



# Weber Renders & Decorative Finishes



**we  
care**

# About Weber



As a recognised manufacturer and innovator of easy-to-apply products in the construction mortars, façades, flooring systems and tile-fixing markets, Weber is a leading player in the construction products industry. The natural synergy between these specialist activities enables Weber to provide integrated solutions for a wide range of projects from building renovation and refurbishment to new building developments and major civil engineering.

Weber does not sell only products but the complete solution, which includes the services that go with the products; technical support and training. Based on its strong knowledge and experience of the market, the Weber training programmes meet the needs of its customers. Weber provides specifiers, developers and contractors across the board with substantial technical support, both before, during and after contract periods.

## About Saint-Gobain

Weber is part of Saint-Gobain, one of the world's leading industrial groups with activities in construction products, flat glass and packaging, high performance materials and building distribution. Saint-Gobain is an international group employing over 180,000 people in over 68 countries worldwide. Established in France in 1665, Saint-Gobain is one of the world's largest industrial groups, with an annual turnover of €41.8 billion.

Some of the UK and Ireland's most respected companies and brands in the construction sector are part of Saint-Gobain, including British Gypsum, Glassolutions, Isover, PAM, Artex, Celotex, Ecophon and Pasquill. Together, these businesses offer an unrivalled range of products and innovative material solutions that give architects and designers the ability to respond to the latest trends, whilst meeting the most exacting performance and legislative standards.

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## Our guide to renders

Rejuvenate existing buildings or provide a high quality finish for new build projects with a durable weather resistant surface. The Weber range of Renders and Decorative Finishes offers fast application onto a variety of substrates and includes traditional finishes and advanced flexible coatings.

Weber is a leading UK formulator and manufacturer of innovative materials in the construction market, holding prominent position within the renders market. Weber not only manufactures its products within the UK and Ireland, but is the first producer of monocouche render to be awarded an A+ Green Guide rating as defined in the BRE Global 2008 Green Guide to Specification for **weberpral M** and **weberpral D**. The Green Guide is an accredited environmental profile rating system for products and building elements, allowing specifiers to reduce the environmental impact of their buildings whilst achieving more materials credits in a Code for Sustainable Homes assessment.

This guide serves as a quick reference to the Weber range and the key issues for consideration when selecting a render finish. For further in-depth technical information please visit our website **www.uk.weber** where you will find datasheets, FAQ's and problem solutions. You will also find a variety of services on our website including a Consumption Calculator, review training options, book CPD presentations, download the **weberapp** and order samples.

# Products

## Monocouche Renders – Pages 10-18



### weberpral M

A coloured one-coat monocouche render suitable for most types of brick or block work.



### weberpral D

A coloured one-coat monocouche render suitable for most types of brick or block work.



### weberpral MF

weberpral MF is a one-coat, coloured fine texture render suitable for hand or spray application.



### weberend one coat dash

weberend one-coat dash is a one coat render that can receive a dry dash finish without the need to apply a second coat.

## Render Systems – Pages 19-20



### weberend OCR

Pre-blended single coat render providing an excellent background for all Weber finishes.



### weberend MT

A high performance, multi-coat render system incorporating glass-fibre meshcloth.

## Decorative Finishes – Pages 21-28



### alpine finish

Cement-based mix with travertine finish.



### webersil P

Silicone-based, high performance mineral paint.



### webermineral TF

A polymer-modified, thin coat cementitious decorative finish.



### cullamix tyrolean

Cement-based mix with tyrolean finish.



### weberplast TF

Acrylic-based textured decorative finish.



### webersil TF

Silicone-based, high performance textured finish.

## Ancillary Products – Pages 29-35

### weberend bead adhesive

For fixing of metal or plastic render profile beads to most suitably prepared brick and blockwork.

### weber accélérateur monocouche

A liquid setting accelerator solution for monocouche.

### triple strength medusa

Admixture in white powder form. Its addition to a concrete mix will improve the water repellence of the finished work.

### weberend aid

Preparatory key coat for rendering.

### weber PR310

Liquid paint primer.

### weber CL150

Masonry cleaner.

### weberend protect

Protective coating for renders.

# Product/System Selector

## How to use the selector

To find the most suitable render option for your needs, refer to the primary selector chart below and on the next page the **Guide to Choice of Finish** for criteria that most closely fit your requirements.



