



tempio<sup>®</sup> **SYSTEMS**

VENTILATED FAÇADES | FACHADAS VENTILADAS

# MAKING QUALITY PROJECTS

## CREANDO PROYECTOS DE CALIDAD

Ventilated façades comprise a building system that has consolidated its place among architects and builders, in particular for its high quality, aesthetic possibilities and its undisputed thermal and acoustic insulation benefits.

A ventilated façade is made up of a supporting wall, an insulating layer that is either anchored to it or sprayed on it, and a facing layer joined to the building using an anchoring structure, generally in aluminium. In this system, an air chamber is created between the insulation and the facing, and the "chimney effect" provides for an efficient natural ventilation system, maintaining the insulation dry and achieving significant energy savings.

It is considered to be the most efficient system for solving insulation issues in buildings, eliminating thermal bridges and condensation problems.

The ceramic material is extruded porcelain stoneware which is coloured throughout the whole body, with a natural or glazed finish in a wide range of colours, fired at a temperature of 1200°C.

Leading European laboratories have certified the physical characteristics of this material:

- Frost-resistant material pursuant to standard UNE EN 10545 withstanding 100 frost/defrost cycles.
- Non-combustible material.
- High impact resistance >0,75 pursuant to standard UNE EN 10545.
- Non-variable material, easy to clean.

La fachada ventilada es un sistema constructivo que se ha ido consolidando con gran aceptación entre arquitectos y constructores, sobre todo por su elevada calidad, posibilidades estéticas y por sus indiscutibles ventajas de aislamiento térmico y acústico.

El sistema de fachada ventilada consta del muro soporte, una capa de aislante anclado o proyectado sobre el soporte y por una capa de revestimiento vinculada al edificio mediante una estructura de anclaje, generalmente de aluminio. Entre el aislante y el revestimiento se crea de este modo una cámara de aire que, por el "efecto chimenea", activa una eficaz ventilación natural, manteniendo el aislamiento seco y consiguiendo de esta forma un gran ahorro en el consumo energético.

En cuanto al material cerámico, se trata de un gres porcelánico extruído color en masa, con acabado natural o esmaltado en una amplia gama de colores y cocido a una temperatura de 1200°C.

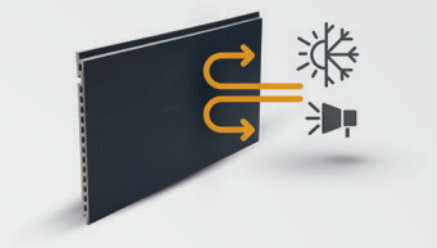
Los mejores laboratorios europeos certifican las cualidades físicas del material:

- Material resistente al hielo según norma UNE EN 10545 soportando 100 ciclos de hielo/deshielo.
- Se trata de un material no combustible.
- Importante resistencia a golpes >0,75 según norma UNE EN 10545.
- Material invariable y fácil de limpiar.










# Why should you choose Tempio ventilated façade?

¿Por qué elegir fachada ventilada Tempio?








## EXCELLENT ISOLATION PROTECCIÓN AISLANTE

-  **– Energetic costs 25-40% reduction**  
\_ Reducción entre 25-40% del gasto energético
-  **– Increased thermal and acoustic comfort**  
\_ Aumento del confort térmico y acústico
-  **– No water condensation**  
\_ Eliminación del agua de condensación
-  **– Waterproof building**  
\_ Impermeabilidad del edificio
-  **– Passive ventilation**  
\_ Ventilación pasiva
-  **– Thermal isolation**  
\_ Aislante térmico
-  **– Double wall**  
\_ Doble pared






## REHABILITATION REHABILITACIÓN

-  **– Direct application without creating debris**  
\_ Aplicación directa sin crear escombros
-  **– Piece by piece replaceable system**  
\_ Sistema reemplazable pieza por pieza
-  **– Revaluation of property**  
\_ Revalorización del inmueble
-  **– Hidden conductions**  
\_ Paso de conducciones no vistas
-  **– Hidden cracks and crevices**  
\_ Grietas ocultas






## LONG LIFE PRODUCT PRODUCTO DE LARGA VIDA

-  **– Unalterable colours**  
\_ Colores inalterables al paso del tiempo
-  **– Self-cleaning with rainwater**  
\_ Autolimpiable con agua de lluvia
-  **– Time resistant**  
\_ Resistente al paso del tiempo



## SUSTAINABLE SOSTENIBLE

-  **– 0% wastewater discharged**  
\_ 0% de aguas residuales vertidas
-  **– Low CO2 emissions**  
\_ Mínima emisión de CO<sub>2</sub>
-  **– Waste material recycling**  
\_ Reciclaje del material sobrante





**PROJECT**  
Abercrombie Building  
University of Sydney Business School

**LOCATION**  
Darlington, Australia

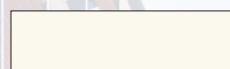
**ARCHITECT**  
Woods Bagot/Kann Finch

**PIECE**

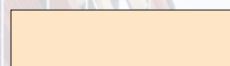


B-5x13

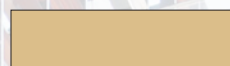
**COLOURS**



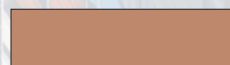
White Formentera EB3210



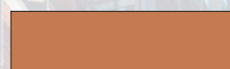
Blanco W2-07



Amarillo Y125-15



Rojo R05-05



Rojo R25-25







**PROJECT**  
Helsingin Malta

**LOCATION**  
Jätkäsaari, Helsinki

**ARCHITECT**  
ARK-house arkkitehdit Oy

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**PIECE**



FK-20

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**COLOURS**

-  Blue Orinoco EB3370
-  White Madrid EM2220
-  Red Murano EB3550
-  Red Venezia EB3560
-  Yellow Angola EB3680
-  Violet Nicaragua EB3985
-  Violet Monterrey EB3950
-  Violet Guadalajara EB3990









**PROJECT**  
Biological Science Building  
University Of New South Wales (UNSW)

**LOCATION**  
Sydney, Australia

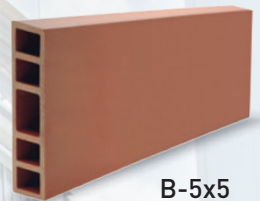
**ARCHITECT**  
Woods Bagot, John Norman

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**PIECE**



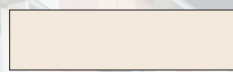
FK-20



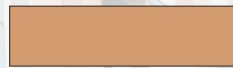
B-5x5  
B-250x60

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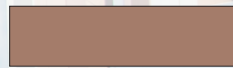
**COLOURS**



Blanco W00-20



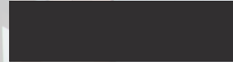
Naranja NA05-05



Rojo R15-10



Rojo R25-19



Negro B5-10

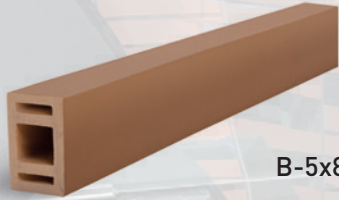


PROJECT  
Marrakville Metro Shopping Centre

LOCATION  
Sydney, Australia

ARCHITECT  
Francis-Jones Morehen Thorp

PIECE

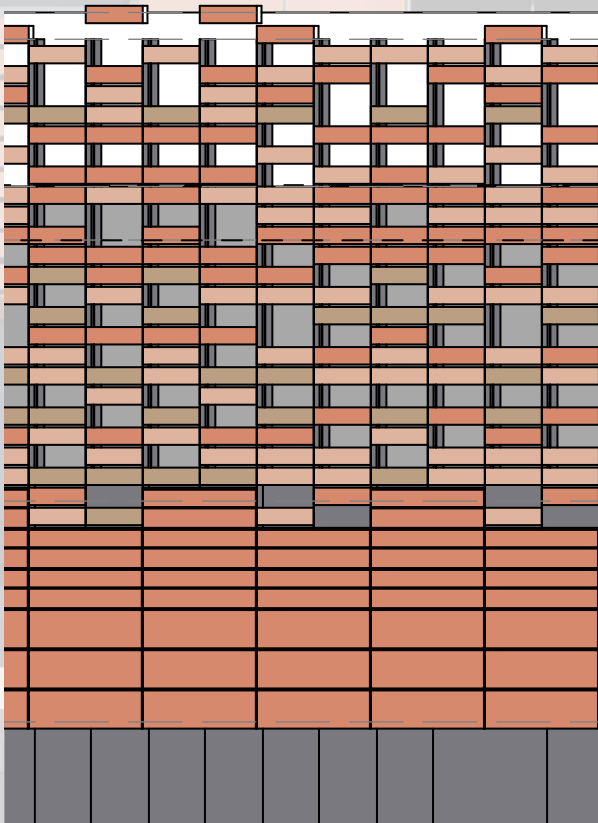


B-5x8

COLOURS



Rojo R15-10









**PROJECT**  
The Quads R6 Building,  
Student Accomodation, Bath University

**LOCATION**  
Bath, United Kingdom

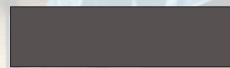
**ARCHITECT**  
Laing O'Rourke Co.

