

# CERAMIC VENTILATED FACADES SYSTEMS





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# CHOOSE THE EXTERIOR CLADDING THAT CONTRIBUTES TO A GREENER FUTURE.

A facade is far more than just the protective shell of a building. Its design not only characterizes the building itself, but also influences – often visible from far away – the urban environment. Being one of the most durable and easy to clean materials, ceramic ventilated cladding is an indisputable choice for extreme northern climates. The appealing design, innovative system and high-quality German craftsmanship, KeraTwin® K20 has positioned our supplier Agrob Buchtal as one of the world leaders in contemporary architecture.

The variety of colours, formats and surface finishes, KeraTwin® K20 offers the architect enormous freedom of design. As diverse fastening alternatives ensure technical and structural versatility, this system offers the appropriate solution to any challenge even on difficult bases.





# THE PERFECT SOLUTION: CURTAIN-TYPE, REAR-VENTILATED CERAMIC FACADES



SUN AND VISUAL  
PROTECTION



LESS WASTE ON SITE



SUSTAINABILITY



VARIETY OF DESIGN



PROTECTION AGAINST  
HEAT AND COLD



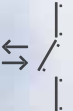
ECONOMIC FEASIBILITY



FIRE SAFETY



RESISTANCE TO FROST



REPLACING  
INDIVIDUAL PANELS



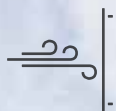
LIGHT AND COLOURFAST



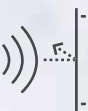
ANTI-GRAFFITI



EARTHQUAKE-SAFE



DESIGN LOADS



NOISE PROTECTION

# SUSTAINABLE BUILDING WITH HT LIGHT ACTIVATES RAIN CLEANS

## HT TREATMENT: FACADES WITH SELF-WASHING EFFECT

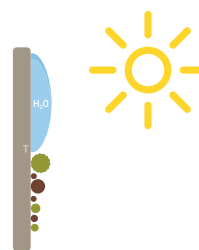
The ceramic ventilated cladding is a staple for commercial building facade projects. Being one of the most **durable** and **easy to clean** materials, it is an indisputable choice for extreme northern climates. KeraTwin® K20 ceramic panels are all coated with **the innovative HT (hydrophilic tile) coating technology**, which has exceptional antibacterial properties. The ceramic ventilated cladding stands out for its **contribution to the environment** and for taking a step towards **sustainable development**. Each building contributes to its own microclimate and uses light to actively breakdown pollutants, as well as industrial fumes and exhaust fumes.



Thanks to HT treatment and its antibacterial effect, algae, fungi and moss are decomposed. As soon as it rains, dirt and impurities are simply washed away by the self-washing effect in the case of glazed facade ceramics. This saves on maintenance costs in the life cycle of a building.

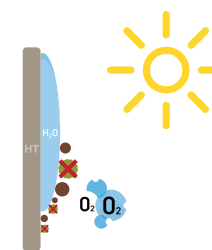
1

The surface tension of the water is overcome. A thin water film forms.



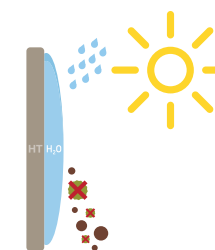
2

By the action of the light, the catalyst activates oxygen. Microorganisms, algae, fungi and moss are decomposed.



3

When it rains, dirt and microorganisms are simply infiltrated and removed.



# CERAMIC FACADE SYSTEMS FOR SUSTAINABLE RENOVATION

Ceramic facade systems installed on the old facade like a second shell provide a sustainable, energy-efficient and aesthetic solution. In this way, diverse energy-saving requirements can be met, as the gap between the old and new facades provides space for insulation layers of any thickness. In addition, curtain-type facades offer ideal conditions for the visual enhancement of buildings, as they also allow for a building grid independent of the original structure. Thanks to the decoupling of the outer shell from the building structure, the living spaces remain cool in the summer and warm in the winter. The positive effects on quality of life are another benefit of this type of renovation.