## Guide to choice of system

Substrate	Blockwork	Brick	Concrete	Cement/Sand Renders	Render Boards
Finish					
Monocouche coloured render	✓	✓ *	with weberend aid		
Mineral Cement- based Finish i.e. <b>alpine</b> , <b>cullamix tyrolean</b>	with weberend OCR	with weberend OCR	with weberend aid & weberend OCR	✓	
Synthetic Finish i.e. <b>webersil TF</b>	with weberend OCR	with weberend OCR	with weberend aid & weberend OCR	✓	with weberend MT

\*If mortar joints are not recessed, then **weberend aid** will be required.  
See Good Site Practice (Pages 36-39) for details



# Product Finish Selector

## Main product selector

Selectors here are designed to narrow your selection down to a choice of either monocouche, mineral or synthetic finishes. Colour and texture can be related to the actual product that will provide the finish chosen in the particular system. Substrate and main system features can be related to the system itself.



## Guide to choice of system

Finish								
Monocouche	Spray texture	Scrape finish	Ashlar	Dry dash finish	Fine texture	Travertine	Float finish	Roller texture
	weberpral M & weberpral D				weberpral MF			
Mineral	cullamix tyrolean	weberpral MF	weberpral MF	weberend onecoat dash	weberpral MF	webermineral TF	alpine finish	
Synthetic					weberplast TF			
					webersil TF		webersil P	

# Monocouche Renders

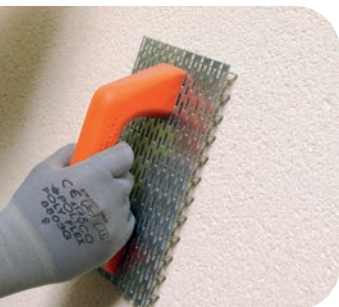
**weberpral** monocouche renders create an external, decorative, coloured finish suitable for most types of brick or blockwork.

The factory production process for **weberpral** renders ensures quality materials are used in a controlled and accurate method, using proven engineered formulations which result in high performance in practice.



## Colour and Texture

A wide range of colours and textures are possible creating a wide range of options for the designer. Colour charts are shown on the following pages.



## Fast Track Construction

The use of advanced technology enables the **weberpral** range to be applied in one application. In addition, it can be applied by machine, creating even faster application.

## Low Maintenance

**weberpral** renders are coloured in nature and therefore do not require further decoration. Should the need arise, the render can be easily cleaned with a 'hobby' style pressure washer and suitable detergent.



Stonework design such as ashlar can be replicated by cutting recessed joints into the finished render using specialist tools.

Changes in colour or thickness can be employed to produce raised features such as bands, plinths and stones.

Alternatively, the render can be finished as a traditional roughcast spray finish which is particularly effective in areas of high exposure.



# Monocouche Renders

## weberpral M



### About this product

**weberpral M** is a one-coat through-coloured external render which offers a weather resistant, low maintenance and highly durable finish.

**weberpral M** is suitable either for machine or hand application onto brick or block walls. Available in a range of 24 colours, **weberpral M** has achieved an A+ Green Guide rating, BBA approved certificate no 17/5464.



- One-coat for fast application and short programme periods
- Through-coloured for low maintenance – decoration not required
- Formulated to be spray applied by render pump for faster application
- **weberpral M** offers a variety of ways to achieve distinct architectural features
- Available in a range of 24 colours
- A+ Green Guide rated
- Algae Resistant

#### Cement Based

Supplied in 25kg bags.  
Coverage: 25kg/m<sup>2</sup> for 15mm finish thickness.

## weberpral D (only available in Ireland)



### About this product

**weberpral D** is a one-coat through-coloured external render manufactured for the Irish Market, suitable for machine or hand application.

**weberpral D** is available in 12 colours. NSAI approved, certificate number 03/0180.



- One-coat for fast application and short programme periods
- Through-coloured for low maintenance – decoration not required
- Formulated to be spray applied by render pump for faster application
- **weberpral D** offers a variety of ways to achieve distinct architectural features
- Available in a range of 12 colours
- A+ Green Guide rated
- Algae Resistant

#### Cement Based

Supplied in 25kg bags.  
Coverage: 25kg/m<sup>2</sup> for 15mm finish thickness.



# Colour Chart

Available in **weberpral M** & **weberpral D**



Chalk



Silver Pearl



Ivory



Cream



Beige



Limestone



Cornish



Mushroom



Graphite



Stone Grey



Earth



Earth Red

Available in **weberpral M** only



Light Beige



Sand



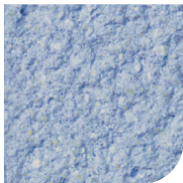
Parchment



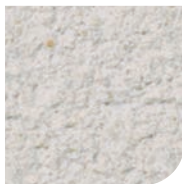
Buff



Light Blue



Azure Blue



Pearl Grey



Granite Grey



Ocre Rose



Rose



Brick Red



Sage Green

These colour representations are as close as printing techniques permit.  
Final selection against an actual sample is strongly recommended.



