EN 539-2
- Worldwide compliance and testing certificates have been achieved



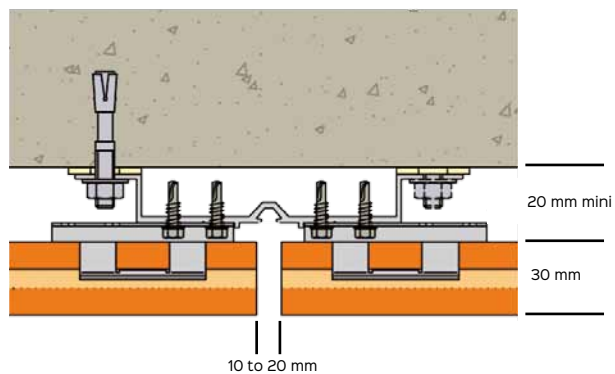
STANDARD INSTALLATION DETAILS



STANDARD FIT



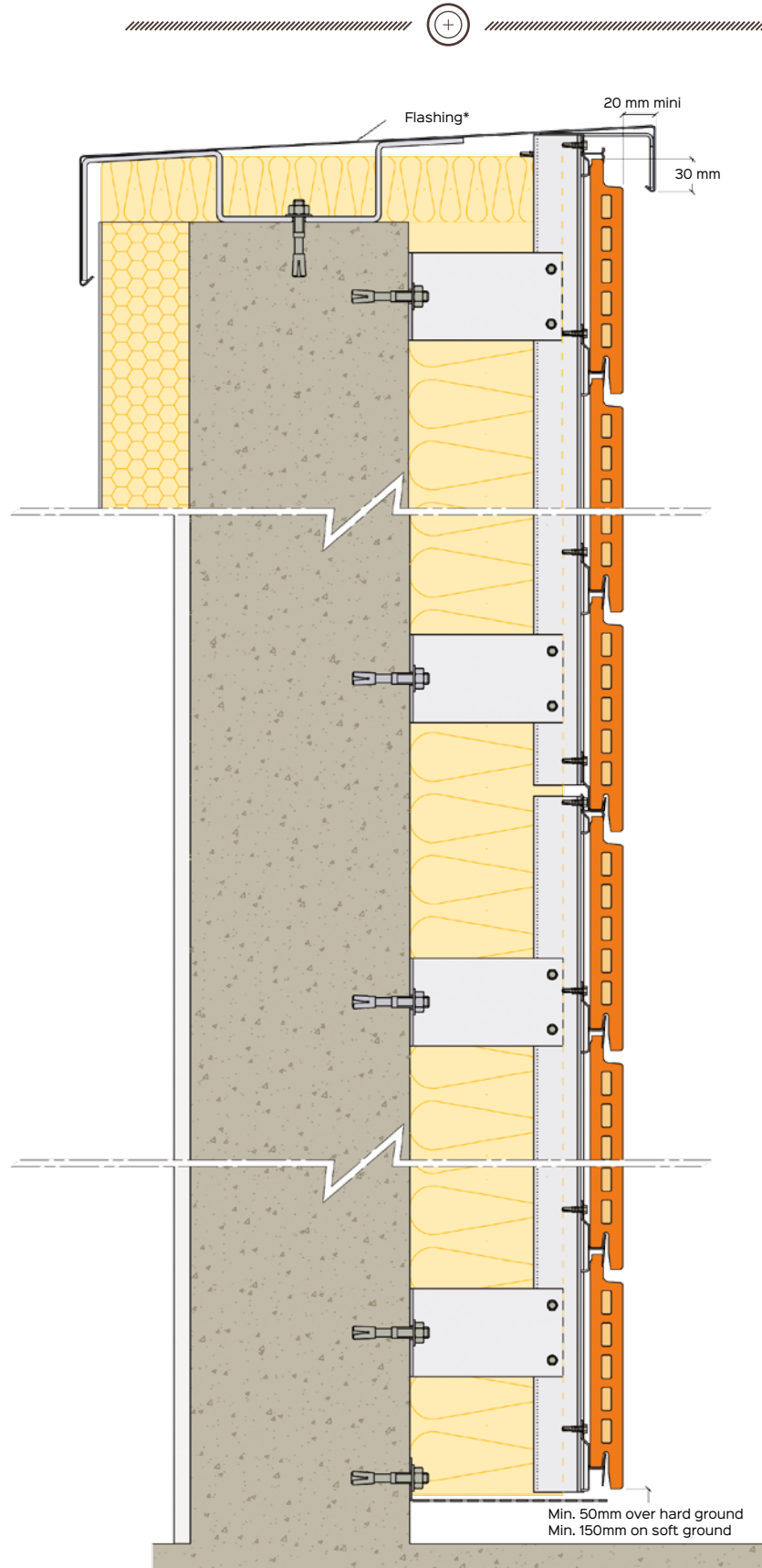
DIRECT FIT



* Not furnished by Terreal

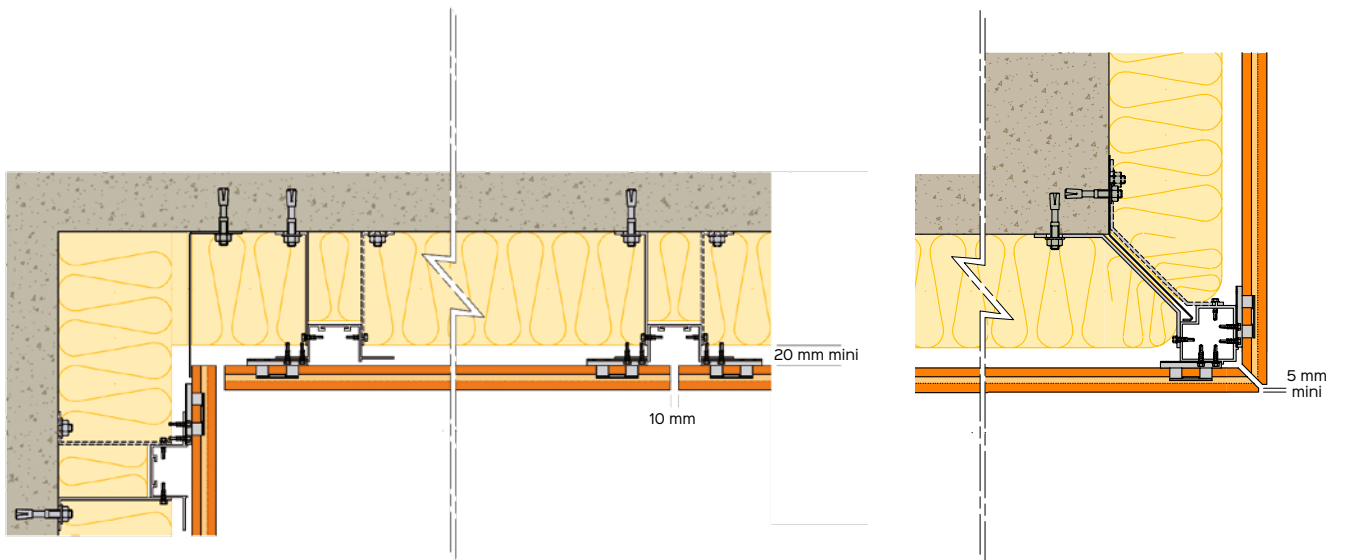


DETAIL :
WALL BASE AND PARAPET



* Not furnished by Terreal

DETAIL :
CORNERS

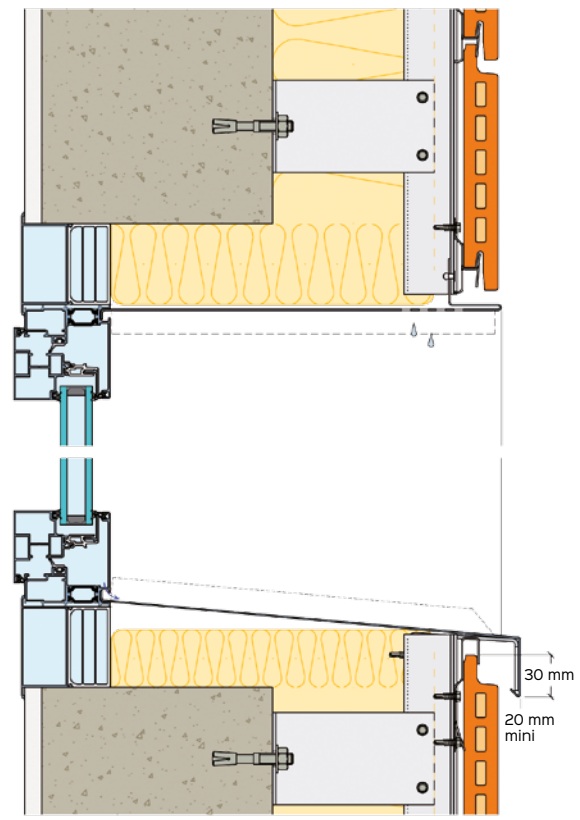




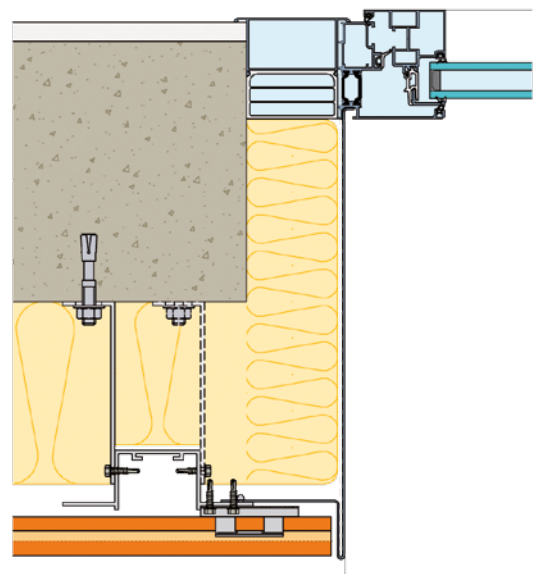
DETAIL :
WINDOW FRAME FLUSH WITH INSIDE WALL



Lintel



Window sill



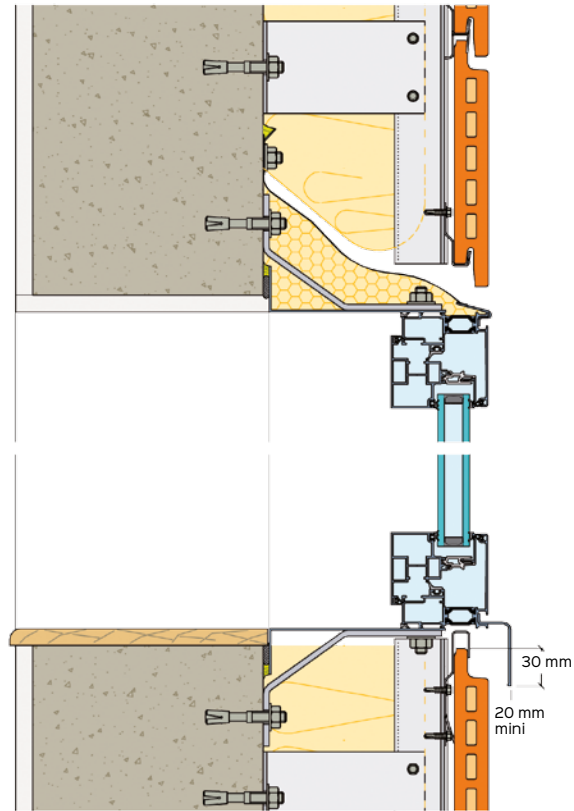
Jambs



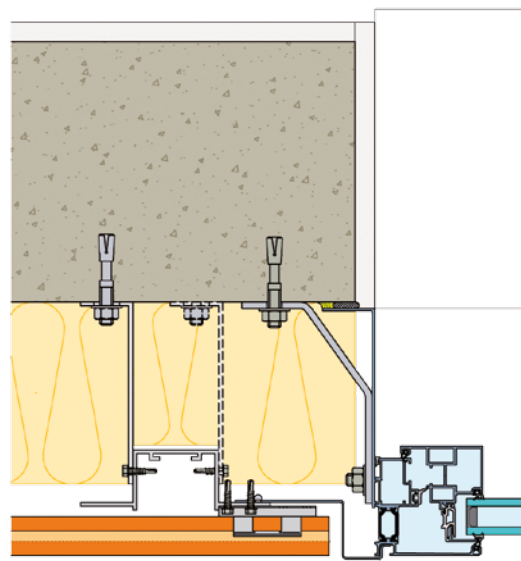
DETAIL :
WINDOW FRAME FLUSH WITH OUTSIDE WALL



Lintel



Window sill



Jambs

MAESTRAL®

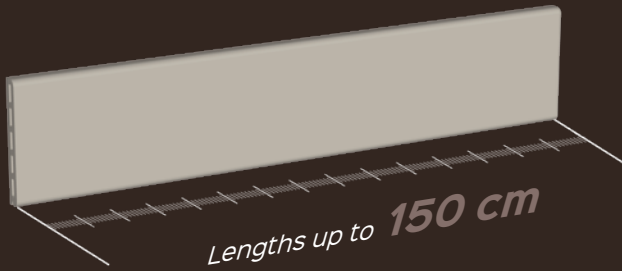


Maestral® is a wall cladding system with a unique look. The open horizontal joints and rounded edges break with the traditional straight lines of wall cladding to bring shape and depth to façades. Mounted with clips fixed to vertical profiles, it can be installed horizontally or vertically on flat or curved walls, in various patterns: stacked, staggered, or with open joints.

— TERRA MUNDI BUILDING, OPAC LYON HQ —
FRANCE

Architect : HTVS Architecture
Client : OPAC du Grand Lyon
Installer : Somiroc
Product : Maestral® Red-Orange

ADVANTAGES



- Unique aesthetics bringing shape and depth to the façade
- Length up to 150cm
- Flexible installation : horizontal, vertical, linear, staggered
- Can be installed with open joints
- Impact performance: Rated Q4, can be installed at ground level
- Simple and fast installation using clips

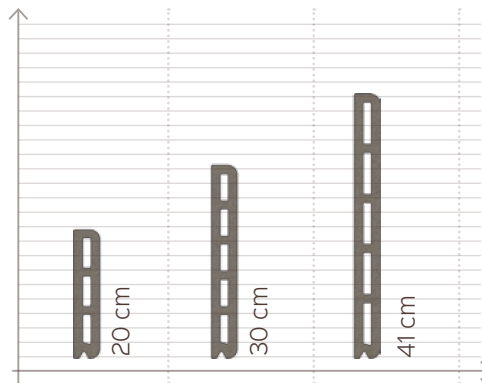
13 COLOURS



3 FINISHES



3 MODULES



All module heights and lengths are available in imperial dimensional products

CHARACTERISTICS



STANDARD SIZES AND PERFORMANCES

| PRODUCT | MODULE H x L mm | DIMENSIONS H x L x Th mm | WEIGHT /U per Kg | WEIGHT /m ² per Kg | IMPACT RESISTANCE* | WIND RESISTANCE | |
|-----------|-----------------------|--------------------------------|------------------------|-------------------------------------|-----------------------|--------------------|--------------|
| MAESTRAL® | 20 | 210 x 1520** | 200 x 1520 x 40 | 19,8 | 61 | Up to Q4* | V3 (1930 Pa) |
| | 30 | 310 x 1520** | 300 x 1520 x 40 | 29 | 61 | Q4 | V2 (1470 Pa) |
| | 41 | 420 x 1400** | 410 x 1400 x 40 | 35 | 61 | Q4 | V1 (1120 Pa) |

H = Height ; L = Length ; Th. = Thickness

* With additional upright

** for a 1 cm horizontal joint and for a 2 cm vertical joint

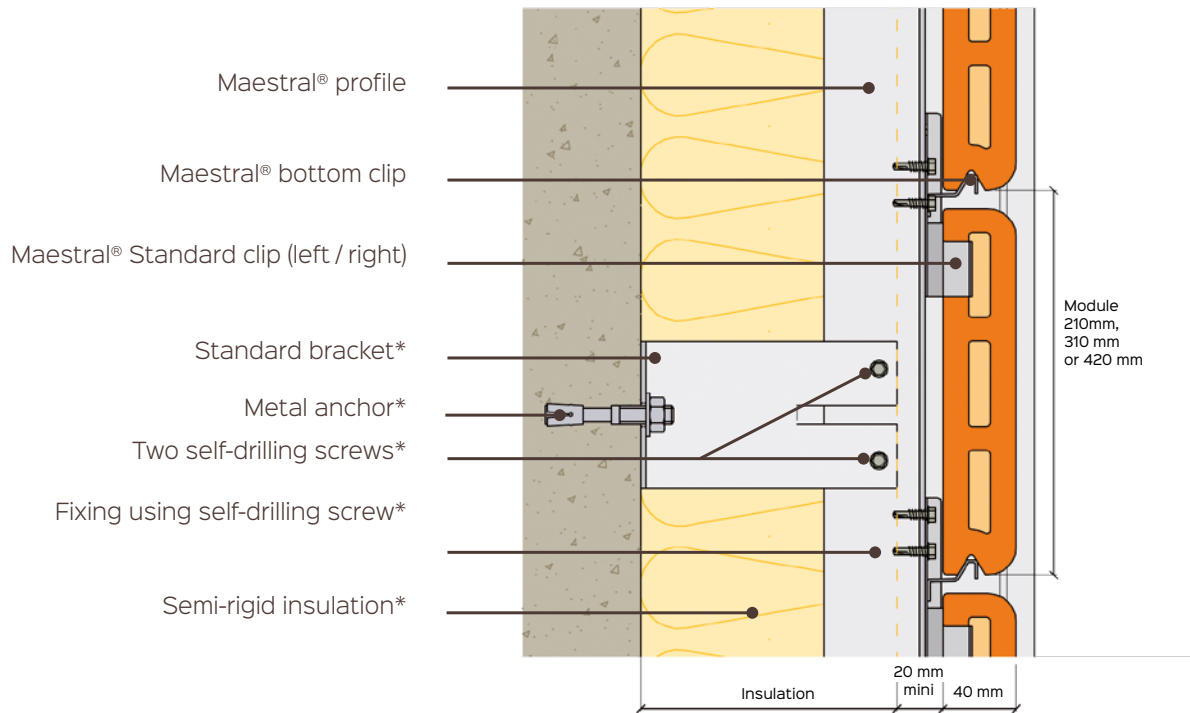
All module heights and lengths are available in imperial dimensional products

INSTALLATION PROPERTIES

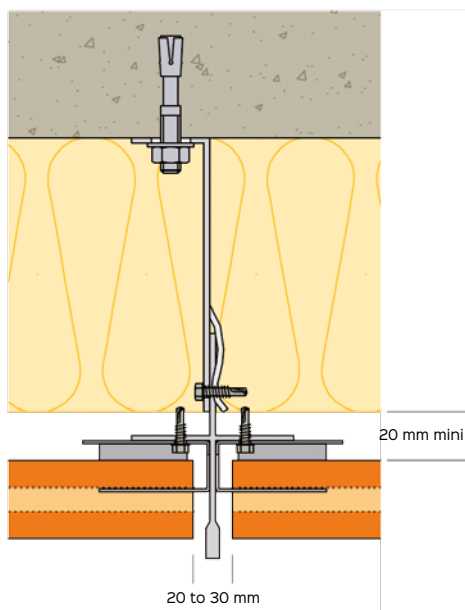
- Under Technical Assessment No.2/10-1428.
- **Substrate** : Concrete wall, coated masonry timber framed walls.
- **Primary framework** : Metal or timber.
- **Installation using dedicated stainless steel clips** with EPDM interface.
- **Vertical support profiles** with a protruding ridge that protects against weather and contributes to the overall aesthetics of the cladding.
- **Very simple replacement** of a broken panel.
- **Air gap for ventilation** : Minimum 20mm.
- **Corner terracotta** product available.
- **Vertical joints** : 20 to 30mm.
- **Seismic performance** : Approved in zones 4 for buildings types II with insulation up to 120 mm.
- **Frost resistance** : Complies with standard NF EN 539-2.
- **Worldwide compliance and testing certificates** have been achieved



