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## C/S Wallglaze® Hygienic Coatings

for Healthcare Environments



### C/S WALLGLAZE® HYGIENIC COATINGS

### **COATINGS YOU CAN TRUST**

C/S Hygienic Coating Systems for walls and ceilings have been applied in healthcare environments for over 40 years. Their anti-microbial properties are highly effective in infection control of the coated surfaces. Different performance levels can be achieved by choosing the appropriate system for the project criteria.

Typically used in the full range of healthcare environments, as well as many other facilities, where durability, hygiene and maintainability are key requirements.

The durability of C/S Wallglaze<sup>®</sup> Hygienic Coatings is testimony to the quality of the products and their performance in clean environments means they can be trusted to help protect your facility for many years.



Operating theatres



X-ray areas



Wards and treatment rooms



Pathology laboratories



Mortuaries



Kitchens



Hydrotherapy areas



Corridors

### Company profile

Construction Specialties operate through 22 offices worldwide, and have key manufacturing locations or Sales Offices in most European countries.

The UK Head Office, based in Buckinghamshire, is the sales and manufacturing hub for servicing markets across the UK and Ireland (and parts of Europe), through a network of experienced and professional technical sales representatives.

Our product ranges include wall protection systems, entrance matting systems, specialist coatings for walls and floors, expansion joint covers, solar shading, cubicle curtain track and pressure relief systems. These have been successfully installed in many of the world's most prestigious buildings, across a spectrum of business sectors, including healthcare, transport, retail, leisure and commercial offices.

## FEATURES AND BENEFITS

### **CONTENTS**

- All C/S Wallglaze products have non-leaching anti-microbial agents in every coat of the system, so even with the most rigorous maintenance programmes the anti-microbial properties are effective for the whole life of the product
- C/S Wallglaze provides protection against fungi and bacteria, including MRSA, Salmonella typhimurium, Aspergillus niger, E. coli 0157:H7, and many others
- Product range offering chemical resistance levels to suit project requirements and cleaning regimes
- C/S Armourglaze is the most durable and chemically resistant polyurethane coating on the market
- C/S Wallflex can be decontaminated from radioactivity and complies with HBN 26 'Facilities for Surgical Procedures Vol. 1'
- VOC levels compliant with current legislation
- Fibreglass reinforcement (FG) options for increased abrasion/impact resistance
- All systems are Brush & Roller applied, which requires minor masking before application and also makes it easy to effect repairs whenever necessary
- C/S Hygienic Coatings will not require re-coating for at least 10 years, when applied, maintained and cleaned correctly.\*
- \* This assumes that the correct system has been specified for the environment.

Pages
4
5
6-7
8-9
10-11
12
12
13
14
15
16
17
18
19

### INTRODUCTION TO HYGIENIC COATINGS

In the selection process for hygienic coatings, knowledge of the end use is essential and consideration should be given to the desired:

### · Durability and Lifecycle

The high resin content in all C/S Wallglaze Hygienic Coatings ensures excellent durability, with a typical lifespan of a system in excess of 10 years. After this time the surface can be restored by an application of just one or two coats of Topcoat.

It is essential to ensure that the scrub and abrasion resistance of the chosen system is appropriate to the type of usage expected.

#### · Microbial Resistance

C/S Wallglaze coatings contain a cocktail of non-leaching biocides and will inhibit the growth and reproduction of bacteria and fungi on their surface. These properties will remain effective throughout the long design life of the product.

### Aesthetics

C/S Wallglaze Hygienic Coatings are available in a wide range of colours from the BS 4800, RAL and NCS ranges. Colours can also be matched to project requirements.

### · Environmental Considerations

For instances where the building will be occupied during coating application, or when a completely solvent-free system is required, use Wallflex or the waterborne Wallsheen system.

### • Chemical Resistance and Cleaning Regimes

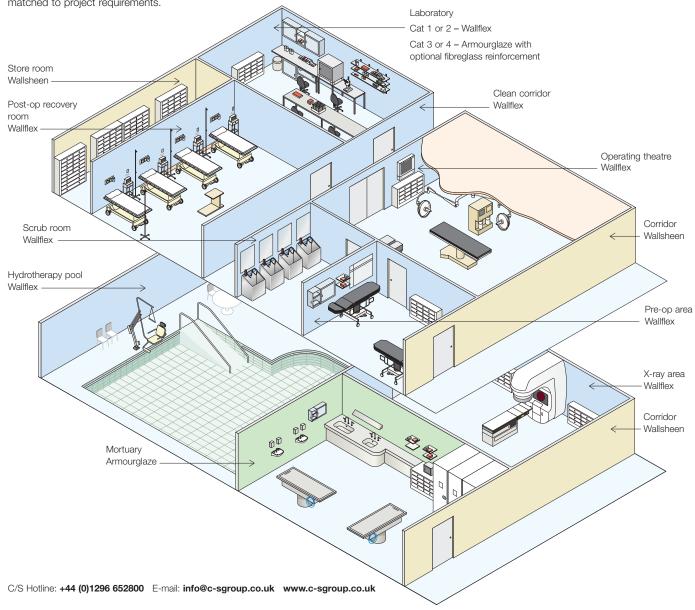
In the areas where rigorous and aggressive cleaning is expected it is essential to use the high performance Armourglaze system.

### • Impact Resistance

For areas likely to suffer from impact damage, we recommend upgrading standard systems with fibreglass reinforcement (see p.13).

#### Substrate

C/S Wallglaze Hygienic Coatings can be applied to almost any type of substrate, providing the surface has been primed with the correct product (see p.12).



