

# KeraTwin® Façade

UK Projects  
Selection

 **EH Smith**  
Specialist Façades Ltd

AGROB  
BUCHTAL 





# Hytect coated ceramic for light-active façades.

## Focus on façades

For several years, the commitment towards energy-efficient buildings has led to a range of problems with façades turning green on account of algae and moss. Environmentally-friendly use of natural resources makes sense but must not stand in the way of economic aspects such as maintenance and operating costs across the entire life of the building. Not to mention the use of chemicals which are detrimental to the soil.

## Intelligent solutions

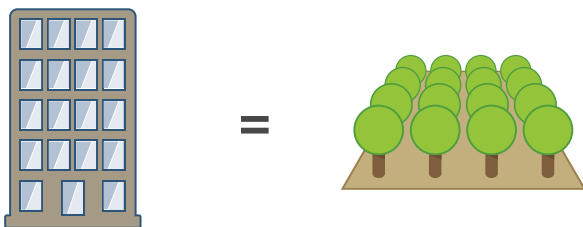
Each building also contributes to the individual micro-climate of its environment, whereby complex interactions are possible between the building and its respective surroundings. Within the context of sustainable building, the use of innovative materials offers entirely new and intelligent solutions for designing extremely positive effects of a building on its environment.

## Sustainable efficiency

One convincing example is represented by façade ceramics featuring the revolutionary Hytect coating. Hytect coated ceramic helps to

- **actively break down air pollutants, industrial and car fumes,**
- **decisively impede the growth of moss, algae, mould and other microorganisms,**
- **significantly reduce and facilitate the cleaning effort associated with the façade surface.**

**And all of this simply through the effects of light!**



1,000m<sup>2</sup> of façade ceramics featuring Hytect clean the air as effectively as a small deciduous wood.

# Hytect breathable air made **clean**.



## Activated by light

Hytect technology works without any further chemical treatment – and therefore without any detriments to human health. When exposed to light, the titanium dioxide in the surface glaze triggers a simple physical reaction referred to as photocatalysis. This process releases activated oxygen on the surface which can significantly decompose industrial and car fumes such as  $\text{NO}_x^*$  from ambient air.

## Active air cleaning

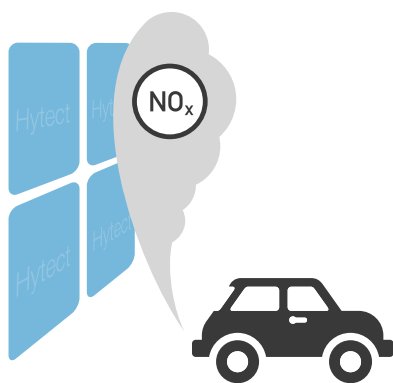
The photocatalytical process acts like an air freshener here: when pollutant molecules come into contact with the façade surface, titanium dioxide as a light-activated catalyst immediately transforms them into mineral salts which are entirely harmless and which are then simply washed away the next time the tiles are cleaned. This significantly improves the air quality in the vicinity of the building.

## Naturally effective

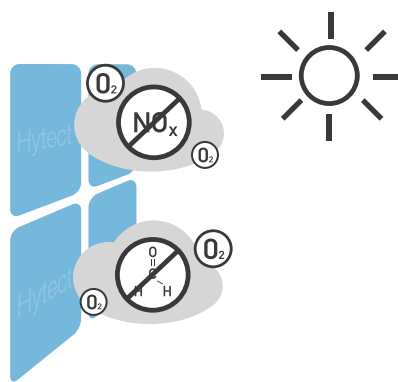
This unique characteristic makes HT-coated façades an ideal choice for planners and architects when it comes to designing new buildings or modernising the façades of existing ones – particularly in urban environments. An innovative decision of long-term significance for the environment!

\*  $\text{NO}_x$  is an irritant gas which penetrates far into the lungs and can cause damage to the mucous membranes. It is transferred with HT into a water-soluble form which is then washed out of the air by humidity and rain.

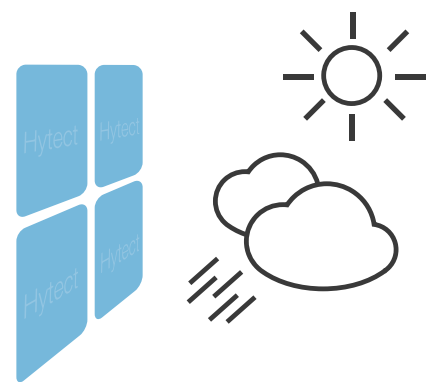
## Degradation of pollutants:



**1** Pollutant molecules such as nitric oxides come into contact with the ceramic surface.

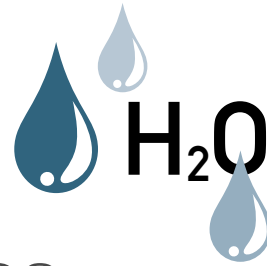


**2** Through light and with the aid of the catalyst, the activated oxygen converts pollutants into harmless compounds.



**3** These harmless compounds are released into the air.

# Hytect **light-active** to combat soiled façades.



## The weather is always on your side

Sunlight permits particularly intensive photocatalysis. The antibacterial effect breaks down algae, fungi and moss. When it rains, the following happens: water does not form droplets or balls ("lotus effect") which ineffectively pearl off or dry leaving unattractive marks but rather a wafer-thin film is formed. This self-washing effect rinses off dirt and soiling.