**PIECE**

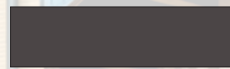


FS-20

**COLOURS**



Grey Arcadia E3155



Grey Princeton E3182



Black Columbia E3187







PROJECT  
Monarch

LOCATION  
Mosman, Australia

ARCHITECT  
Bates Smart

PIECE



FK-L 2/16



B-5x5

COLOURS



Rojo R05-05







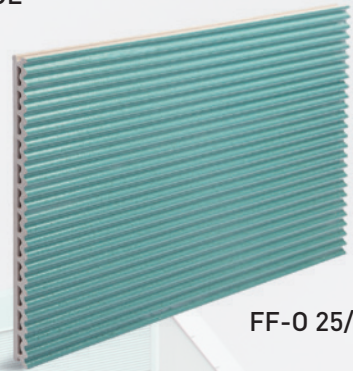


**PROJECT**  
VandCenter

**LOCATION**  
Odense, Denmark

**ARCHITECT**  
Jesper Thyge Brøgger

**PIECE**



FF-O 25/17

**COLOURS**



Blue Volga







**PROJECT**

The Knowledge Industry Center in Song-Do  
Song-do BRC Smart Valley

**LOCATION**

Song-do, South Korea

**ARCHITECT**

Gunwon

**PIECE**



FK-L 2/16



FK-16

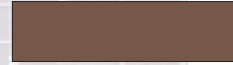
**COLOURS**



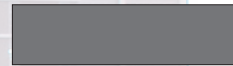
Naranja NA05-15



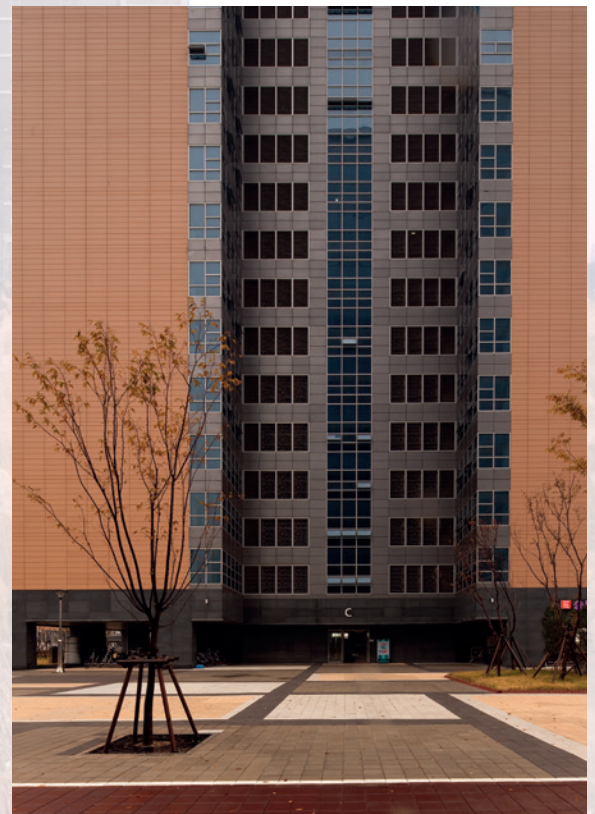
Rojo R25-25



Marrón BR2-08

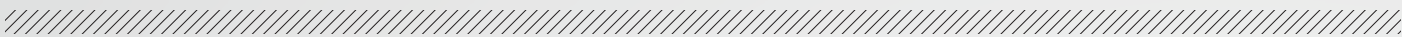


Gris GR02-20



# FAÇADE SYSTEMS

VENTILATED FAÇADE | FACHADA VENTILADA



tempio® [projects] Acavalley Kindergarten. Incheon, Korea

The following aspects can be highlighted as the main advantages of this building material:

Easy to mount on site. These are elements that are assembled on site "dry", that is, using mechanical anchoring and fixing systems only.

No maintenance costs over the years, as ambient conditions do not affect the ceramic pieces and rainwater is enough to keep them clean.

The individual tiles are very easily replaced in the unlikely event of a mishap.

Thanks to this system, the internal wall structure is protected from atmospheric agents. Cracking due to subsidence is completely avoided.

Energy savings range from 25% to 40%.

No thermal bridges.

Surface water condensation is totally eliminated. The presence of an air chamber facilitates the evacuation of water vapour from the inside, and favours the evaporation of any humidity due to filtration.

Excellent soundproofing both in exteriors and in pavilions, theatres, schools, etc.

Very convenient as a rehabilitation system for older buildings as the façade is easily installed over underlying structures.

Entre las principales ventajas de la utilización de este sistema constructivo destacamos los siguientes aspectos:

Fácil colocación en obra. Se trata de elementos ensamblados en obra "en seco", mediante aparatos de enganche y fijado de tipo mecánico.

Coste de mantenimiento nulo a lo largo de los años, ya que las condiciones externas no afectan a la pieza cerámica y el agua de lluvia es suficiente para mantenerla limpia.

Posibilidad de intervención sobre cada una de las piezas, siendo muy sencillo su reemplazo.

Protección de la estructura del muro de la acción de los agentes atmosféricos. Se evita que las grietas provocadas por movimientos de obra sean visibles.

Ahorro energético que oscila entre el 25% y 40%.

Eliminación de los puentes térmicos.

Eliminación del agua de condensación superficial.

La presencia de la cámara de aire facilita la evacuación del vapor de agua procedente del interior, favoreciendo la salida de la eventual humedad debida a filtraciones.

Es un excelente aislamiento acústico tanto en exteriores como en pabellones, teatros, colegios, etc.

Sistema muy conveniente en rehabilitaciones para renovar la estética del edificio ya que se coloca muy fácilmente sobre viejas estructuras.

## TECHNICAL CHARACTERISTICS

### CARACTERÍSTICAS TÉCNICAS



Customized designed substructure  
Subestructura especialmente diseñada



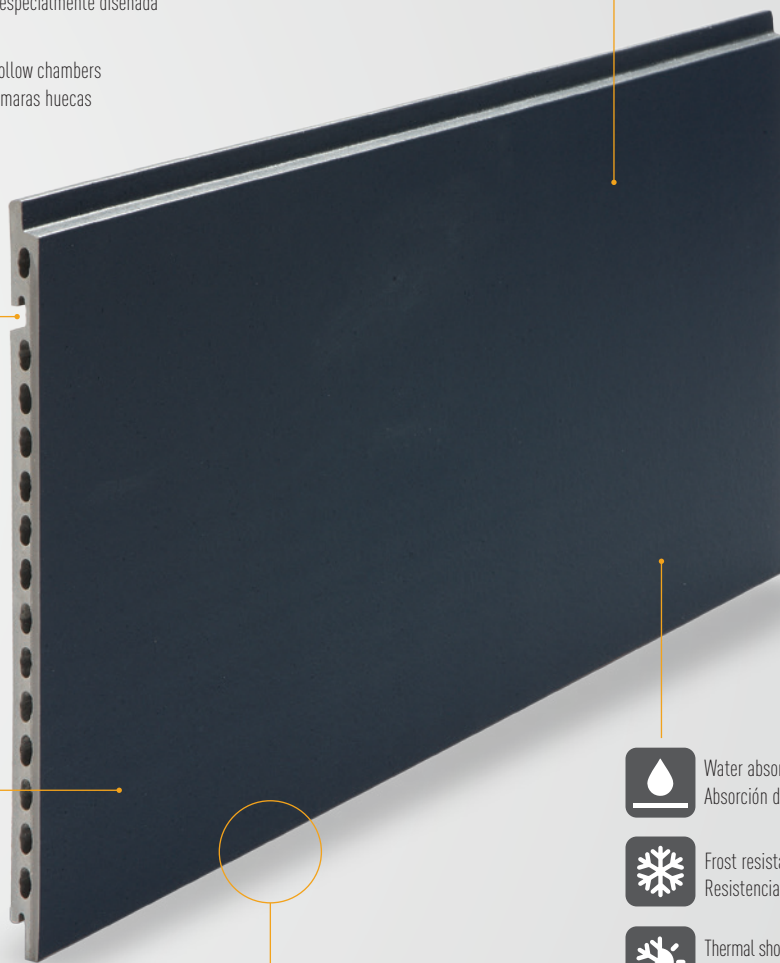
Profiles with hollow chambers  
Perfiles con cámaras huecas