### PRODUCT SELECTION GUIDE

STEM	WALLSHEEN p.6-7	WALLFLEX	ARMOURGLAZE p.10-11
	· · · · · · · · · · · · · · · · · · ·	·	Solventborne Polyurethane
Finish	•	•	Satin or Gloss
			very high (including resistance
	modiam	Tilgit	to 40% Formaldehyde solution)
1 107	1200 cycles	4000± cycles	4000+ cycles
· · · · · · · · · · · · · · · · · · ·			6000 cycles
		·	white or coloured
			Brush and Roller
- ' '	Brasil and Holler	Brasil and Hollor	Diagnana Fiolici
	3 no 6	4 no	4 no.
	-	111-	3 no.
	15-21 a/ltr		220 g/ltr
·		<u> </u>	Not tested
			Light or Heavy
	Light of Decorative	Light of Fleavy	Light of Fleavy
	<u> </u>	•	
1 0			
		·	
	<u> </u>		
		•	•
	• Cot 1	• Cot 1 % oot 2	<u> </u>
<u> </u>	Val. 1		• Cat. 3 & 4 <sup>4</sup>
			• Cat. 3 & 4
	•	• / /	
	<u> </u>	<b>.</b> 1	
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	Finish Chemical resistance (for further information refer to product pages) Scrub resistance (tested to ASTM D2486) Abrasion resistance (tested to ASTM D1044, D3389) Pigmentation Application method No. of coats required (standard systems, including primer) • Application on grey-faced plasterboard in dry areas • Application on other substrates and/or in wet areas VOC of the Topcoat Can be decontaminated from radioactivity Optional fibreglass reinforcement • Public access corridors, circulation spaces Clean corridors Operating theatres Pre-operating and post-operative recovery areas Wards Treatment/therapy rooms- category 5 or 6² Treatment rooms - category 1 or 3² X-ray areas Mortuary / Post-mortem rooms Clean rooms/labs - category 1 & 2³ Clean rooms/labs - category 3 & 4³ Kitchens - live steam/steam cleaning Kitchens - indirect steam Canteens / dining rooms Bathrooms/shower rooms Therapy rooms/ gyms Hydrotherapy pool changing areas Clean utility / Dirty utility General store rooms/linen store Plant rooms	Finish Eggshell Chemical resistance (for further information refer to product pages) Scrub resistance (tested to ASTM D2486) 1200 cycles Abrasion resistance (tested to ASTM D1044, D3389) n/a Pigmentation white or coloured Application method Brush and Roller No. of coats required (standard systems, including primer) • Application on grey-faced plasterboard in dry areas • Application on other substrates and/or in wet areas VOC of the Topcoat 15-21 g/ltr Can be decontaminated from radioactivity No Optional fibreglass reinforcement Light or Decorative Public access corridors, circulation spaces Clean corridors Operating theatres Pre-operating and post-operative recovery areas Wards Treatment/therapy rooms- category 5 or 62 Treatment rooms - category 1 or 32 X-ray areas Mortuary / Post-mortem rooms Clean rooms/labs - category 3 & 43 Kitchens - live steam/steam cleaning Kitchens - indirect steam • Canteens / dining rooms Bathrooms/shower rooms Therapy rooms/ gyms + Hydrotherapy pool changing areas Clean utility / Dirty utility General store rooms/linen store • Water of the Topcous of the second of	P.6-7 P.8-9  Waterborne Acrylic  Finish Eggshell Eggshell Chemical resistance (for further information refer to product pages)  Scrub resistance (tested to ASTM D2486) 1200 cycles 4000+ cycles Abrasion resistance (tested to ASTM D1044, D3389) Pigmentation White or coloured Application method No. of coats required (standard systems, including primer) Application on grey-faced plasterboard in dry areas Application on order substrates and/or in wet areas Application on order substrates and/or in wet areas Application on other substrates and foller Application on other substrates an

- 1 Wallflex system incorporating C/S Hygienic Mastic should be used in the following circumstances:
- in areas where there is positive or negative pressure
  - < 60 Pa Mastic only
  - ullet > 60 Pa Mastic and fibreglass reinforcement
- in areas where temperature cycling occurs
- when fibreglass reinforcement system is applied
- where dissimilar adjacent surfaces occur (boxes, light switches etc.)
- when applying system in wet areas
- <sup>2</sup> Performance categories relating to user requirements for wall finishes in different hospital areas. Source - Health Technical Memorandum 56 - Building Components - Partitions, NHS Estates, 2005 edition
- <sup>3</sup> Clean room/laboratory categories relate to Containment Levels as defined by the Advisory Committee on Dangerous Pathogens (ACDP)
- ${\bf 4}$  Fibreglass reinforcement is available where there are requirements for higher specification
- <sup>5</sup> System including heavy duty fibreglass reinforcement (FG Heavy)
- <sup>6</sup> Four coats may be required for application on non-grey plasterboard

## C/S WALLSHEEN™ WALL AND CEILING COATING SYSTEM

C/S Wallsheen™ is a 'super-emulsion' coating providing superior performance and durability, and is as easy to apply as regular emulsion.

It is a durable, single pack, water based coating system with a very low odour. The anti-microbial properties of Wallsheen ensure resistance to MRSA, E. coli, Pseudomonas aeruginosa and other types of bacteria and fungi.

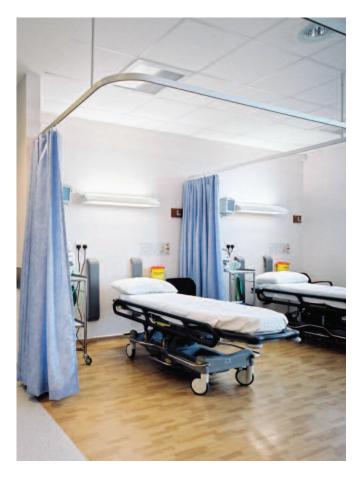
The coating's thickness provides excellent durability, making it resilient to long-term essential cleaning regimes.

### TYPICAL HEALTHCARE APPLICATION AREAS

- Public access corridors, circulation spaces
- Kitchens (indirect steam)
- Canteens/dining rooms
- Therapy rooms/gyms
- General storage areas, linen store, etc.
- Wards
- Category 1 ACDP clean rooms/laboratories
- Treatment rooms (category 5-6, ref: HTM 56)

### **KEY FEATURES**

- Non-leaching anti-microbial additives are in every system layer
- Durable
- For internal applications in dry areas
- Colour and UV stable
- Low VOC level
- Easy to apply and maintain



### PRODUCT PERFORMANCE

### Chemical resistance

C/S Wallsheen is resistant to a range of chemicals including Sodium Hydroxide (5%), Potassium Hydroxide (5%), Sodium Hypochlorite (5%), Mild Anionic Detergent (15%) and Mild Cationic Detergent (15%). The coating is also resistant to water, bacteria (including MRSA, E. coli and Salmonella typhimurium) and fungi.

### Scrub resistance

Scrub resistance tested to ASTM D2486 - 1200 cycles

### Cleaning

C/S Wallsheen will withstand repeated cleaning with mild detergents throughout its life.