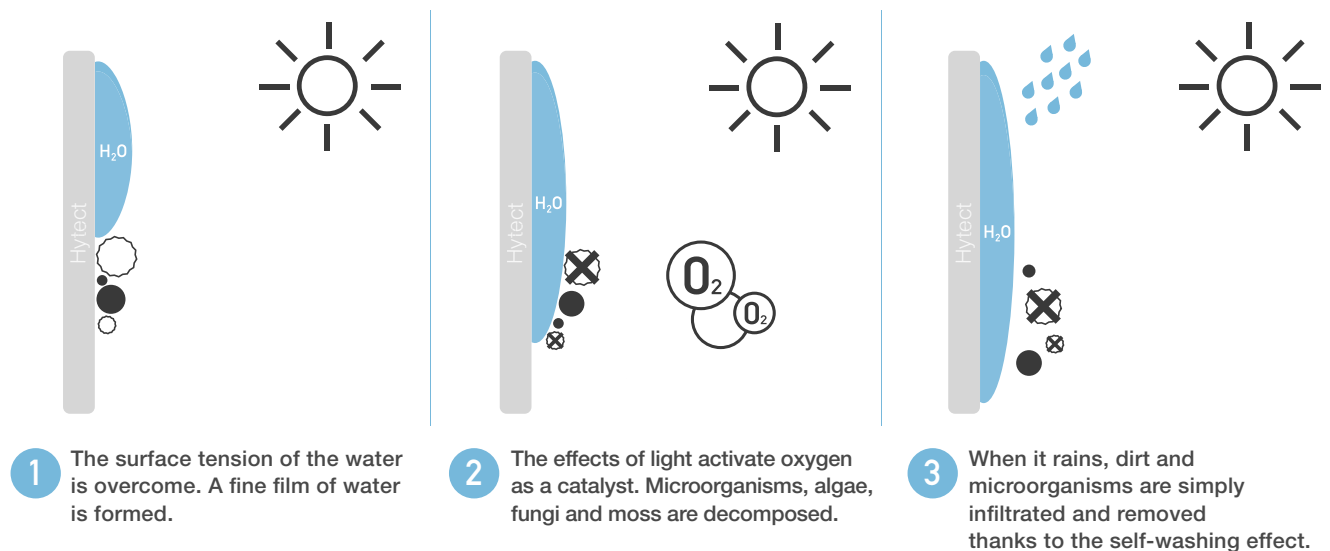
## Effectively inexpensive

The distinctive self-washing effect means that Hytect effectively reduces the costs of cleaning across the entire service life of coated façades. This surface makes HT-coated façades an ideal coating for any building exterior.

## Active against dirt

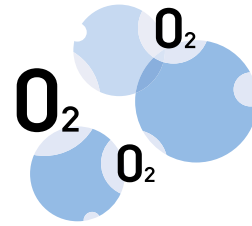
This water film ensures that even the tiniest particles of dirt and stubborn residue which is difficult to remove under normal conditions are thoroughly infiltrated, detaching them from the surface. The result is a clean surface.

## Self-washing effect:





# Hytect **light-active** against mould, moss and algae.



## No greening

The activated oxygen on the surface of the Hytect coated façade released by the photocatalytical process effectively breaks down moss, bacteria, fungi, algae and mould. At the same time, the formation of new microorganisms on the surface of the façade is effectively impeded. This effect is scientifically confirmed by tests conducted by independent research facilities.

## Constantly effective

The effect of reducing microorganisms is continuously renewed as soon as the Hytect coated façade is exposed to light. And this continues across the entire life of the building. With the result that the façade is permanently protected from greening without using any harmful biocides. And the effort associated with cleaning measures is significantly reduced.

## Active against microorganisms

Hytect activates oxygen in the air in a photocatalytical process which decomposes microorganisms such as algae and moss. At the same time, new growth is effectively impeded, whereby Hytect is entirely non-toxic and free of irritants.

# Hytect ceramic: **safe, long-lasting – efficient.**

## Product guarantee by Deutsche Steinzeug

During the production process, the Hytect coating is bonded permanently at a high temperature with the façade surface – making it practically indestructible. This is even covered by our unique long-term guarantee!

## The positive tile properties are retained.

Tiles are:

- colour- and light-fast
- incombustible
- free of emissions and solvents
- resistant to chemicals
- antistatic
- thermally conductive

## Optimised ceramic

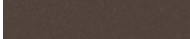
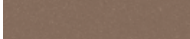
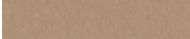
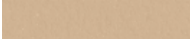
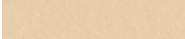















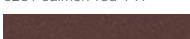




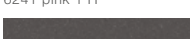
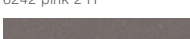
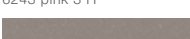
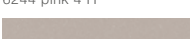
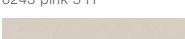
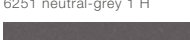
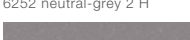
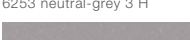
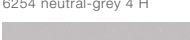
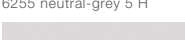


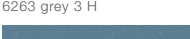









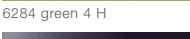
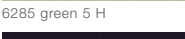
Façade ceramics for use on buildings have long been materials displaying outstanding product characteristics. They are light-fast over the long term, entirely impervious to wind and weather and therefore practically wear-free. In the case of the Hytect coating, the outstanding properties displayed by ceramic are decisively optimised.

## Naturally safe







As a natural substance, titanium dioxide is harmless and can be found in toothpaste, food or medication, for example. In the factory, it is permanently burned into the glaze at a high temperature thereby bonding firmly with the surface.

# GLAZED

## 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

## Contrasting colors glazed, glossy

				
150 lemon-yellow H	151 orange H	152 apple-green H	153 violet H	154 contrasting red H
				
144 intense blue H				

Pantone, RAL and BS colours available  
including hand glazed finishes.

## Design glazed

### Stone

NEW

NEW



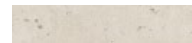
1185 Savona lime H



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

### Cement



1140 Construct 1 H



1141 Construct 2 H

### Metal



1180 Metal 1 H



1181 Metal 2 H



1182 Metal 3 H

NEW



1190 Metallic 1



1191 Metallic 2



1192 Metallic 3

NEW



1155 vertical Streetlife rust H



1156 horizontal Streetlife rust H

### Wood

NEW

NEW



1145 Oak cream oak H



1165 Driftwood grey-brown H



1170 Bosco 1 H



1146 Oak natural oak H



1171 Bosco 2 H



1147 Oak anthracite oak H



1172 Bosco 3 H





## Glazed



Keele University  
1200 x 400mm • Ref: 6285 Green



Telegraph Works, Greenwich  
200 - 1200 x 230mm • Ref: Various Greens, Orange, Red (K20)



Old London Rd, Kingston  
300 x 1600mm • Ref: Patina Glossy (K20)





Abbey Mill, Reading  
400 x 200mm • Ref: 4832 (K3)



City Village, Coventry  
900 x 150mm • Ref: 161048 Blue (K20)



New UnionWharf, London, 1119 x 205mm  
1119 x 205mm • Ref: 160138,160144,160146,160405 (K20)

## Glazed



Sainsbury's, Nine Elms  
255 x 400mm • Ref: Matt Grey (K20)



Vanston Place, Fulham  
400 x 230mm • Ref: 85056, Mauve Glossy (K20)



Nottingham Aerospace  
275 x 1200mm • Ref: Various Reds (K20)





Queensland Road, London  
400 x 200 & 150mm • Ref: 87619, 87521, 87522 (K20)