Wide range of formats  
Amplia gama de formatos



Glazed and natural colours  
Colores naturales y esmaltados



Bending strenght  
Resistencia a la flexión

EN ISO 10545-4

**>17N / mm<sup>2</sup>**



Impact strenght  
Resistencia al impacto

EN ISO 10545-5



Water absorption  
Absorción de agua

**0,5 % < - < 4%**  
**2% < - < 7%**



Frost resistance  
Resistencia a la helada

EN ISO 10545-12



Thermal shock resistance  
Resistencia al choque térmico

EN ISO 10545-9



Dimensional tolerance  
Tolerancia dimensional

EN ISO 10545-2



Thermal expansion  
Dilatación térmica

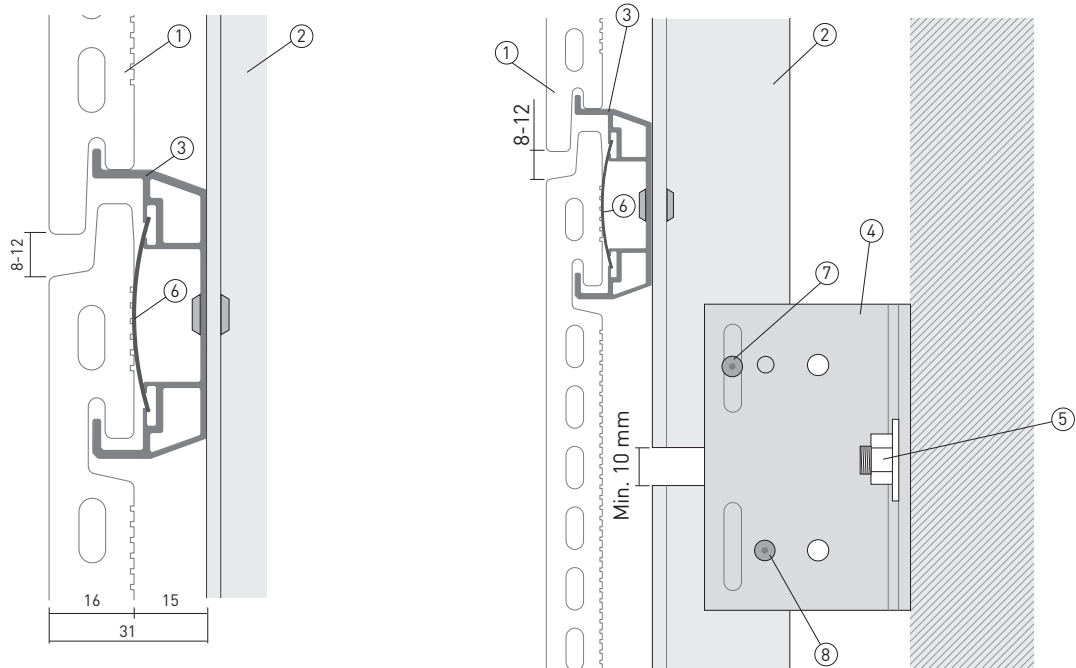


Download technical informaton at  
Descarga de información técnica en

[www.tempio.es](http://www.tempio.es)

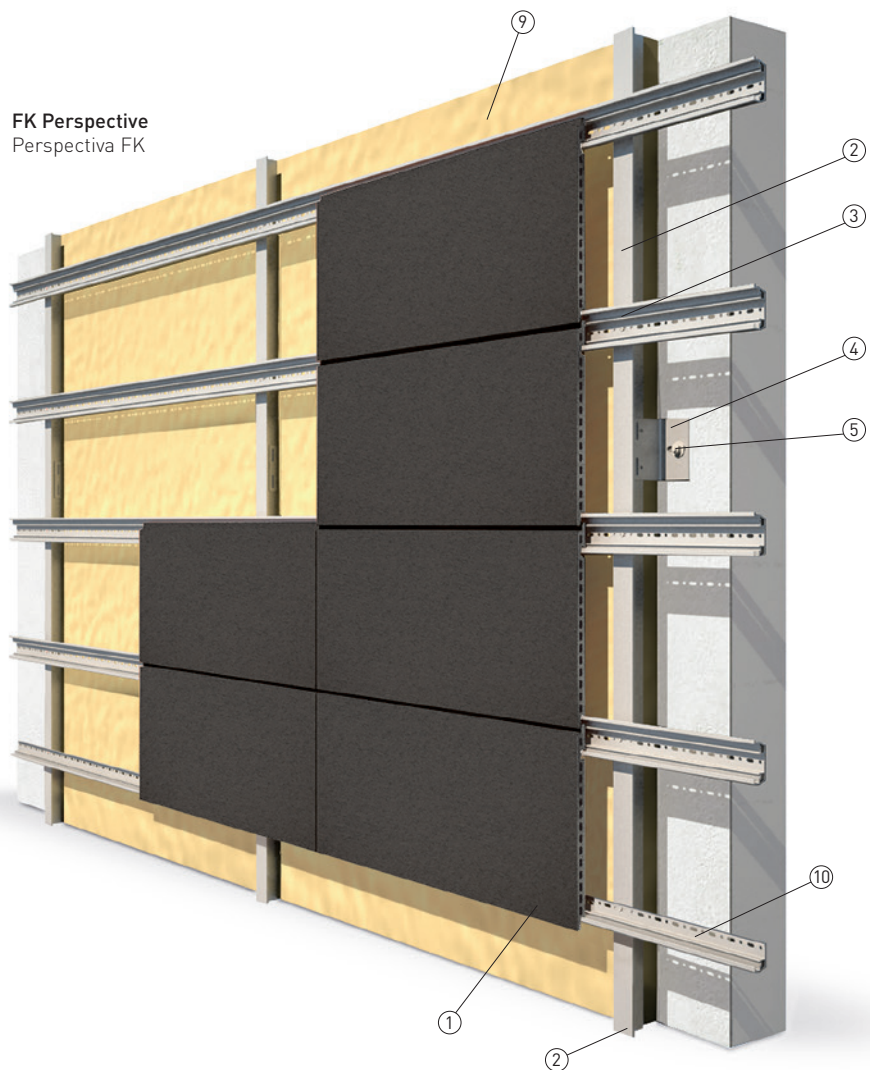
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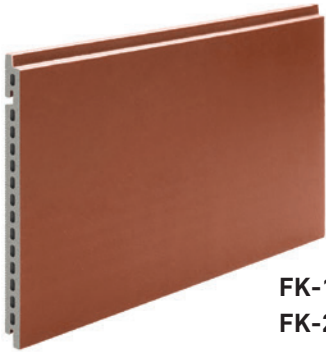
## Fixation detail between vertical profiles Detalle de fijaciones entre perfiles verticales



## FK Perspective Perspectiva FK

- 1\_ **Tempio tile**  
Pieza Tempio
- 2\_ **Vertical T profile**  
Perfil T vertical
- 3\_ **Horizontal profile**  
Perfil horizontal
- 4\_ **Bracket**  
Ménsula
- 5\_ **Anchorage**  
Anclaje
- 6\_ **Metal sheet**  
Chapa de metal
- 7\_ **Fixet to sliding point**  
Fijación corredera
- 8\_ **Fixed point**  
Fijación fija
- 9\_ **Insulating layer**  
Aislante
- 10\_ **Termination profile**  
Perfil de terminación