### **COLOURS AND FINISHES**

### Finishes

C/S Wallsheen is available in an Eggshell finish.

### Colours

C/S Wallsheen can be supplied in any BS 4800, RAL Classic or NCS 2nd Series colour as standard.

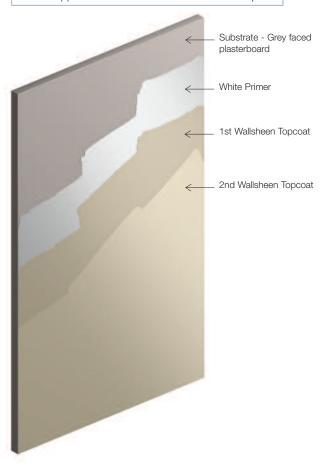
Colours can also be matched to project requirements.

### TYPICAL SYSTEM APPLICATION

C/S Wallsheen can be applied to a variety of substrates, which first need to be sealed with a suitable primer (for full selection of primers refer to page 12).

Two coats of C/S Wallsheen Topcoat are applied onto the primed surface using Brush and Roller (three coats may be required when applying system to non-grey plasterboard).

Detailed application instructions are available on request.



### **OPTIONAL TREATMENTS**

### Fibreglass reinforcement (FG)

For decoration and added durability a light fibreglass reinforcement can be incorporated into the Wallsheen system. The following decorative options are also available.



Please note Penetration Primer is recommended for use on plaster/plasterboard with fibreglass reinforced system.

For further information refer to page 13.

Product	Coverage rates* Drying times in hou		Pack sizes (ltr)	Recommended build thickness*	
	(m²/ltr)	(20°C @ 60% RH)		Wet film	Dry film
White Primer	7-9	2-4	5 and 20 (single pack)	120µ to 140µ	30µ to 40µ
Wallsheen Topcoat - Eggshell	7-9	4-6	5 and 15 (single pack)	140µ to 160µ	80μ to 95μ

<sup>\*</sup> Per coat, based on application to grey faced plasterboard.

# C/S WALLFLEX® WALL AND CEILING COATING SYSTEM

C/S Wallflex® is a superior and versatile hygienic coating. It has been reformulated to be 99.5% solvent free, very low odour, and with all the resilience and anti-microbial properties associated with Wallflex.

### TYPICAL HEALTHCARE APPLICATION AREAS

### System incorporating C/S Hygienic Mastic

- Operating theatres
- Pre-op and post-op recovery areas
- Category 3 ACDP clean rooms/laboratories (with optional FG)
- Kitchens live steam/steam cleaning (including FG Heavy)
- Bathrooms/shower rooms (FG Heavy option in wheelchair access areas)
- · Hydrotherapy pool halls and changing areas
- · Clean/dirty utility

### System without C/S Hygienic Mastic

- Clean corridors
- Treatment rooms (category 1 or 3; ref: HTM 56)
- X-ray areas
- Category 1 or 2 ACDP clean rooms/laboratories

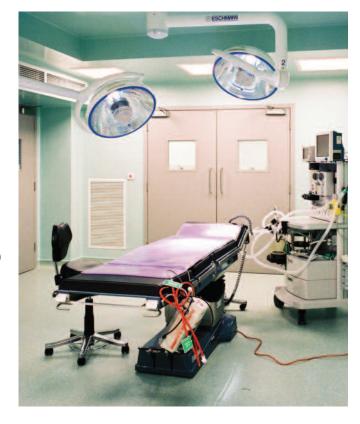
### **KEY FEATURES**

- Non-leaching anti-microbial additives in all system layers
- Solvent free polyurethane system
- Highly durable
- · Eliminates cracking in corners, joints etc.
- Can be decontaminated from radioactivity (complies with HBN 26 'Facilities for Surgical Procedures: Vol. 1')
- · Easy to maintain

### APPLICATION OF C/S HYGIENIC MASTIC

C/S Hygienic Mastic is used to enhance the elastomeric properties of C/S Wallflex and should be applied to all dissimilar adjacent surfaces/materials and any junction that may crack. It is particularly required for use:

- in areas where there is positive or negative pressure (e.g. operating theatres)
  - < 60 Pa Mastic only
  - > 60 Pa Mastic and fibreglass reinforcement
- in areas where temperature cycling occurs (e.g. category 3 labs)
- when applying system in wet areas (e.g. bathrooms/shower areas)
- when standard system is enhanced with fibreglass reinforcement



### PRODUCT PERFORMANCE

### Chemical resistance

C/S Wallflex is highly resistant to a range of Oils (animal/vegetable/mineral); Urine, Sewage and Blood; Salt, Beer and Molasses; Petrol and Paraffin, Diacetone and Isopropyl Alcohol; Ethylene Glycol; low (<10%) Formaldehyde solution; Sulphuric Acid (10%); Hydrochloric Acid (10%); Nitric Acid (10%); Phosphoric Acid (10%); Lactic Acid (25%); Caustic Soda (10%); water and indirect steam. It also inhibits the growth of microbes on its surface including MRSA, E. coli, Salmonella typhimurium and Aspergillus niger.

### Scrub and abrasion resistance

Scrub resistance (tested to ASTM D2486) - 4000+ cycles. Abrasion resistance (tested to ASTM D1044, D3389) - 5000 cycles.

### Cleaning

The system will withstand repeated cleaning with alkaline detergents, antiseptics and intermittent mild fumigation treatments without any degradation to surface or performance.

### **COLOURS AND FINISHES**

### Finishes

C/S Wallflex is available in an Eggshell finish.

### Colours

C/S Wallflex can be supplied in any BS 4800, RAL Classic or NCS 2nd Series colour as standard.

Colours can also be matched to project requirements.

### TYPICAL SYSTEM APPLICATION

### Application on plaster/plasterboard in dry areas

The substrate should be sealed with one coat of White Primer and C/S Hygienic Mastic applied, where required. One coat of C/S Universal Undercoat and two coats of C/S Wallflex Topcoat should then be applied using Brush and Roller.

### Application on other substrates and/or in wet areas (except plastics)

The substrate should be sealed with one coat of Multi Surface Primer and C/S Hygienic Mastic applied, where required. Two coats of C/S Wallflex Topcoat should then be applied using Brush and Roller.

Detailed application instructions are available on request. For full selection of primers refer to page 12.

