

02

Flexible Silicone & Acrylic Finishes





Flexible Silicone & Acrylic Finishes

The current shortage of traditional tradesmen has recently led architects to re-evaluate the use of renders as an aesthetically pleasing option for external finishes. With the vast choice of colours and textures offered within the WBS range, architects are now able to widen their scope and unleash their creative flair when designing prestigious buildings that require a rendered finish.

The Silicone & Acrylic range of products have an unrivalled track record in Europe and are becoming increasingly popular in the UK due to their superb quality, ease of application and vast colour range.

The flexible anti-crack formulation and UV resistant pigments allow for large areas to be seamlessly rendered with perfect colour consistency.

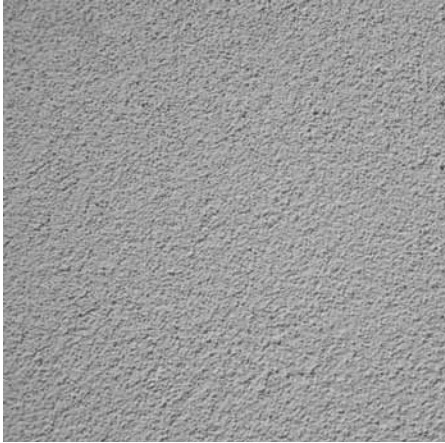
As well as being an excellent finishing coat to an external wall insulation system, silicone and acrylic renders are suitable for application to thin-coat or thick-coat render only systems.

This versatility allows the products to be specified with confidence to enhance virtually any substrate, giving dull and tired looking structures a new lease of life.



Available Finishes

WBS silicone and acrylic finishes are available in four standard grain sizes in the 'K' range and two grain sizes in the 'R' range, however other grain sizes can be acquired on request.



1.0mm 'K'



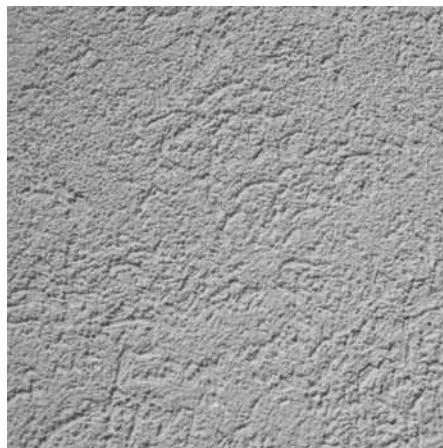
1.5mm 'K'



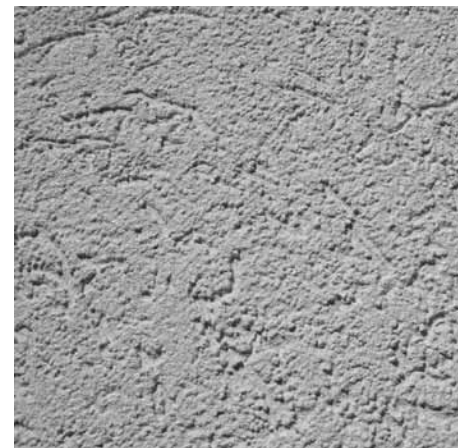
2.0mm 'K'



3.0mm 'K'



1.5mm 'R'



2.0mm 'R'

The Benefits

- Anti-crack capabilities / properties
- Eliminates the need for on-site mixing
- Exceptional weatherproofing properties
- UV stable
- Vapour permeable allowing the release of excess condensation
- High levels of impact resistance
- Can be applied to a wide variety of substrates
- Low maintenance with self cleaning properties
- Excellent adhesion and ease of application
- 50 year track record throughout Europe
- Manufactured to ISO9001

Silicone 'VS' Acrylic

	Acrylic	Silicone
Range of colours available	★★★★	★★★
Cost	★★★	★★★
Flexibility	★★★★★	★★★★★
Ease of application	★★★★	★★★★
Water repellence	★★	★★★★★
UV stability	★★★	★★★★★
Dirt repellence - self cleaning properties	-	★★★★★
Vapour permeability - allowing system to breathe	-	★★★★★
Anticipated life span	-	★★★★★

The WBS Colour Mixing System

The WBS Colour Mixing System allows the tinting of white base products (from standard emulsion paints to technically advanced silicone & acrylic coatings) to produce literally hundreds of different colour shades.