## LAURIE-EVE-CORMIER AQUATIC COMPLEX

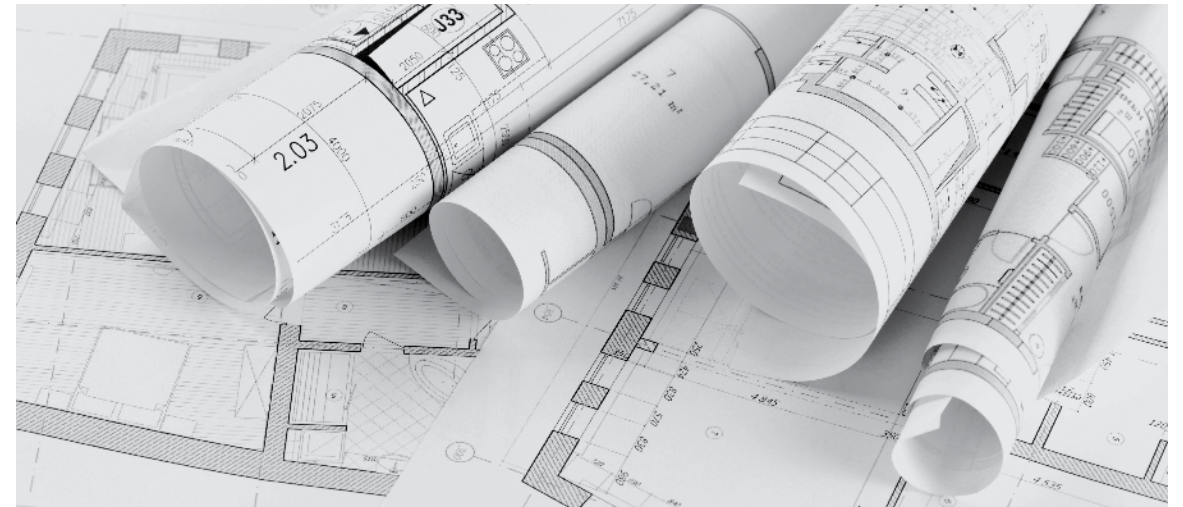


BEFORE



AFTER

# SERVICE AND EXPERTISE



A reference in the world of design and architecture, Ceragres offers complete and diversified range of cutting-edge products, as well as technical support and a high level of service.

Ceragres product specialists facilitate the specification of Agrob Buchtal's KeraTwin® K20 system by providing technical support from the design phase to product installation. For more information, contact our team of experts.

- Preliminary meetings to assess needs
- Budget study
- Samples
- Support to architects and contractors
- Network of specialized and experienced installers
- Technical assistance of the manufacturer
- 10-year manufacturer warranty





# CONDOMINIUMS O CARTIER



Location:  
LAVAL

Architects:  
CONSORTIUM  
LUPIEN + MATTEAU /  
BARIN ARCHITECTURE + DESIGN

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Natura 415 N vulcan-grey H  
Spectraview 4230 glacier-white, glossy H

Quantity:  
55,000 ft<sup>2</sup>





# LAURIE-EVE-CORMIER AQUATIC COMPLEX

Location:  
BOUCHERVILLE

Architects:  
CONSORTIUM  
RIOPEL + ASSOCIÉS ARCHITECTES /  
POIRIER FONTAINE ARCHITECTES

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 150 lemon-yellow H  
Spectraview 4230 glacier-white, glossy H  
Spectraview Blue Series

Quantity:  
6,500 ft<sup>2</sup>







# MAINTENANCE AND OPERATIONS CENTER – STO

Location:  
GATINEAU

Architects:  
COBALT ARCHITECTES

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 4230 glacier-white,  
glossy H  
Spectraview 6271 BLUE 1H

Quantity:  
33,000 ft<sup>2</sup>



# CCQ HEADQUARTERS

Location:  
MONTREAL

Architects:  
LEMAY

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Natura 415 N vulcan-grey H  
—  
Natura 403 red H

Quantity:  
62,000 ft<sup>2</sup>





# ORDRE DES INFIRMIÈRES ET INFIRMIERS DU QUÉBEC – OIIQ

Location:  
MONTREAL

Architects:  
LEMAY



System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 4230 glacier-white, glossy H

Quantity:  
13,000 ft<sup>2</sup>



# STINSON BUS GARAGE – STM

Location:  
MONTREAL

Architects:  
LEMAY

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 150 lemon-yellow H  
—  
Natura 415 N vulcan-grey H

Quantity:  
25,000 ft<sup>2</sup>





# CENTRE SANTÉ RACINE

Location:  
CHICOUTIMI

Architects:  
LES MAÎTRES D'ŒUVRE  
HOVINGTON GAUTHIER  
ARCHITECTES

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 4230 glacier-white, glossy H

Quantity:  
11,000 ft<sup>2</sup>



# AQUA COMPLEX

Location:  
DRUMMONDVILLE

Architects:  
CONSORTIUM  
POIRIER FONTAINE ARCHITECTES /  
BILODEAU BARIL ASSOCIÉS

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 6272 BLUE 2H

Quantity:  
3,750 ft<sup>2</sup>





# CONCEPTION BAY SOUTH TOWN HALL

Location:  
NEW FOUNDLAND

Architects:  
JOHN HEARN ARCHITECT INC.