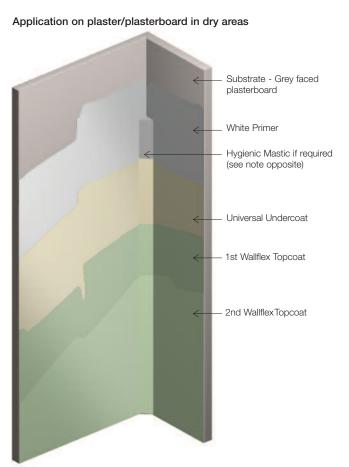
### **OPTIONAL TREATMENTS**

### Fibreglass reinforcement (FG)

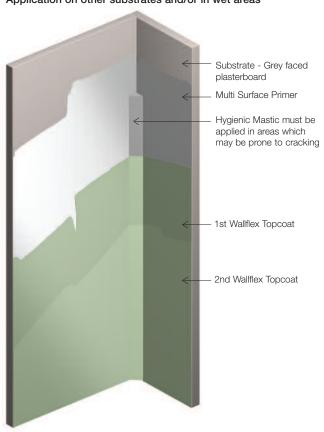
For added durability and increased abrasion/impact resistance fibreglass reinforcement (Light or Heavy option) can be incorporated into the Wallflex system.

Please note Penetration Primer is recommended for use on plaster/plasterboard when fibreglass reinforced system is used.

For further information refer to page 13.



### Application on other substrates and/or in wet areas



Product	Coverage rates* (m <sup>2</sup> /ltr)	Drying times in hours* (20°C @ 60% RH)	Pack sizes (Itr)	Recommended I Wet film	ouild thickness* Dry film
White Primer	7-9	2-4	5 and 20 (single pack)	120µ to 140µ	30µ to 40µ
Multi Surface Primer	6-14 <sup>‡</sup>	4-6	2.5 and 5 (two pack)	120μ to 140μ	70µ to 80µ
Universal Undercoat**	9-11	4-6	5 and 15 (single pack)	140µ to 160µ	70μ to 90μ
Wallflex Topcoat - Eggshell	8-10	4-6	2.5 and 5 (two pack)	90µ to 100µ	90μ to 100μ

<sup>\*</sup> Coverage rates, drying times and recommended build thickness are per coat.

<sup>\*\*</sup> Universal Undercoat is only required for application on plaster/plasterboard in dry areas.

<sup>&</sup>lt;sup>‡</sup>Multi Surface Primer can be used on a variety of substrates and coverage rate will depend on substrate porosity, absorption and texture – see p.12 for further details.

## C/S ARMOURGLAZE™ WALL AND CEILING COATING SYSTEM

The toughest polyurethane coating system available, which will withstand rigorous cleaning with fumigants, peroxides and other aggressive chemical cleaners.

C/S Armourglaze<sup>™</sup> is highly durable, abrasion resistant and anti-microbial, making it suitable for use in cutting edge research laboratory conditions as well as mortuaries.

### TYPICAL HEALTHCARE APPLICATION AREAS

- Category 3 and 4 ACDP clean rooms/labs (with optional fibreglass reinforcement)
- Mortuaries
- Plant rooms/Chemical stores

### **KEY FEATURES**

- Two pack, very durable system
- Colour and UV stable
- Resistant to aggressive cleaning agents, fumigants, chemicals and abrasives
- Easy to maintain
- System incorporating FG Heavy can be steam cleaned



### PRODUCT PERFORMANCE

### Chemical resistance

C/S Armourglaze is extremely resistant to a wide range of chemicals and solvents used in the removal of graffiti, fumigation (using Formaldehyde or Vaporised Hydrogen Peroxide) and decontamination processes including Hydrochloric Acid (10%); Sulphuric Acid (10%); Nitric Acid (10%); Formic Acid (10%); Caustic Soda (10%); Formaldehyde (40%); Benzyl Alcohol; water and steam. It also inhibits the growth of bacteria and fungi on its surface. For more comprehensive chemical resistance data refer to System Technical Data Sheet.

### Scrub and abrasion resistance

Scrub resistance (tested to ASTM D2486) - 4000+ cycles Abrasion resistance (tested to ASTM D1044, D3389) - 6000 cycles.

### Cleaning

The system will withstand repeated cleaning with alkaline detergents, antiseptics and fumigation treatments without any degradation to surface or performance.

### **COLOURS AND FINISHES**

### Finishes

C/S Armourglaze is available in a Satin or Gloss finish.

### Colours

C/S Armourglaze can be supplied in any BS 4800, RAL Classic and NCS 2nd Series colour as standard.

Colours can also be matched to project requirements.

### TYPICAL SYSTEM APPLICATION

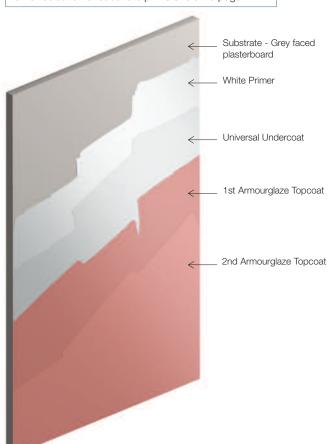
### On grey plasterboard

Surface needs to be primed with White Primer. One coat of C/S Universal Undercoat and two coats of C/S Armourglaze Topcoat are then applied using Brush and Roller.

### On reinforced concrete

Multi Surface Primer should be used to seal the surface. Two coats of C/S Armourglaze Topcoat are then applied using Brush and Roller.

Detailed application instructions are available on request. For full selection of substrate primers refer to page 12.



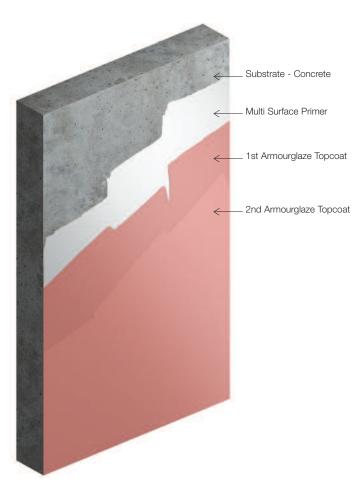
### **OPTIONAL TREATMENTS**

### Fibreglass reinforcement (FG)

For added durability fibreglass reinforcement (Light or Heavy option) can be incorporated into the C/S Armourglaze system.

Please note Penetration Primer is recommended for use on plaster/plasterboard when fibreglass reinforcement is used.