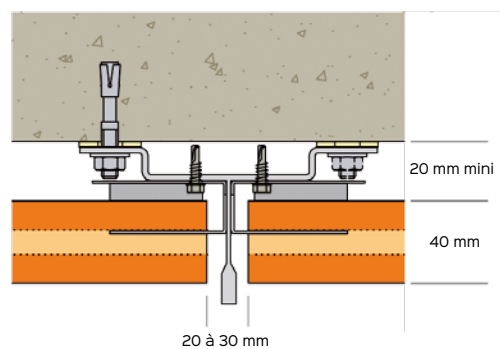
STANDARD INSTALLATION DETAILS



STANDARD FIT



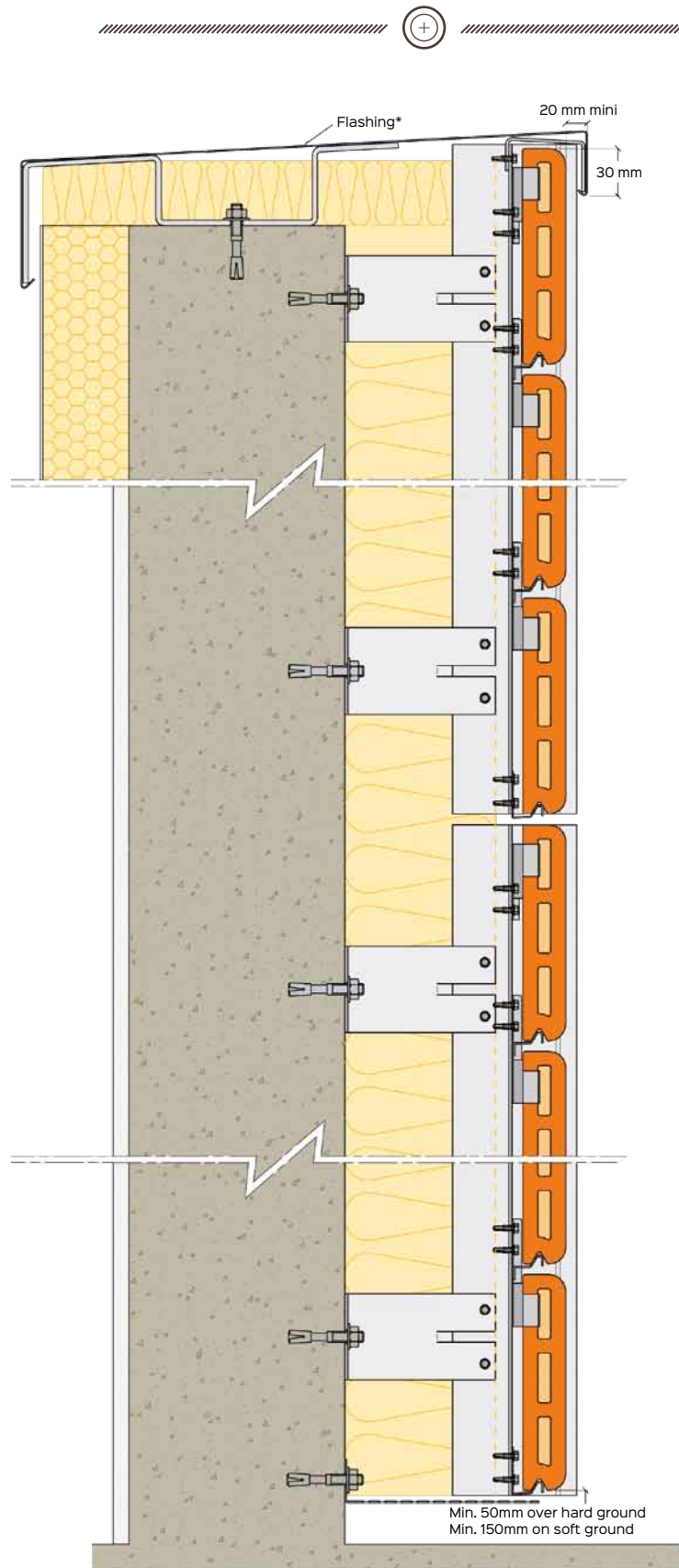
DIRECT FIT



* Not furnished by Terreal

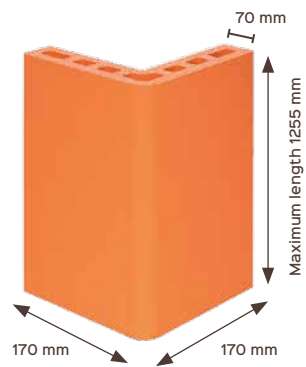
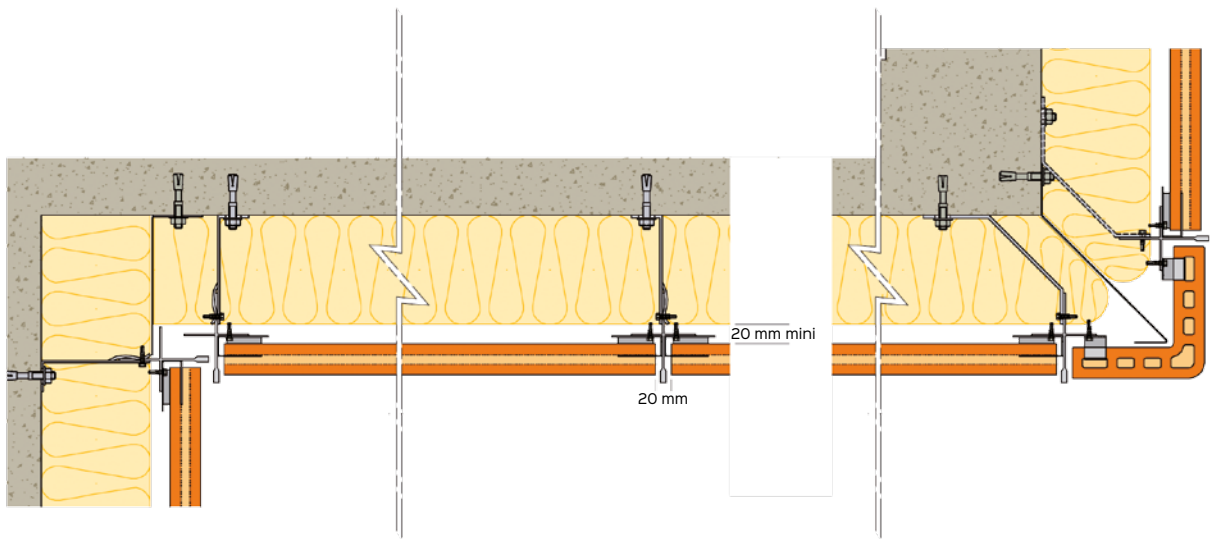


DETAIL :
WALL BASE AND PARAPET



* Not furnished by Terreal

DETAIL :
CORNERS

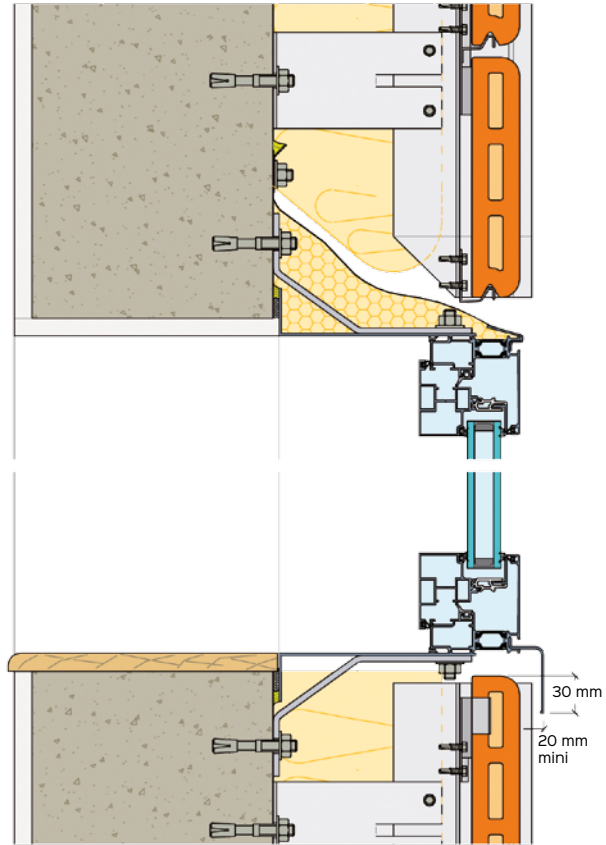




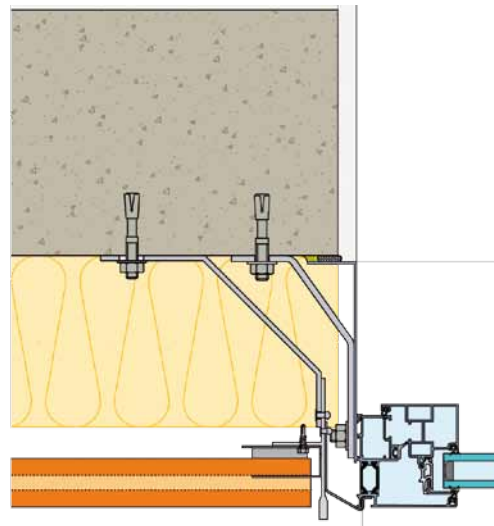
DETAIL :
**WINDOW FRAME FLUSH
WITH OUTSIDE WALL**



Lintel



Window sill



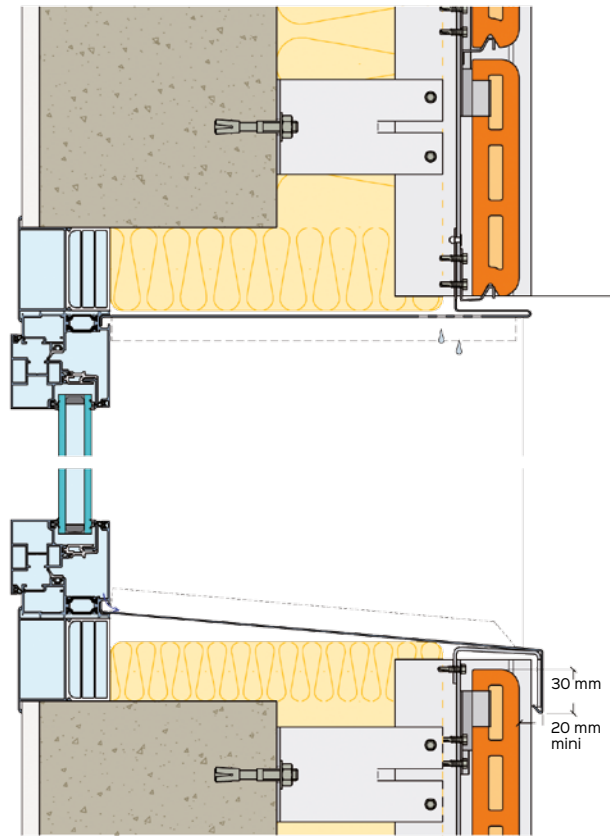
Jambs



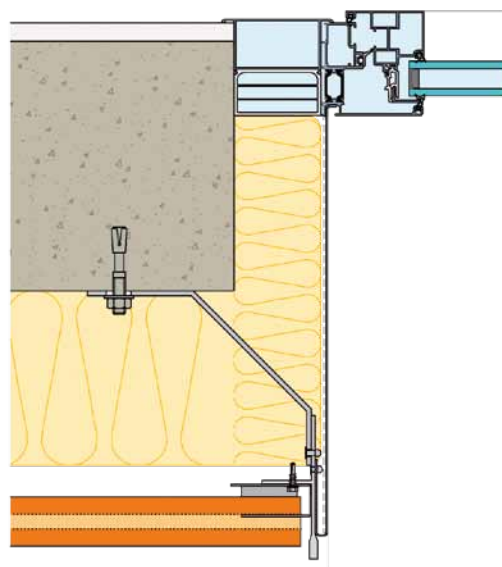
DETAIL :
**WINDOW FRAME FLUSH
WITH INSIDE WALL**



Lintel



Window sill



Jambs

VERTICAL INSTALLATION with V-Clip® label façade



TERREAL Façade adds the V-Clip® system from the LABEL FAÇADE company to its extensive range of cladding solutions. Tested and approved by the CSTB, the V-Clip® fixing system is made of a high performance steel wire clip that locks on a horizontal rail. With V-Clip®, the products Piterak® Slim, Piterak® XS and Maestral® can be installed vertically on flat or curved surfaces. This system reduces the horizontal joint to 8mm. As a result the cladding looks more continuous, emphasizing the verticality of the façade.

Technical Assessment No.2/09-1362



ELLIPSE TOWER, APPART' CITY, AMIENS, FRANCE

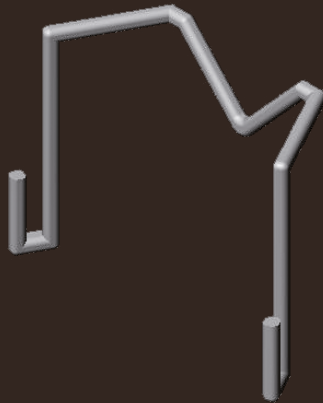
Architect : Scau Architecture

Owner : Vinci Immobilier

Installer : Mauger Père et Fils

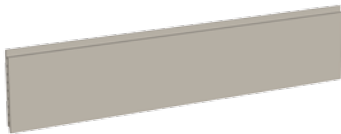
Product : Maestral® mat glazed white, light grey and black

ADVANTAGES

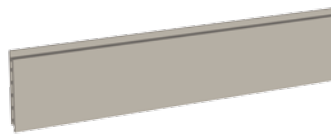


- System technical assessment
- Fits with all configurations of walls
- Fast and easy installation
- System masked by the invisible terracotta alveoli
- Seismic Resistance
- Wind resistance