System:  
KERATWIN® K20  
—  
HT Treatment

Colors:  
Spectraview 4234 chalk-white H

Quantity:  
5,200 ft<sup>2</sup>

# SURFACES FOR KERATWIN® K20

KeraTwin® K20 panels offer a variety of surfaces such as gloss, silky-matt and natural finishes. In addition, digital printing technology provides access to the production of stone, wood and metal looks.

# FORMATS FOR KERATWIN® K20

Length: up to 1,800mm (in 1mm steps)	Height: up to 600mm	Thickness: 20mm	Weight: 32kg/m <sup>2</sup>
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SMOOTH



GROOVED PANEL



GROOVED PANEL POSITIVE



STRIPY PATTERN



SHED PROFILE



BRUSHED SURFACE



SINE WAVE



NEW WAVE

Length (mm)	up to 900		up to 1,200		up to 1,500		up to 1,800								
Height (mm)	150	175	200	225	250	275	300	325	350	375	400	450	500	550	600





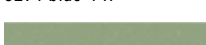
Schematic diagram: production-related deviations possible in individual cases; exact panel cross-section on request.

In addition to the variants shown, other individual developments are possible on request. Due to the different panel cross-sections, the choice of fastening system depends on the individual case.






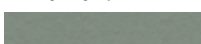


# COLORS

## SPECTRAVIEW GLAZED, SILKY-MATT

 6201 cream 1 H	 6202 cream 2 H	 6203 cream 3 H	 6204 cream 4 H	 6205 cream 5 H
 6211 yellow 1 H	 6212 yellow 2 H	 6213 yellow 3 H	 6214 yellow 4 H	 6215 yellow 5 H
 6221 apricot 1 H	 6222 apricot 2 H	 6223 apricot 3 H	 6224 apricot 4 H	 6225 apricot 5 H
 6231 salmon-red 1 H	 6232 salmon-red 2 H	 6233 salmon-red 3 H	 6234 salmon-red 4 H	 6235 salmon-red 5 H
 6241 pink 1 H	 6242 pink 2 H	 6243 pink 3 H	 6244 pink 4 H	 6245 pink 5 H
 6251 neutral-grey 1 H	 6252 neutral-grey 2 H	 6253 neutral-grey 3 H	 6254 neutral-grey 4 H	 6255 neutral-grey 5 H
 6261 grey 1 H	 6262 grey 2 H	 6263 grey 3 H	 6264 grey 4 H	 6265 grey 5 H
 6271 blue 1 H	 6272 blue 2 H	 6273 blue 3 H	 6274 blue 4 H	 6275 blue 5 H
 6281 green 1 H	 6282 green 2 H	 6283 green 3 H	 6284 green 4 H	 6285 green 5 H
	 4230 glacier-white, glossy H	 4234 chalk-white, matt H	 4530 black, glossy H	 4534 black, matt H
<b>CONTRASTING COLORS</b> GLAZED, GLOSSY	 150 lemon-yellow H	 151 orange H	 152 apple-green H	
	 153 violet H	 154 contrasting red H	 144 intense blue H	

## NATURA UNGLAZED

 407 white 407 white H	 410 cream 410 cream H	 411 ochre 411 ochre H	 412 salmon 412 salmon H	 396 salmon-red 396 salmon-red H
 403 red 403 red H	 397 brick-red 397 brick-red H	 408 red-brown 408 red-brown H	 418 brown 418 brown H	 414 light-grey 414 light-grey H
 409 iron-grey 409 iron-grey H	 415 N vulcan-grey 415 N vulcan-grey H	 419 black 419 black H	 416 smoky-blue 416 smoky-blue H	 417 patina-green 417 patina-green H



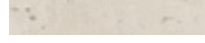












ceragres.ca

## DESIGN UNGLAZED

 1403 golden red 1403 golden red H	 1410 golden cream 1410 golden cream H	 1414 golden grey 1414 golden grey H	 1415 golden anthracite 1415 golden anthracite H
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## DESIGN GLAZED



### STONE

 1185 savona lime H	 1152 quarzit basalt-grey H	 1100 stonewall 1 H	 1115 rockface 1 H	 1090 haze 1 H
 1188 savona beige H	 1150 quarzit white-grey H	 1101 stonewall 2 H	 1116 rockface 2 H	 1091 haze 2 H
 1189 savona brown H	 1151 quarzit sand-beige H	 1102 stonewall 3 H	 1117 rockface 3 H	 1093 haze 3 H
 1186 savona grey H		 1103 stonewall 4 H		 1092 haze 4 H
 1187 anthracite H				