For further information refer to page 13.



Product	Coverage rates*	Drying times in hours*	Pack sizes (ltr)	Recommended build thickness*	
	(m <sup>2</sup> /ltr)	(20°C @ 60% RH)	, ,	Wet film	Dry film
White Primer	7-9	2-4	5 and 20 (single pack)	120µ to 140µ	30µ to 40µ
Multi Surface Primer	6-14 <sup>‡</sup>	4-6	2.5 and 5 (two pack water based)	120µ to 140µ	70µ to 80µ
Universal Undercoat**	9-11	4-6	5 and 15 (single pack)	140µ to 160µ	70µ to 90µ
Armourglaze Topcoat - Satir	7.5-9.5	4-6	2.5 and 5 (two pack)	120µ to 140µ	75µ to 90µ
Armourglaze Topcoat - Glos	s 8-10	4-6	2.5 and 5 (two pack)	120μ to 140μ	75µ to 90µ

 $<sup>^{\</sup>star}\textsc{Coverage}$  rates, drying times and build thickness are per coat.

<sup>\*\*</sup>Universal Undercoat is supplied white as standard and is required for application of the system on plaster/plasterboard in dry areas only.

<sup>†</sup>Multi Surface Primer can be used on a variety of substrates and coverage rate will depend on substrate porosity, absorption and texture – see p.12 for further details.

### **PRIMERS**

Substrate	C/S System	Recommended Primer	Coverage Rates (m²/ltr)	Drying Times (hrs @ 20°C @ 60% RH)
Plaster	Dry areas	White Primer	7 to 9	2 to 4
Plasterboard	Wallsheen, Wallflex or Armourglaze			
	Wet areas	Multi Surface Primer	8 to 11	4 to 6
	Wallflex or Armourglaze			
	Fibreglass reinforced systems	Penetration Primer	7 to 9	2 to 4
	Wallsheen, Wallflex or Armourglaze			
Concrete	Wallsheen	White Primer	7 to 9	2 to 3
	Wallflex or Armourglaze	Multi Surface Primer	8 to 10	4 to 6
	(including fibreglass reinforced options)			
Brickwork	Wallsheen	White Primer	7 to 9	2 to 4
Blockwork	Wallflex or Armourglaze	Multi Surface Primer	6 to 8	4 to 6
	(including fibreglass reinforced options)			
Ceramic Tiles	Wallflex or Armourglaze	Multi Surface Primer	11 to 14	4 to 6
	(including fibreglass reinforced options)			
Softwood	Wallflex or Armourglaze	Multi Surface Primer	7 to 9	4 to 6
MDF				
Plywood				
High Pressure	Wallflex or Armourglaze	Multi Surface Primer	9 to 11	4 to 6
Laminates				
Plastics	Wallflex or Armourglaze	Plastic Primer	12 to 15	1 to 2
(excluding polypropylenes)				

### **COLOURS**

When specifying C/S Wallglaze you don't need to compromise aesthetics for performance. Our coatings can be supplied in BS 4800, RAL Classic or NCS 2nd series colour ranges. We can also match a solid colour to a sample to give you complete freedom of choice when designing your colour scheme.

Our manufacturing processes use only environmentally friendly and non-toxic pigments and are free of chrome (III), cadmium, mercury, arsenic, radium, lead or any other hazardous materials.

Coloured coatings are manufactured to CIE LAB  $\Delta E$  (D65) < 1.5 and batch to batch colour variations <  $\Delta E$  1 may occur.

All C/S Wallglaze coloured systems are lightfast.



### **OPTIONAL TREATMENTS**

### FIBREGLASS REINFORCEMENT

Where greater resistance to impact, abrasion or steam cleaning is required, two fibreglass reinforcement options can be incorporated into our wall coating systems.

### Standard light fibreglass reinforcement (FG Light)

This is a lightweight fibreglass tissue (50 g/sqm), applied in a single layer. It offers improved impact resistance when combined with standard C/S coatings and is particularly useful where the existing wall surface may incorporate old minor cracking or unevenness.

Standard light fibreglass tissue is suitable for use with Wallsheen, Wallflex and Armourglaze

### Heavy fibreglass reinforcement (FG Heavy)

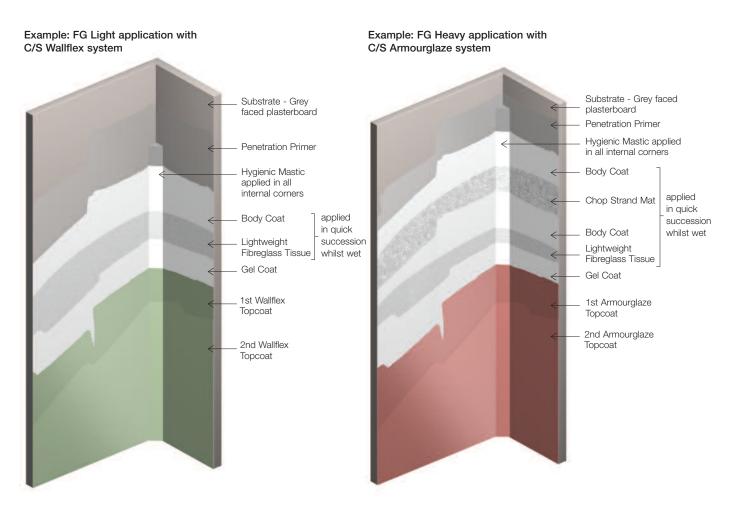
This is a dual gauge fibreglass system, comprising of a heavy duty chop strand mat (150 g/sqm) and a lightweight fibreglass tissue (50 g/sqm). This option provides the ultimate in impact resistance and durability within a coating system. In many cases it also allows direct coating over heavily cracked and uneven wall surfaces, without the need for raking out, filling etc.

FG Heavy can be specified as an option with Wallflex and Armourglaze.

### **DECORATIVE FIBREGLASS PATTERNS**

Six decorative patterns in light fibreglass tissue are available for use with Wallsheen system only.