**FK-16  
FK-20**



**FK-L 1/16  
FK-L 1/20**



**FK-1BA 5/16**



**FK-L 2/16**



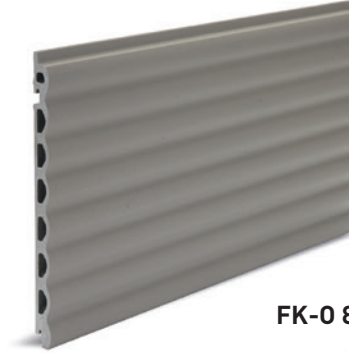
**FK-L 3/16**



**FK-2B 5/16**



**FK-L 4/16**



**FK-O 8/20**



**FK-1BB 5/16**

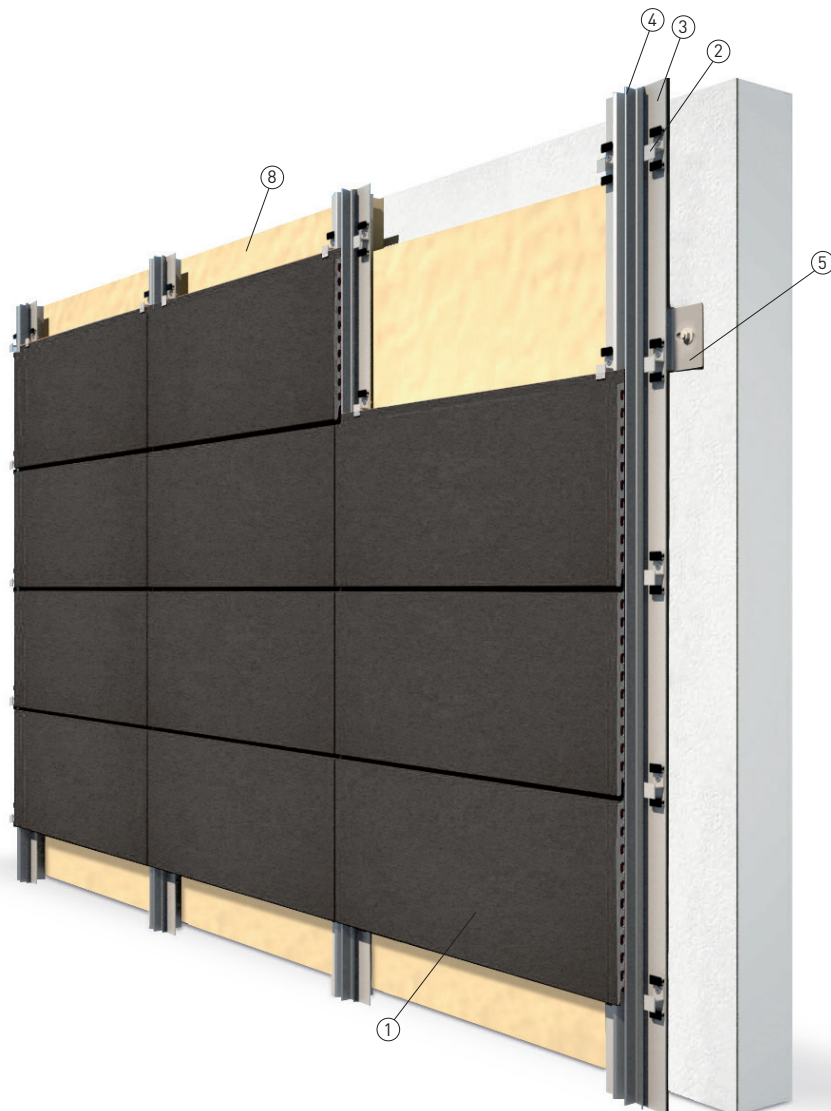
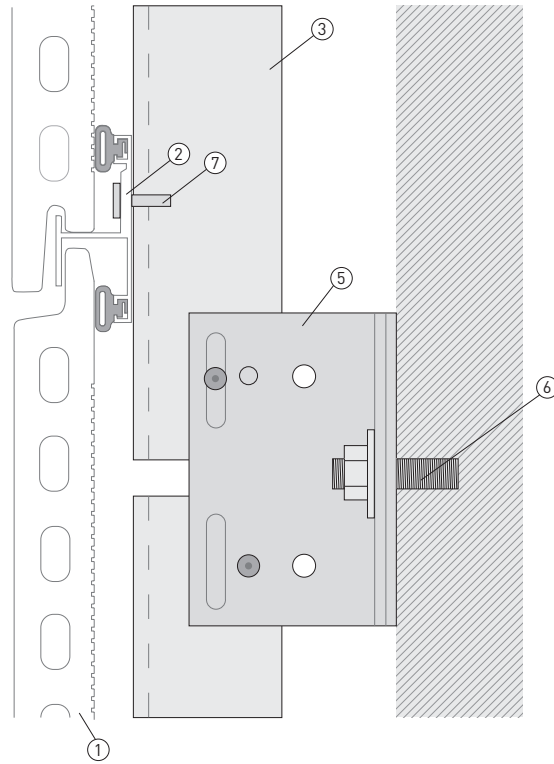
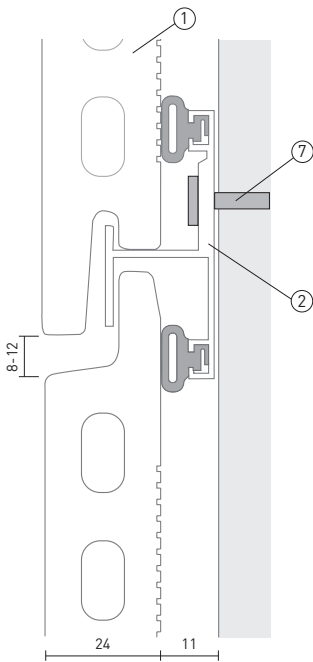


**FK-L 59/16**

SYSTEM PIECES / SISTEMA DE PIEZAS

height module / inch alto módulo / mm	FK-16	FK-20	FK-L 1/16	FK-L 1/20	FK-L 2/16	FK-L 3/16	FK-L 4/16	FK-O 8/20	FK-L 59/16	FK-1BA 5/16	FK-1BB 5/16	FK-2B 5/16
200 - 7.87"	■	■	■						■			
250 - 9.84"	■											
280 - 11.02"	■											
300 - 11.81"	■	■	■		■		■	■		■	■	■
310 - 12.20"												
350 - 13.78"	■	■										
380 - 14.96"	■											
400 - 15.74"	■	■	■	■		■						
450 - 17.71"	■											
510 - 20.07"	■											
545 - 21.45"		■										
length piece / largo pieza	<1200mm	<1500mm	<1200mm	<1500mm	<1200mm	<1200mm	<1200mm	<1200mm	<1200mm	<1200mm	<1200mm	<1200mm
weight / peso - kg/m <sup>2</sup>	28,5	33	28,5	33	28,5	27	28,5	30	28	30	30	32

**Fixation detail between vertical profiles**  
Detalle de fijaciones entre perfiles verticales



- 1\_ **Tempio tile**  
Pieza Tempio
- 2\_ **Clip**  
Grapa
- 3\_ **Main T profile**  
Peril en T
- 4\_ **Vertical joint profile**  
Perfil vertical de junta
- 5\_ **Bracket**  
Ménsula
- 6\_ **Anchorage**  
Anclaje
- 7\_ **Self screwing**  
Tornillo autoroscante
- 8\_ **Insulating layer**  
Aislante





FS-20 | FS-24 | FS-30



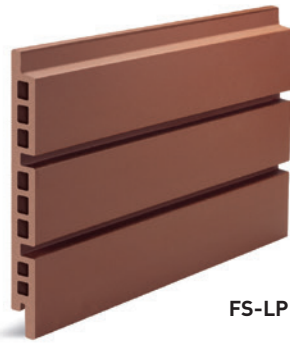
FS-L 2/20



FS-T 7/28



FS-L 2/24



FS-LP 2/30



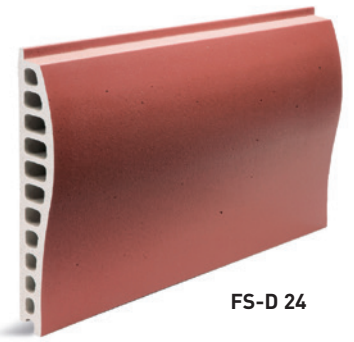
FS-2B 5/30



FS-L 3/30



FS-LP 3/30



FS-D 24



FS-L 4/24



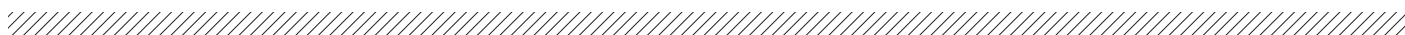
FS-L 5/30



FS-L 7/30

height module / inch alto módulo / mm	FS-20	FS-24	FS-30	FS-D 24	FS-L 2/20	FS-L 2/24	FS-L 3/30	FS-L 4/24	FS-L 5/30	FS-L 7/30	FS-LP 2/30	FS-LP 3/30	FS-2B 5/30	FS-T 7/28
200 - 7.87"	■	■	■											
225 - 8.86"	■													
250 - 9.84"	■	■	■											
280 - 11.02"	■	■												
300 - 11.81"	■	■	■	■	■	■					■		■	■
350 - 13.78"					■									
374 - 14.72"	■													
400 - 15.74"		■	■				■			■		■		
450 - 17.71"	■													
500 - 19.68"	■	■						■						
600 - 23.622"									■					
length piece / largo pieza	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm	<1500mm
weight / peso - kg/m <sup>2</sup>	33	42	48	38,5	32	39	45	40	45,5	44	42	42	52	37

# FF SYSTEM



tempio®[projects] Dolcestone by Toyo Itto. Logroño, Spain.