Available FOR 3 PRODUCTS



Piterak® Slim

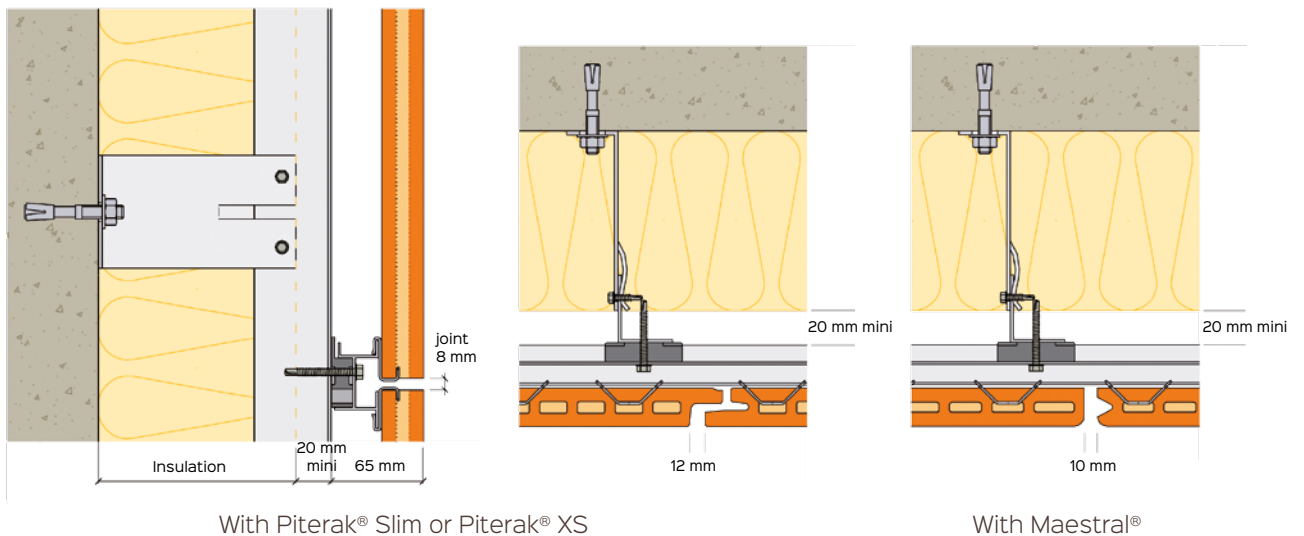


Piterak® XS

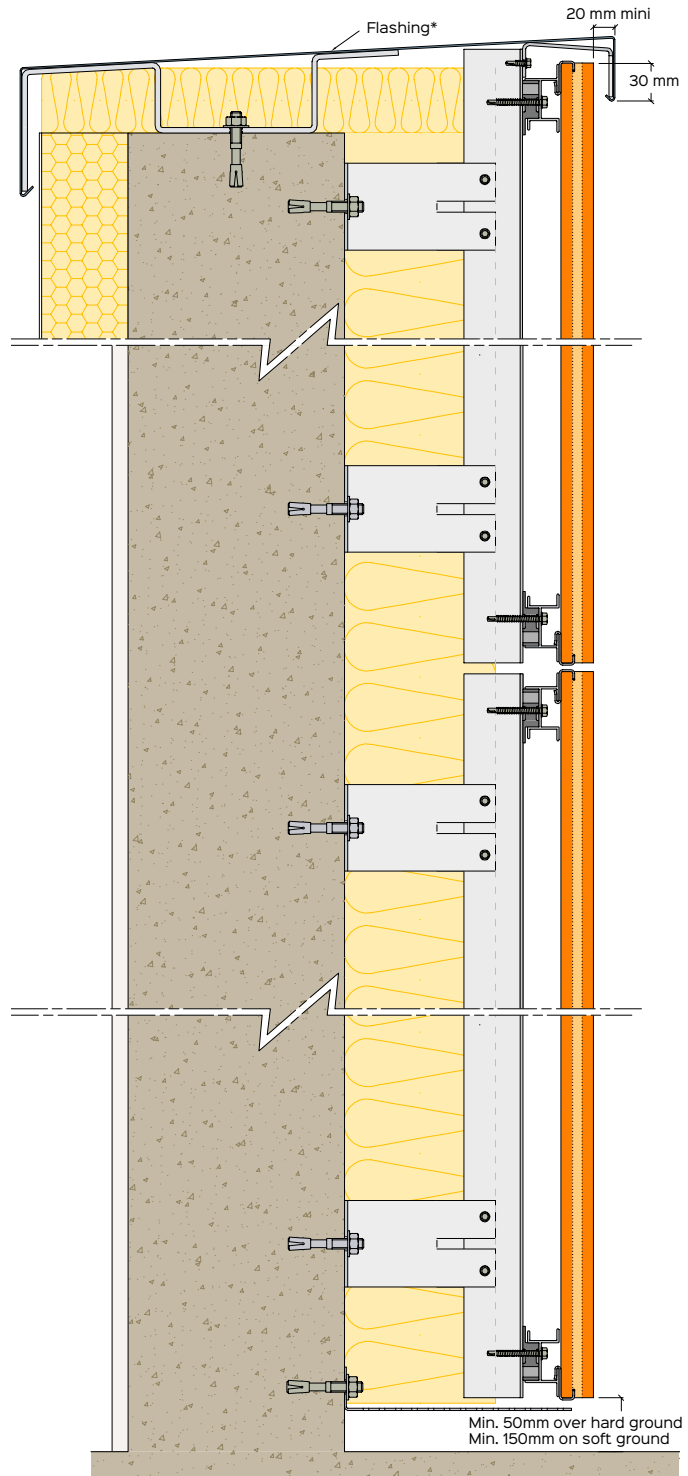


Maestral®

Standard installation DETAILS

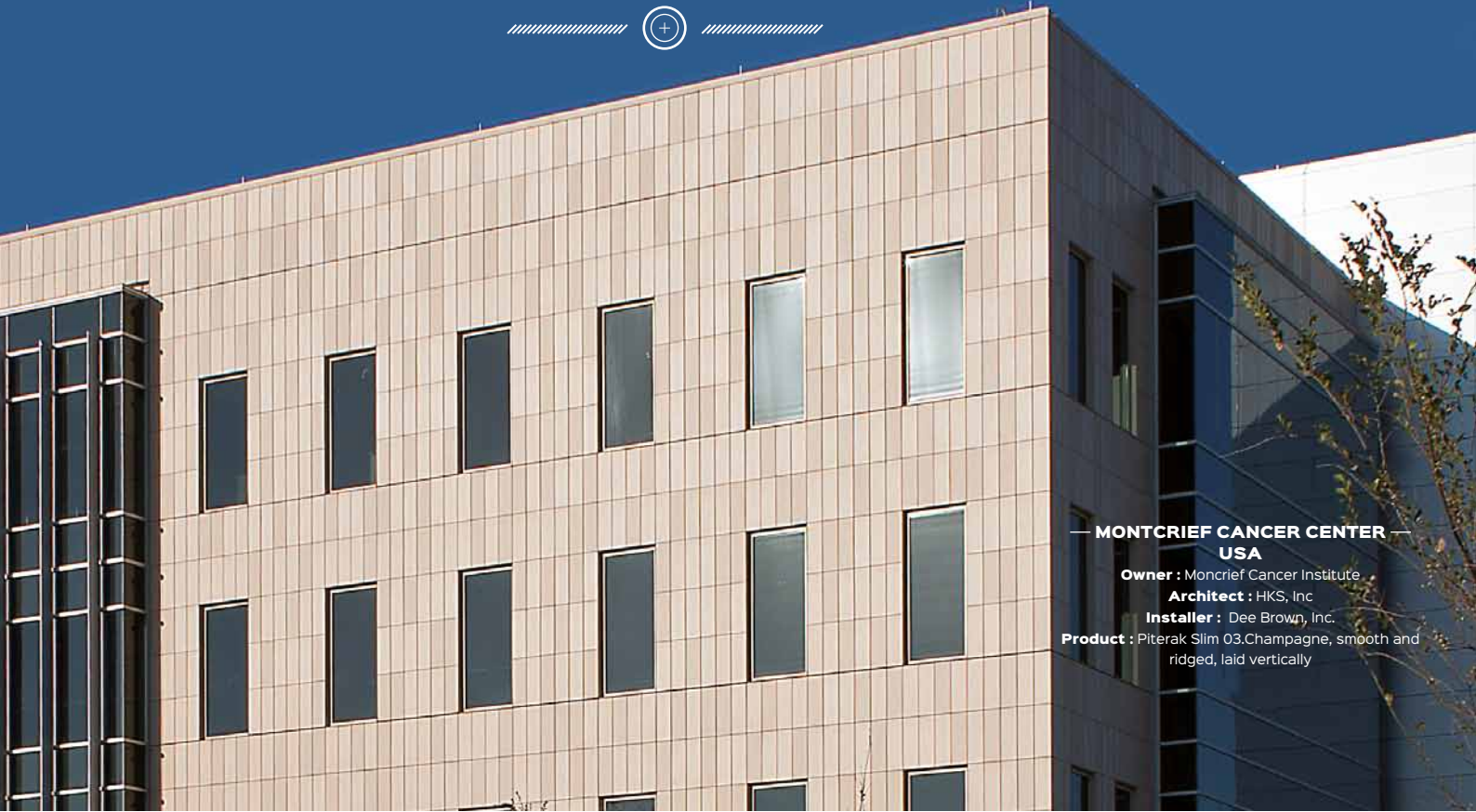


DETAIL :
WALL BASE AND PARAPET



* Not furnished by Terreal

DETAIL :
CORNERS



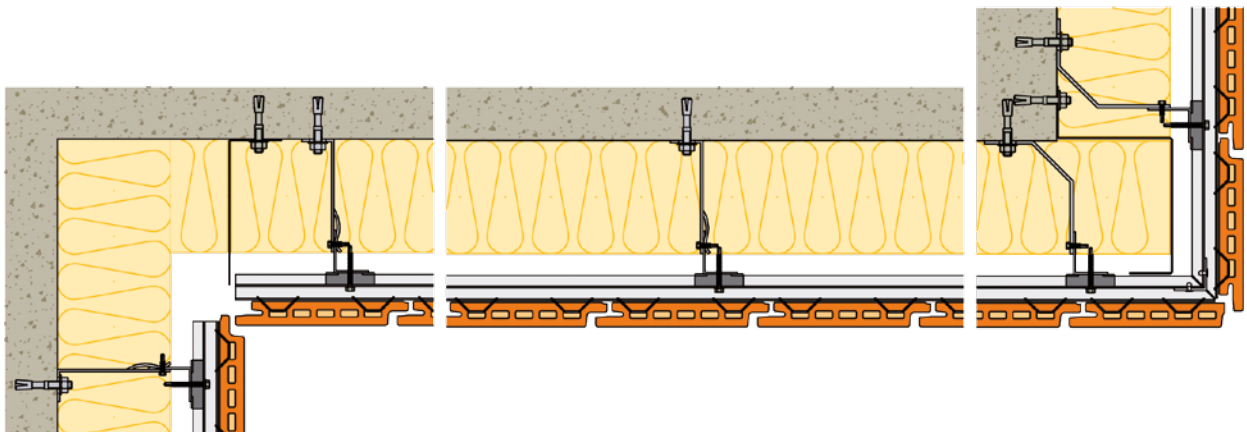
— **MONTCRIEF CANCER CENTER** —
USA

Owner : Moncrief Cancer Institute

Architect : HKS, Inc

Installer : Dee Brown, Inc.

Product : Piterak Slim 03.Champagne, smooth and ridged, laid vertically

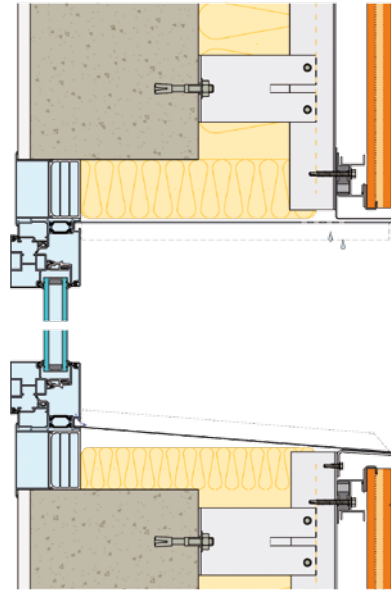




DETAIL :
**WINDOW FRAME FLUSH
WITH INSIDE AND OUTSIDE WALL**

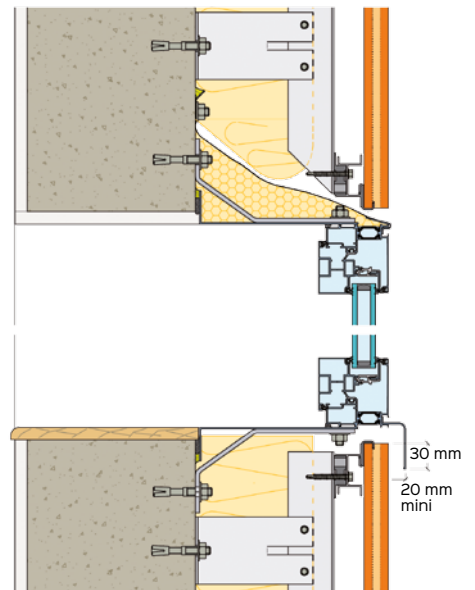


Lintel

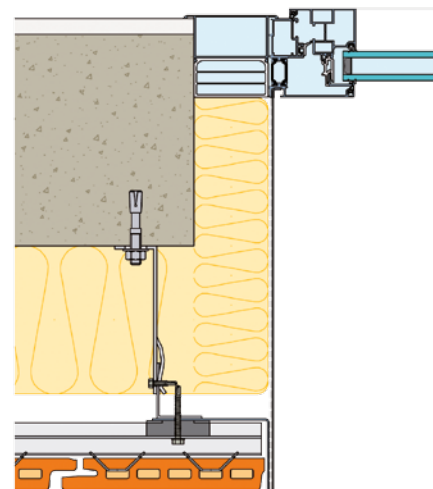


Window sill

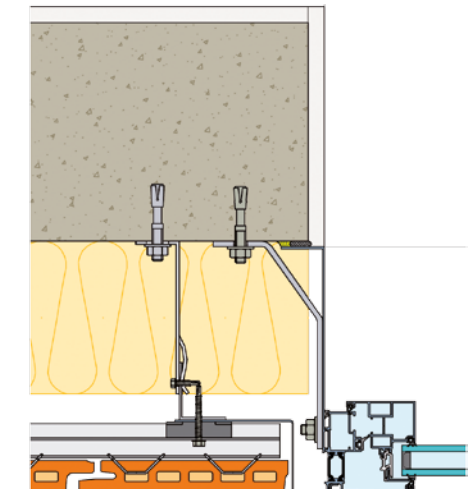
Lintel



Window sill

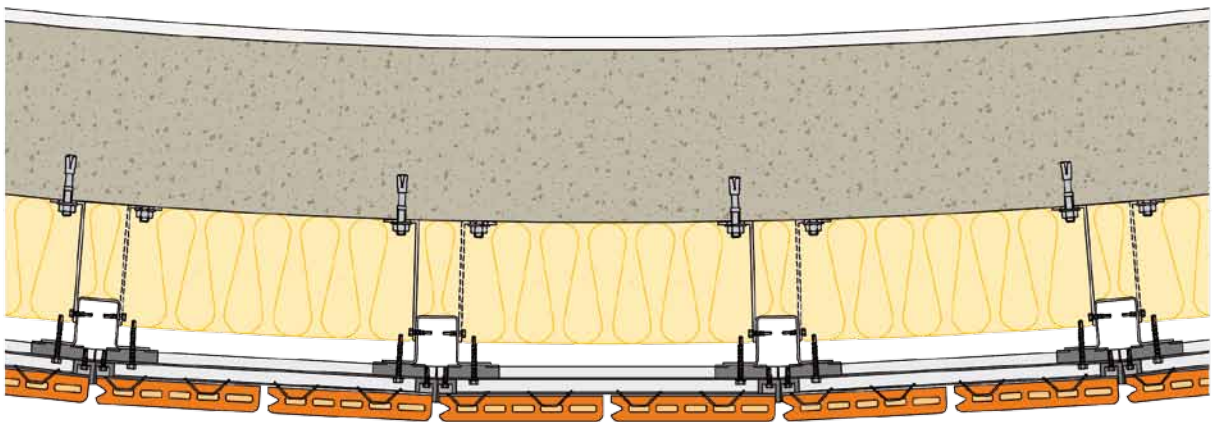
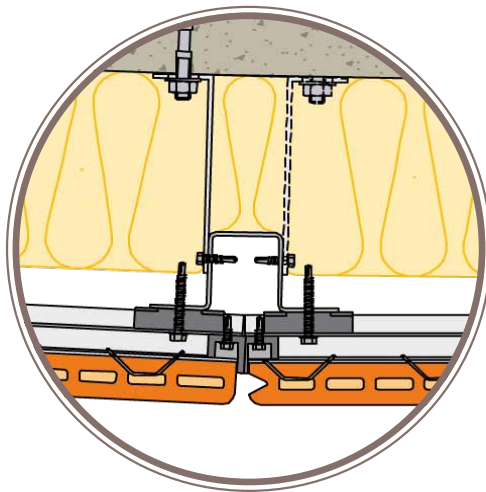
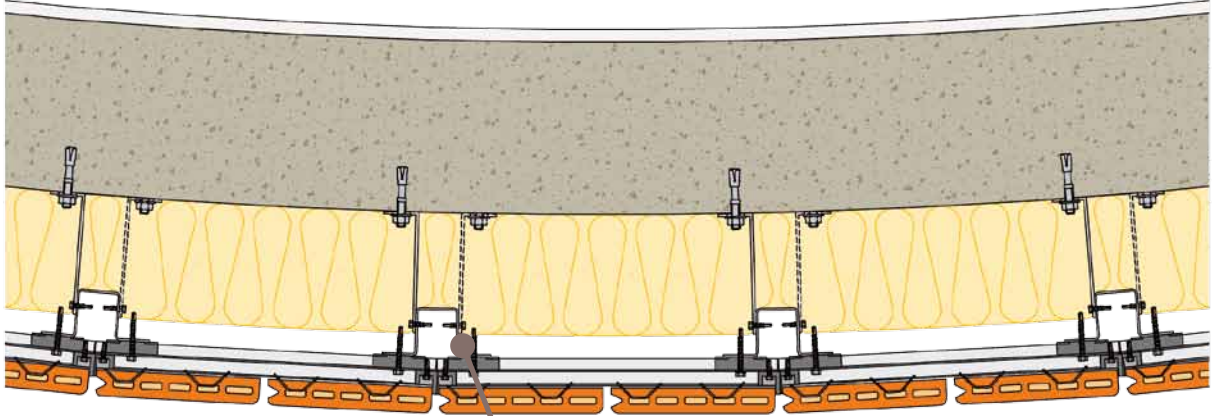


Jambs



Jambs

.....
INSTALLATION ON
CURVED WALLS

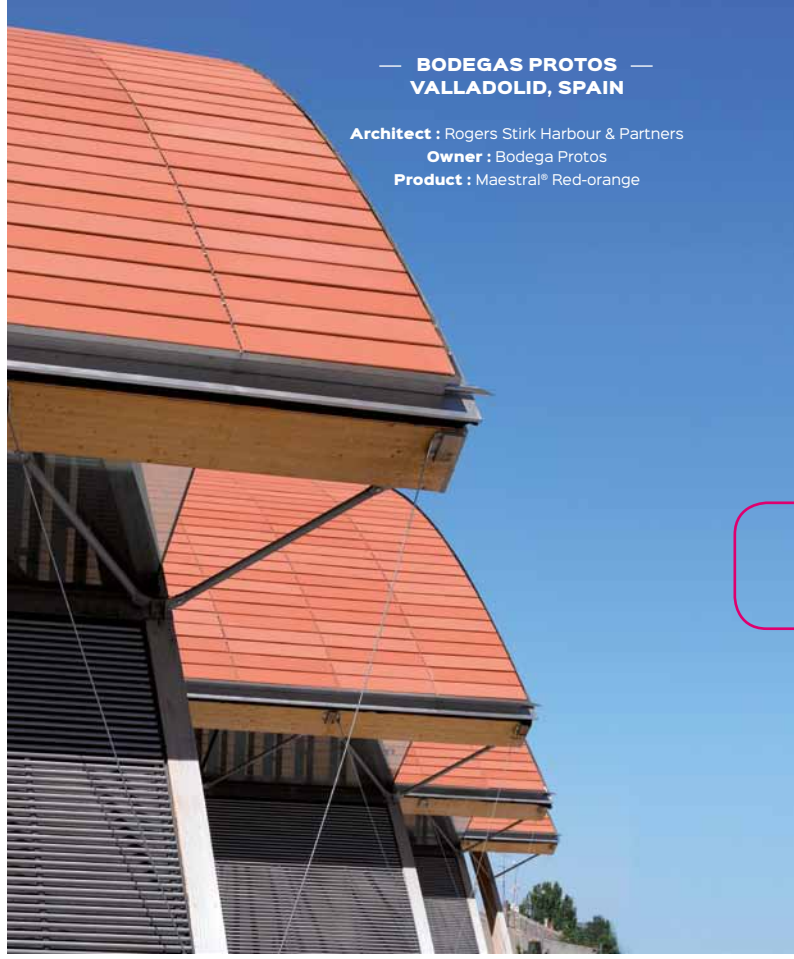




— TOULOUSE TRIBUNAL, TOULOUSE, FRANCE —

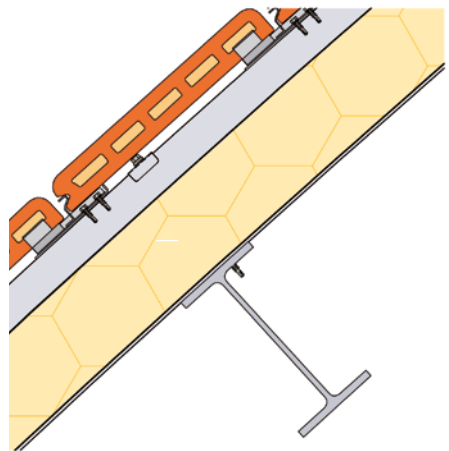
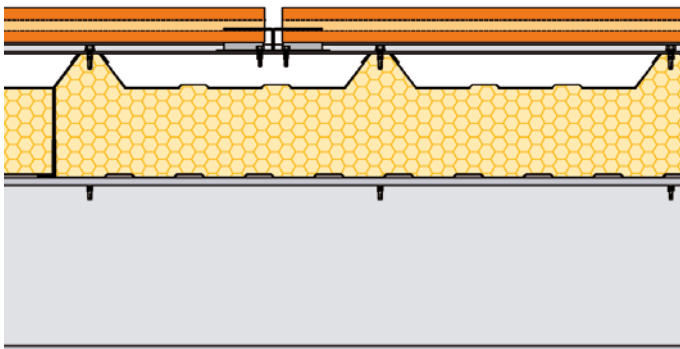
Client : Ministère de la Justice
Architect : Pascal Prunet
Contractor : SMAC Toulouse
Product : Maestral Red-Orange

THE FACADE EXTENDS AS A ROOF



— BODEGAS PROTOS —
VALLADOLID, SPAIN

Architect : Rogers Stirk Harbour & Partners
Owner : Bodega Protos
Product : Maestral® Red-orange







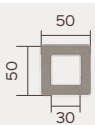


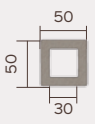



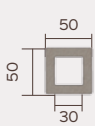

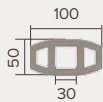


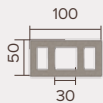



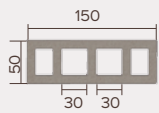



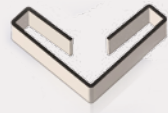
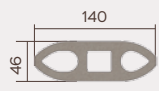


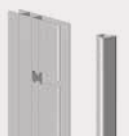
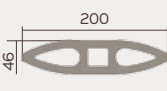

THE SUNSCREEN **PRODUCT RANGE**

SUN PROTECTION AND VERSATILE DESIGNS

To answer the many requirements of building envelopes and specifically the expectations regarding sun protection, TERREAL offers a wide range of terracotta baguettes that can be used to build sunscreens, wall claddings and visual screens.

As an integral part of the façade, sunscreens provide thermal comfort, let natural light in, and help reduce blinding effects without blocking visual contact with outside. They truly bring façades to life. They create depth and allow the designers to play with shadows, while combining thermal comfort, control of sunlight input and optimization of natural daylight.