### **LEGISLATION**

### **LEGISLATION**

C/S Hygienic Coatings conform to the requirements of the following:

- The Biocidal Products Regulations 2001 (Statutory Instrument 2001 No. 880) and all subsequent amendments, including the Biocidal Products (Amendment) Regulations 2010 (Statutory Instrument 2010 No. 745), which came into force on the 6th April 2010 and are the statutory instruments implementing the EU Biocidal Products Directive (98/8/EC) in Great Britain.
- REACH European Union regulation concerning the Registration, Evaluation, Authorisation and restriction of Chemicals, which came into force on 1st June 2007.
- Phase II of the Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2005 (Statutory Instrument 2005 No. 2773), which became effective from 1st January 2010.
- The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (also known as CHIP 4).
- EC Directives and Environmental Health Officers regulations relating to materials and articles intended to come into contact with foodstuffs.
- COSHH Construction Specialities (UK) Ltd comply with the statutory requirements for the Control of Substances Hazardous to Health regulations.

### **TEST DATA**

#### Fire Resistance

C/S Hygienic Coatings comply with the requirements for a Class 1 spread of flame with a designated 0 surface as defined in Appendix A of Approved Document B (Fire Safety) – Volume 2 to the Building Regulations 2000 (2006 edition) and as tested in accordance with BS 476: Part 6: 1989 and Part 7: 1987

### Microbial Resistance

C/S Wallglaze Hygienic Coatings have been tested and proven effective against a range of bacteria and fungi, including species associated with poisoning, septicaemia, gastroenteritis etc. Please contact us for details.

### Chemical Resistance

C/S Hygienic Coatings are resistant to a wide range of chemicals and water.

For more complete chemical resistance test data please contact our Customer Service Team on +44 (0)1296 652800.

### SUSTAINABILITY

Construction Specialties recognises its responsibility to current and future generations for its role in the preservation and improvement of our global environment. This intent remains our reality throughout all our operations worldwide and we are continually working towards more environmentally sound practices.

C/S are committed to protecting the environment and operates ongoing investment into the research and development of new and existing products that are waterborne, solvent free and harmonise with environmental considerations. C/S Wallglaze® Hygienic Coatings are produced efficiently, keeping waste to a minimum, and where possible waste material is recycled.



### SPECIFICATION GUIDANCE

Construction Specialties (UK) Ltd is a member of NBS Plus to assist architects and other specifiers when writing specifications.

This specification guide is based on NBS Standard Version M60.

### M60 PAINTING/CLEAR FINISHING

195A HYGIENIC COATING ... ... - Insert location e.g. "TO ALL

OPERATING THEATRE WALLS"

Manufacturer: Construction Specialties (UK) Ltd,

> 1010 Westcott Venture Park, Westcott, HP18 0XB T: +44 (0)1296 652800 Fax: +44 (0)1296 652888 E: nbs@c-sgroup.co.uk, W: www.c-sgroup.co.uk

### for standard Wallsheen system insert:

Product reference: C/S Wallglaze® - Wallsheen™

... ... - If not already covered by the clause heading, insert Surface(s):

a brief description indicating as appropriate:

· Whether the surfaces are previously decorated, already

primed, or uncoated and/or new material • Type of material e.g. plasterboard

• Type(s) of element e.g. walls and ceilings

Preparation: Dry, clean and free from grease, dirt and laitance

Primer: One coat of C/S White Primer, at 7-9 m<sup>2</sup>/ltr Two coats of C/S Wallsheen™ Topcoat Eggshell, at Undercoat/

Topcoat: 7-9m<sup>2</sup>/ltr - Three coats are required when applying the

system on non-grey plasterboard Colour: ... ... - Insert colour reference from BS 4800, NCS

2nd Series or RAL Classic colour ranges. Colours can

also be matched to project requirements.

### for standard Wallflex system insert:

Product reference: C/S Wallglaze® - Wallflex®

... ... - see notes in standard Wallsheen system Surface(s): Preparation: Dry, clean and free from grease, dirt and laitance Primer: One coat of ... ... - Select suitable primer from p.12

e.g. C/S White Primer, at 7-9 m<sup>2</sup>/ltr

Flexible mastic: Required

Not required - Refer to p.8 for guidance

One coat of C/S Universal Undercoat, at 9-11m<sup>2</sup>/ltr -Undercoat:

Required only for application on plaster/plasterboard

Two coats of C/S Wallflex® Topcoat Eggshell, at 8-10 m<sup>2</sup>/ltr Topcoats:

... ... - see notes in standard Wallsheen system Colour:

### for standard Armourglaze system insert:

Product reference: C/S Wallglaze® - Armourglaze $^{\text{TM}}$ 

..... - see notes in standard Wallsheen system Surface(s): Preparation: Dry, clean and free from grease, dirt and laitance Primer: One coat of ... ... - Select suitable primer from p.12

e.g. C/S White Primer, at 7-9 m<sup>2</sup>/ltr

Undercoat: One coat of C/S Universal Undercoat, at 9-11 m<sup>2</sup>/ltr -

Required only for application on plaster/plasterboard

in dry areas

Two coats of C/S Armourglaze™ Topcoat Satin, at Topcoats:

7.5-9.5 m<sup>2</sup>/ltr - For Satin finish

One coat of C/S Armourglaze™ Topcoat Satin, at

7.5-9.5 m<sup>2</sup>/ltr and one coat of C/S Armourglaze™ Topcoat

Gloss, at 8-10 m<sup>2</sup>/ltr - For Gloss finish

Colour: ... ... - see notes in standard Wallsheen system



### for Wallsheen with Light/Decorative Fibreglass Reinforcement insert:

Product reference: C/S Wallglaze® - Wallsheen™ inc. FG Light Surface(s): ... ... - see notes in standard Wallsheen system Preparation: Dry, clean and free from grease, dirt and laitance One coat of C/S Penetration Primer, at 7-9 m<sup>2</sup>/ltr Primer: One integral C/S Body Coat @ 2.5 m²/ltr, incorporating **Fibreglass** reinforcement: one layer of fibreglass ... ... - Insert one of the options:

Standard tissue, Rhombus, Diamond, Small Chevron,

Large Chevron, Small Weave, Large Weave Undercoat/ Two coats of C/S Wallsheen™ Topcoat Eggshell, at

Topcoat: 7-9m<sup>2</sup>/ltr

Colour: ...... - see notes in standard Wallsheen system

### for Wallflex or Armourglaze with FG Light insert:

Product reference: C/S Wallglaze® - ... ... inc. FG Light - Insert Wallflex or

Armourglaze

Surface(s): ... ... - see notes in standard Wallsheen system Preparation: Dry, clean and free from grease, dirt and laitance Primer:

One coat of ... ... - Select suitable primer from p.12 e.g.