Grand Parade, Eastbourne  
300 x 1200mm • Ref: 1131 (K12)

## Glazed



Hale Village, London  
300 x 1200mm • Ref: Various Colours (K20)



Sainsburys, Bath  
300 x 600mm • Ref: 83876 stone (K20)



Finchley Memorial Hospital, London  
150 x 600 - 1200mm • Ref: 85904- 85909 (K20)





Strood Academy, Kent  
1200 x 300mm • Ref: 86043 Blue (K20)



Stourbridge College  
1200 x 400mm • Ref: 294 Black Grey (K18)



HIX, Manchester  
400 x 600 - 1200mm • Ref: Glossy Colours (K18)

## Glazed



Shrewsbury Grammar School  
900 x 300mm • Ref: Neutral Grey (K18)



Vantage Point, Milton Keynes  
750 x 292mm • Ref: 355291 (K18)



City Hospital, Derby  
500 x 250 & 225mm • Ref: 295 (K3)





West Quay, Newhaven  
600 x 280mm • Ref: 259657 Grey (K3)



Anglia University, Chelmsford  
500 x 250mm • Ref: 291, 292, 293, 259503 (K3)



City Gate House, Gants Hill  
500 x 250 & 200mm • Ref: 289 (K3)

## Glazed



Friend St, London  
284 x 600mm • Ref: 298 (K3)



Warwick House, London  
200 x 400mm • Ref: Light Grey (K3)



Oxted Health Centre, Surrey  
280 x 600mm • Ref: Various Creams (K3)





Sir John Lyon House, London  
260 x 1100m • Ref: various (K12)

## Glazed



Nottingham University  
980 x 305mm • Ref: 161129 (K20)



Ruskin Square, Croydon  
1000 x 205mm • Ref: 89258 Black (K18)



Apex House, Wembley  
900 x 205mm • Ref: 161110, 161117, 161115 (K20)





High St, Ascot  
600 x 80mm • Ref: 6221 Apricot (K3)



Barking Building 3  
Ref: Gloss Black 4530 (K18)



Leeds Student Village  
Ref: 6265 Light Grey (K20)

## Glazed



Edmund St, Birmingham  
600 x 250mm • Ref: 293 (K3)



Rochester Academy, Kent  
1192 x 305mm • Ref: Burgundy (K20)



Barking Building 2  
Ref: 85214 brown & 85908 Yellow (K18)





Isledon Road, London  
Ref: Various (K3)



Western Avenue, Poole  
450 - 1100 x 250 & 400mm • Ref: St Regis (K18)



Electron House, Docklands  
Ref: 290 White (K12)




## UNGLAZED

Pantone, RAL and BS colours available  
including hand glazed finishes.

### 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

### 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





City Village, Coventry  
900 x 190mm • Ref: 403 Unglazed Red

## Unglazed



Aldi, Denbigh  
392 x 250mm • Ref: 403 (K20)



Keele University  
1350 x 300, 400, 500mm • Ref: 415 Vulcan Grey (K20)



Bebington Police Station  
492 x 255mm • Ref: 414 (K20)





Windmill Lane, London  
400 x 200mm • Ref: 403 Red (K3)



Nottingham Hospital  
900 x 150mm • Ref: 418 Brown



Hagley Road, Birmingham  
600 x 200mm • Ref: 419 (K20)

## Unglazed



Woodberry Down, London  
205, 230, 255 x 1130mm • Ref: 415 (K20)



CBX 500, Milton Keynes  
800 x 200mm • Ref: 405 (K12)



Premier Inn, Malvern  
500 x 300mm • Ref: 414 Light Grey (K20)





Swindon Health Centre  
500 x 240mm • Ref: 403 Red, 408 Red Brown, 411 Ochre,  
412 Salmon, 102069 Red (K3)



The Bridge, Dartford  
300 x 300mm • Ref: 415 Vulcan Grey (K3)



Imperial West, London  
1500 x 302mm • Ref: Various Salmon (K20)



## Unglazed



Balham Hill, London  
950-1350 x 190, 240, 490mm • Ref: 103291, 103283 (K20)



SNAC, Southampton  
600 x 155mm • Ref: 103311 (K20)



Orchard Hotel, Nottingham  
1400-900 x 150mm • Ref: 418, 103314, 103333 (K20)





Emmanuel College, Cambridge  
300-1350 x 300mm • Ref: 103387, 103372, 103075, 102736 (K20)



Bath University  
800 x 400mm • Ref: 103024 (K20)



Elmwood House, London  
1000 x 300 & 150mm • Ref: Various (K20)

## Unglazed



YMCA, Croydon  
434 x 194mm • Ref: 414 Light Grey, 402 Salmon Red (K3)



Pembury Hospital, Kent  
600 x 300mm • Ref: 4362 (K15)



Walthamstow Fire Station  
217 x 229mm • Ref: 412 Salmon, 390 Buff (K15)





Glory Park, High Wycombe  
600 x 280mm • Ref: 403 (K3)



Sainsburys, Hythe  
400 x 200mm • Ref: 411 Ochre (K3)



Arlington Road, Poole  
900 x 230mm • Ref: 418 (K20)

## Unglazed



Yell.Com, Reading  
500 x 250mm • Ref: 410 (K3)



Cressex School, High Wycombe  
600 x 250mm • Ref: 415 (K15)



Skinners Academy, London  
1200 x 300mm • Ref: Various Red (K18)





Canada Water, London  
480 x 310mm • Ref: 403 (K15)



Queen Alexandra Hospital, Portsmouth  
600 x 230mm • Ref: 402, 403 Various (K3)



Hatton Gardens, Liverpool  
600 x 254mm • Ref: 405 Light Grey (K3)



## Unglazed



Manor Rd, Teddington  
1200 x 300mm • Ref: Patina Green (K18)



Abbeygate, Milton Keynes  
473 x 250mm • Ref: 410 (K3)



University of Wolverhampton  
600 x 300mm • Ref: 403 (K3)





City Village, Coventry  
900 x 190mm • Ref: 403 (K20)

## Unglazed



Franciscan Way, Ipswich  
400 x 250mm • Ref: 403 (K3)



Ladymead Retail Park, Guildford  
600 x 280mm • Ref: 404 Brown (K20)