SUNSCREEN PRODUCT GUIDE

| PRODUCT | MODULES IN MM | MAXIMUM PRODUCT LENGTH IN CM | FIXING ACCESSORIES | |
|--------------------|---|--|--|---|
| AUTAN® ROUND |  |  31 cm |  |  Aluminum tubes |
| AUTAN® |  |  31 cm | End plates |  Stabilizing device |
| AUTAN® XL |  |  120 cm |  |  Mounting and fixing screws |
| AUTAN® XL DROPLET |  |  120 cm | EPDM Interface | |
| HARMATTAN® |  |  31 cm | End plates |  Vertical standard profile |
| ZONDA® XL 10 |  |  RV : 100 cm ET : 120 cm |  |  aluminum profile cover |
| ZONDA® XL 15 RV ET |  |  RV : 150 cm ET : 120 cm |  End plates  EPDM Interface |  Inox bracket for angle 90° |
| SHAMAL® 14 |  |  129 cm |  SHAP03 Standard profile |  SHAP04 Standard profile |
| SHAMAL® 20 |  |  129 cm | | |

PERFORMANCES

SHADE PERCENTAGE

Sun angles considered : Summer Solstice 39°, Equinoxes 45°, Winter Solstice 21°.

| PRODUCT |  | CENTRES | SUMMER SOLSTICE | EQUINOXES | WINTER SOLSTICE |
|--|---|---------|-----------------|-----------|-----------------|
| AUTAN®, AUTAN® ROUND, AUTAN® XL, AUTAN® XL DROPLET | | 15 cm | 100% | 67% | 46% |
| | | 20 cm | 89% | 50% | 35% |
| | | 25 cm | 71% | 40% | 28% |
| HARMATTAN®, ZONDA® XL 10 | | 20 cm | 100% | 75% | 45% |
| | | 25 cm | 100% | 60% | 36% |
| | | 30 cm | 100% | 50% | 30% |
| ZONDA® XL 15 | | 25 cm | 100% | 80% | 44% |
| | | 30 cm | 100% | 67% | 36% |
| | | 40 cm | 100% | 50% | 27% |

| | CENTRES | SUMMER SOLSTICE | | | | EQUINOXES | | | | WINTER SOLSTICE | | | |
|--|---------|-----------------|------|------|------|-----------|------|------|------|-----------------|-----|-----|------|
|  Shamal® tilt | | 0° | 15° | 30° | 45° | 0° | 15° | 30° | 45° | 0° | 15° | 30° | 45° |
| SHAMAL® 14 | 20 cm | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 43% | 67% | 86% | 100% |
| | 30 cm | 100% | 100% | 100% | 100% | 70% | 84% | 92% | 94% | 29% | 44% | 57% | 66% |
| SHAMAL® 20 | 20 cm | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 43% | 67% | 86% | 100% |
| | 30 cm | 100% | 100% | 100% | 100% | 70% | 84% | 92% | 94% | 29% | 44% | 57% | 66% |

| COLOUR CHART | Stone color | (03.) Champagne | Dune pink | 06. Sand | 04. Salmon pink | (02.) Red-orange | (01.) Red | 07. Siena | Violine | (11.) Sahara beige | Pearl grey | Dark grey | 09. Coffee | Chocolate brown | (16.) Ebony | 10. Chalk white | Clay grey | 12. Light grey | (13.) Storm grey | (15.) Slate grey |
|--|-------------|-----------------|-----------|----------|-----------------|------------------|-----------|-----------|---------|--------------------|------------|-----------|------------|-----------------|-------------|-----------------|-----------|----------------|------------------|------------------|
| AUTAN® XL DROPLET, SHAMAL®, ZONDA® XL | • | • | • | | | • | • | | • | • | • | | • | • | | • | | • | | |
| AUTAN® XL, ZONDA® XL | | • | | • | • | • | • | | | • | | | • | | • | • | | • | • | • |
| AUTAN®, AUTAN® ROUND, HARMATTAN® | • | • | | | | • | • | | • | • | • | | • | • | | | | | | |

TERRACOTTA BAGUETTES AND ARCHITECTURAL SUN PROTECTION

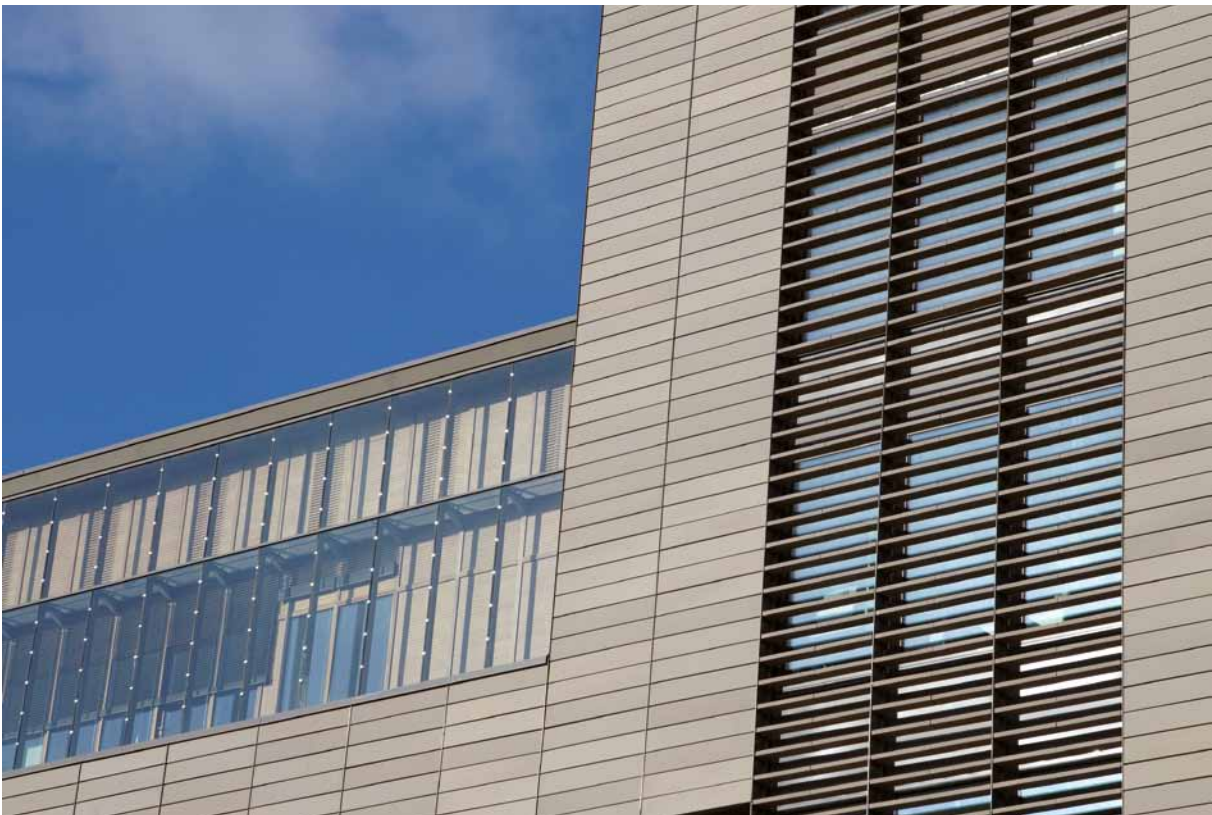
The Crédit Agricole bank in La Courrouze is the first service sector building to achieve the High Quality Environmental (HQE) certification in Brittany, France.

“ Sunscreen products contributed to achieve the HQE certification thanks to the natural quality of the products and their installation on the South façade, ensuring thermal comfort while allowing daylight to pass through ”

Jean-Pierre MEIGNAN,
Project Architect

CRÉDIT AGRICOLE OFFICE BUILDING,
RENNES, FRANCE

Architect : Meignan Architecture
Owner : Caisse régionale du Crédit Agricole d'Ille-et-Vilaine
Installer : SNPR
Products : Zonda® XL 15 and Piterak® Pearl grey
Spacing between rows : 30 cm



TERRACOTTA SUNSCREENS

ARTISTIC LIGHT AND SHADOW EFFECTS

“Here, terracotta sunscreens were arranged in filled and empty spaces, in a checkerboard pattern. This pattern lets the light in and enables views of the outside, while controlling sunlight and its thermal impact on the building. The multiple modules give the façade a playful and changing identity.”

*Fabienne Bulle,
Project Architect*

— ANATOLE FRANCE SCHOOL
SAINT-DENIS, FRANCE —

Architect : Fabienne Bulle
Owner : City of Saint Denis
Installer : Facade 6
Product : Zonda® Red
Spacing between rows : 10 and 70 cm



TERRACOTTA BAGUETTES FOR A PIXELATED FAÇADE





— IBIS HOTEL, NÎMES, FRANCE —

Architect : Architecture Studio

Owner : Ibis Hotel

Installer : Serrurerie du Vallespir

Product : Harmattan® Violine, Brown, Beige

Spacing between rows : 10 cm

SMALL SUNSCREENS

Small sunscreens are an economical way to bring façades to life. Their versatility adds to all the other advantages of terracotta to implement sun protection, screening, or wall cladding in a playful format, which offers a wide range of architectural choices.



— EDF RENNES, FRANCE —

Architect : Jean-Pierre Meignan

Owner : EDF

Installer : SEO

Product : Autan® Pearl Grey and Piterak®

Spacing between rows : 10 cm

AUTAN®



AUTAN®
ROUND



HARMATTAN®



ADVANTAGES

- Cost effective
- Effective sun protection
- Simple and fast installation
- Wide range of shapes and colours pixelated

Maximum segment length
31 cm

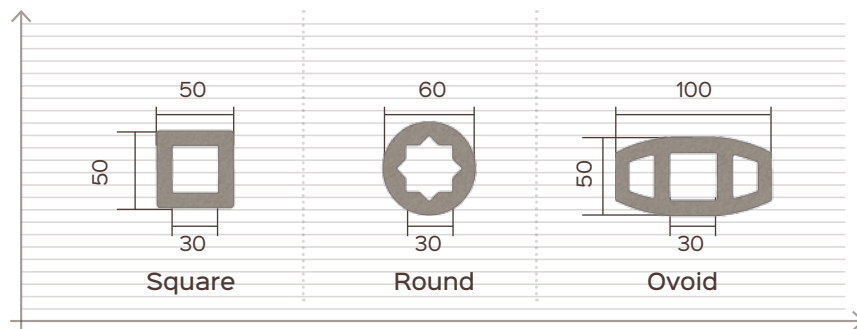
10
COLOURS



3
FINISHES

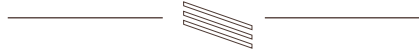


3
SHAPES

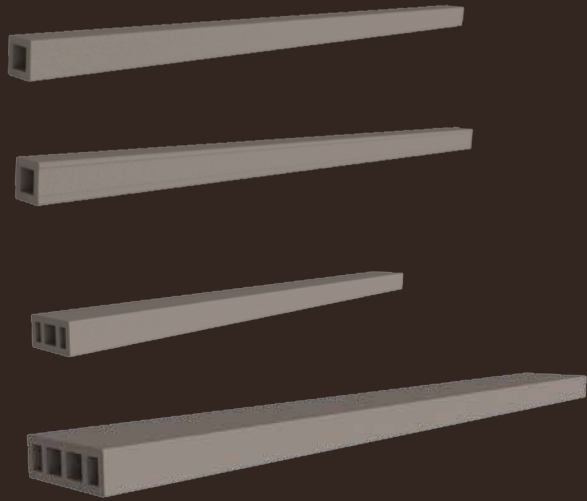


LARGE SUNSCREENS

Thanks to their long lengths, these sunscreens offer a modern look to realize the full architectural creative potential. Installed vertically or horizontally to protect from sunlight or to decorate façades, they accommodate all types of projects and offer many options to express rich and lasting architectural ideas.



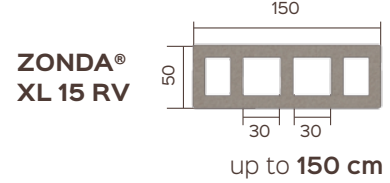
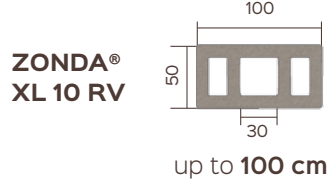
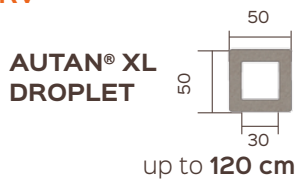
— MUSÉ A CASA, SÃO PAULO, BRAZIL —
Architect : Perkins + Will
Product : Autan® XL 12.Light grey



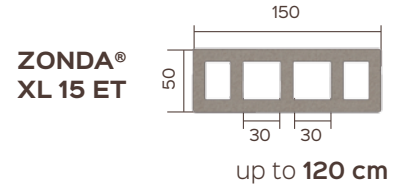
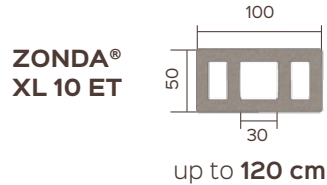
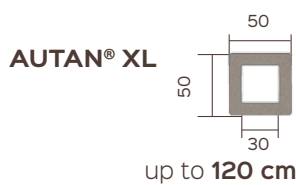
ADVANTAGES

- Large format for a modern aesthetic
- Effective sun protection
- Simple and fast installation
- Wide range of shapes and colours

FACTORY RV



FACTORY ET



CHARACTERISTICS



STANDARD SIZES

| PRODUCT | SECTION mm H X L. | MAXIMUM LENGTH cm | WEIGHT /ml Kg |
|---|-------------------------|-------------------------|---------------------|
|  AUTAN® | 50 x 50 | 31 | 3,2 |
|  AUTAN® Round | Ø 60 | 31 | 3,6 |
|  HARMATTAN® | 50 x 100 | 31 | 6,6 |
|  AUTAN® XL Droplet | 50 x 50 | 120 | 3,2 |
|  AUTAN® XL | 50 x 50 | 120 | 3,2 |
|  ZONDA® XL 10 | 50 x 100 | RV : 100 ET : 120 | 6,4 |
|  ZONDA® XL 15 | 50 x 150 | RV : 150 ET : 120 | 8 |

H = Height; L = Length

SUPPORT SYSTEM

The TERREAL sunscreen system is easily assembled on site and quickly installed on an aluminium framework. Available in four sizes, the installation kit can adapt to all desired lengths by simply cutting the aluminium tube, and **can reach up to 180cm**.







Its modular design allows varying the centre spacing between sunscreen rows as well as their orientation. It can be installed either vertically or horizontally and offers total architectural freedom.

SYSTEM ADVANTAGES

- **Vertical upright centre spacing** up to 180 cm
- Vertical or horizontal **installation**
- **Fixed floor to floor** sub-frame profile
- **Versatility** : choice of spacing and length
- **Finish** : Anodized or coated with any RAL colour reference
- **Compatible** with all sunscreen products (except Shamal®)
- **Four standard modules** : 100, 120, 150 et 180 cm
- **Made of** aluminium or stainless steel

COMPONENTS OF THE TERREAL FIXING KIT



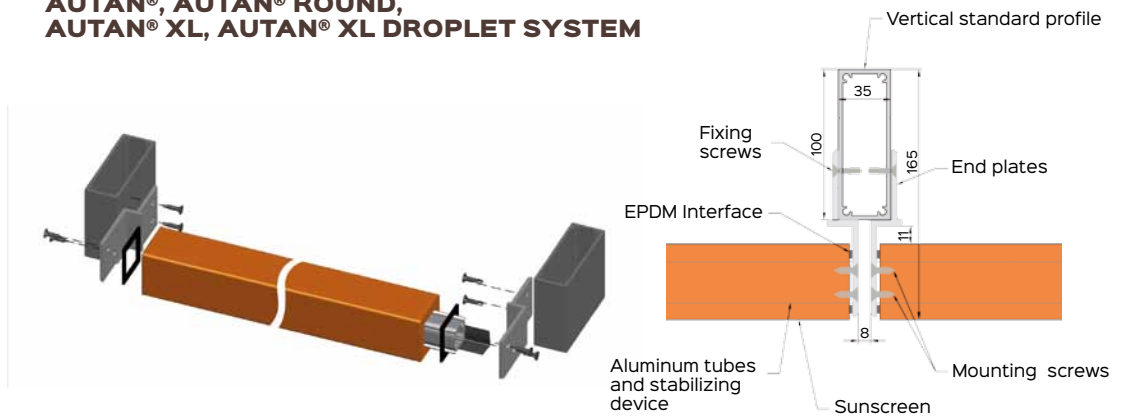
| | | |  27 X 27 |  |  |  |  |  |
|---|-------------------------|------------------------------|--|---|--|---|---|---|
| | Standard module dim. cm | Number of sunscreen products | Tubes aluminium cm | Stabilizing device cm | End plates Units / kit | EPDM interfaces Units / kit | Mounting Screws Units / kit | Fixing screws Units / kit |
| AUTAN® AUTAN® ROUND HARMATTAN® | 120 | 4 x 29,4 | 1 x 118,4 | 1 x 108 | 2 | 5 | 4 | 4 |
| | 150 | 5 x 29,4 | 1 x 148,4 | 1 x 128 | 2 | 6 | 4 | 4 |
| | 180 | 6 x 29,4 | 1 x 178,4 | 1 x 168 | 2 | 7 | 4 | 4 |
| AUTAN® XL AUTAN® DROPLET | 100 | 1 x 98 | 1 x 98,4 | 1 x 98 | 2 | 2 | 4 | 4 |
| | 120 | 1 x 118 | 1 x 118,4 | 1 x 108 | 2 | 2 | 4 | 4 |
| | 150 | 2 x 73,9 | 1 x 148,4 | 1 x 128 | 2 | 3 | 4 | 4 |
| | 180 | 2 x 88,9 | 1 x 178,4 | 1 x 168 | 2 | 3 | 4 | 4 |
| ZONDA® XL 10 | 100 | 1 x 98 | 1 x 98,4 | 1 x 98 | 2 | 2 | 4 | 6 |
| | 120 | 1 x 118 | 1 x 118,4 | 1 x 108 | 2 | 2 | 4 | 6 |
| | 150 | 2 x 73,9 | 1 x 148,4 | 1 x 128 | 2 | 3 | 4 | 6 |
| | 180 | 2 x 88,9 | 1 x 178,4 | 1 x 168 | 2 | 3 | 4 | 6 |
| ZONDA® XL 15 | 100 | 1 x 98 | 2 x 98,4 | 2 x 98 | 2 | 2 | 8 | 8 |
| | 120 | 1 x 118 | 2 x 118,4 | 2 x 108 | 2 | 2 | 8 | 8 |
| | 150 | 2 x 73,9 | 2 x 148,4 | 2 x 128 | 2 | 3 | 8 | 8 |
| | 180 | 2 x 88,9 | 2 x 178,4 | 2 x 168 | 2 | 3 | 8 | 8 |

Support profiles are not included in kits

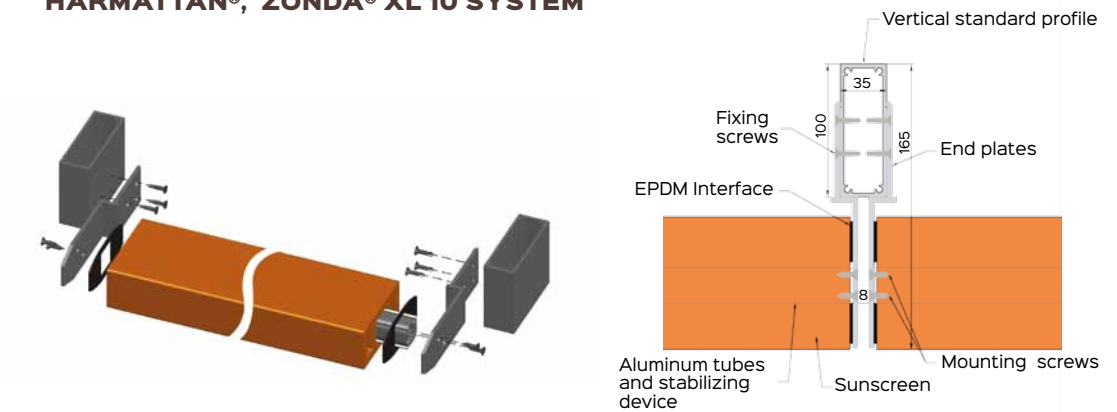
INSTALLATION DETAILS



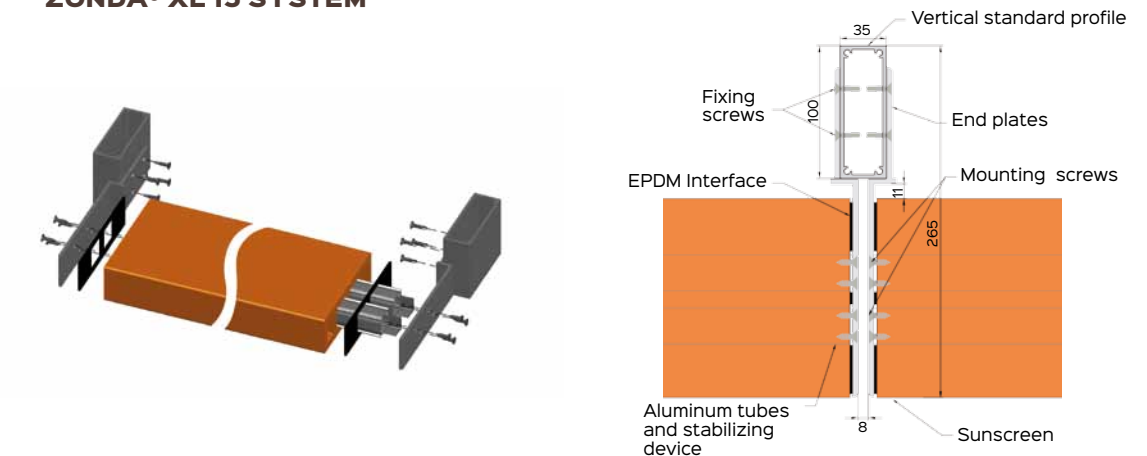
AUTAN®, AUTAN® ROUND, AUTAN® XL, AUTAN® XL DROPLET SYSTEM