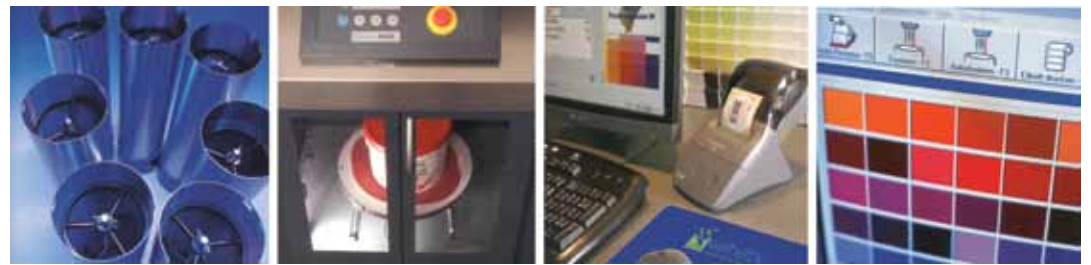
State of the art computer controlled dispensing ensures that the accuracy of repeat tinting is guaranteed and that maximum quality control is adhered to.

The Standard Colour Chart offers 100 of our most popular shades, however the more comprehensive Colour Swatch contains approximately 380 shades with all colours based on the NCS Colour System.

It is also possible to tint to BS4800, RAL and other manufacturer's colours.

Why not take advantage of the WBS Colour Matching Service?

Perfect for refurbishment and renovation projects, our aim is to gain the closest match possible to your existing substrate/material, be it brickwork, stonework, timber or concrete which will allow you to achieve a well blended finish.



Colour Samples

Due to the vast range of colours, all of our silicone & acrylic texture samples are initially supplied on a hand-sized pre-textured board, over-painted with the colour(s) of your choice.

The top right hand corner is purposely left unpainted to show the detail of the actual texture. This gives the opportunity to quickly narrow down your choice of colour and texture.

For larger projects, once you are satisfied with your choice of colour, we would then look to produce larger 'through-colour' product samples for the benefit of architects / on-site display / client purposes.



Note: If you are considering using a relatively dark colour on an insulated render system the **Lightness Value** of the colour chosen is of particular importance.

For further details, please contact **WBS TECHNICAL SUPPORT** on **08458 382380**.

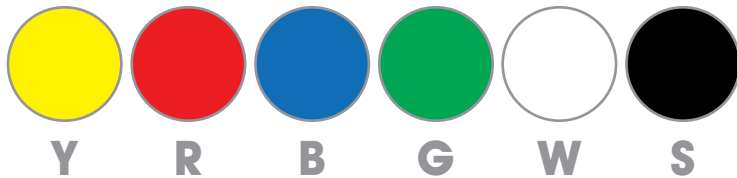


The NCS-Natural Colour System[®][©]

When it comes to choosing a colour for a silicone or acrylic render, there are literally hundreds to choose from. It is easy to understand therefore, that to easily identify a specific colour, a widely recognisable colour scheme must be utilised.

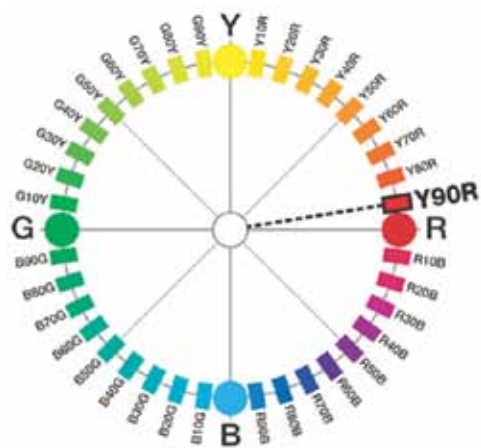
When referencing colours, Wetherby use the Natural Colour System, as it is the only colour system that describes colours exactly as we see them, which is why it is easy to understand, logical and simple to use.

NCS Elementary Colours



The NCS system begins with six elementary colours; four chromatic elementary colours, Yellow (Y), Red (R), Blue (B) and Green (G), and two non-chromatic elementary colours, White (W) and Black (S).

NCS colour notations are based on how much a given colour appears to resemble two or more of these six elementary colours.