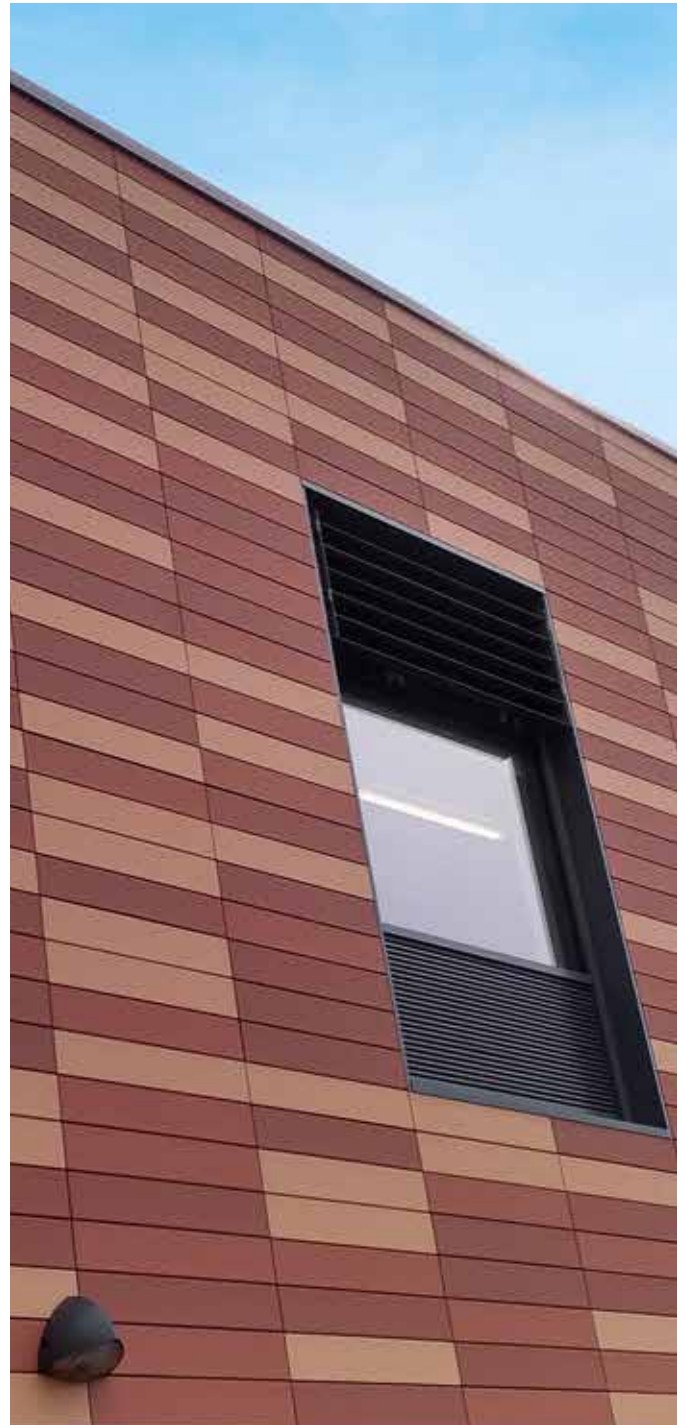


Milton Park, Didcot  
750 x 270mm • Ref: 403 N (K1)





Travelodge, Norwich  
400 x 200mm • Ref: 403 Red (K3)



Park Primary School, London  
1180 x 205mm • Ref: 403,404 & 412 (K20)



St Andrews, Norwich  
600 x 200mm • Ref: 403 Red (K3)

## Unglazed



Allesley St, Birmingham  
715 x 250mm • Ref: 413 & 415(K20)



Cornwall House, Birmingham  
436 x 169mm • Ref: 403 (K3)



Blakenhall Gardens, Wolverhampton  
1350 x 205mm • Ref: 103215, 102976, 103338 (K20)





HIX Surbiton  
1200 x 300mm • Ref: 101493 Light Grey, 411 Buff (K18)



Wolverhampton Interchange  
1350 x 300mm • Ref: 410 (K20)



Aston University, Birmingham  
500 x 220mm • Ref: 403 (K3)