HARMATTAN®, ZONDA® XL 10 SYSTEM



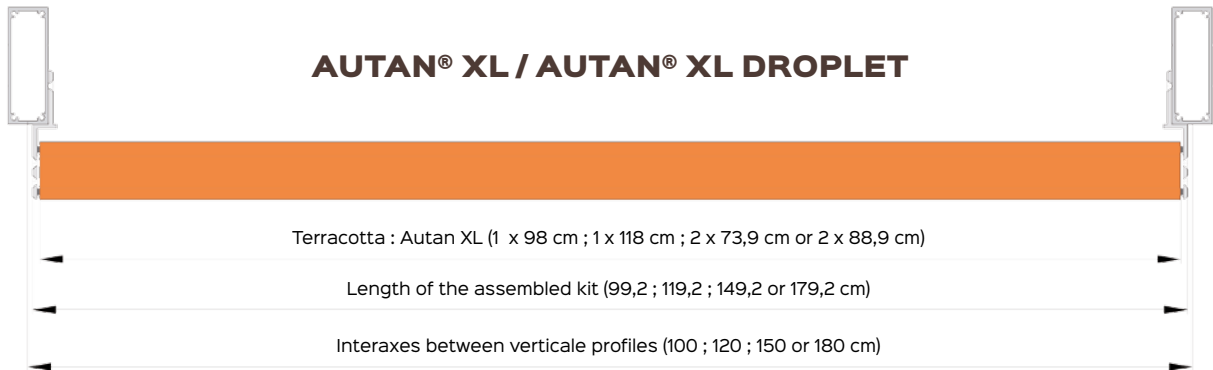
ZONDA® XL 15 SYSTEM



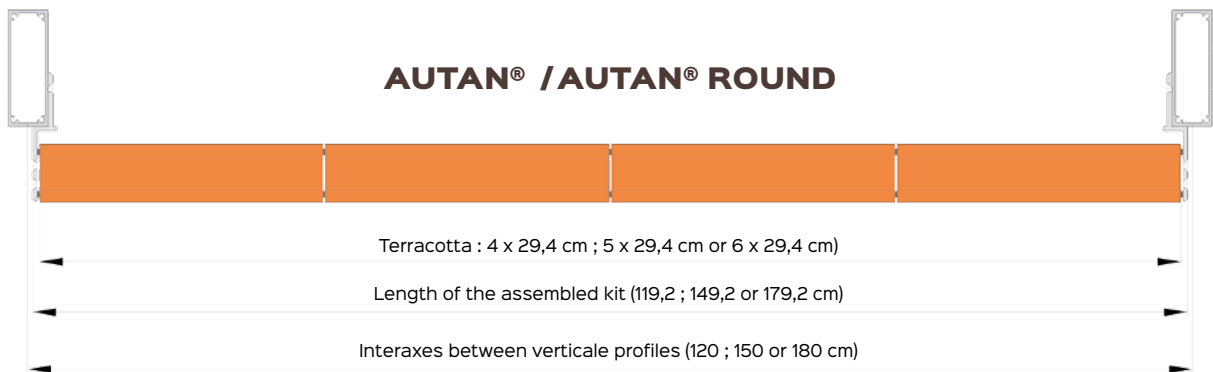
FIXING KIT
DIMENSIONS



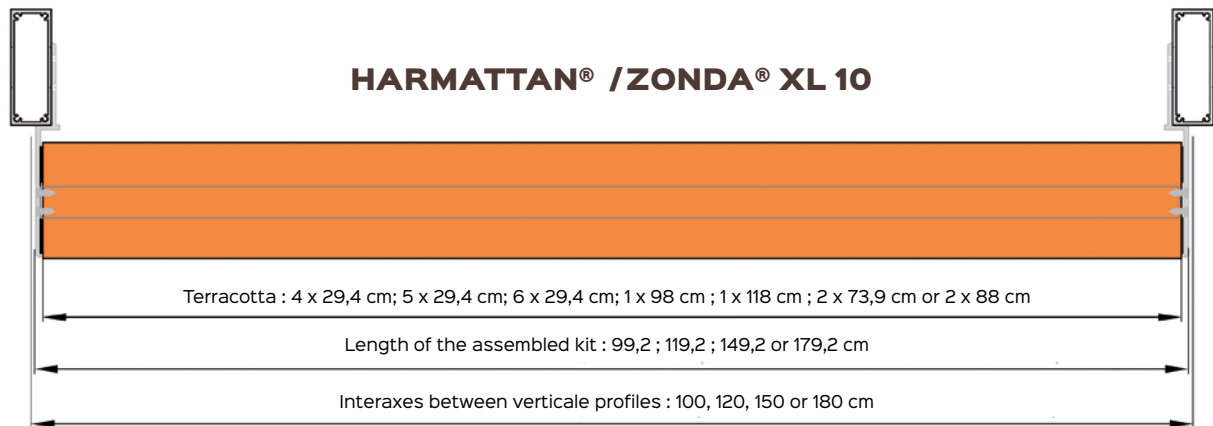
AUTAN® XL / AUTAN® XL DROPLET



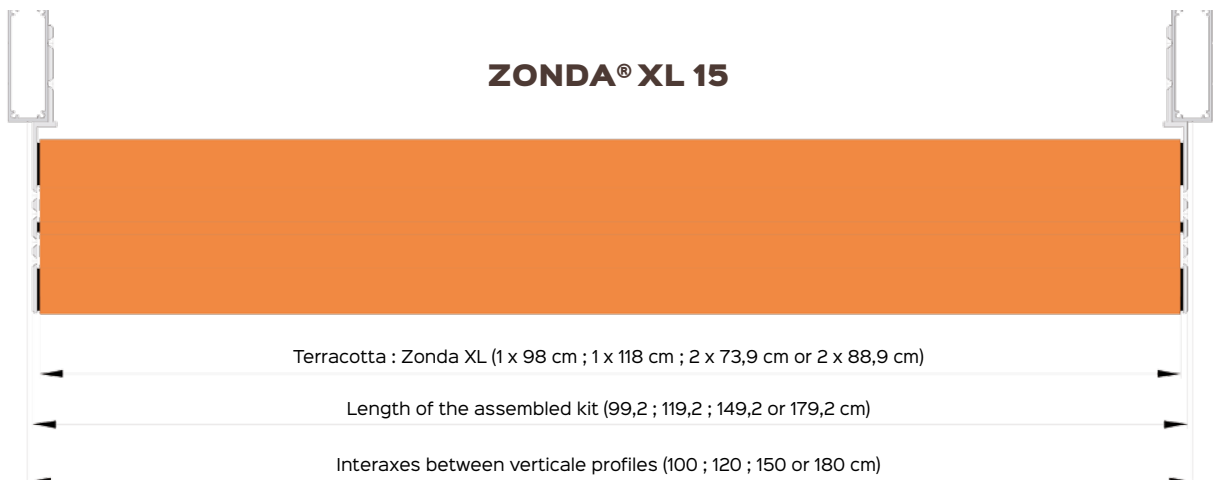
AUTAN® /AUTAN® ROUND



HARMATTAN® /ZONDA® XL 10



ZONDA® XL 15



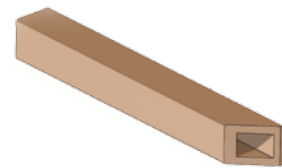
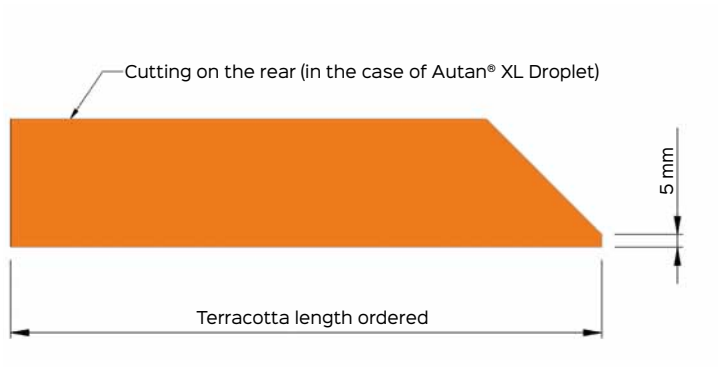
Other lengths are achievable please consult Terreal

DETAIL CORNERS



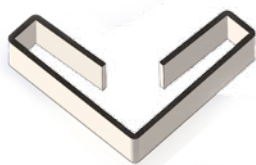
ANGLE CUT

- 45° angle cut at factory is available (optional, on request)



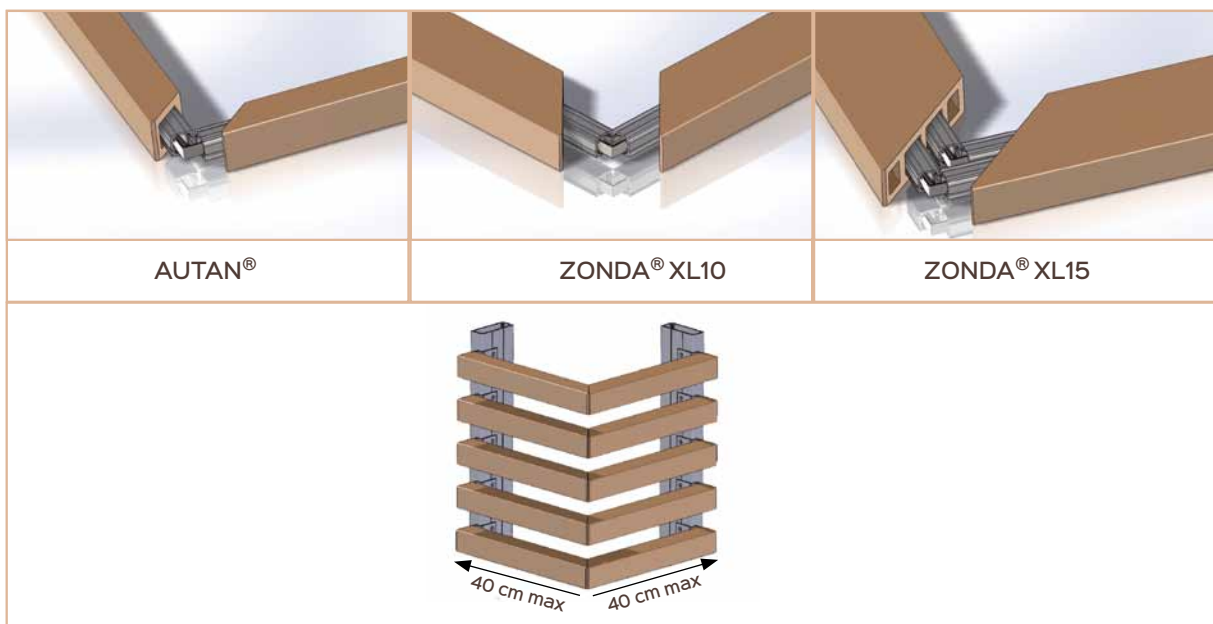
Example AUTAN®

FIXING ACCESSORIE



90° Inox bracket

SAMPLE IMPLEMENATION



— ANCONA RESIDENCE, VIA COLLE AMENO, —
ITALY

Architect : Studio Brau
Product : Autan® Beige

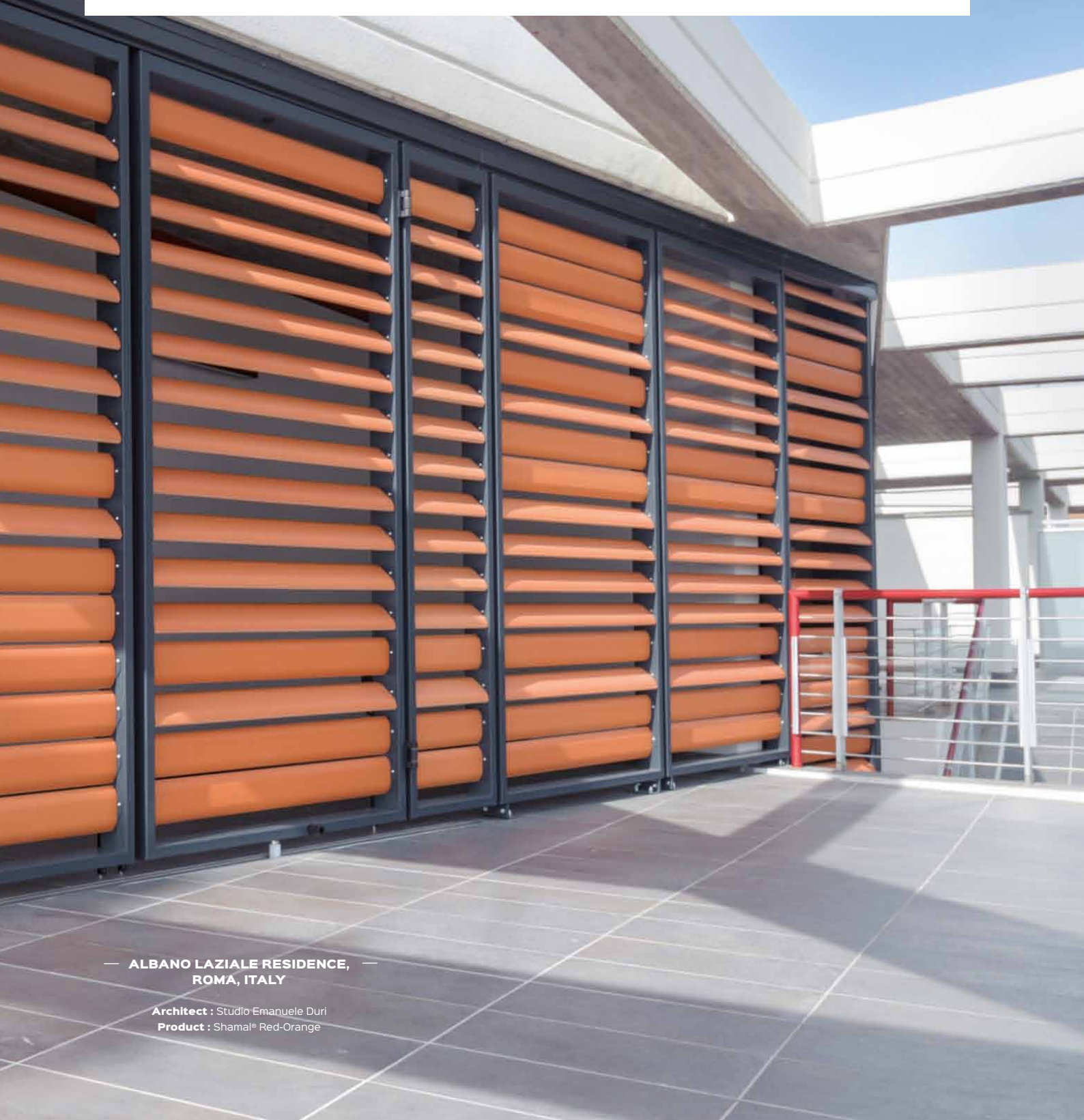


SHAMAL®



Shamal® is a sunshade providing an airfoil configuration cross section. It is available with an exclusive fastening system that includes all components required for a complete installation. It provides highly effective sunlight protection and thermal insulation for buildings.

The angle of inclination and spacing of the Shamal® sunshades may be customized to fulfill the requirements of the architectural design.



— ALBANO LAZIALE RESIDENCE,
ROMA, ITALY —

Architect : Studio Emanuele Duri
Product : Shamal® Red-Orange



Available factory assembled by
TERREAL

ADVANTAGES

- Available factory assembled
- Effective sunlight protection
- The distinctive shape of an airplane wing
- Large choice of colours



Maximum length
129 cm

13

COLOURS



3

FINISHES



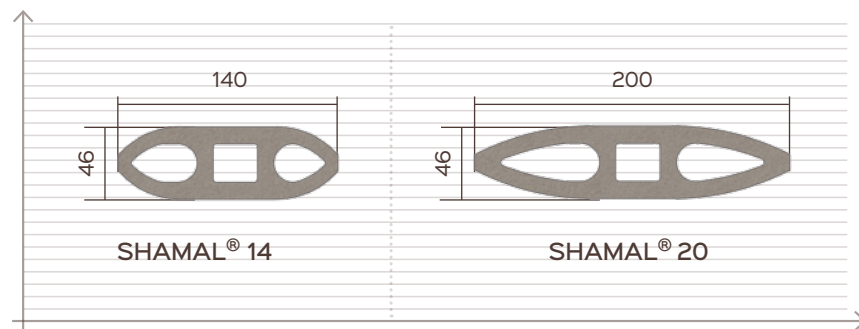
Smooth

Sanded

Glazed

2

SHAPES



CHARACTERISTICS



STANDARD SIZES

| PRODUCT | SECTION H x L x w mm | WEIGHT /m ² Kg | IMPACT RESISTANCE | WIND RESISTANCE |
|----------------------|----------------------------|---------------------------------|----------------------|---|
| SHAMAL® 14 | 46 x 1290* x 140 | 7,4 | - | 1940 Pa (V3) or 244 km/h (wind tunnel test) |
| SHAMAL® 14 ASSEMBLED | 46 x 1313* x 140 | 7,9 | - | |
| SHAMAL® 20 | 46 x 1290* x 200 | 9,6 | - | |
| SHAMAL® 20 ASSEMBLED | 46 x 1313* x 200 | 10,7 | Q3 | |

H = height; L: Length; W = Width

* Theoretical dimensions at close terracotta tolerances

SUPPORT SYSTEM

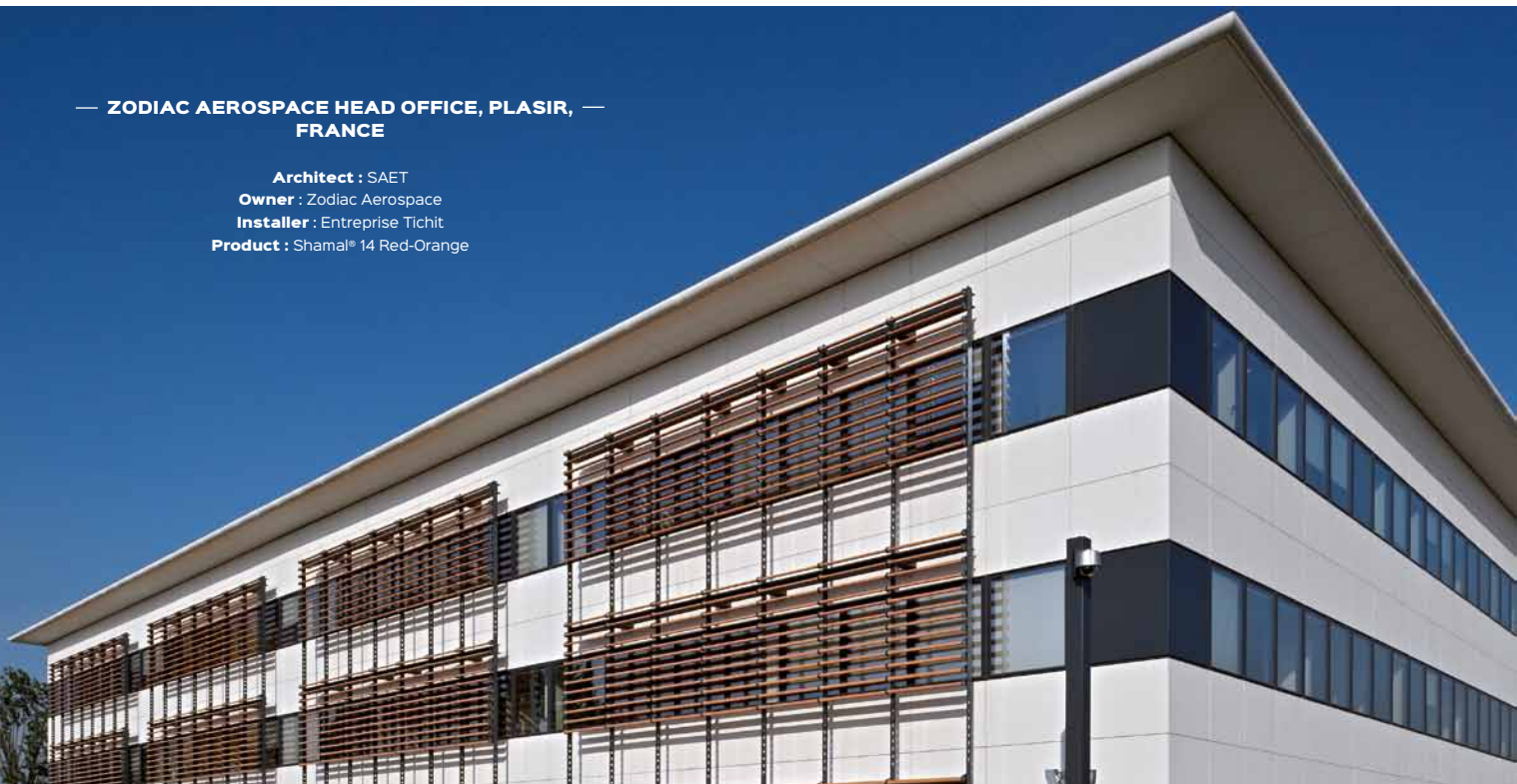
The Shamal® fixing system includes the Equipped Shamal® elements and the dedicated, spaced vertical support profiles. These dedicated vertical support profiles easily and properly position the assembled Shamal® sunscreens. They allow any orientation around the axis, and offer two possible Shamal® row spacing values (200mm or 300mm). Orientation is set at installation and does not allow changes to the rotation angle; this feature preserves the sunscreen's cohesion and keeps the products in place.