NCS Colour Circle

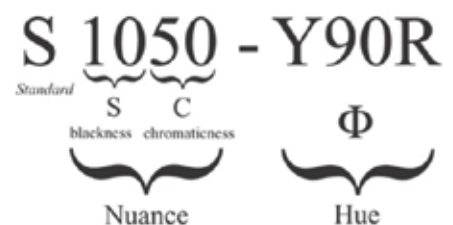
The NCS Colour Circle is a horizontal cut through the middle of the NCS colour space with the four chromatic elementary colours of yellow (Y), red (R), blue (B) and green (G) being placed as the four cardinal points as on the points of a compass. Each quadrant between two elementary colours is divided into 100 points of identical size (on our diagram every 10th point is shown). This results in 40 different hues around the circle which gradually merge into each other. For our example the hue Y90R is marked which reads as a yellow with 90% redness and 10% yellowness.

NCS Notations

The way in which NCS colours are written (their notation) follows a specific pattern – this is generally the letter 'S', followed by 4 numbers that indicate the colours nuance (i.e. the degree of resemblance to whiteness and blackness); and a letter, two numbers and another letter that indicates the hue, which describes the degree of resemblance between the four chromatic elementary colours.

The NCS notation shown in our example is 1050-Y90R. 1050 describes the nuance, i.e. the degree of resemblance from whiteness to blackness (which is 10%) and to the chromaticness (which is 50%). The hue Y90R describes the degree of resemblance between Yellow and Red (Y and R). Y90R describes yellow with 90% redness and 10% yellowness.

Pure grey colours have no hue and are given nuance notations followed by -N to describe Neutral. The pure grey scale is a scale from white (0300-N) to black (9000-N).





Application Guide

Applied to brickwork, incorporating phenolic insulation & a silicone finish

Surface Preparation: When applying directly to existing brickwork / blockwork / rendered surface, the substrate should be brushed down to remove any friable material, algae or lichen and a generous coat of fungicidal wash applied.

If an insulation adhesive is not required, any ridges or protrusions should be removed and hollows filled to provide a flat surface.

Attach base rails & surface profiles.

Install all beads and trims using approved WBS fixings at a maximum of 300mm centres (depending on the substrate - please consult WBS technical department for assistance).

For uneven surfaces and installations over 3 storeys
Insulation boards should be both adhesively fixed to the substrate using WBS Insulation Adhesive and also mechanically fixed as below thereafter. Please consult WBS Technical Department for assistance.

Place first insulation board onto base rail and secure with approved WBS mechanical fixings at a rate of 8 - 9 fixings per m² in accordance with WBS fixing pattern. Continue with additional boards ensuring that a staggered laying pattern is adhered to. All boards must be interleaved at external corners. Joints should be tightly butted to eliminate thermal breaks and there should be no joints in boards at window or door openings.

Where the insulation boards butt up against dissimilar materials, WBS Sealing Tape should be affixed to the adjacent surface and the boards fitted tight against the seal to allow full compression of the tape.

● Mix scrim adhesive (as specified) to a pliable consistency and trowel apply an initial coat onto the insulation to a minimum of 4-6mm.

Bed in alkali resistant reinforcing mesh into top third of scrim adhesive, ensuring a minimum overlap of 75mm is achieved. Mesh should be kept taught and fixed from the top down. There should be no overlaps within 150mm of any reveal or corner.

Apply corner reinforcements and bed in additional stress patches (using 200mm x 200mm off-cuts of mesh) positioned at 45° to window and door openings. Fix surface render beads and dub out as required.

When scrim adhesive is dry, apply a secondary tight levelling coat of scrim adhesive at 2-4mm to the entire wall surface to ensure that mesh is fully covered. Smooth to a flat surface using a damp dry lining sponge (or similar) and allow secondary coat to dry fully before applying primer coat.