# SPECIALS

## SpectraView glazed, silky-matt



6201 cream 1



6202 cream 2



6203 cream 3



6204 cream 4



6205 cream 5



6211 yellow 1



6212 yellow 2



6213 yellow 3



6214 yellow 4



6215 yellow 5



6221 apricot 1



6222 apricot 2



6223 apricot 3



6224 apricot 4



6225 apricot 5



6231 salmon-red 1



6232 salmon-red 2



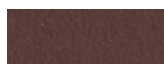
6233 salmon-red 3



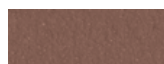
6234 salmon-red 4



6235 salmon-red 5



6241 pink 1



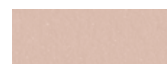
6242 pink 2



6243 pink 3



6244 pink 4



6245 pink 5

## Contrasting colors, glazed, glossy



150 lemon-yellow



151 orange



152 apple-green

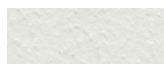


153 violet



154 contrasting red

## Natura unglazed



407 white\*



410 cream



411 ochre



412 salmon



396 salmon-red



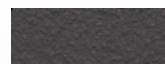
414 light-grey



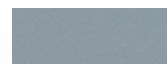
409 iron-grey



415 vulcan-grey



419 black\*

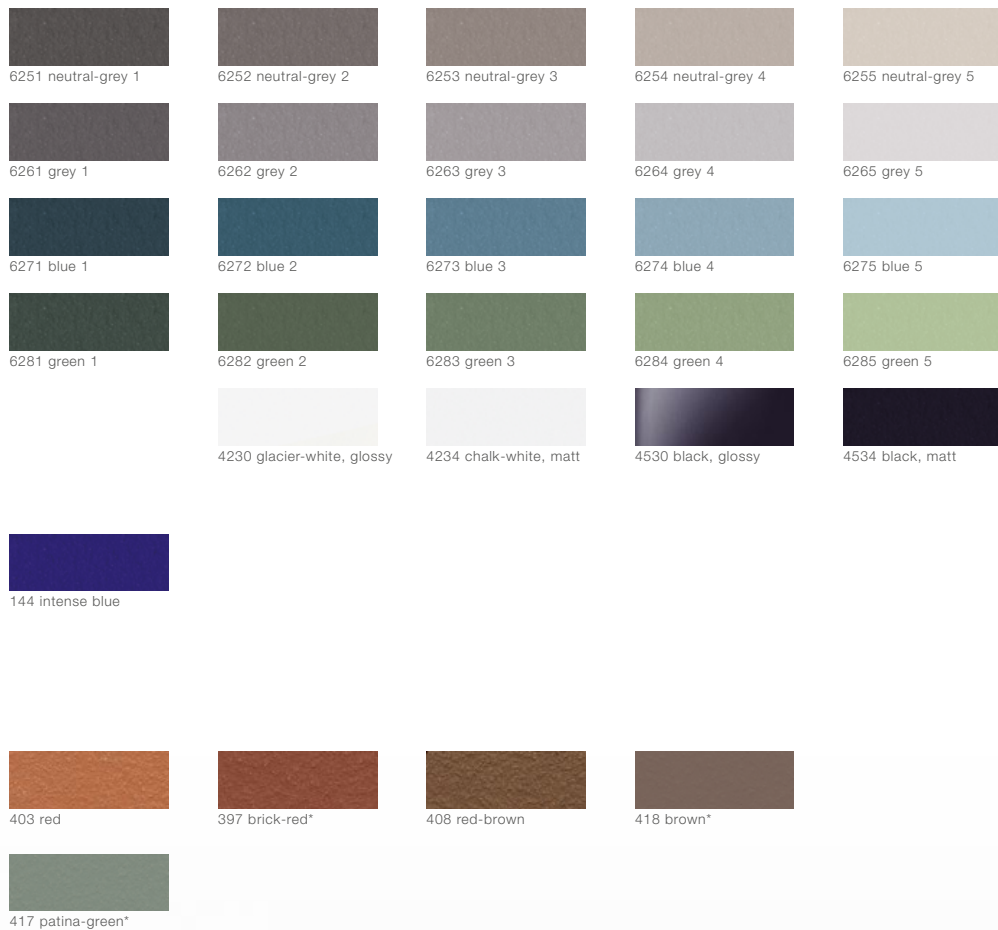


416 smoky-blue\*





Pantone, RAL and BS colours available  
including hand glazed finishes.



## Specials



Jerwood Gallery, Hastings  
500 x 2525mm • Ref: Metallic Pewter Glazed (K18)



Wilko, Doncaster  
500 x 200mm • Ref: Pewter Hand Glaze (K18)





Tate Gallery, St Ives  
Ref: Hand Glaze and Special Shape (K18)



Eureka Park, Ashford  
Grooved 485 x 280mm • Ref: 101938 (K3)



Caernarfon Station  
1092 x 500mm • Ref: 1152 Quarzit (K20)

## Specials

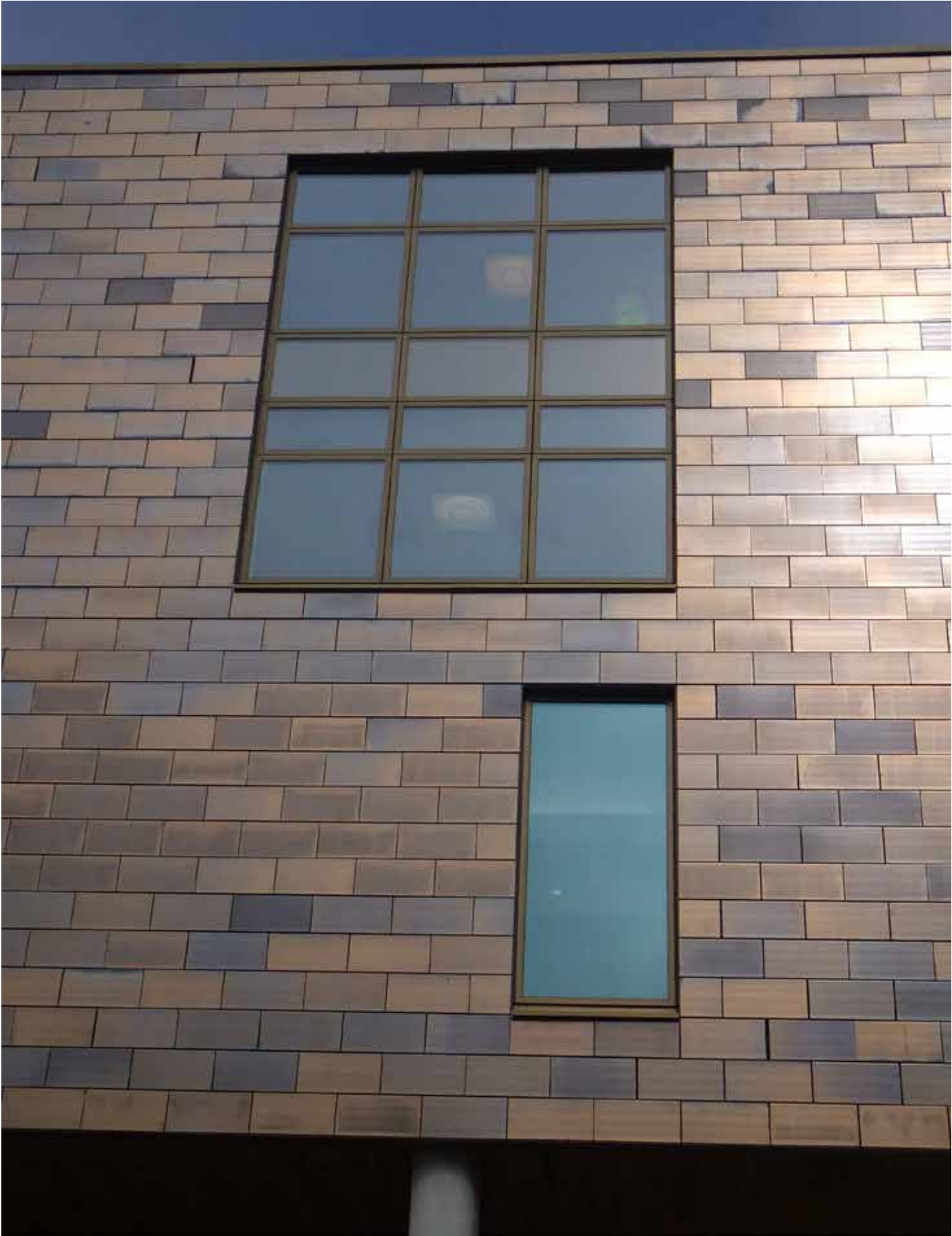


The Slot, Manchester  
Glazed Baguettes 500 - 1200mm



St Andrews, Norwich  
600 x 200mm • Ref: Grooved (K3)





QE2 Hospital, Welwyn Garden City  
600 x 300mm • Ref: Hand Glaze Gold Crystalline (K18)

## Specials



Woodberry Down, London  
905 x 200mm • Ref: Pewter Hand Glazed (K20)