C/S Penetration Primer, at 7-9 m<sup>2</sup>/ltr

Flexible mastic: C/S Hygienic Mastic at corners, adjoining dissimilar

One integral C/S Body Coat at 2.5 m²/ltr, incorporating one Fibreglass

reinforcement: layer of 50 g/m<sup>2</sup> fibreglass standard tissue followed by one

coat of C/S Gel Coat at 4.5 m<sup>2</sup>/ltr.

Two coats of ... ... - Refer to standard system clauses for Topcoats:

information on Topcoats and insert as required, e.g. Wallflex

Topcoat Eggshell @ 8-10 m<sup>2</sup>/ltr

... ... - see notes in standard Wallsheen system Colour:

### for Wallflex or Armourglaze with FG Heavy insert:

Product reference: C/S Wallglaze® - ... ... inc. FG Heavy - Insert Wallflex or

Armourglaze

Surface(s): ... ... - see notes in standard Wallsheen system Preparation: Dry, clean and free from grease, dirt and laitance Primer: One coat of ... ... - Select suitable primer from p.12

e.g. C/S Penetration Primer, at 7-9 m<sup>2</sup>/ltr

Flexible mastic: C/S Hygienic Mastic at corners, adjoining dissimilar

substrates etc.

Fibreglass One integral C/S Body Coat at 1m²/ltr, incorporating one reinforcement: layer of 150 g/m<sup>2</sup> chop strand mat and one layer of

50 g/m² fibreglass standard tissue, followed by one coat of

C/S Gel Coat at 4.5 m<sup>2</sup>/ltr.

Two coats of ... ... - Refer to standard system clauses for Topcoats:

information on Topcoats and insert as required, e.g. Wallflex

Topcoat Eggshell @ 8-10m<sup>2</sup>/ltr

Colour: ... ... - see notes in standard Wallsheen system

### **SITEWORK**

This is a general guide to site preparation of surfaces and other associated considerations prior to the application of C/S Wallglaze Hygienic Coatings.

Application should only be undertaken by experienced painting contractors. Comprehensive training is available and recommended. Please contact us for details.

### STORAGE OF MATERIALS

C/S Wallglaze products are supplied in a variety of container sizes to suit project requirements.

In all cases they must be stored under cover, in a frost free environment but below 35°C, in compliance with current legislation (i.e. COSHH/CHIP) and local regulations and practices.

### SUBSTRATE PREPARATION

All works should be completed prior to the application of the coatings.

### Walls and Ceilings

New build: All surfaces should be of a good standard, free from dust, dirt, visible dampness (see below for maximum moisture content) and defects.

### Re-decorations

Oil and grease should be removed using either C/S Gel Cleaner or a solution of C/S Wallclenze.

Laitance should be removed either mechanically or by using a 10% Hydrochloric acid solution, followed by a thorough wash down with clean water.

Any build up of algae/fungi should be removed using a solution of bleach, C/S Wallclenze or C/S Fungiclenze.

Dirt and any loose material must be removed by mechanical means such as wire brushing, abrasion or high pressure water lance for large scale projects. Care should also be taken to isolate and repair any cracks, prior to coating.

C/S Wallclenze or C/S Fungiclenze can be used to clean and disinfect areas to be coated.

### SUBSTRATE MOISTURE

Surfaces to be coated should be left to dry thoroughly and a moisture reading taken prior to the application of Wallglaze systems using a Protimeter (or equivalent device) on the wood scale.

Substrate moisture should be below 20 points for the application of C/S Multi Surface Primer and below 12 points for the application of any other C/S Primer. Failure to adhere to these guidelines will compromise the application severely.



### CARE AND MAINTENANCE

### **CLEANING**

All C/S Wallglaze Hygienic Coatings will inhibit the growth of bacteria and fungi, both at the substrate to coating and the coating to the environment interfaces. However, the build up of grease, dirt and nutrients on the coating's surface will impair its effectiveness, thus creating a surface where bacteria and fungi can grow. Regular cleaning should therefore be undertaken to reduce the amount of soiling that takes place in critical environments.

Should C/S Wallglaze products become soiled the following procedure should be adhered to:-

### Acrylic systems - Wallsheen

Add a small amount of C/S Wallclenze (or similar product) to warm water (40-50°C) at an approximate ratio of 1:10. Wash wall using a soft cloth, soft brush or sponge. Rinse off with clean water.

### Polyurethane systems - Wallflex, Armourglaze

Wash the whole area with a solution of C/S Wallclenze (or similar product), as described above. Particularly stubborn stains can be treated using C/S Gel Cleaner, applied with a soft brush and wiped clean after 5 minutes. Wash the area again with

C/S Wallclenze (or similar detergent) diluted in warm water, then rinse off with warm clean water.

### **MAINTENANCE**

### Minor repairs

All C/S Wallglaze Coating Systems should be regularly inspected, especially in areas that will be subject to frequent impact, abrasion or aggressive cleaning regimes and any defects (minor damage and wear) should be noted and repaired in the correct approved sequence.

If damage has occurred to surfaces, then this can easily be repaired by cleaning back the damaged area, making good and re-decorating with the same coating material.

### Refurbishment

In practice, the durability and resistance of the C/S Wallglaze Coatings will often exceed the quoted lifespan therefore substantial maintenance will not be required. However we recommend that the system be recoated to maintain the effective anti-microbial properties after this initial lifespan. This can be done quickly and efficiently with the application of one or two coats of the topcoats of the system specified.

Re-coating a system to extend its life is a very cost-effective way of refurbishing the surface and can significantly reduce long-term maintenance costs.

### C/S CLEANERS

#### C/S Wallclenze

A mild water based detergent, suitable for cleaning all C/S Wallglaze systems. It should always be used diluted in warm water, for removing general soiling a proportion of 1 part of Wallclenze to 10 parts of water should be sufficient. Areas which have been treated with C/S Wallclenze should always be rinsed off with clean water. Available in 1 and 5 litre containers.

### C/S Gel Cleaner

A heavy duty cleaner gel, suitable for removing stubborn stains from C/S Wallglaze polyurethane systems (Wallflex, Armourglaze). It should be applied by a soft brush to targeted areas and left on for about 5 minutes to take effect. Residue of the cleaner needs to be removed from the surface and treated area first washed off with C/S Wallclenze solution and finally rinsed off with clean water. Available in 1 and 5 litre containers.