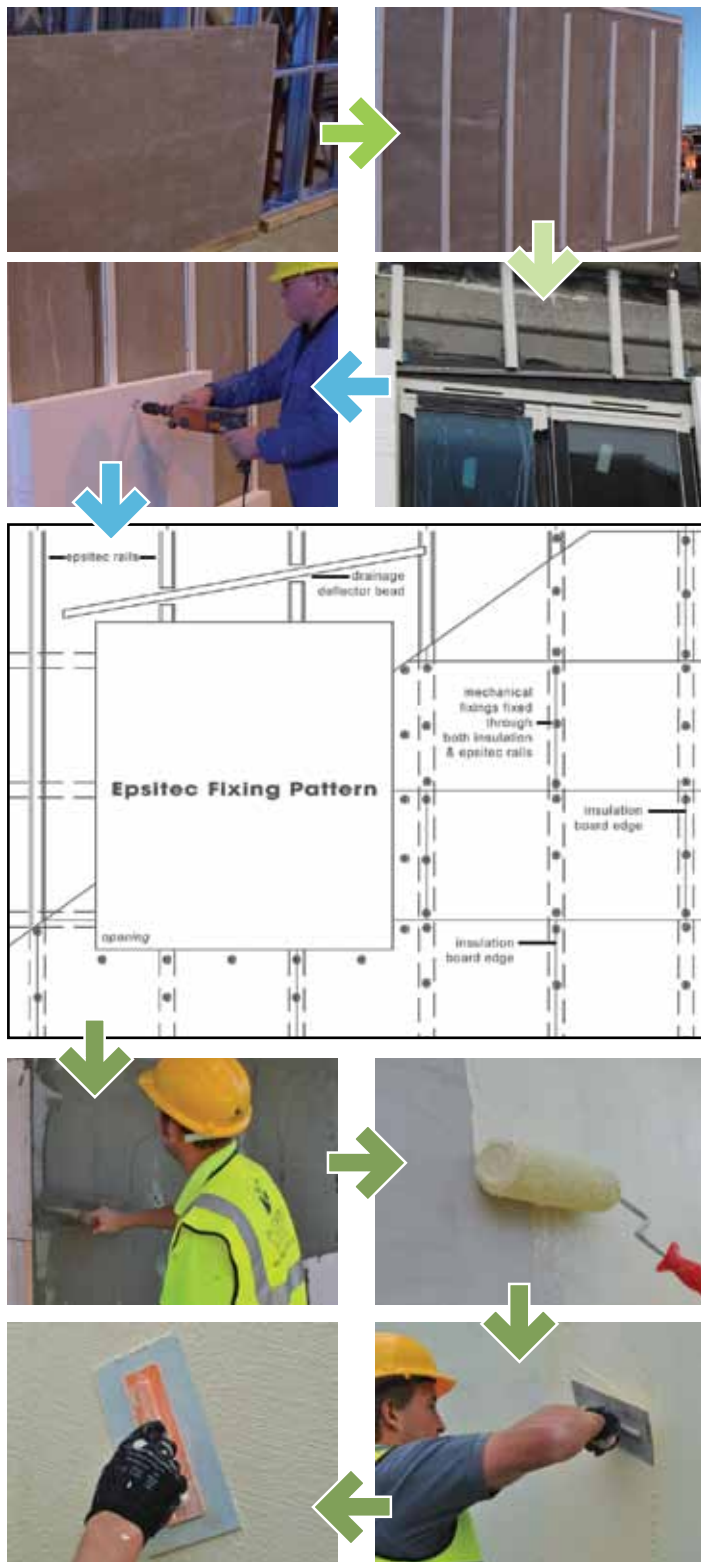
Thoroughly mix WBS primer (supplied in liquid form, ready for use, colour to match final texture coat) and apply over scrim adhesive with a roller and leave to dry.

Finally, thoroughly mix the pre-mixed WBS Silicone texture to a uniform consistency, using a clean, rust-free low speed mixer. Apply in a continuous motion always working to a wet edge.



Application Guide

Applied to steel frame, incorporating expanded polystyrene insulation & a silicone finish



Securely fix approved sheathing board to the steel frame, ensuring that the manufacturer's instructions are closely followed for fixing types, fixing pattern, joint widths etc.

Seal all board joints with WBS silicone sealant.

Attach base rails using approved WBS fixings at a maximum of 300mm centres.

Mechanically fix the EPSITEC cavity spacer track at a maximum of 600mm vertical centres using approved fixings. Ensure that fixings are applied to both sides of the spacer track at a maximum of 300mm vertical centres.

NB: extra track will be required around window and door openings.

The system may require packing / spacers to ensure that the boards will be to true line and level for required external plane. Ensure layout of track will fully support the insulation boards.

Mechanically fix drainage deflector beads at a min. 10° acute angle above all window and door openings.

Apply foam intumescent closer strips (fire stops) at specified vertical and horizontal positions using approved fixings.