Hatton Gardens, Liverpool  
Grooved 600 x 250mm • Ref: 405 (K3)





Saville Row, London  
300 x 300mm • Ref: Hand Glazed (K18)



Balham Hill, London  
Baguettes and Special Square Edge Tile (K20)

## Specials



Skidders Academy, London  
Baguettes



Raddison Blu Hotel, East Midlands Airport  
Stripy 300 x 600 - 1200mm • Ref: 411 (K18)





Finchley Memorial Hospital, London  
Glazed Baguettes 500 - 1200mm

## Specials

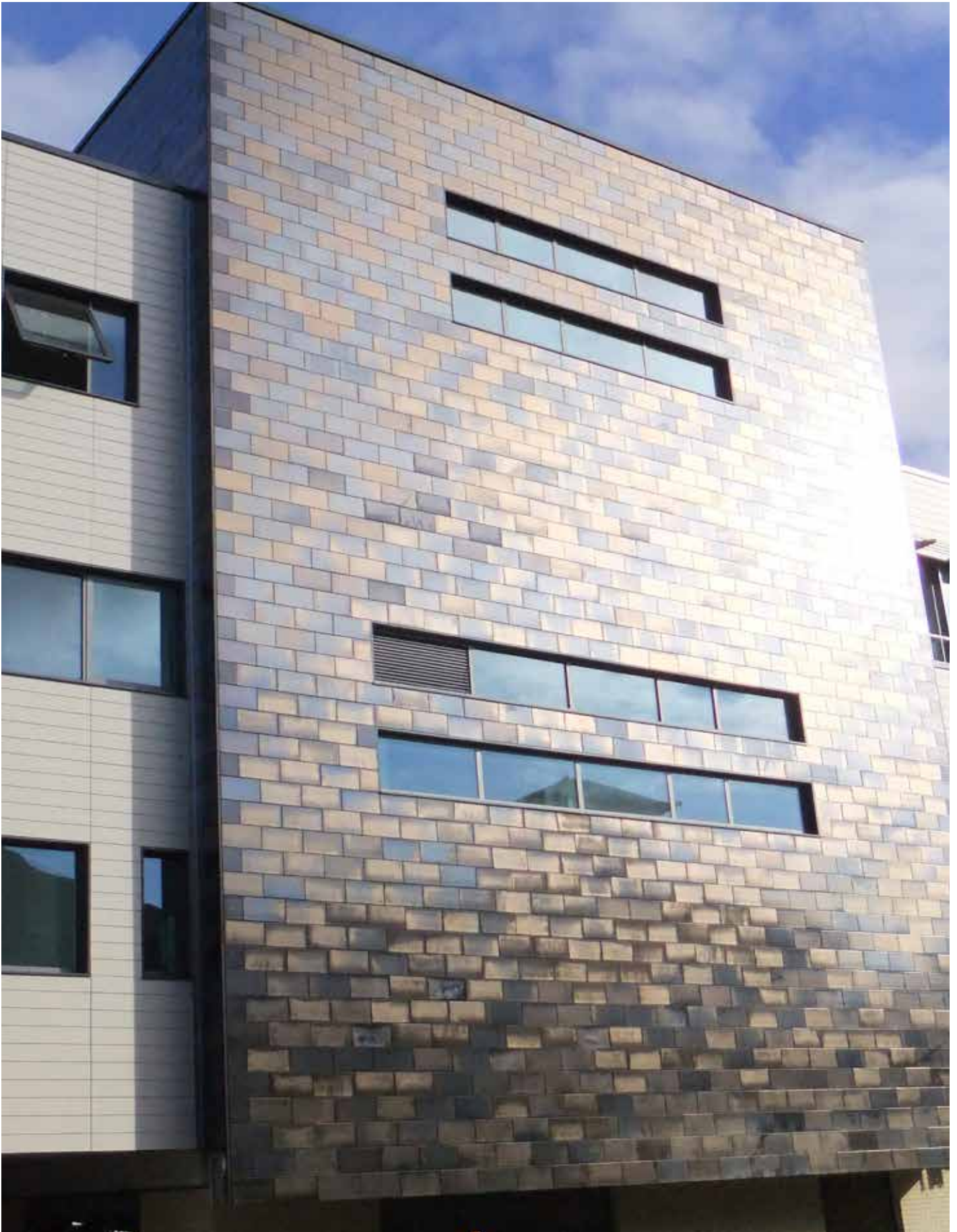


St Ives, Cornwall  
Special Hand Glaze (K20) • RIBA South West and National Award 2018



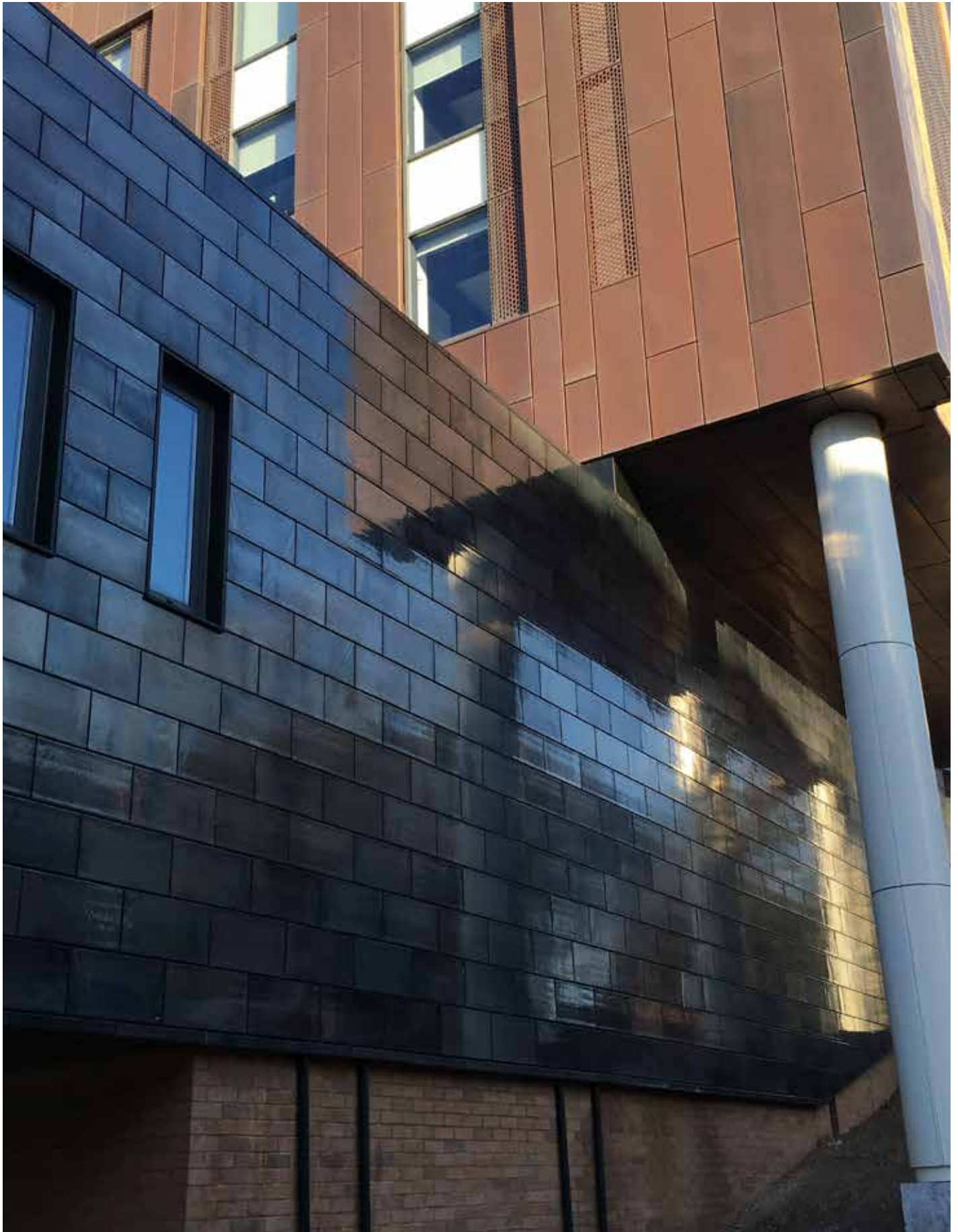
Saville Row, London  
300 x 300mm • Ref: White Engobe (K18 & K20)