Equipped Shamal® 14 and Shamal® 20 are shipped pre-assembled by Terreal. They include a Shamal® terracotta baguette equipped with metal and rubber components and can be installed directly on a vertical framework that is also available from TERREAL.

Installing Equipped Shamal® on site is very easy, thanks to the system's dedicated notched profiles. These profiles are fixed to the wall using brackets or double brackets. Their position relative to each other and their verticality must comply with codes for installing wall cladding.

— ZODIAC AEROSPACE HEAD OFFICE, PLASIR, —
FRANCE

Architect : SAET
Owner : Zodiac Aerospace
Installer : Entreprise Tichit
Product : Shamal® 14 Red-Orange

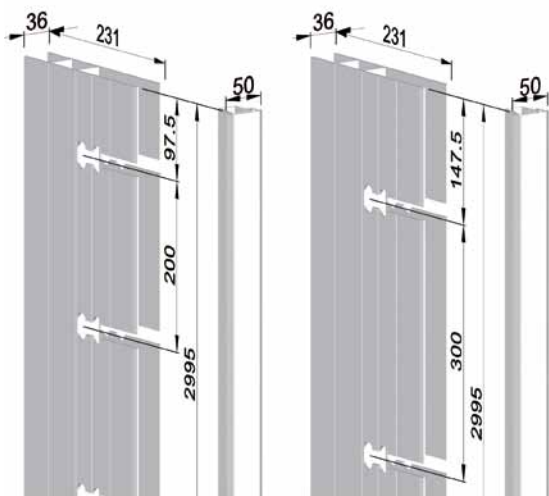


FIXING KIT COMPONENTS

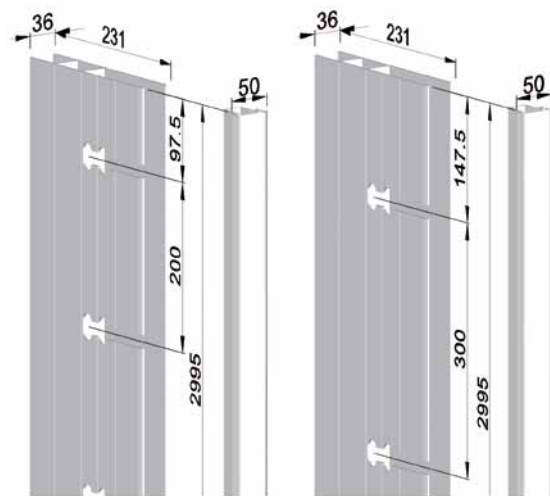


The 2.995m-long Shamal® vertical support profiles are available in field vertical profiles (perforations on both sides) and termination vertical profiles (perforation on one side) that receive the positioning bolt of the Shamal® suspension brackets. Each vertical profile is shipped with a finishing trim for installation on the front before the sunscreen elements are secured in place.

FIELD PROFILE



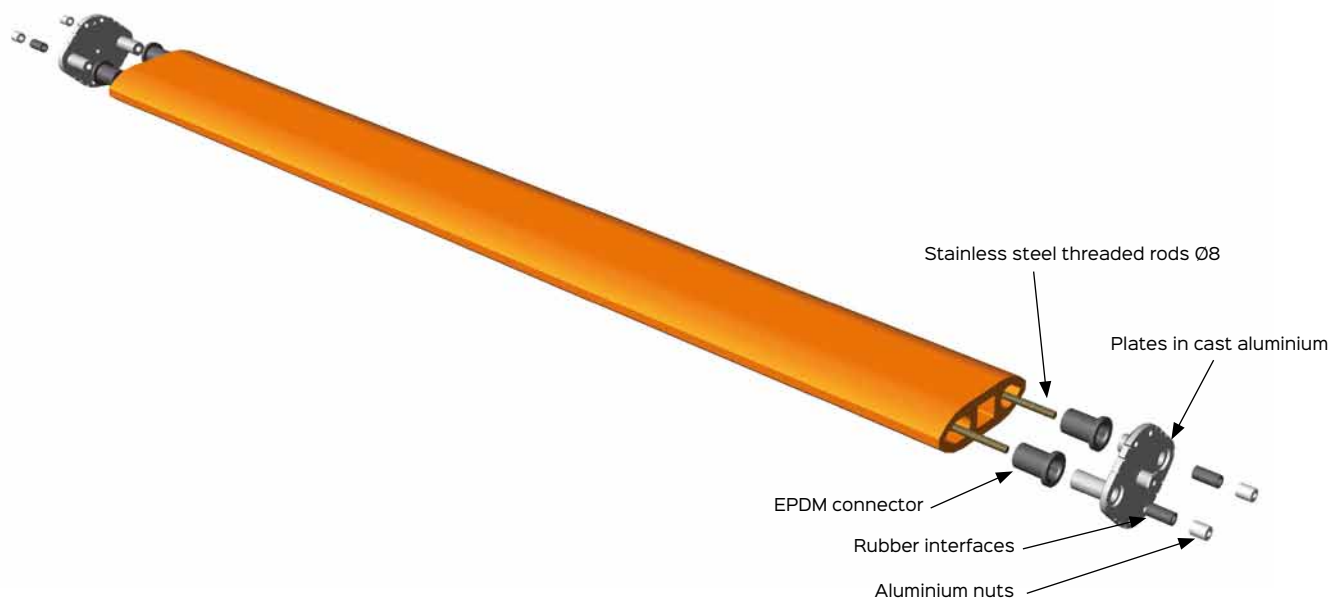
TERMINATION PROFILE



INSTALLATION DETAILS



Shamal® 14 or 20



— TOWN HALL CHALANDS, —
FRANCE

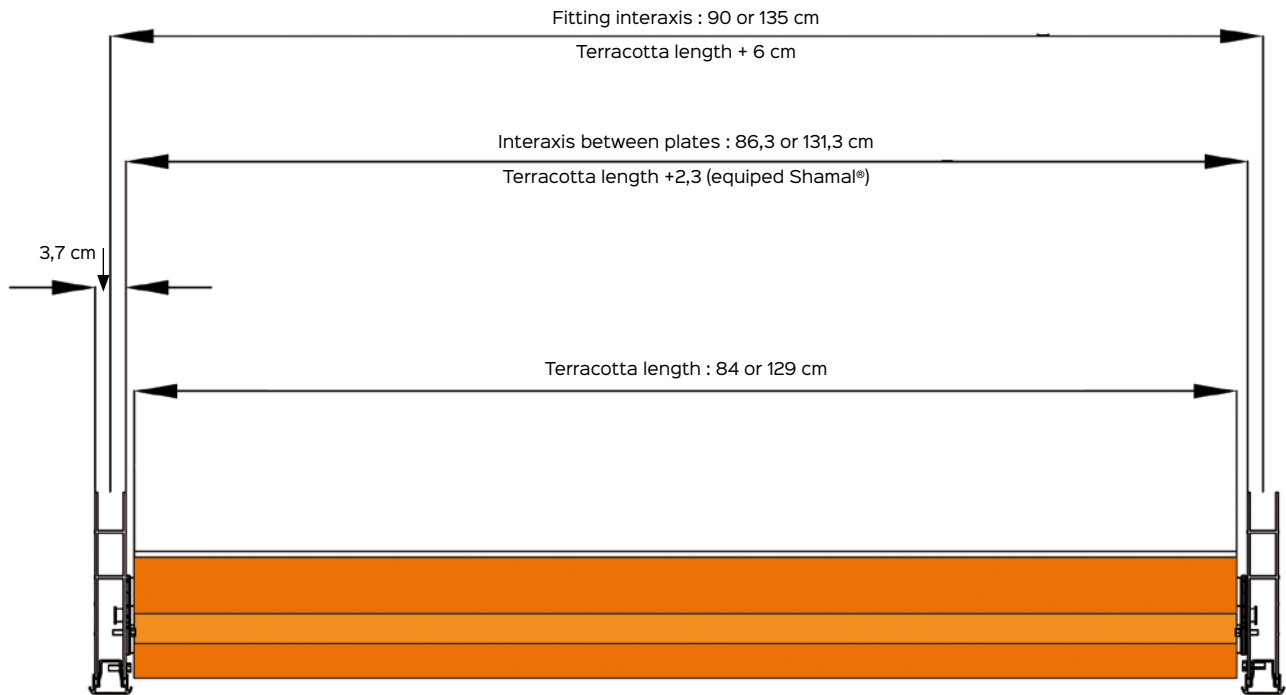
Architect : Lepinay

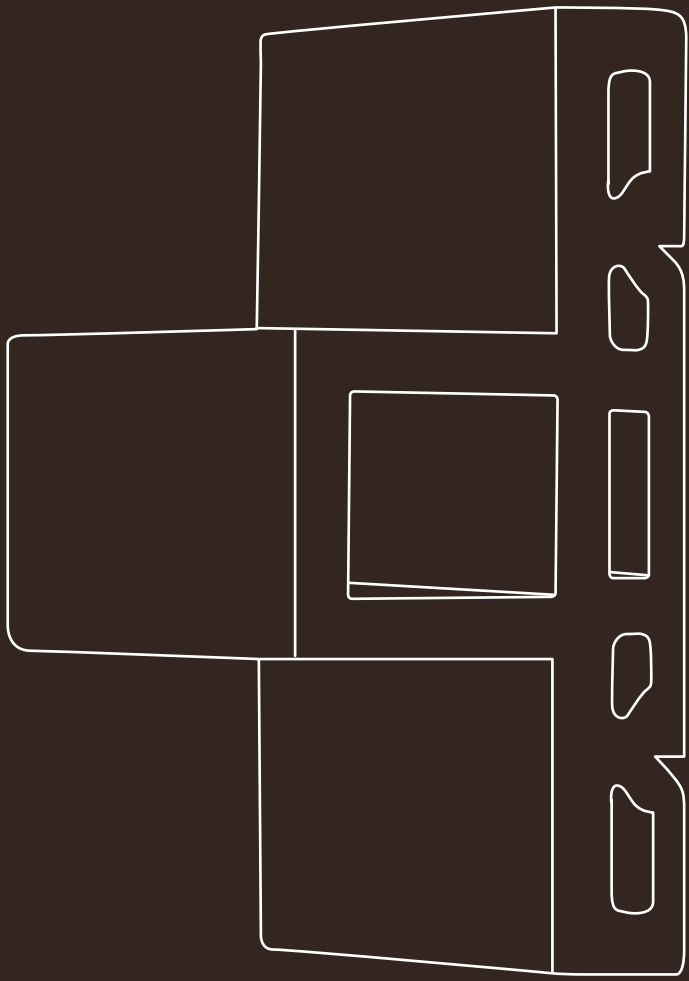
Owner : Commune de Challans

Installer : Pavageau

Product : Shamal® 20 Red-Orange

.....
**FIXING SYSTEM
DIMENSIONS**





CUSTOM **PRODUCTS**

ENVISION NEW FAÇADES

TERREAL Façade solutions constantly evolve thanks to the creativity of pioneering architects.

Through innovative formats, volumes, sizes or finishes, terracotta is renewing itself to answer today's and tomorrow's challenges, and is opening new areas in architectural design.

The age-old building material has been, and will remain, at the forefront of materials providing architects with a wide variety of choices, as well as rich and long-lasting designs.

3D SHAPES, DEPTH AND CONTRAST EFFECTS



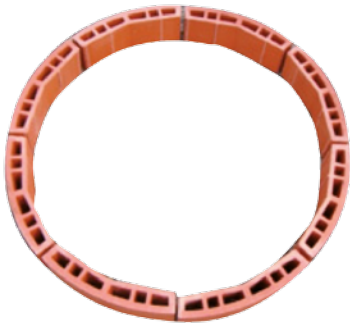
— **BENNET SHOPPING MALL** —
SACILE, ITALIE

Architect : Gesti Project Studio
Owner : Bennet

Product : T Shape 04. Sable



**CUSTOM MADE
ACCESSORIES
TO PERSONALIZE
THE EXTERIOR**



**BIG TEN CONFERENCE
CHICAGO, IL: USA**

Owner : BIG TEN Athletic Conference
Architect : RATIO Architects
Product : Terracotta column and Zephyr
Evolution Red-Orange



VERY LARGE SCREEN

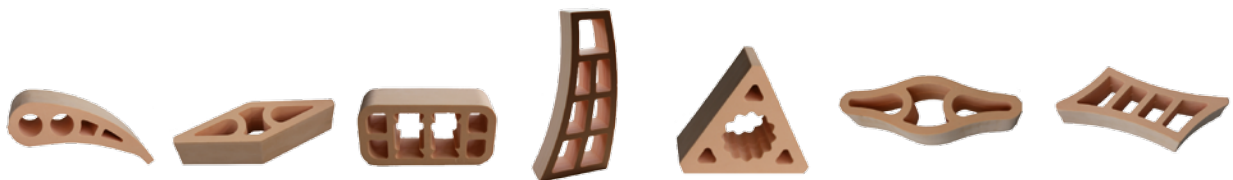


— SWINDON CARPARK LOT, UK —

Owner : MUSE Developments

Product : Custom Zonda® XL 40 x 10 x 150 cm Red-orange
laid vertically

GIVE FREE REIN TO YOUR IMAGINATION ...



... TO ENVISION NEW SHAPES

PATINATED CLADDING AND STAGGERED JOINTS

— GORSE STACKS BUILDING —
CHESTER, GB

Architect : Nightingale

Owner : n h s

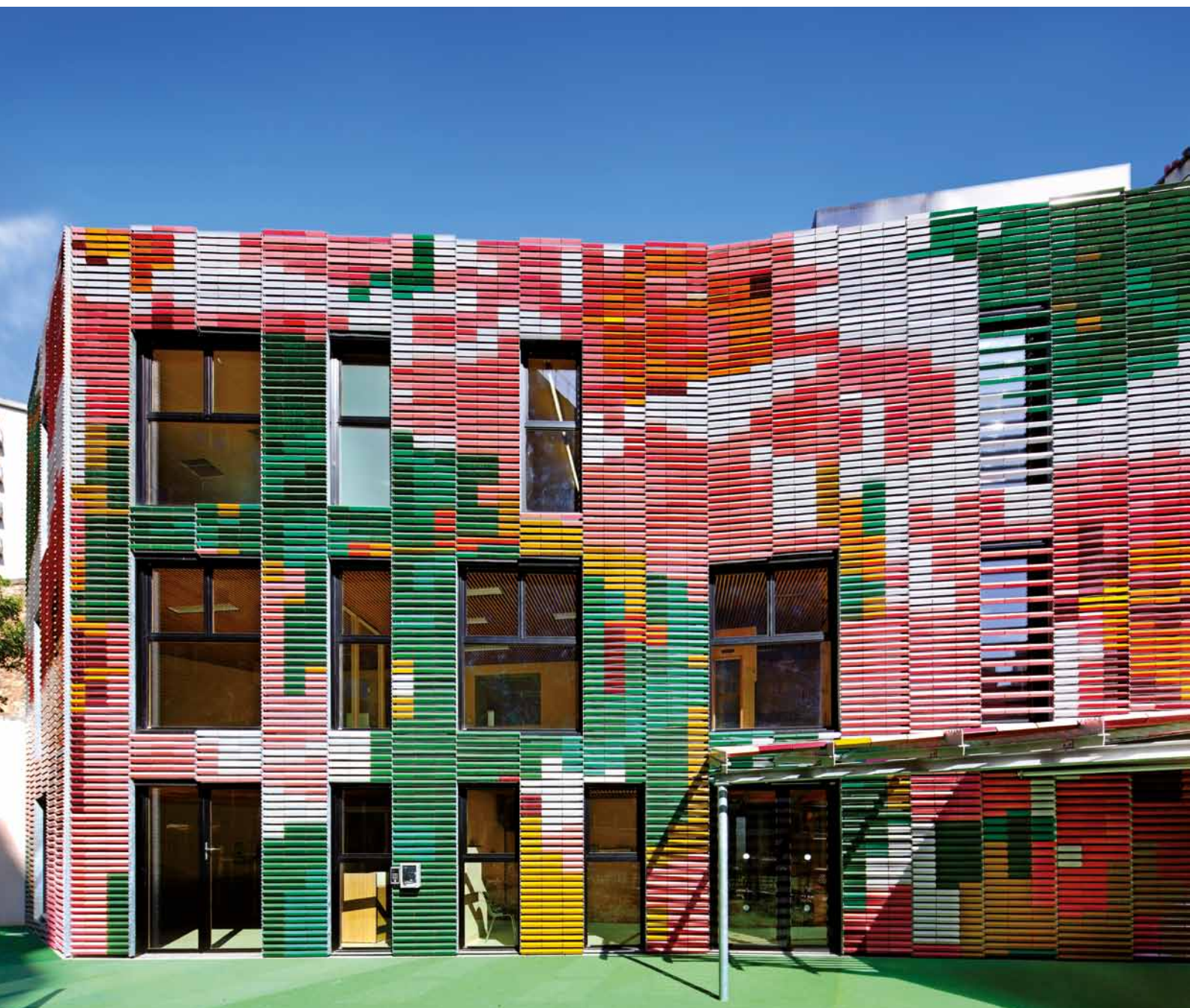
Product : Piterak® Slim 14.Storm Grey patinated finish