Place first insulation board onto base rail and secure through spacer track with approved WBS mechanical fixings at a rate of 8 - 9 fixings per m² in accordance with the EPSITEC fixing pattern. (May also be fixed through sheathing board into steel frame, depending on position of steel frame fixings).

Continue with additional boards ensuring that a staggered laying pattern is adhered to. All boards must be interleaved at external corners. Joints should be tightly butted to eliminate thermal breaks and there should be no joints in boards at window or door openings.

Where the insulation boards butt up against dissimilar materials WBS Sealing Tape should be affixed to the adjacent surface and the boards fitted tight against the seal to allow full compression of the tape.

NB: All vertical board joints should be aligned with the spacer track

● Details on how to finish the system with a WBS Silicone Texture can be found on Page 7.

PLEASE NOTE: Do not apply silicone texture with different batch numbers on the same elevation and care should be taken to avoid texture changes at different levels.

To prevent staining of the finish coating, always ensure that the scaffold boards are free from dust before commencing application of the final coat.

If possible, entire sections or elevations should be coated in a single operation to avoid joint marks in the finish. Often this can be achieved by working to natural breaks in the building or changes in colour or texture. Prior to setting, polish with plastic float to give an even texture and remove any trowel marks.

Case Study: Silicone & Acrylic

Project Type:	Newbuild Apartments
Location:	Eden Square, Urmston, Manchester, M41 9UB
Client:	Ask Property Developments Limited
Architect:	Broadway Malyan, Manchester
Main Contractor:	Carillion Construction
System Installer:	Astley Façades
Finish:	WBS Silicone 1.5mm 'K'



Located within the Metropolitan Borough of Trafford, approximately six miles southwest of Manchester city centre, Urmston town centre is currently undergoing a £43 million transformation.

With an aim to help regenerate the area and create new jobs for the local community, the former council offices and adjacent vacant units were demolished to make way for various new mixed-use schemes. Phase 1 is now complete and the new modern retail centre boasts 14 new shops, 3 restaurants, a library, a substantial car parking area and 64 'city-style' residential apartments.

As well as providing an insulated render solution to the front face of the adjacent Sainsbury's supermarket, Wetherby also supplied a visually stunning render-only solution for the residential apartments, which are located directly above the thriving retail centre.

Constructed from timber frame and blockwork, the outer walls of the apartment blocks were firstly encapsulated in a Wetherby K&A basecoat with a reinforcing mesh suspended within to provide additional impact resistance. A coloured primer was then applied followed by a white 1.5mm 'K' silicone texture which gave the homes a bright, modern, weatherproof façade.

Case Study: Silicone & Acrylic

Project Type:	New Build - Leisure
Location:	Bluestone Holiday Village, Narbeth, South Wales
Client:	Bluestone Leisure Ltd
Architect:	Powell Dobson, Cardiff
Main Contractor:	Alfred McAlpine
System Installer:	Bluestone Resorts Ltd
System Used:	WBS Render Only System
Finish:	WBS Silicone 1.5mm 'K'



Situated near the town of Narbeth, at the heart of the Pembrokeshire Coast National Park in Wales, this £110 million, 5 star leisure village is the brain child of local entrepreneur William McNamara. This entire development is spread over two valleys and offers 182 timber frame lodges, cottages and studio apartments along with a variety of leisure facilities including a water park, indoor adventure centre, shops, a pub and fine dining.

Sustainability is the key to the Bluestone design and much focus has been placed on the care and enhancement of the surrounding natural environment. Designed by Powell Dobson Architects, a uniquely modern development was realised that incorporated bright, imaginative structures, yet still remained in keeping with the traditional Pembrokeshire style.

The vast majority of the accommodation lodges were manufactured in timber, however Wetherby were commissioned to provide a visually stunning external render solution for the one/two bedroom cottages and properties located within the 'village' area, the sports centre, swimming complex and wine bar.

The result was achieved by firstly mechanically fixing calcium silicate boards to the timber frame structures and applying an alkali resistant reinforcing mesh suspended into a layer of basecoat. Once dry, a coloured primer was applied over the basecoat, followed by a 1.5mm WBS Silicone Texture in a myriad of pastel shades which transformed the buildings resulting in bright, yet subtly modern external façades.