Law Courts, Chelmsford  
Bespoke Hand Glazed (K18)

## Specials

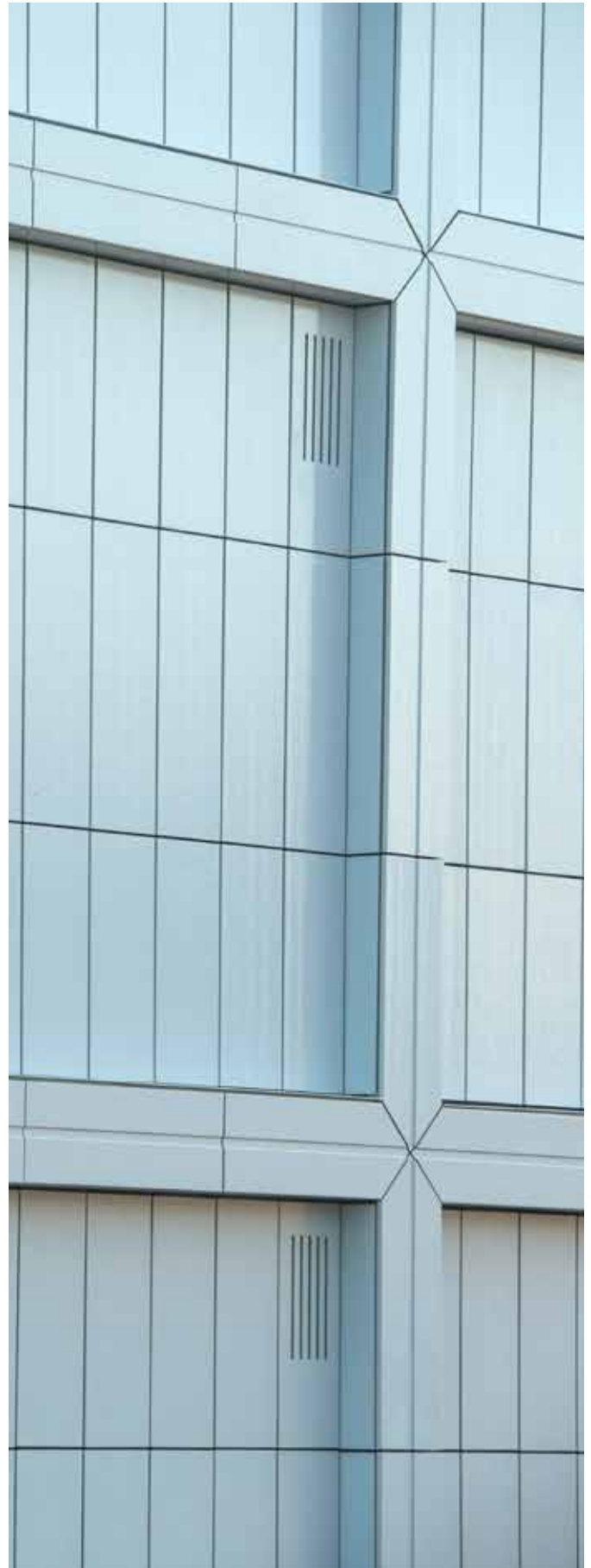


Chamberlain Halls, Birmingham  
Bespoke Hand Glazed (K18)