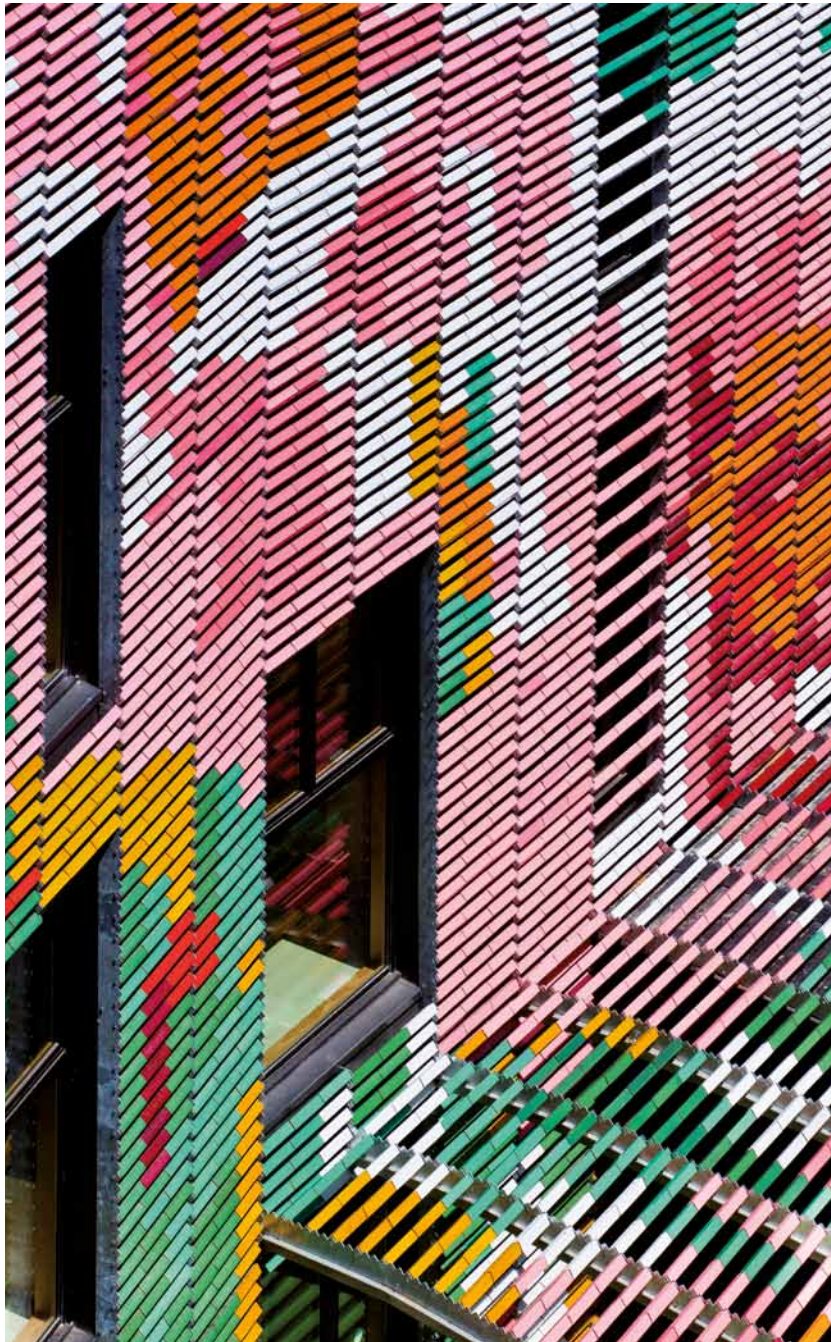
Modules : 225/300 x 450/750/1200





BRIGHTNESS AND COLOUR EFFECTS WITH GLAZED FINISHES





— FRÉMICOURT NURSERY —
30 BED LOW-ENERGY BUILDING
PARIS, FRANCE

Architect : Périphériques Architectes

Owner : Paris habitat

Installer : Cover Back

Product : Autan® custom glazed colours

NEUTRAL GLAZED COLOURS FOR A MODERN APPROACH TO TERRACOTTA



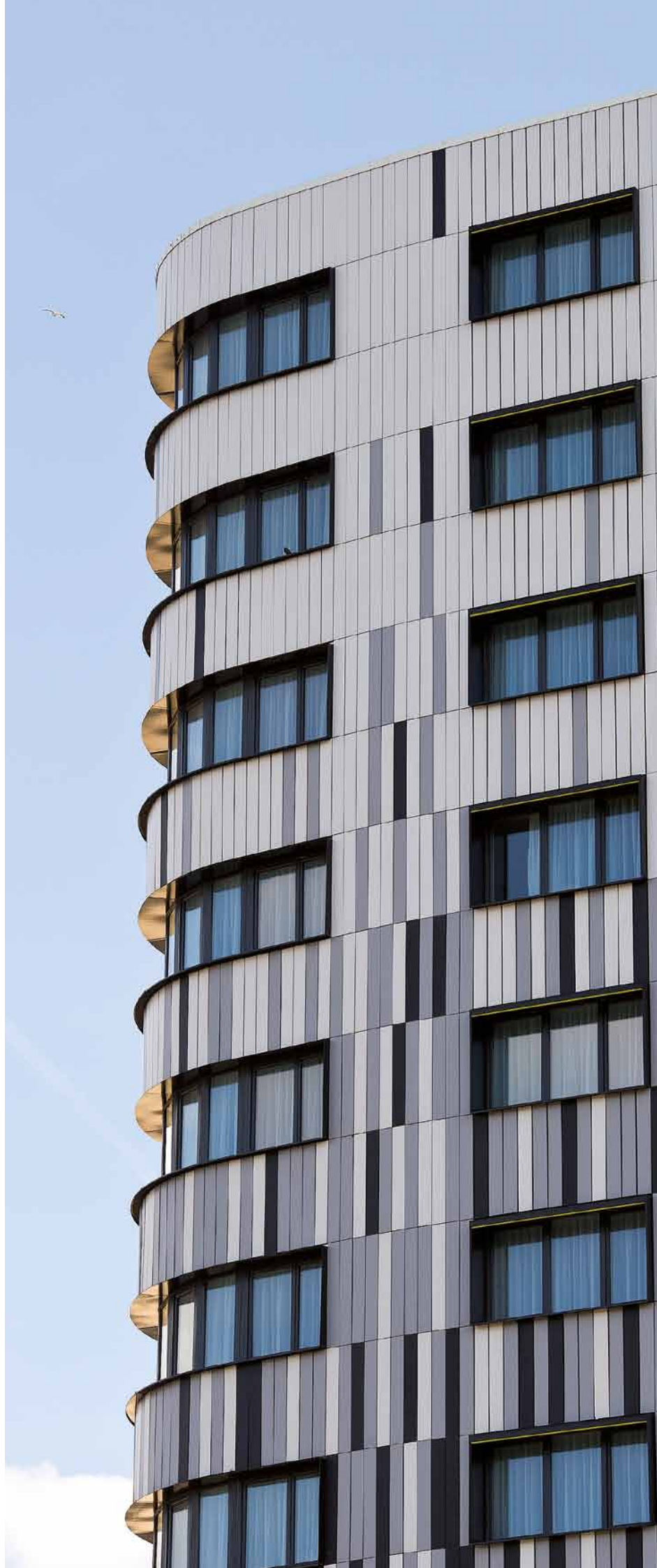
— ELLIPSE TOWER, APPART' CITY —
AMIENS, FRANCE

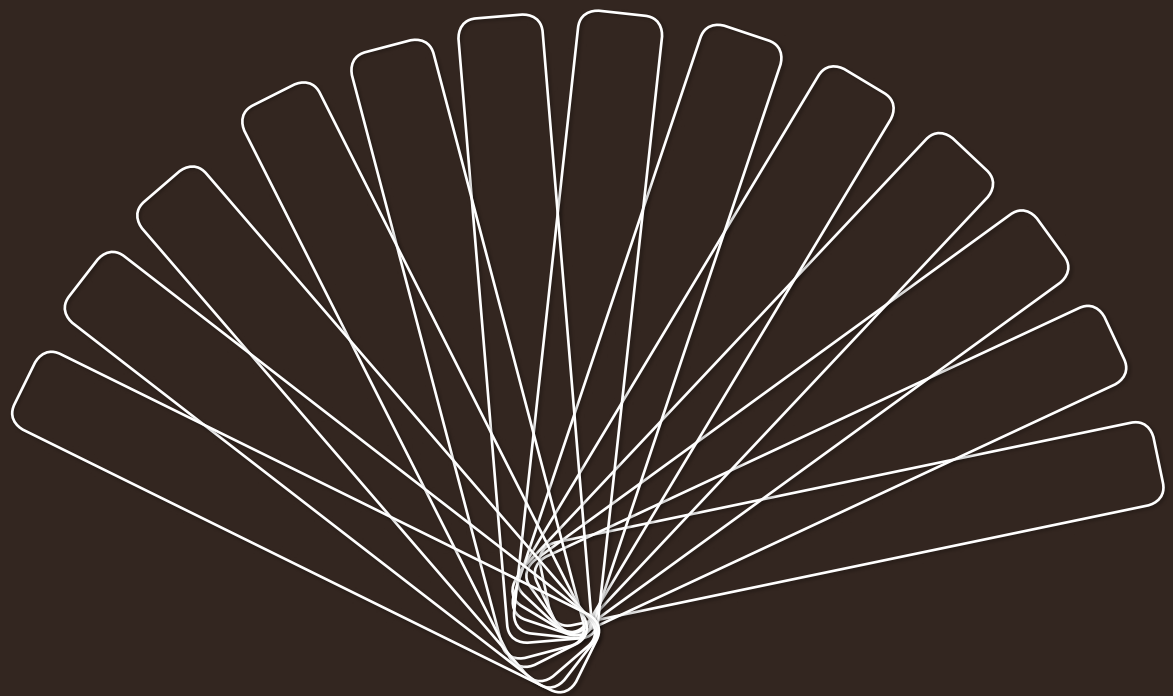
Architect : SCAU Architecture

Owner : Vinci Immobilier

Installer : Mauger père et fils

Product : Piterak® Slim Colours Matt White, Matt Grey, and Matt Black





TERRACOTTA COLOURS

MATERIAL, TEXTURE AND DESIGNS

Colour and material are at the forefront of modern architectural design.

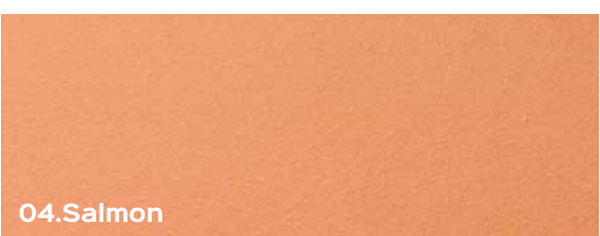
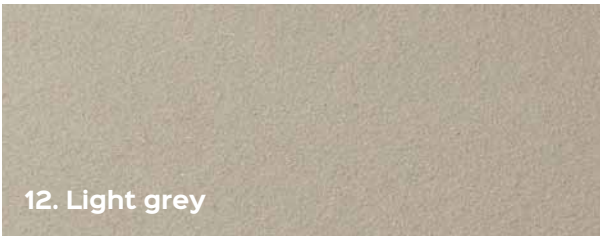
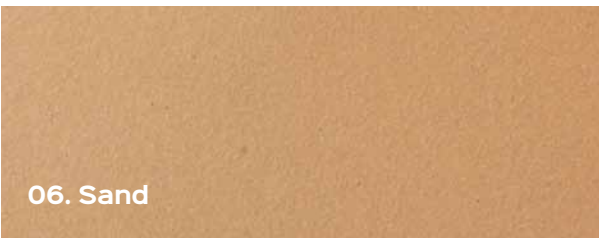
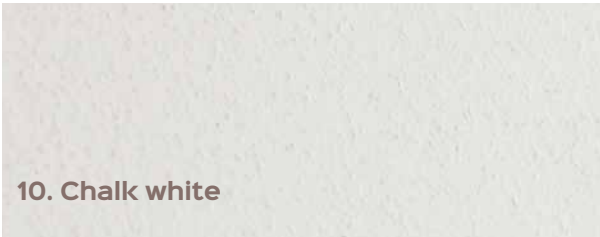
Available in a wide range of colours and finishes, terracotta is the leader among materials that offer architects a rich and long lasting palette of colours to create a dynamic and coherent environment.

The TERREAL collection offers a rich colour range of standard references providing a stimulating tool focused on colour and material.

Everything addresses your senses: the subtlety of smooth skins, the authenticity of sanded skins, the simplicity of ridged skins, and the brightness of glazed finishes.

Following a 5,000-year history, terracotta is still today at the forefront of modernity.

STANDARD THROUGH COLOURS





| | 10. Chalk white | Clay grey | 12. Light grey | (13). Storm grey | 15. Slate grey | Dune pink | 06. Sand | 04. Salmon | (02). Red-orange | (01). Red | Violine | 07. Siena | 09. Coffee | Chocolat brown | Ebony | Stone colour | (03). Champagne | (11). Sahara beige | Pearl grey | Dark grey |
|--|-----------------|-----------|----------------|------------------|----------------|-----------|----------|------------|------------------|-----------|---------|-----------|------------|----------------|-------|--------------|-----------------|--------------------|------------|-----------|
| ZEPHIR® EVOLUTION® MAESTRAL® AUTAN® DROPLET SHAMAL® ZONDA® XL | | • | | • | | • | | | • | • | • | | | • | • | • | • | • | • | • |
| PITERAK® SLIM PITERAK® XS AUTAN® XL ZONDA XL® | • | | • | • | • | | • | • | • | • | | • | • | | • | | • | • | | |
| SMALL SUNSCREEN | | | | | | | | | • | • | • | | | • | • | • | • | • | • | • |

STANDARD GLAZED COLOURS

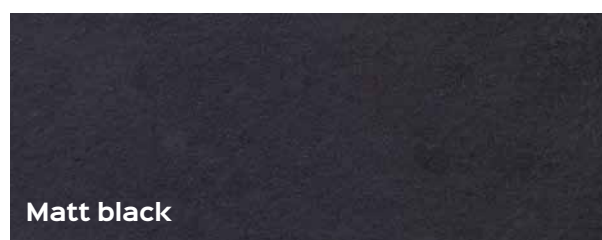
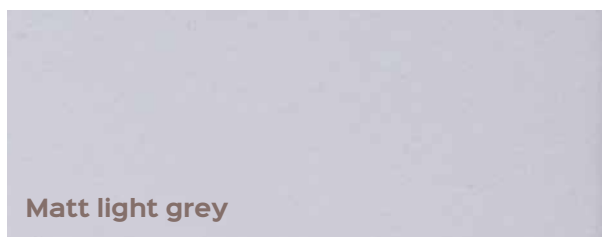
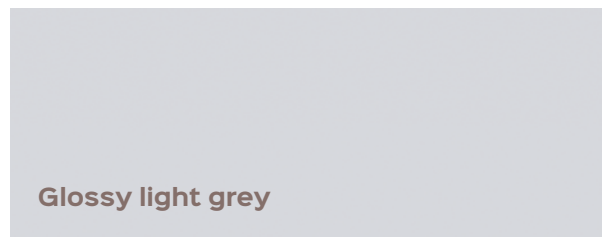
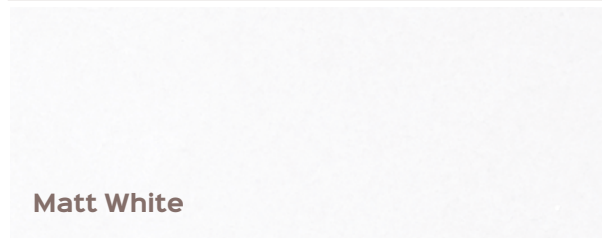
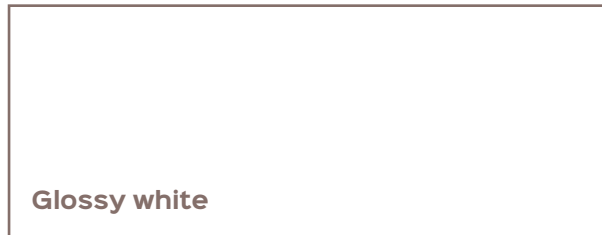
THE CHROMA COLLECTION

Bright and deep colours taken from the Chroma wheel



THE NEUTRA COLLECTION

Neutral and stylish photographic colours



THE VIVA COLLECTION

Lively colours that change and vibrate with the façade



CUSTOM BLUE AND GREEN COLOURS FOR A ONE-OF-A-KIND TERRACOTTA FAÇADE



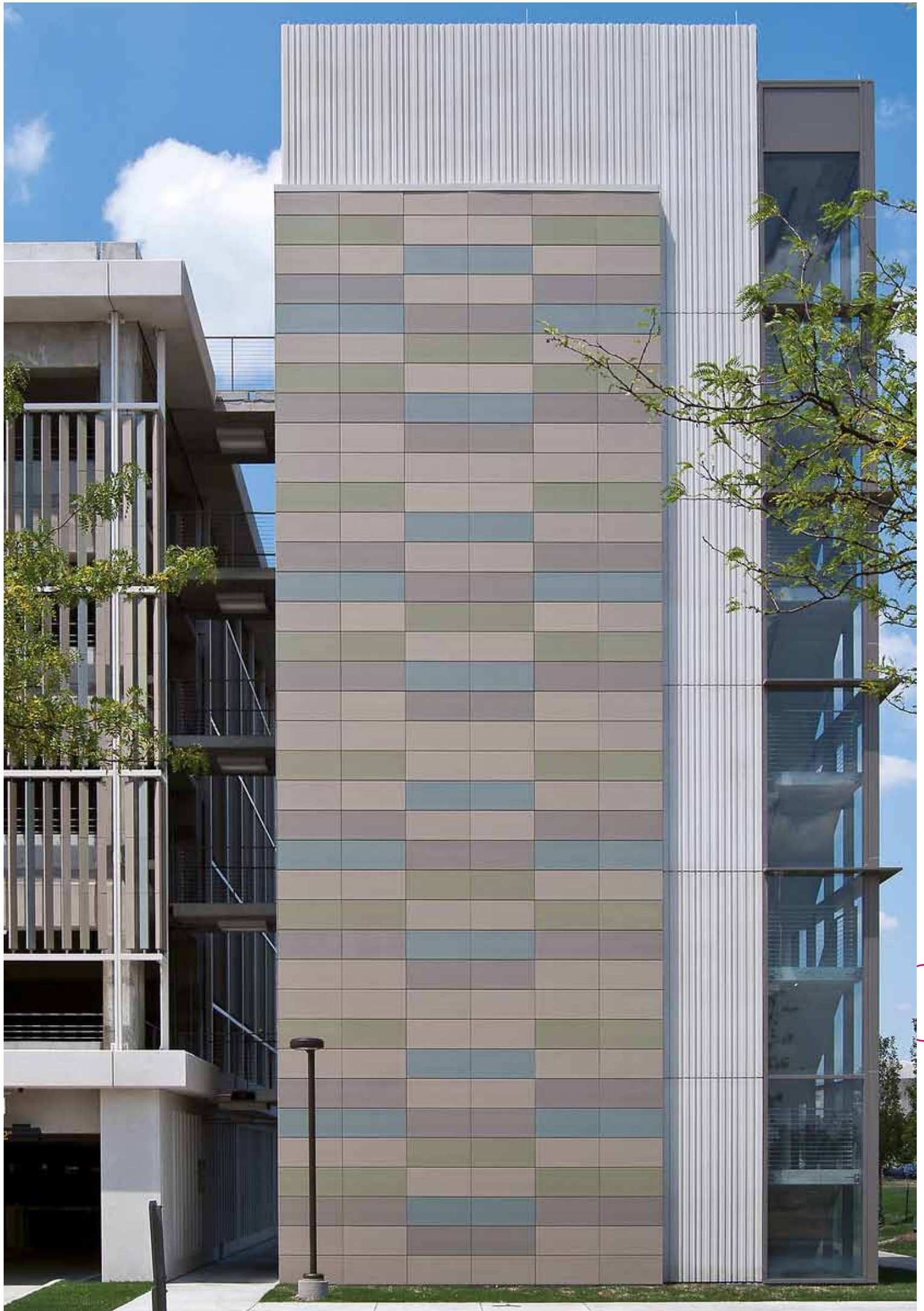
— IUPUI SPORTS DISTRICT PARKING GARAGE INDIANAPOLIS, —
USA

Owner : Indiana University - Purdue University Indianapolis

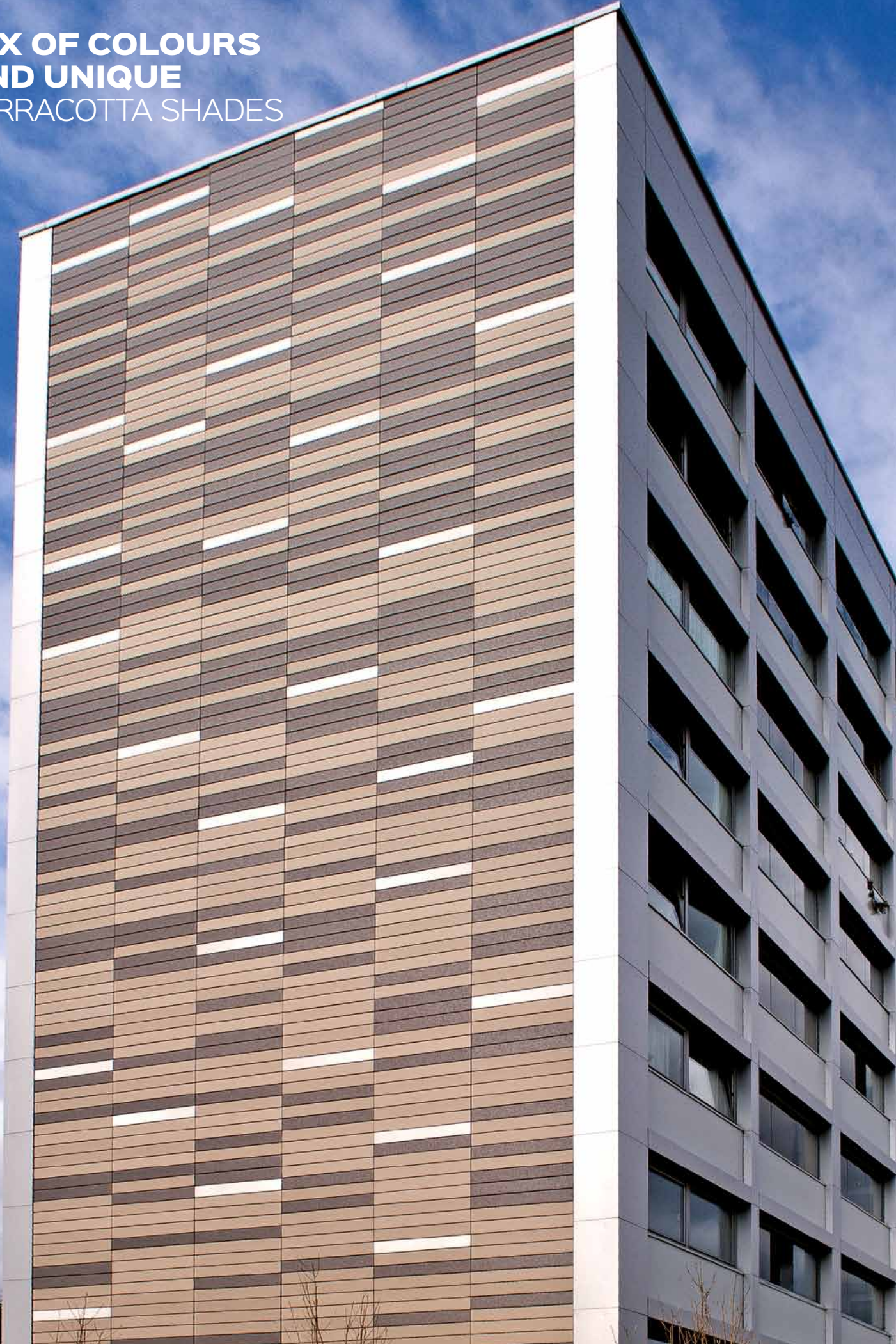
Architect : RATIO Architects

Installer : Wilhelm Construction; Indianapolis, Indiana

Product : Piterak Slim® + Zonda® XL sunscreen. Colour 12.Light Grey, 13.Storm Grey,
custom and Blue and Green coloured through



**MIX OF COLOURS
AND UNIQUE
TERRACOTTA SHADES**





— **RENOVATION OF 11 SOCIAL HOUSING BUILDINGS,** —
HULME, GB

Architect : 2e Edelmann et Ebling
Owner : City South Manchester Housing Trust
Installer : Keyclad
Product : Piterak® Slim, 11. Sahara Beige, 13.Storm Grey,
and Matt White Glazed.