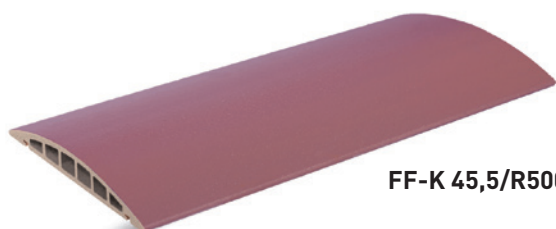
FF-0 25/17



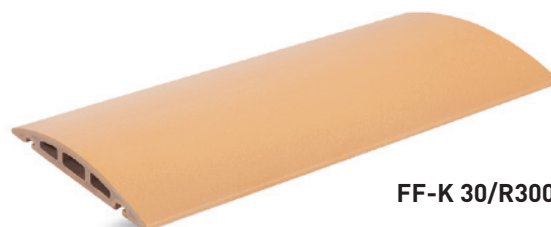
FF-L 2/20



FF-C 9/65



FF-K 45,5/R500



FF-K 30/R300



**ARCHITECTS**

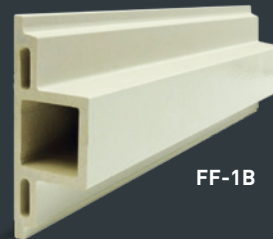
ARCHITECTS. Department of aid  
for development projects

Resources used by architects

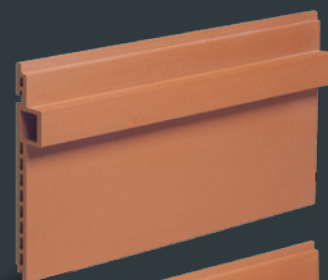
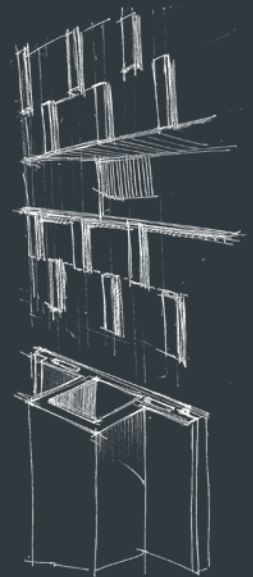
LAB ideas

ARQUITECTOS. Departamento de ayuda  
para desarrollo de proyectos

Recursos para arquitectos



FF-1B



FK-1BA 5/16



FK-2B 5/16



FK-1BB 5/16

# BAGUETTE

CERAMIC SUNCREEENS | SISTEMA DE LAMAS CERÁMICAS



## TECHNICAL CHARACTERISTICS CARACTERÍSTICAS TÉCNICAS

Customized designed substructure  
Subestructura especialmente diseñada

Profiles with hollow chambers  
Perfiles con cámaras huecas

Dimensional tolerance  
Tolerancia dimensional | EN ISO 10545-2 ✓

Thermal expansion  
Dilatación térmica | ✓

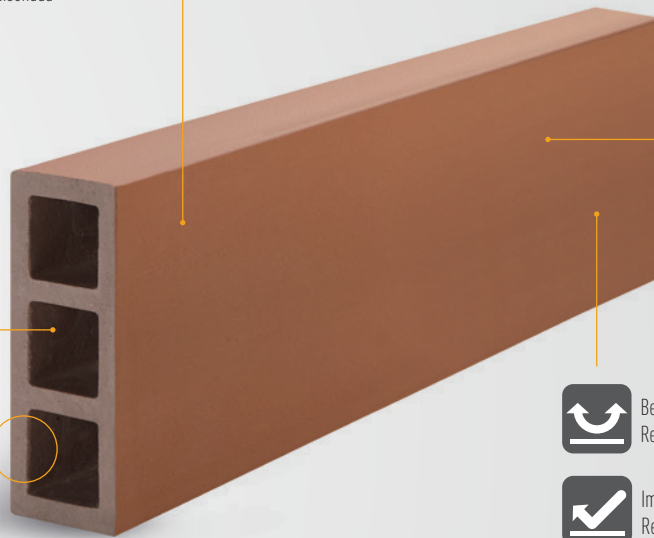
Water absorption  
Absorción de agua | 0,5% < - < 4%  
2% < - < 7%

Frost resistance  
Resistencia a la helada | EN ISO 10545-12 ✓

Thermal shock resistance  
Resistencia al choque térmico | EN ISO 10545-9 ✓

Wide range of formats  
Amplia gama de formatos

Glazed and natural colours  
Colores naturales y esmaltados



Bending strength  
Resistencia a la flexión | EN ISO 10545-4  
**>17N / mm<sup>2</sup>**

Impact strength  
Resistencia al impacto | EN ISO 10545-5 ✓

Solar shading.

Horizontal and vertical element orientation.

Suitable for any building size.

Venetian blind slats with Ceramics.

Window sill and wall copings.

Profiles with hollow chambers.

Customized designed substructure.

Wide variety of terracotta colours and glazed colours with gloss or matt finish. On request, other finishing colors can be produced.

Customized pieces.

### INDOOR APPLICATION

Ambient separation.

Coating for interior walls and ceilings.

Ephemeral architecture.

Protección solar.

Orientación elemento horizontal y vertical.

Apto para cualquier tamaño del edificio.

Celosía con lamas de Cerámica.

Alfeizares de ventanas y coronación de paredes.

Perfiles con cámaras huecas.

Subestructura especialmente diseñada.

Gran variedad de colores naturales y esmaltados brillo o mate. También fabricamos colores bajo demanda.

A medida.

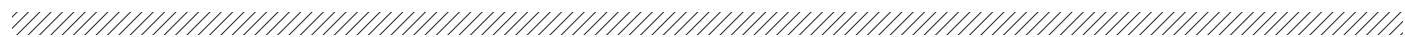
### APLICACIÓN INTERIOR

Separación de ambientes.

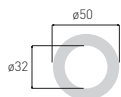
Revestimiento de techos y paredes interiores.

Arquitectura efímera.

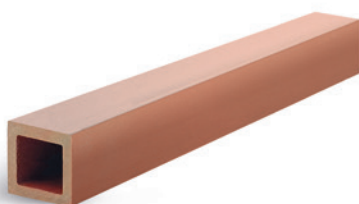
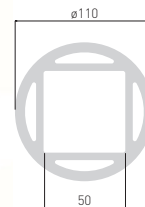
# BAGUETTE SYSTEM



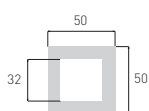
**B-d50**



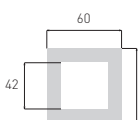
**B-d110**



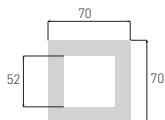
**B-5x5**



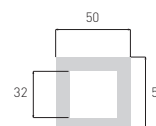
**B-6x6**



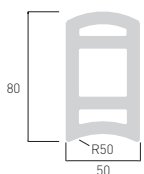
**B-7x7**



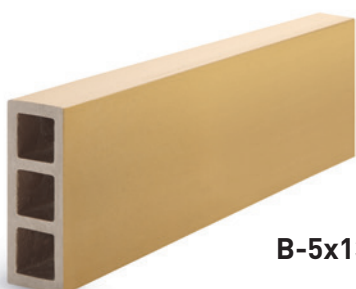
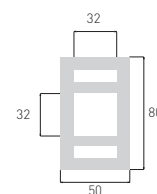
**B-5x5 curvo**