#### C/S Fungiclenze

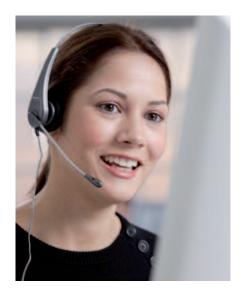
A water based fungicidal solution used to clean and prepare areas affected by mould and fungi, prior to the application of C/S Wallglaze systems. Dilute in water in proportion of 1 part of Fungiclenze to 5 parts of water. In heavily affected areas use undiluted product. Apply with sponge or roller, there is no need for rinsing. Available in 1 and 5 litre containers.

### C/S Brush Cleaner

Suitable for use with C/S Wallglaze polyurethane systems (Wallflex, Armourglaze). Available in 5 litre containers.



### **OUR SERVICE**



### C/S TECHNICAL SUPPORT

We look forward to assisting you with any queries which you may have and ensuring that you have made the right selection for your project. Call us on +44 (0)1296 652800 to speak with our Customer Service Team, Technical Team or Area Representatives.

### C/S EXPORT SUPPORT

C/S Wallglaze Hygienic Coatings are recognised and exported worldwide. Construction Specialties have a global network of operations capable of servicing even the most far reaching of market areas.

### C/S SPECIFICATION SUPPORT

Please refer to our Specification Guide on p.15. Should you require further specification assistance please call us on +44 (0)1296 652800.



NBS Specification Clauses for our products are also available on NBS Plus.

### **TRAINING**

Specialist training for painting contractors wishing to become proficient with C/S Wallglaze Coating Systems can be arranged. Please contact us for associated costs.

### **CPD PRESENTATIONS**

Tailored CPD presentations can be arranged through our Customer Service Team or your local C/S representative.



### SAMPLES SERVICE

Samples of all C/S Wallglaze Systems are available on request.

Please contact our Customer Service Team on +44 (0)1296 652800 with your requirements.

### PRODUCT DESIGN/FORMULATION

The company reserves the right to make composition changes for the purpose of product improvement, or to withdraw any product without notice.

### **APPLICATION**

Please contact us on +44 (0)1296 652800 for details of preferred applicators in your area.

Detailed application instructions are issued with product shipment. Copies of instructions can be requested on +44 (0)1296 652800 or downloaded from our website www.c-sgroup.co.uk

### **WARRANTY POLICY**

Construction Specialties (UK) Ltd (the Company) warrants to its purchasers that their C/S Wallglaze products sold, will be free from defects in materials and will meet the product criteria noted in our brochures when properly applied and maintained. If, in the sole opinion of the Company, a product covered by this warranty is defective, the Company will replace it free of charge. This warranty shall extend for a period of two years following shipment by the Company.

This is in lieu of all warranties expressed or implied, and is the sole warranty extended by the Company. The liability of the Company under this warranty is limited to replacement only, and does not include any responsibility for consequential or other damage of any nature.

### RECENT PROJECTS

John Radcliffe Hospital - Oxford West Mendip Community Hospital -

Glastonbury

Addenbrookes Hospital - Cambridge

Brentwood Community Hospital - Brentwood

Northampton General Hospital - Northampton

Queen Alexandra Hospital - Portsmouth

Sheffield General Hospital - Sheffield

Roscommon County Hospital - Roscommon Town, Ireland

Churchill Hospital - Oxford

Royal London & St Bartholomews Hospital -London

Pembury Hospital - Tunbridge Wells

Whipps Cross Hospital - London

Hull Royal Infirmary - Hull

Guy's and St Thomas Hospital - London

Gilbert Bain Hospital - Lerwick

Hope Hospital - Salford

Medway Maritime Hospital - Gillingham

Papworth Hospital - Cambridge

Lambeth Hospital - London

Harrogate District Hospital - Harrogate

Gloucester Royal Hospital - Gloucester

Children's Hospital for Wales - Cardiff

University Hospital of Wales - Cardiff

Whittington Hospital - London

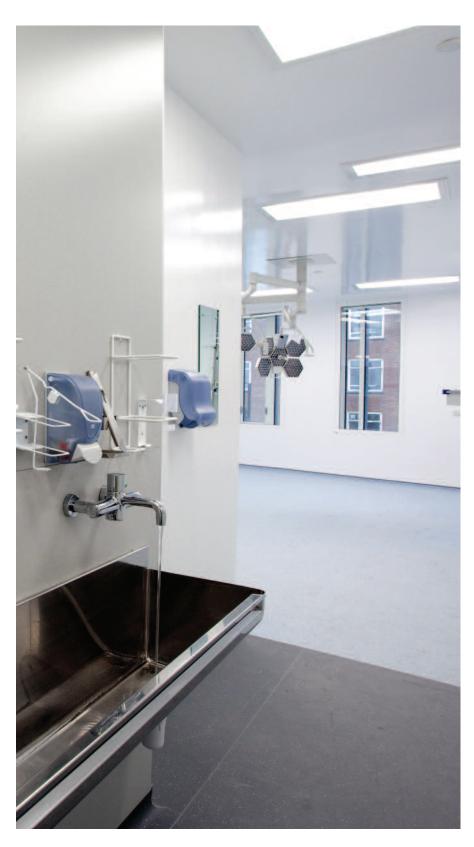
Southmead Hospital - Bristol

Altnagelvin Hospital - Derry, Northern Ireland

Blackpool Victoria Hospital - Blackpool

Naas Hospital - Dublin, Ireland

Mount Carmel Hospital - Dublin, Ireland



### The complete range of C/S products



C/S Acrovyn° Wall, Door and Corner Protection



C/S Specialist Coatings Wallglaze and Floorglaze



C/S Pedisystems Entrance Flooring Systems



C/S Allway® Expansion Joint Covers



C/S Airfoil® Solar Shading Systems



C/S Supertrak° Cubicle Curtain Track



C/S Explovent® **Explosion Venting Systems** 

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### Construction Specialties (UK) Ltd C/S Group worldwide operations

- UK (also servicing: Republic of Ireland, Scandinavia, Malta,
- Portugal, Iceland)
- France
- Germany
- Austria
- Italy Spain
- Poland
  - USA
  - Canada
  - Australia
  - Singapore
  - Hong Kong
  - Taiwan
  - UAE
  - Uruguay



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