### STONE

 1110 mega 1 H	 1111 mega 2 H	 1112 mega 3 H
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### CEMENT

 1140 construct 1 H	 1141 construct 2 H
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### METAL

 1180 metal 1 H	 1181 metal 2 H	 1182 metal 3 H
 1190 metallic 1	 1191 metallic 2	 1192 metallic 3

### WOOD

 1145 oak cream oak H	 1146 oak natural oak H	 1147 oak anthracite oak H
 1165 driftwood grey-brown H		
 1170 bosco 1 H	 1171 bosco 2 H	 1172 bosco 3 H



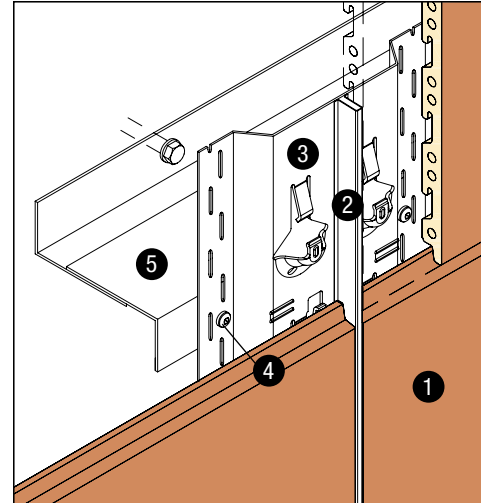
H = HT coating

# KERATWIN® K20 – FASTENING WITH VERTICAL SYSTEM RAIL

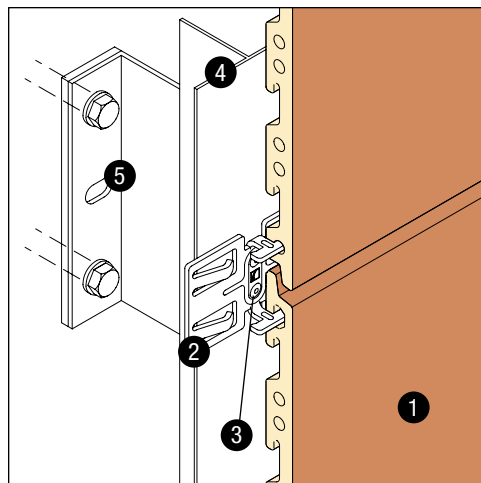
## OMEGA SYSTEM

- OMEGA rail with pre-punched and pre-aligned attachment hooks
- Perfect alignment of the panels thanks to the vertical joint profiles
- Integrated corner profiles

- 1 FACADE PANEL KERATWIN® K20
- 2 VERTICAL JOINT PROFILE K20, ARTICLE 640
- 3 OMEGA SYSTEM RAIL K20, ARTICLE 627
- 4 STAINLESS STEEL SCREW, ARTICLE 659
- 5 ADJUSTABLE Z-BAR (TYPICAL SUPPORT SUPPLIED BY OTHER MANUFACTURERS)



CHOOSE THE EXTERIOR CLADDING THAT CONTRIBUTES TO A GREENER FUTURE.



## CLAMP SYSTEM

- Panels can be mounted in any direction: horizontal, vertical, on an angle or soffit

- 1 FACADE PANEL KERATWIN® K20
- 2 TWIN-CLAMP K20, ARTICLE 680
- 3 STAINLESS STEEL BLIND RIVET, ARTICLE 675
- 4 VERTICAL BEARING PROFILE (BASIC SUBSTRUCTURE)
- 5 WALL BRACKET (BASIC SUBSTRUCTURE)



# CERAMIC VENTILATED FACADE SYSTEMS

 IMOLA  
TECNICA

 CERAGRES

Imola Tecnica is an Italian company located near Bologna in the Emilia-Romagna region. For more than 10 years, Imola Tecnica has focused its efforts on the development of stoneware porcelain products for ventilated facades. Four systems are now available to provide modern and innovative solutions.

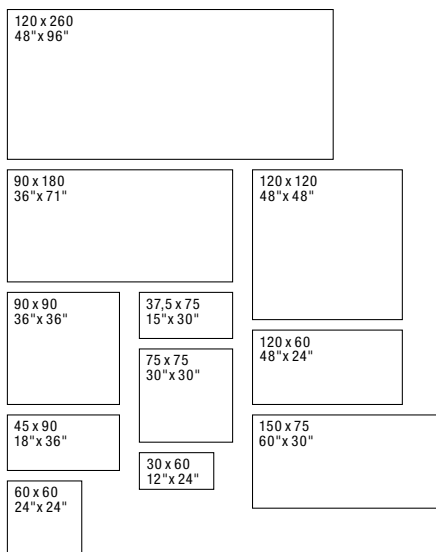
Imola Tecnica and the technical team of Ceragres assist the designer throughout the process and provide customized technological solutions. The modularity of the cladding follows the contours of the building. The sub-structure for the assembly stages is then developed.