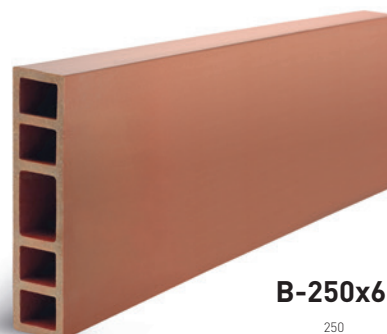
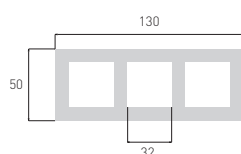
**B-5x8 r50**



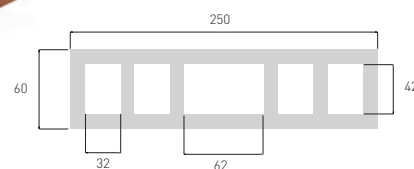
**B-5x8**



**B-5x13**



**B-250x60**

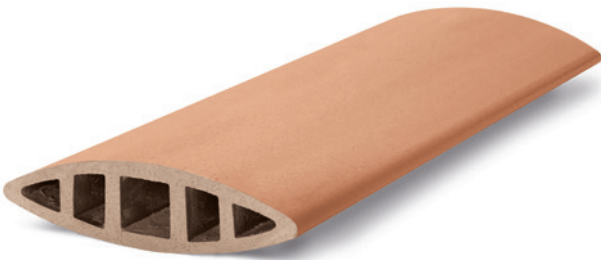
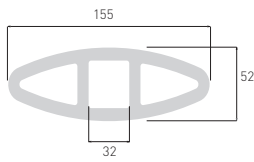




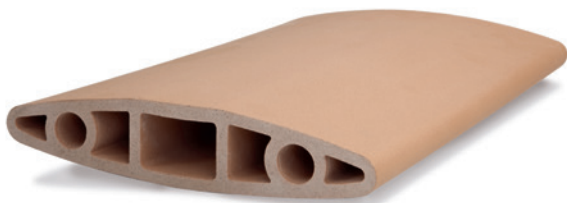
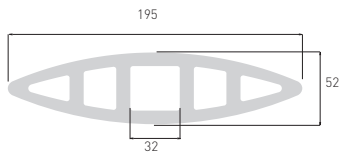
## Size guide Guía de medidas



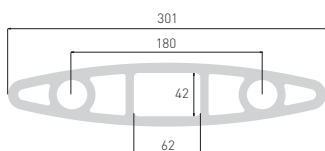
**BO-160x50**



**BO-200x50**



**BO-300x62**



piece / pieza	length piece largo pieza	weight / peso kg/m lineal
<b>B-d50</b>	< 1800 mm	2,5
<b>B-d110</b>	< 1500 mm	2,5
<b>B-5x5</b>	< 1800 mm	3,5
<b>B-6x6</b>	< 1800 mm	4
<b>B-7x7</b>	< 1800 mm	5
<b>B-5x5 curve</b>	< 600 mm	3,5
<b>B-5x8</b>	< 1800 mm	5,5
<b>B-5x8 r50</b>	< 1800 mm	5,5
<b>B-5x13</b>	< 1800 mm	7,7
<b>B-250X60</b>	< 1800 mm	15
<b>BO-160x50</b>	< 1500 mm	7,6
<b>BO-200x50</b>	< 1500 mm	9,7
<b>BO-300x62</b>	< 1500 mm	17,5

**Profiles with hollow chambers**  
Perfiles con cámaras huecas

**Specially designed substructure**  
Subestructura especialmente diseñada



## Special projects Proyectos especiales

**Made-to-measure on request**  
Fabricación a medida bajo demanda

**Special Cuts**  
Cortes especiales

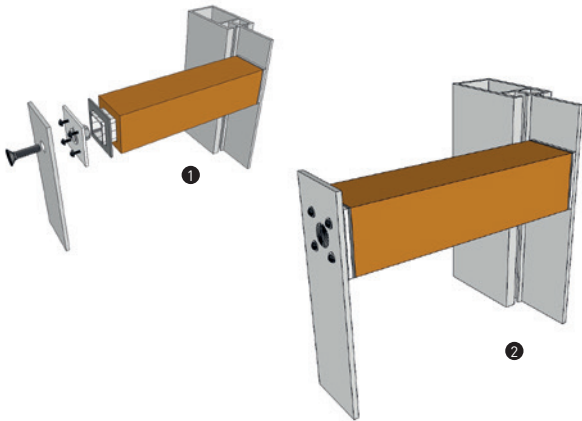
**Colour development for projects**  
Desarrollo de colores especiales  
para proyectos