# Monocouche Renders

## weberpral MF



### About this product

**weberpral MF** uses fine grade aggregates to achieve a more contemporary render finish whilst maintaining excellent weather resistance properties.

**weberpral MF** is a one-coat, coloured fine texture render suitable for hand or spray application.



- Fine texture render for a modern, contemporary finish
- Grain size of 0-1.5mm compared to 0-2.2mm on standard renders
- Finer texture allows for the creation of finer ashlar cuts
- One coat for fast application and short programme periods
- Formulated to be spray applied by render pump for faster application
- Coloured for low maintenance – decoration not required
- Weather & algae resistant
- Available in a choice of 4 colours

#### Cement Based

Supplied in 25kg bags.

Coverage: 25kg/m<sup>2</sup> for 15mm finish thickness.

## weberend one coat dash



### About this product

**weberend one coat dash** is a one coat render that can receive a dry dash finish without the need to apply a second coat.

**weberend one coat dash** is suitable for machine or hand application and can be applied and finished on the same day saving 3-7 days typically associated with a traditional multi-coat system.



- Can be applied in a single pass to create a monolithic coat\*
- Reduced curing time compared with traditional multi-coat systems
- Allows for faster application and reduced programme periods, and thereby costs
- Suitable for machine or hand application
- Ready mixed – only water required to be added on site for ease of use
- Provides a coloured background to receive dry dash
- Available in a choice of 3 colours

\*Dependent on criteria such as construction alignment, suction and mechanical key offered by the substrate and weather conditions.

#### Cement Based

Supplied in 25kg bags.

Coverage: 25kg/m<sup>2</sup> for 16mm finish thickness.

# Colour Chart

## weberpral MF



Chalk



Cream



Ivory



Silver Pearl

## weberend one coat dash



White



Cream



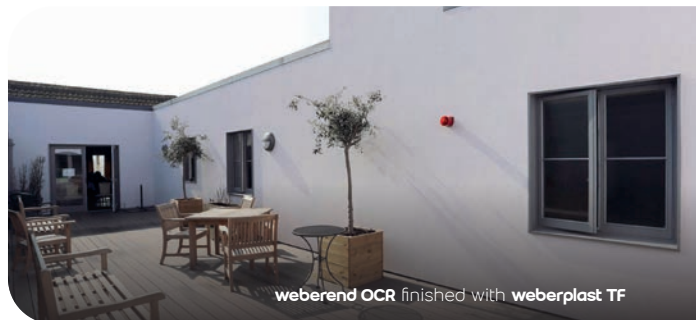
Buff

Shown with optional dashing aggregate.  
Visit [www.uk.weber](http://www.uk.weber) for the full range available from Weber.

These colour representations are as close as printing techniques permit.  
Final selection against an actual sample is strongly recommended.

# Render Systems

## weberend OCR



weberend OCR finished with weberplast TF

## About this product

**weberend OCR** is a proprietary render based on Portland cement, lime and sand. It is supplied as a pre-blended dry powder, which requires only the addition of clean water. Conforms and meets the requirements of BS EN 13914-1 : 2016.

Can be applied by hand or spray render pump for faster application.



- **ECO Smart™** – Contains cement replacement technology
- Formulated to comply with British Standard mix designations (see technical data on website)
- Excellent weather resistance quality and durability, whilst allowing the structure to breathe
- Factory controlled production to give a consistently high quality product
- Provide an appearance of a traditional cement and sand render but in significantly less time

### Cement Based

Supplied in 25kg bags.  
Coverage: 25kg/m<sup>2</sup> for 16mm thickness.

# Render Systems

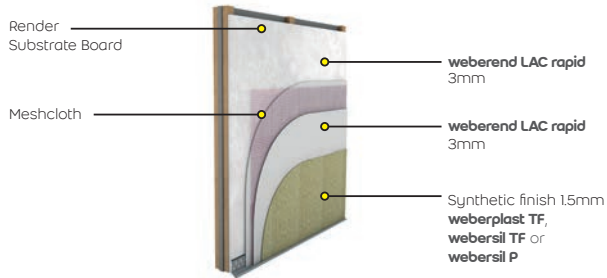
## weberend MT



### About this product

**weberend MT** is a high performance, multi-coat render system, incorporating glass-fibre meshcloth and a resin-rich adhesive coat with a choice of textured finishes in a wide range of colours. BBA approved certificate no 15/5228.