GROOVED CLADDING
FOR A FAÇADES IN
CONTINUITY

— OFFICES RUE CUVIER —
MONTREUIL, FRANCE

Architect : Hubert Godet

Installer : Unimarbre

Product : Piterak® red-orange grooved



**RIDGED CLADDING FOR
SHADOW AND LIGHT EFFECTS**

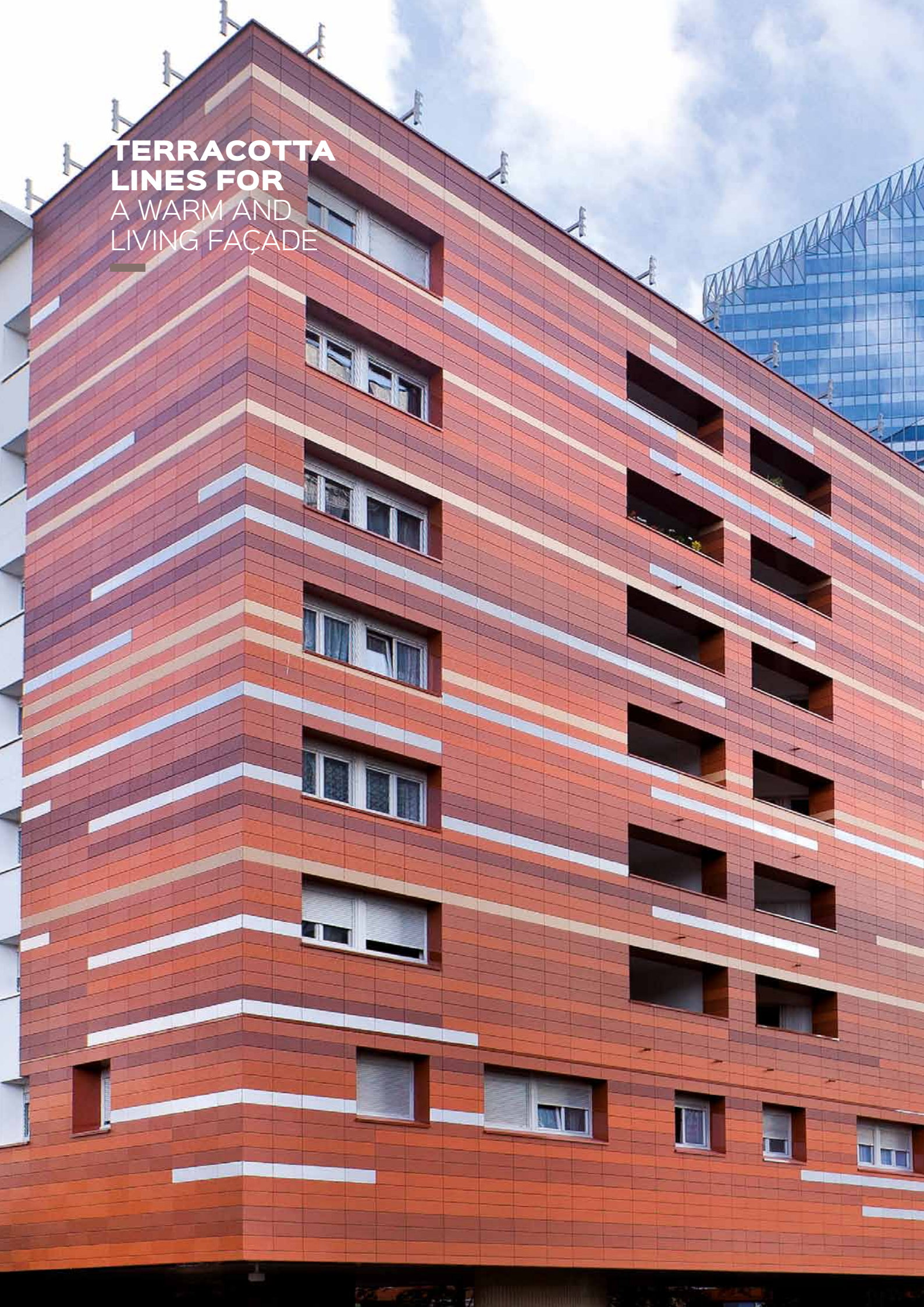
— MONTCRIEF CANCER INSTITUTE —
FT. WORTH, TEXAS, USA

Architect : HKS Inc.

Installer : Dee Brown, Inc.

Product : Piterak® Slim Slim 03.Champagne, smooth and ridged,
laid vertically

**TERRACOTTA
LINES FOR
A WARM AND
LIVING FAÇADE**





**RENOVATED ANCRE RESIDENCE,
COURBEVOIE, FRANCE**

Architect : Levandowski Architectes

Owner : Office HLM de Courbevoie

Installer : GCEB

Product : Zéphir® Red-orange, Red, Violine,
Champagne and Glazed White

PALETTE OF SHADES
AND LUMINOUS GRADATION



— MAISON DU BÂTIMENT, —
ORLÉANS, FRANCE

Architect : Atelier Poinville Lavaux

Owner : SCI Saint Laurent - FFB du Loiret

Installer : Metz

Product : Piterak® et Autan® Chocolate brown, Violine, Red-orange,
Dune pink, Champagne, Stone colour



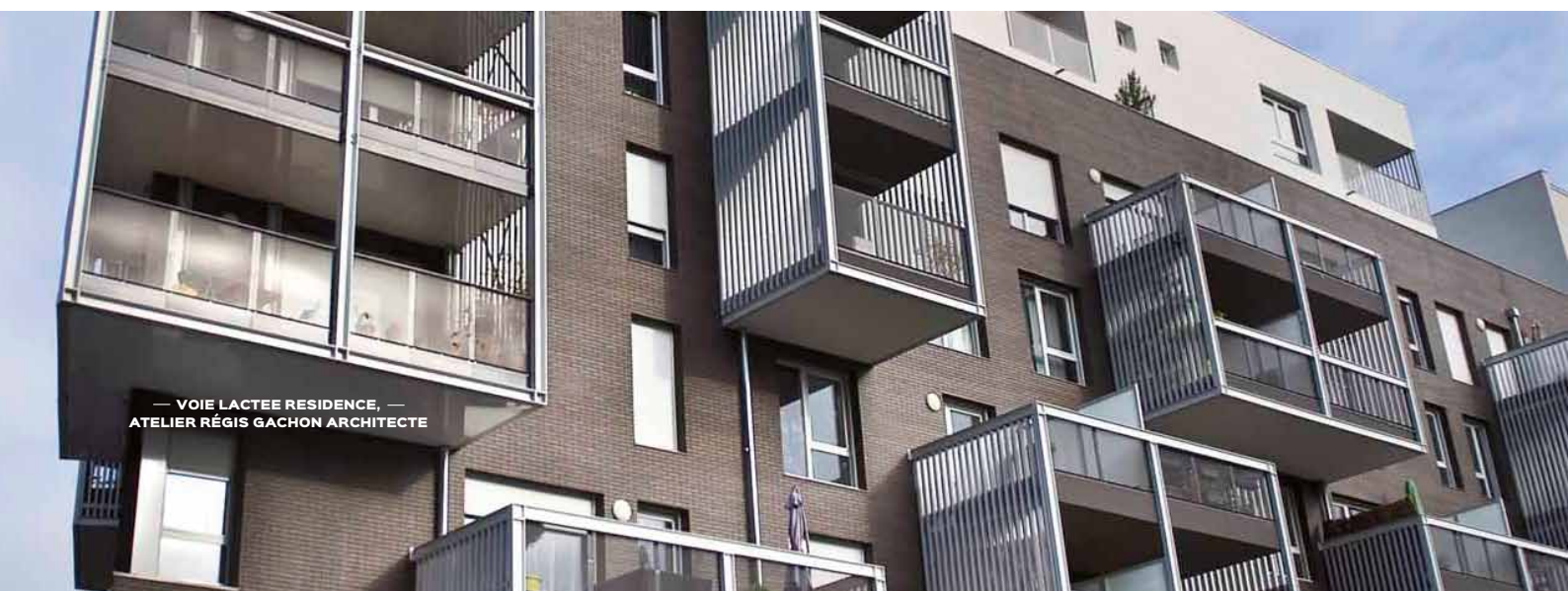
TERREAL, THE GLOBAL
SOLUTION FOR
**THE BUILDING
ENVELOPE**

BRICKS AND BRICK SLIPS

REINVENTING AN AGE-OLD MATERIAL

Used in construction for centuries, terracotta bricks have revitalized to meet today's and tomorrow's challenges.

Terreal offers a complete range of bricks and brick slips to let you discover terracotta's extraordinary wealth, its many installation possibilities, and its amazing ability to accommodate all types of buildings. Available in a wide range of colours and sizes, everything will address your senses: the subtlety of smooth skins, the roughness of sanded skins, the brightness of glazed finishes, and the authenticity of hand-moulded surfaces.



ADVANTAGES



- ✓ A wide range of sizes, of colours and finishes,
- ✓ Frost-resistant products,
- ✓ Durable and maintenance-free, due to their physical and aesthetic qualities,
- ✓ Dimensional regularity and optimized calibration for easier installation,
- ✓ Thermal comfort thanks to terracotta's thermal inertia,



Classic, hand-moulded, textured or glazed: discover Terreal's brick and brick slip range on : WWW.TERREALFACADE.COM

MAAX BRICK LINE, A TIMELESS MODERNITY

From ancient times to the present, the continuous evolution has involved in brickwork construction design and techniques. Today, Terreal San Marco has reinvented terracotta, transforming it into a modern, flexible material with not only distinctive character but also suitable for more innovative and unconventional architectural design. To this end, Terreal San Marco created MAAX, "Mattone Artistico e Architettonico eXtralarge" (Artistic and Architectural eXtralarge Brick). The research and innovation of the MAAX range are inspired by the harmonising of contemporary architectural designs with those of the historic ones. This gives designers the expressive possibilities of clay, with the technical performance required by any modern project.



ADVANTAGES

- ✓ A unique aesthetic modern and innovative,
- ✓ A range of trendy colours,
- ✓ Gives an unmistakable vibrancy to the façades
- ✓ Frost resistant products,
- ✓ Sustainability and maintenance free,
- ✓ Material that naturally embodies extraordinary thermal and structural performance,



Discover the incomparable made in Italy facing brick and tile products on our website :
WWW.SANMARCO.IT

WALL CLADDING TILE

WHEN ROOFS BLEND WITH FAÇADES

With rich colours and varied formats, Terreal's terracotta tiles open new creative fields. Our wall cladding tile solutions provide durable and cost-effective ways to create unconventional building envelopes, particularly when the tile chosen for the roof extends onto the façade.



ADVANTAGES



- ✓ Cost-effective solution,
- ✓ Unique aesthetics for the perception of continuity,
- ✓ Terracotta's well-known durability,
- ✓ Wide range of colours
- ✓ Simple and fast to install



Terracotta tiles, roof products, insulation or solar systems. Discover Terreal's roofing solutions on : WWW.TERREALCOUVERTURE.COM

CREATES UNIQUE VISUAL IMPACT WITH LUDOWICI CUSTOM TILES

With six standard textures Terreal's NeXclad System offers architects an extensive range of finish options from smooth to slate. Combined with over fifty standard colours and an infinite pallet of custom colours the architectural possibilities are endless. The unique custom capabilities of tiles to produce pressed panels with three-dimensional patterns allow architects to go beyond standard flat panels. Subtle to dramatic effects can be created with the interplay of rolling surfaces, geometric shapes and shadow.

— LIBERTY UNITED METHODIST CHURCH, —
KANSAS, USA
DAKE WELLS ARCHITECTURE



ADVANTAGES



- ✓ Large variety of standard surfaces and colours,
- ✓ Unparalleled custom colour capability,
- ✓ Fast to install,
- ✓ Easily adapted to radius wall or roof design,
- ✓ 75 year product warranty that covers colour fastness
Meets building standards (under technical assessment),
- ✓ Strong performance in terms of resistance to wind and impacts;
sometimes increased by a local strengthening of the loadbearing structures
- ✓ Simplicity of how a piece is replaced in the event of breakage.



Discover all the roof, floor and wall tiles range of Terreal Ludowici on our website : WWW.LUDOWICI.COM

DIABOLO, ARCHITECTURAL INNOVATION FOR FLOORS

Enhance your open spaces with Diabolo, the combination of a natural material with an eco-friendly floor. The use of terracotta highlights your projects' elegance and authenticity. The vegetal finish respects any wish for an ecologically responsible and sustainable development.

Diabolo is an architectural vision developed specifically by Terreal and Renzo Piano with tomorrow's urban landscapes in mind.

Diabolo is the fruit of the partnership between Terreal and the Renzo Piano Building Workshop, with the support of AIA INGENIERIE, for the exterior design of the parade grounds at Amiens' Citadel.



« The idea came from Renzo Piano during his first public visit of the Amiens Citadel. The Citadel must be a good, "HAPPY" place to live, a place for interaction and sharing, where one can sit on the grass on grounds that dries very fast and can welcome the infrastructures required for artistic performances. »

Diabolo's shape directly derives from these multiple uses: To be resistant to loads on a well-prepared floor that drains fast, and to receive both soil and fitting lawn. We have high hopes for this innovation and its applications. »

Paul Vincent, for Renzo Piano Building Workshop

ADVANTAGES

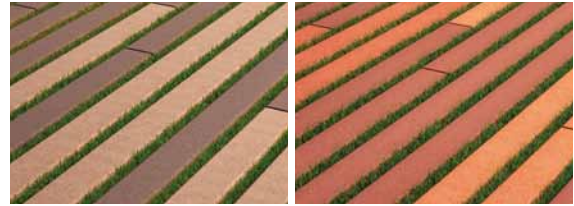


- ✓ An innovative, 100% terracotta product
- ✓ A high-quality, durable and warm material
- ✓ An eco-responsible and self-draining floor that can be installed without any slope (or totally horizontal)
- ✓ A customisable product offering many combinations of sizes and colours
- ✓ Can be used for pedestrian or motorized traffic

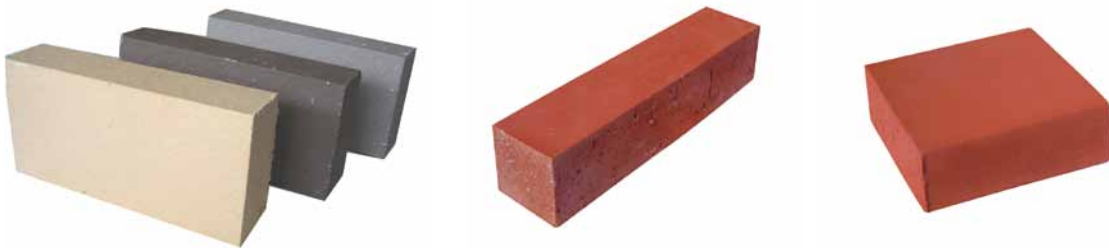
Diabolo DIMENSIONS

- ✓ Length : de 90 cm to 130 cm
- ✓ Height : 10 cm
- ✓ Wide : 5.75 cm

5 COLOURS



FLOOR PRODUCT RANGE



Discover the other terracotta floor solutions on our website : www.terrealdeco.fr

THERMOREAL®-GEBRICK®: PRE-ASSEMBLED INSULATED PANELS

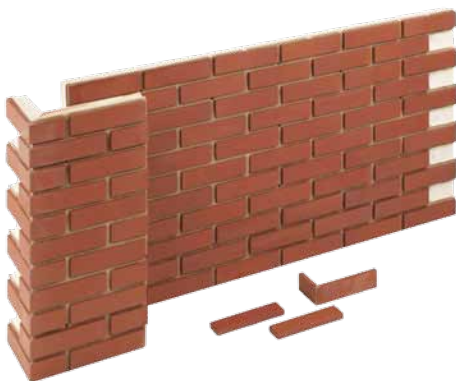
Thermoreal®-Gebrick® is a 1m², 60mm thick panel made of wall facing elements bonded to insulating polyurethane foam. It is fixed to the substrate by mechanical fasteners. It is suited for both new construction and renovation projects, and may be completed with additional insulation - up to 120mm thick - to reach a maximum thermal resistance of 6.79kW/m².

This external thermal insulation solution is rated Q4 for impact resistance, and can be installed at ground level including in public areas. These panels are laid dry, thus mounted very quickly. They can be installed horizontally, vertically, on flat or curved walls, with open joints or running bond, in random layout or Flemish-style pattern.

— L'ARBORTUM, EURAILLE, —
COLDEFY & ASSOCIÉS ARCHITECTES URBANISTES



ADVANTAGES



- ✓ High thermal performance,
- ✓ Rated Q4 for impact resistance,
- ✓ Fire resistant
- ✓ Can be installed on tall buildings,
- ✓ Architectural freedom: varied colours, surfaces, and formats,
- ✓ Mix and match of different colours and finishes on a same panel,
- ✓ Durable and maintenance-free system,
- ✓ Cost-effective and fast installation,
- ✓ Versatility : Easy to cut on site,



Discover all advantages of Terreal's wall facing products on : WWW.TERREALFACADE.COM

TERREAL FAÇADE ACCOMPANY YOU IN YOUR PROJECTS.

Brochures, technical advice, technical drawings, notes for your prescription, colour chart or reference building photos, find all our communication and sales tools on our website.

www.terrealfacade.com



Cover photo information :

Maison du Bâtiment, Orléans, France

Architect : Atelier Poinville Lavaux

Owner : SCI Saint Laurent - FFB du Loiret

Installer : Metz

Product : Piterak® et Autan® Chocolate brown, Violine, Red-orange, Dune pink, Champagne, Stone colour

Photos credits :

Olivier Brunet, Kamel Khalfi, Sergio Grazia, Marie-Claire Bordaz, ABB fotografos, Christophe Doucet,

Hervé Abbadie, Danielle Morra, Michel Dulherm, Terreal

Design : www.placepublique.net

TERREAL has been for over 150 years a key player of clay building materials
Based on this unique experience, our group creates innovative solutions
for the building envelope, through four activities : roofing, structure, façade, decoration.

TERREAL

Antipolis Bât. B
37, Av Normandie Niemen BP 13 - 31701 Blagnac
Tél. : +33 (0)5 34 36 21 00 Email : facade@terreal.com

www.terrealfacade.com