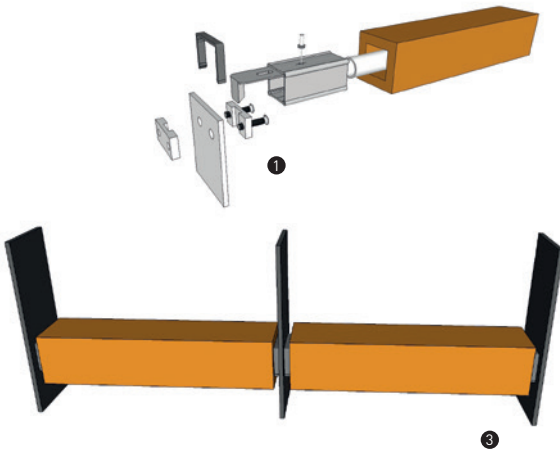


## HORIZONTAL SYSTEMS

### ANCHOR PLATE

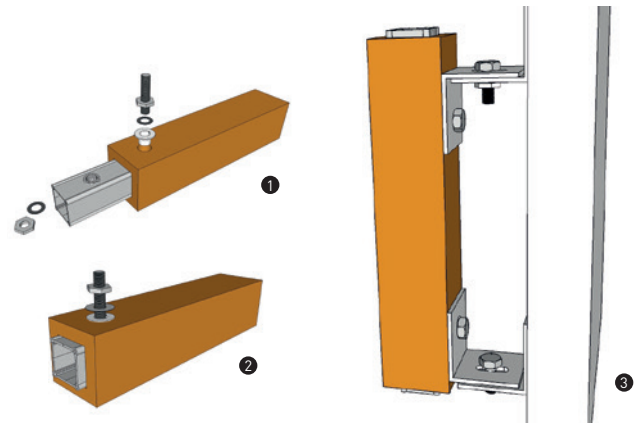


### STANDARD

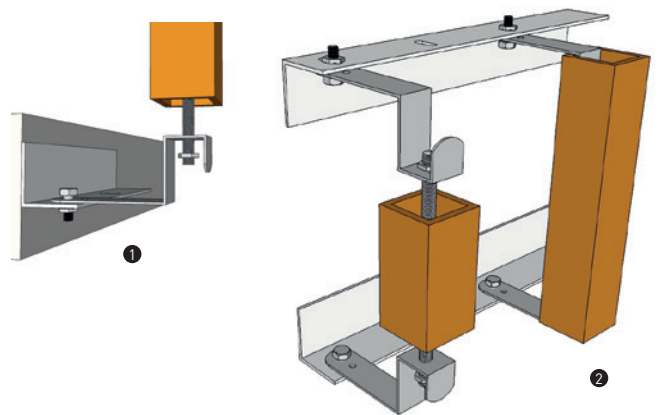


## VERTICAL SYSTEMS

### POP NUT

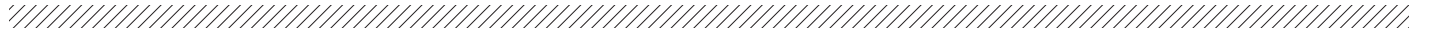


### HOOK

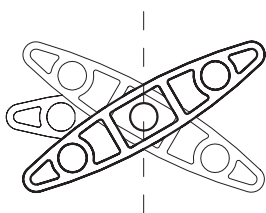
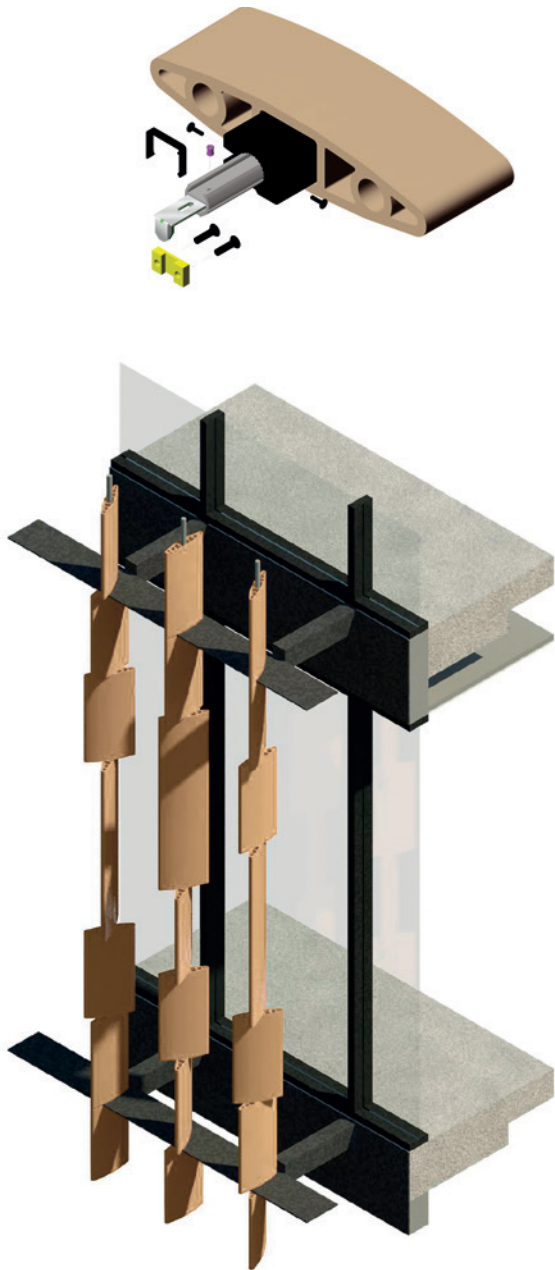




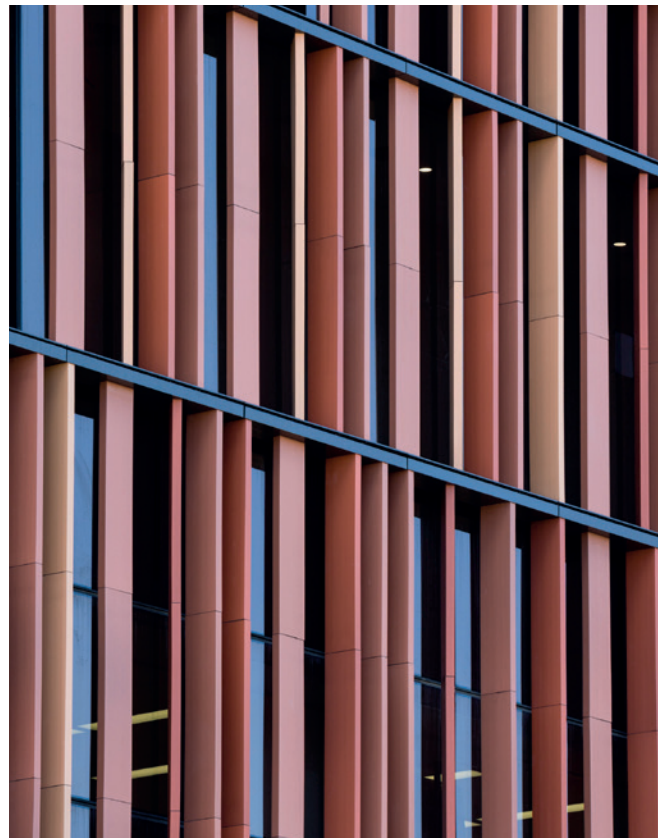
Ceramic blind slats on façade  
Celosía con lamas de cerámica



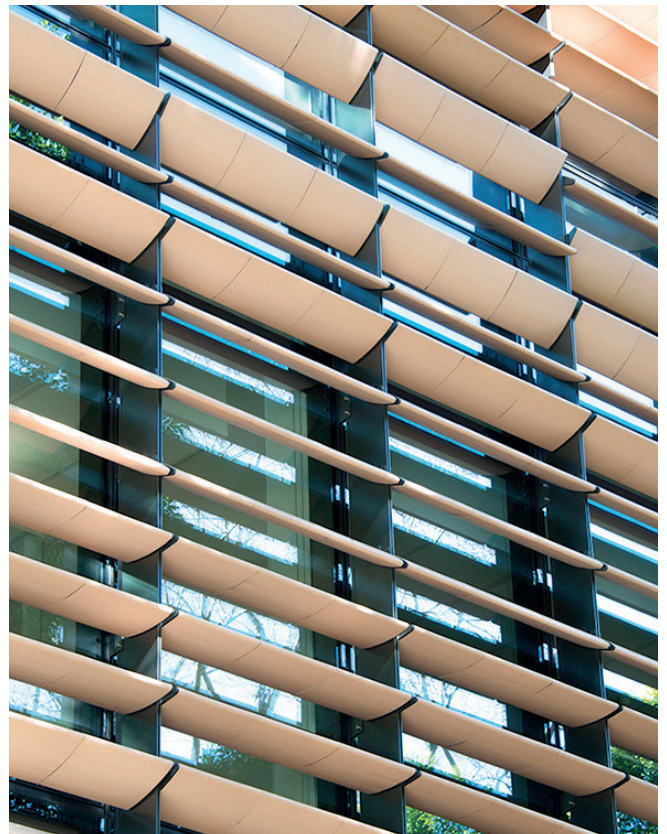
SWING SYSTEMS



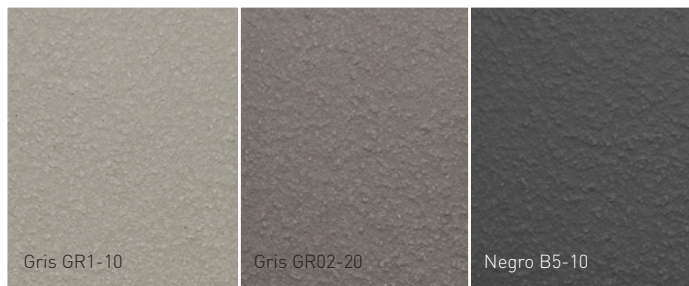
VERTICAL



HORIZONTAL SYSTEM



**BODY COLOURED  
PASTA COLOREADA**  
**NATURAL**



**MAT ENAMEL  
ESMALTE MATE**



**SATIN ENAMEL  
ESMALTE SATINADO**



**GLOSS ENAMEL  
ESMALTADE BRILLO**



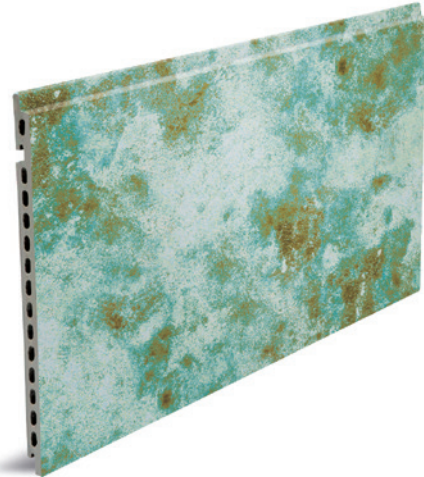
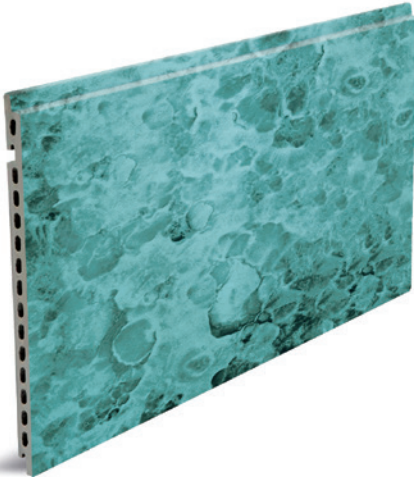


# tempio® Possibilities for special finishes

Posibilidades para acabados especiales



**Colour development**  
Desarrollo del color



## FLAMED FINISH ACABADO FLAMEADO

BODY COLOURED / PASTA COLOREADA

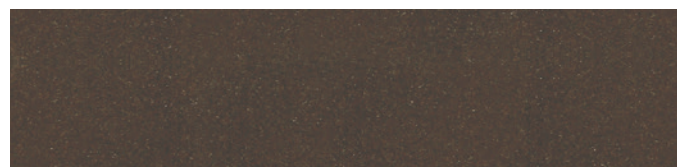
**NATURAL**

Blanco W00-20	Blanco W2-07	Amarillo Y00-05	Amarillo Y125-15	Amarillo Y05-02
Naranja NA05-05	Naranja NA05-15	Rojo R25-19	Rojo R05-05	Rojo R25-25
Rojo R15-10	Marrón BR2-08	Gris GR1-10	Gris GR02-20	Negro B5-10