The image below shows a typical build up of the system. Further details can be found on [www.uk.weber](http://www.uk.weber)



- BBA approved system for use with Knauf Aquapanel Exterior Cement Board and Siniat Bluelad
- Large areas can be rendered on render substrate boards without the need for expressed joints
- Allows previously uneven masonry substrates to be rendered and gives a high level of crack resistance
- Established track record in varying climatic conditions
- Ideal for timber/metal frame applications
- Wide choice of colours and textures available

Can be used in conjunction with the **webersil**, **weberplast** and **webermineral TF** finishes.

# Decorative Finishes



Complementing the monocouche range, Weber offer a choice of mineral and synthetic decorative finishes which can rejuvenate existing substrates and provide a high quality finish for new build applications. The low maintenance finishes not only create an attractive appearance, but also protect with a durable and weather resistant surface. These products can be used on a variety of substrates and range from traditional finishes to advanced flexible coatings.

### Colour and Texture

A wide colour choice is available and a variety of surface finishes are possible ranging from smooth to textured.

### High Performance

Specialist paints such as **webersil P** are silicone based which provides a finish with high water shedding characteristics whilst remaining vapour permeable.

### Support Systems

For dense masonry substrates, **weberend OCR** is a suitable basecoat render for Weber decorative finishes. For framed construction, the **weberend MT** system can be used in conjunction with a render backing board and finished with one of the decorative finishes detailed in this section.



# Decorative Finishes

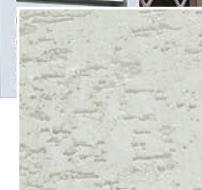
## alpine finish



### About this product

**alpine finish** is a white cement based mix containing aggregates that provides a decorative travertine finish.

When used, alpine enhances the protection of a traditional rendering system and is suitable for coastal, town, suburban and rural environments.

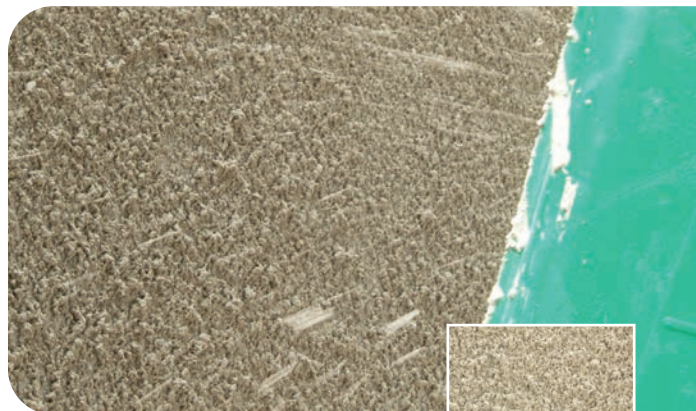


- **ECO Smart™** – Contains cement replacement technology
- Excellent weather resistance and durability
- Low maintenance white finish
- May be over-painted when dry with a suitable masonry paint if required
- Easy and quick to apply
- Simple to finish

#### Cement Based

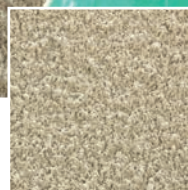
Supplied in 25kg bags.  
Coverage: 5-6m<sup>2</sup> per 25kg bag.

## cullamix tyrolean



### About this product

**cullamix tyrolean** is a white or coloured cement-based mix, which provides a decorative and protective rendering. It is applied by hand or power operated machines and provides an open honeycomb textured (tyrolean) finish.



- **ECO Smart™** – Contains cement replacement technology
- Pre-blended – requires only the addition of clean water on-site
- Durable and weather resistant
- Coloured – requires minimal maintenance and no subsequent painting
- Suitable for most environments: coastal, suburban and rural
- Can be used as an attractive, sound-absorbing textured finish on internal render

#### Cement Based

Supplied in 25kg bags.  
Coverage: 5m<sup>2</sup> per 25kg bag.

# Decorative Finishes

## webermineral TF



### About this product

**webermineral TF** is a polymer-modified, thin coat cementitious decorative finish.

It is a coloured, even textured finish for use with multi-coat render and external wall insulation systems.

This durable, resilient and weatherproof decorative finish offers excellent coverage and is easy to mix and apply by hand.