## FORMATS

Stoneware porcelain is available in several modular and complementary formats.

**Thickness:** 10 mm • **Weight:** 5 lb/ft<sup>2</sup>

A fibreglass mesh is applied to the back of each panel to provide additional strength and facilitate drilling, cutting and handling.



## LOOK

Clean lines, natural surfaces, neutral tones, warm and cool shades and a combination of looks such as contemporary, wood, cement, metal, stone and marble are available in Imola Tecnica's stoneware porcelain collections.

Porcelain is a completely natural product, without any volatile compounds and 100% recyclable.

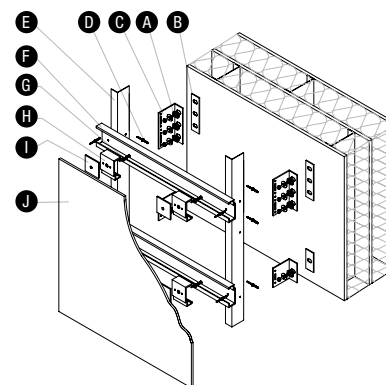


## SYSTEMS

For the Canadian market, Ceragres offers the following two systems for ventilated facade projects. Other systems are also available depending on the project requirements.

### IT-S SYSTEM

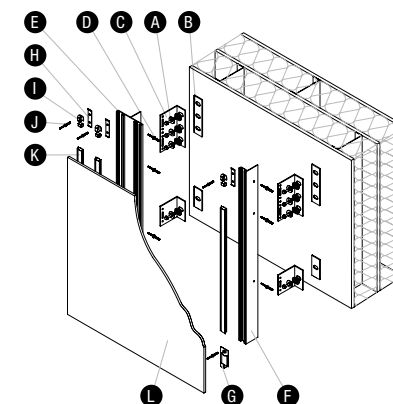
This invisible fixing system is a combination of rails on which aluminium anchor studs are fixed, which are themselves applied to porcelain tiles by means of stainless-steel expansion plugs (KEIL). Once the tiles are assembled, the system provides the possibility of achieving variable joints through high-precision millimetre adjustment screws.



- A** BOLT
- B** TERMOSTOP
- C** L-BRACKET
- D** RIVET
- E** L-VERTICAL MULLION
- F** C-HORIZONTAL PROFILE
- G** BOLT
- H** ADJUSTABLE FASTENER WITH LOCKING SCREW
- I** EPDM
- J** TILE

### IT-M SYSTEM

This system with visible fixing is equally effective and more economical. A special pre-painted stainless-steel plate is installed on a combination of rails, using AISI 316 stainless-steel clips to fix the cladding slabs. The clips are the same colour as the chosen tiles. The system thus composed will have a joint of 8 mm between the slabs.



- A** BOLT
- B** TERMOSTOP
- C** L-BRACKET
- D** RIVET
- E** L-VERTICAL MULLION
- F** T-VERTICAL MULLION
- G** BASE CLIP
- H** SPACER
- I** JOINT CLIP
- J** RIVET
- K** EPDM PROFILE
- L** TILE

Download more technical documents at [imolatecnica.it](http://imolatecnica.it)

CERAMIC VENTILATED FACADE SYSTEMS





## COLLEGE OF BUSINESS STUDIES PAAET

Location:  
MADINAT, KUWAIT

System:  
STRUCTURE IT-S INVISIBLE  
STRUCTURE IT-M APPARENT

Quantity/Format:  
80000 sq m – 50x100 cm



## NORTH SEA SHIPPING HEADQUARTERS

Location:  
BAKKASUND, NORWAY

System:  
STRUCTURE IT-S INVISIBLE

Quantity/Format:  
1800 sq m – 120x60 cm



## UNIVERSITY OF NEBRASKA MEDICAL CENTER

Location:  
OMAHA, UNITED STATES

System:  
STRUCTURE IT-S INVISIBLE

Quantity/Format:  
5000 sq m – 120x120 cm

## FORMER POLICE OFFICE

Location:  
SWEDEN

System:  
STRUCTURE IT-M APPARENT

Quantity/Format:  
4000 sq m – 60x60 cm





TORONTO OTTAWA MONTREAL LAVAL BROSSARD QUEBEC HALIFAX

[ceragres.ca](http://ceragres.ca)