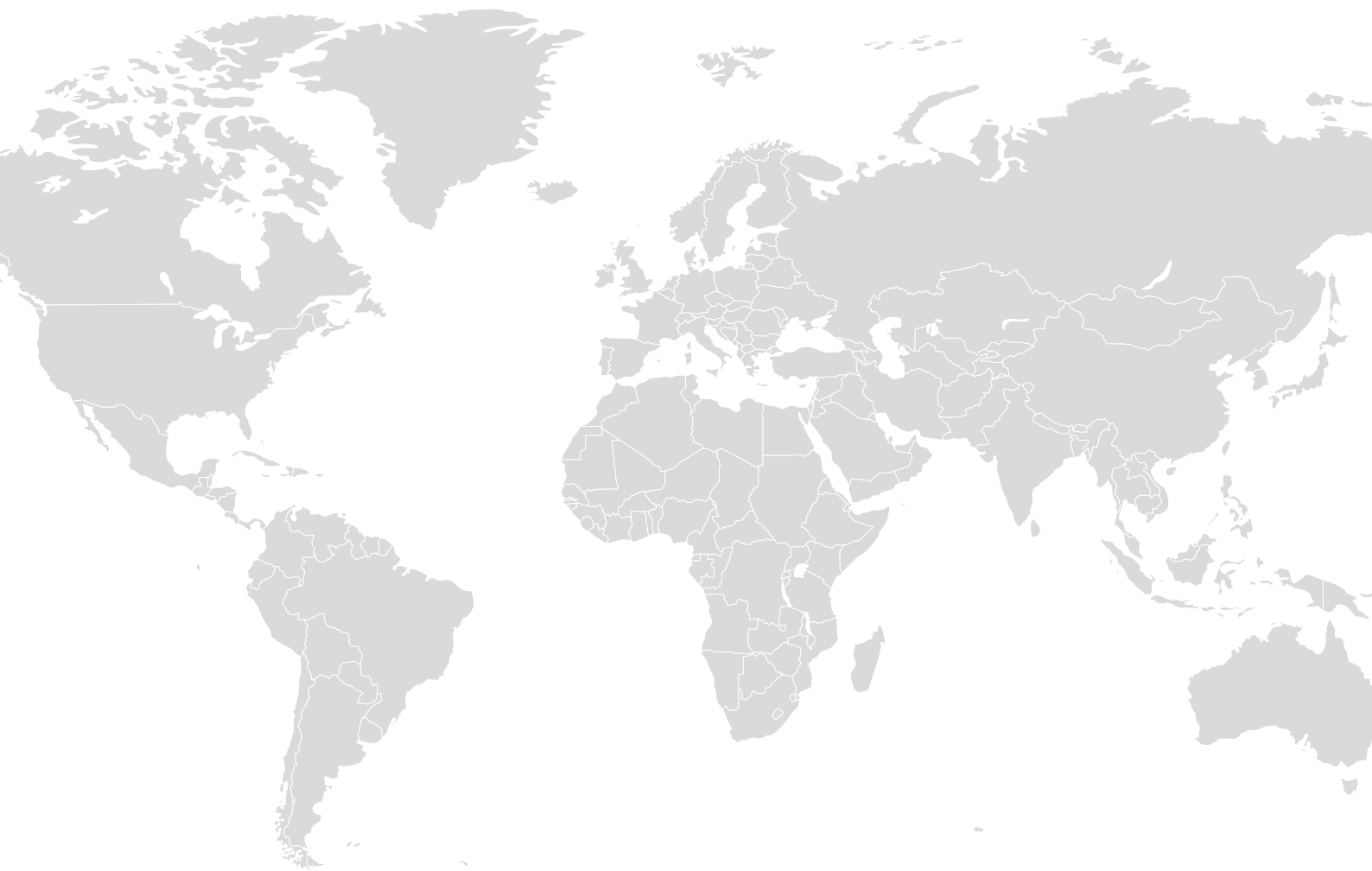


Woodberry Down, London  
1130 x 205mm • Ref: 415 Grooved (K20)



City Village, Coventry  
Grooved, Brushed and Cruciform (K20)

# AGROB BUCHTAL INTERNATIONAL PROJECTS







Handan Service Centre, China  
500 x 280mm • Ref: 403 (K20)



## Agrob Buchtal International Projects



Eden Business Park, Italy  
3D baguettes



Jurubatuba, Brasil  
Ref: 412 & 410





Ljburg Apartments, Netherlands  
185 x 540mm • Ref: 402, n296, n297 (K15)



Administrative Building, Netherlands  
657-1322 x 305mm • Ref: 154,6233, 6231 (K20)



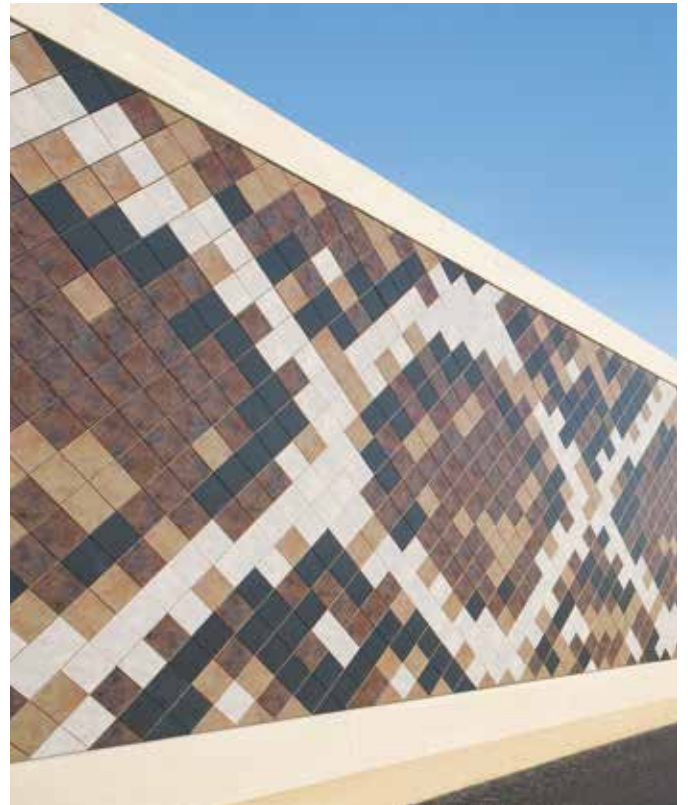
Piliamiestis, Lithuania  
300 x 500, 1200 x 900mm • Ref: 6201 (K20)



## Agrob Buchtal International Projects



Sonaville Apartments, Netherland  
200 x 500mm



Slangenwand, Netherlands



Office Building Sky Deutschland AG, Germany  
1200 x 300 & 305mm





Societe de transport, Montreal  
1179 x 205mm • Ref: 150, n415



The Viridan Apartments, USA  
930 x 305mm • Ref: 103362, 103605, 6204, 87038



Infirmiry du Quebec, Canada  
1192 x 205mm • Ref: 4230

EH Smith  
Specialist Façades  
Westhaven House  
Arleston Way  
Shirley, Solihull  
B90 4LH  
Phone: +44(0)121 713 7200  
E-Mail: [facades@ehsmith.co.uk](mailto:facades@ehsmith.co.uk)  
Internet: [www.ehsmithfacades.co.uk](http://www.ehsmithfacades.co.uk)



AGROB BUCHTAL GmbH  
Buchtal 1  
D-92521 Schwarzenfeld  
Phone: +49(0)94 35-391-0  
E-Mail: [agrob-buchtal@deutsche-steinzeug.de](mailto:agrob-buchtal@deutsche-steinzeug.de)  
Internet: [www.agrob-buchtal.de](http://www.agrob-buchtal.de)

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