Case Study: Silicone & Acrylic

Project Type:	Social Housing Refurbishment
Location:	Priestman Point, Rainhill Way, Bow, London E3
Client:	Swan Housing Association
Architect:	PRP Architects Limited
Main Contractor:	Countryside Properties
System Installer:	Retrofit
System Used:	WBS Insulated Render System incorporating 100mm and 200mm Mineral Wool Insulation
Finish:	WBS 1.5mm Silicone 'K'



Built in the early 1970's the Crossways Estate was once referred to locally as 'The Pride of Bow' yet time has not been kind to the estate and it was considered to be in such a poor state of repair that the majority of the homes had to be demolished and rebuilt as part of an extensive regeneration project. The three tower blocks that dominated the area Mallard Point, Hackworth Point and Priestman Point were saved from demolition and are currently undergoing refurbishment.

Of the three blocks that directly overlook the Olympic Village, Priestman Point was the first to have been thermally and aesthetically transformed using a Wetherby Insulated Render System.

The structural engineer was insistent that the slabs of 100mm and 200mm Mineral Wool be securely anchored all the way back to the reinforced concrete frame which meant that specialist 370mm fixings were needed to be incorporated into the design to enable this.

Basecoat, primer and a 1.5mm silicone texture was then applied to the face of the insulation to provide a clean, weatherproof finish.

Case Study: Silicone & Acrylic

Project Type:	Residential Refurbishment
Location:	The Greenhouse, Beeston Road, Leeds 11
Client:	Citu
Architect:	West & Machell Ltd
Main Contractor:	Clegg Construction
System Installer:	K & E Peck
System Used:	Insulated Render System incorporating 130mm Phenolic Insulation
Finish:	WBS Silicone 1.5mm 'K'



Located in the South Leeds regeneration area known as Beeston Hill & Holbeck, the Greenhouse Project is without question the most challenging eco-friendly refurbishment project undertaken to date in the UK. By addressing environmental impacts, economic regeneration and social inclusion factors, this development clearly has sustainability at its core.

The designers were given the onerous task of transforming a very dated, solid brick 1930's art deco structure (known previously as Shaftsbury House, a common lodging for seasonal workers) into an inspiring, sustainable, carbon neutral development, providing 172 energy efficient 1, 2 and 3 bedroom eco-chic apartments that were not only extremely comfortable to live in, but inexpensive to run.

One of the key factors in this development was the design of the external wall insulation system which required a U-value of just 0.15 W/m²K to enable it to achieve Level 4 of the Code for Sustainable Homes. This ambitious target would ultimately offer a 60% overall percentage reduction in carbon dioxide emissions over current building regulation requirements and result in a considerable increase in thermal comfort and significantly lower energy bills for residents.

The WBS External Wall Insulation System incorporating 130mm Phenolic insulation was the only system that offered enough flexibility for it to be used on a development of this scale where refurbishment and new build techniques needed to be combined and a modern seamless façade was achievable regardless of the building's substrate.

Not only was the design of the wall areas critical but serious consideration was given to the areas where the system would interface with the new roof and other cladding elements, to enable the architect to achieve a watertight building envelope in as short a time frame as possible.

Although the majority of the building saw the insulation adhesively and mechanically fixed directly to the structure, the insulation solution for the internal courtyard area presented a serious challenge as large areas of steel frame infill panels also required insulating. This was overcome by the use of the **epsitec** Rail System which is the only UK accredited system to meet building guidelines onto steel frame structures. The combination of the **epsitec** Rail System along with the conventional rendered insulation system allowed the entire internal courtyard to be finished with the same striking aesthetical elements as the external façade, giving the building a truly seamless finish.



Case Study: Silicone & Acrylic

Project Type:	New Build Hotel
Location:	Ramada Encore Hotel, Locomotive Way, Derby
Client:	Ramcore Hotel Group
Architect:	ICA Architects
Main Contractor:	Speymill Contracts Ltd
System Installer:	MIB Façades (UK) Ltd
System Used:	WBS Insulated Render System incorporating EPS Insulation
Finish:	WBS Silicone 1.5mm 'K'



The Ramada Encore is a new boutique concept that combines simple yet stylish contemporary accommodation with a vibrant and upbeat design.

Designed for the mid-market with the everyday traveller in mind, the guest rooms are bright, spacious and minimalist offering wooden flooring, flat screen TVs, high speed internet access and market-leading wet-rooms. Central to the hotel is a hub lounge, bar and restaurant and three state of the art meeting rooms.