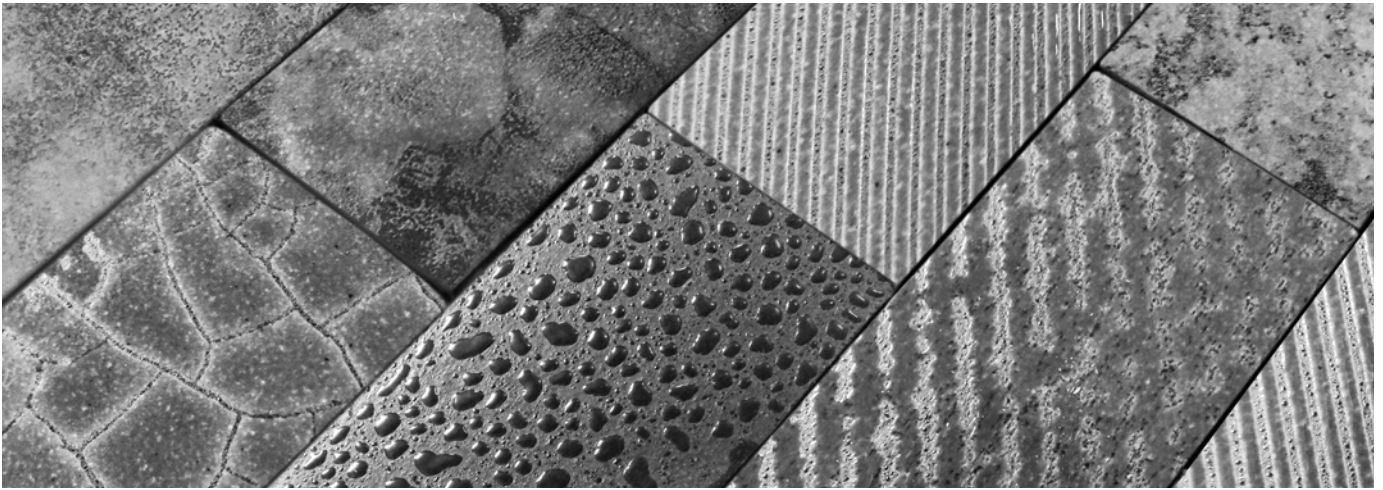
## METALLIC ENAMEL ESMALTADO METÁLICO



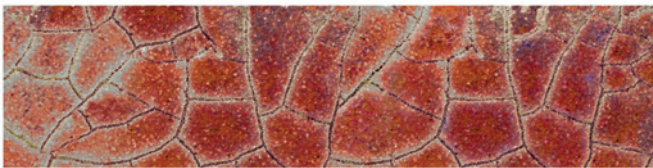
Gold EMT05



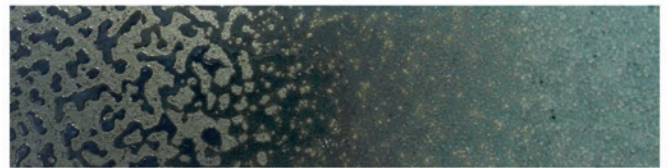
Metal EMT02



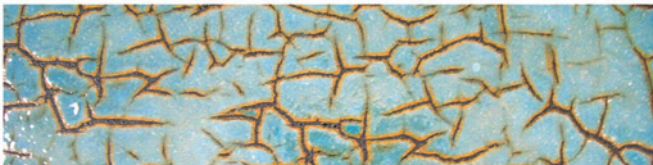
**GLOSS ENAMEL WITH TEXTURE**  
ESMALTADO BRILLO CON TEXTURA



Craquelado Desgastado DE06



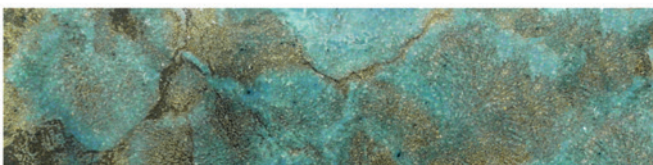
Degradado-1 DE07



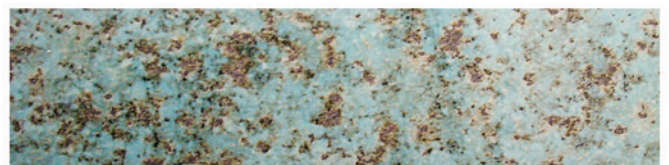
Craquelado DE03



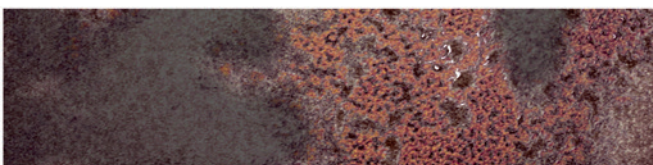
Degradado-2 DE08



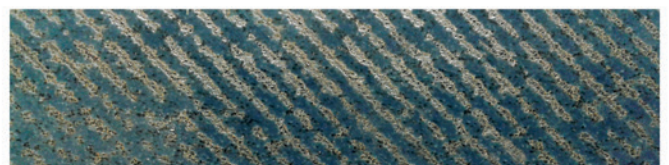
Mercurizado DE01



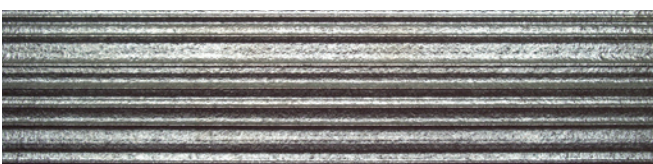
Ruido DE02



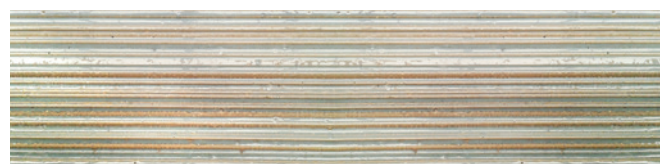
Desgastado DE04



Líneas Ruido DE05



Metallic DE09



Opalum DE10



## EXTREMEDESIGN

New design possibilities for façade: infinite designs, easily adaptable, versatile & customize projects.

Nuevas posibilidades en diseño para fachada: diseños infinitos, fácilmente adaptable, proyectos personalizados y versátiles.



Rainforest Blanco  Wood  
Madera



Rainforest Musgo  Wood  
Madera




Woods Industrial  Wood  
Madera



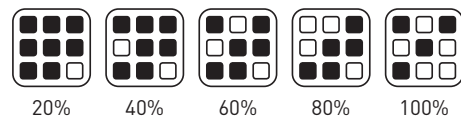
Woods Nordic  Wood  
Madera



Rainforest Nogal  Wood  
Madera

Aesthetic classification and shade variations  
 Clasificación estética y destonificación

\*Colours may suffer variations in tone  
 \* Los colores pueden sufrir variaciones de tonalidad



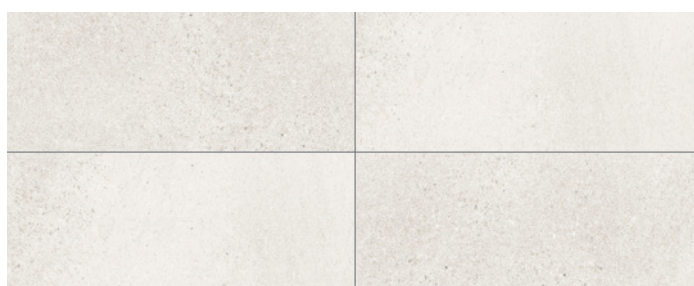
FK-L 1/16



FF-L 2/20



FK-L 2/16



Stromboli Light Stone Piedra



Canyon Cal Stone Piedra



Calacatta Grey Stone Piedra



Stromboli Silver Stone Piedra



Sea Rock Caramel Stone Piedra



Canyon Creme Stone Piedra



Anthracite Stone Piedra



Canyon Mix Stone Piedra

tempio®

VENTILATED FAÇADES  
FACHADAS VENTILADAS



EDITION - FEB'18

Mayor tempio®  
CERÁMICA

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[www.tempio.es](http://www.tempio.es)