To compliment the stylish internal features it was necessary to provide a vibrant, modern façade that reflected the Clients forward-thinking ethos yet also offered a sustainable, energy efficient solution.

This particular project saw a pre-cast concrete frame dramatically transformed by the installation of a WBS Insulated Render System, incorporating varying thicknesses of Expanded Polystyrene Insulation (from 120mm to 240mm), that was directly fixed to the substrate to form features and a change in profile on some elevations. U-value achieved 0.28 W/m²K.

The upper three floors of the hotel were finished using predominately white WBS Silicone 1.5mm 'K' render however two of the elevations were given striking red decorative rendered panels (colour ref: RAL 3013) which is in itself a signature design feature of the Ramada Encore chain.

WBS Design & Specifications Advisory Service

In addition to our continuing success in supplying high quality materials at cost effective rates, Wetherby offer a complete **Design & Specifications Advisory Service**, enabling you to gain sound technical advice based on years of practical on-site experience.

Located across the UK, our technical personnel can advise on all aspects of the suitability of materials and systems, providing details, designs and specifications for the application of the products and also U-value calculations, condensation risk calculations and physical display samples for client consultation purposes.



- Comprehensive specifications
- Thermal calculations
- Full colour technical drawings in *.DWG or *.PDF format
- On site inspections and professional advice
- Tenant awareness presentations & regular liaison meetings
- Physical product samples
- Accurate budget costs supplied via our network of approved contractors



Specifications provided in NBS Format

For further details, please contact
WBS TECHNICAL SUPPORT on **08458 382380**.



wetherby
creating a greener future



Certification & Accreditation



■ epsitec External Wall Insulation Systems

B.B.A. Certificate No D9/4625 PS1

For use on sheathed lightweight steel-framed structures. The system incorporates phenolic insulation, specific reinforced renders and provides a 15mm wide drainage cavity. Minimum life expectancy 30 years.



■ epsiwall External Wall Insulation Systems

B.B.A. Certificate No D9/4625 PS2

For use on walls of solid masonry construction. The system incorporates phenolic insulation and silicone/acrylic reinforced renders. Minimum life expectancy 30 years.



■ epsicon External Wall Insulation Systems

B.B.A. Certificate No: 03/4058 PS1, PS2, PS3

For use on walls of solid masonry or concrete construction. The system incorporates a variety of insulants, reinforcements and decorative render finishes. Minimum life expectancy 30 years. expectancy 30 years.



Wetherby Silicone & Acrylic Systems

Covered DIBT European Technical Approval which is an EEC wide accepted equivalent to BBA standard.

Certificate Nos: 14-8.04.04-10/02, 14-8.04.04-12/02, 14-8.04.04-105/04



Wetherby Renders are manufactured and certified to ISO9002 - Certificate No 2478 and ISO9001 / ISO-14001 - Certificate No 12 100/1004 16976/2.



ISO9001 / ISO14001

Wetherby Building Systems are certified to Quality Standard ISO-9001 and Environmental Standard ISO-14001, Joint Certificate No UK9000006.



Energy Saving Recommended / Ofgem Approved

Many of our insulated systems are approved by the Energy Saving Recommended Scheme & Ofgem. Please visit our website for further details.



Industry Associations

Full members of the Insulated Render and Cladding Association and the National Insulation Association.

For further details, please contact
WBS TECHNICAL SUPPORT on **08458 382380**



01

Insulated Render Systems
// New Build



02

Flexible Silicone & Acrylic Finishes



03

WBS Brick Slip Cladding Systems



04

Insulated Render Systems
// Refurbishment



05

**Polymer Modified Renders
& Specialist Finishes**



06

**GRP Canopies &
Architectural Mouldings**



head office

1 kid glove road
golborne enterprise park
golborne
greater manchester
wa3 3gs

tel: 01942 717100
fax: 01942 717101

scotland

block 14
unit a11 coltness lane
queenslie industrial estate
glasgow
g33 4dr

tel: 0141 766 1767
fax: 0141 766 1768

kidderminster

unit 17a
hartlebury trading estate
kidderminster
worcestershire
dy10 4jb

tel: 01299 251666
fax: 01299 251003

south wales

unit 6
heol ty gwyn industrial estate
maesteg
mid glamorgan
cf34 0bq

tel: 08450 946397
fax: 08450 946398



www.wbs-ltd.co.uk
info@wbs-ltd.co.uk