- Rain resistant to prevent wash-off in 1 hour at 20°C
- Rapid drying, ideal for winter working
- For use in temperatures between 1°C and 20°C
- No need to paint over
- Available in a range of 4 colours
- Forms part of a number of approved BBA systems

#### Cement Based

Supplied in 20kg bags.

Coverage: 8.5m<sup>2</sup> per 20kg bag.

## cullamix tyrolean colours



White



Ivory



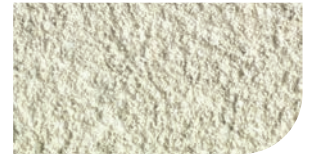
Parchment



Cream



Stone Grey



Silver

## webermineral TF colours



White



Ivory



Stone Grey



Cream

These colour representations are as close as printing techniques permit. Final selection against an actual sample is strongly recommended.

# Decorative Finishes

## weberplast TF



### About this product

**weberplast TF** is an acrylic based decorative finish, pre-mixed and ready to apply in wet form. Excellent performance gives a reliable solution for harsh or exposed conditions. Decorative, even textured finish (1.5mm aggregate content) for application to a prepared surface.

**weberplast TF** is available in a wide range of colours. Specifiers should consult the Weber Colour Chart which can be viewed at [www.uk.weber](http://www.uk.weber)

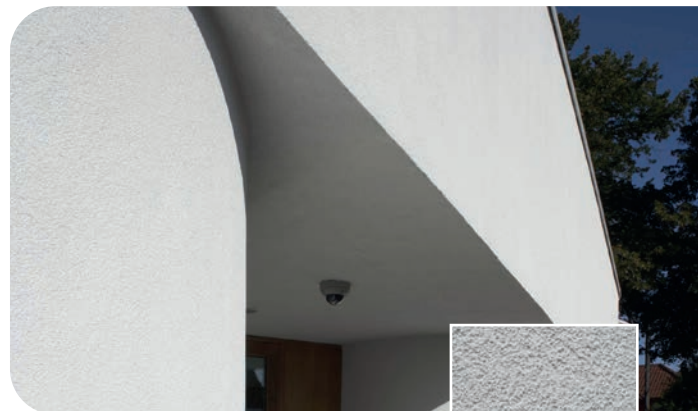


- Factory batched and ready to use
- Excellent all-round weather performance
- Durable and resilient
- Established track record in varying climatic conditions
- Forms part of a number of BBA approved systems

#### Essentially non-hazardous

Supplied in 15kg plastic buckets.  
Coverage: Approx. 5.4m<sup>2</sup> per bucket.

## webersil TF



### About this product

**webersil TF** is a silicone based decorative finish, pre-mixed and ready to apply in wet form. Excellent performance gives a reliable solution for harsh or exposed conditions. Highly water repellent provides optimum façade protection. High performance, decorative even textured finish (1.5mm aggregate content) for application to a prepared surface.

**webersil TF** is available in a wide range of colours. Specifiers should consult the Weber Colour Chart which can be viewed at [www.uk.weber](http://www.uk.weber)



- Factory batched and ready to use
- Excellent all-round weather performance
- Durable and resilient
- Highly vapour permeable
- Low susceptibility to soiling
- Forms part of a number of BBA approved systems

#### Essentially non-hazardous

Supplied in 15kg plastic buckets.  
Coverage: Approx. 5.4m<sup>2</sup> per bucket.



## Decorative Finishes

### webersil P



#### About this product

**webersil P** is a solvent-free, water-based silicone resin emulsion paint (SREP) for masonry substrates.

**webersil P** is available in a wide range of colours. Specifiers should consult the Weber Colour Chart which can be viewed at [www.uk.weber](http://www.uk.weber)



- A high quality mineral paint for new build masonry substrates
- A low-maintenance finish on to external wall insulation
- Rejuvenates existing rendered substrates
- Resistant to algae and fungi growth
- Highly hydrophobic – water beading effect helps maintain a clean surface
- Resistant to blistering and peeling

#### Essentially non-hazardous

Supplied in 12.5kg plastic buckets.  
Coverage: 2 coats 0.5 litre/m<sup>2</sup>.

## Ancillary Products

### weberend bead adhesive



#### About this product

**weberend bead adhesive** is a pre-mixed material just requiring the addition of clean water. It is designed for the purpose of adhering render profile beads to virgin masonry substrates in advance of Weber Render Systems such as **weberpral M** and **weberend OCR**.

For fixing of metal or plastic render profile beads to most suitably prepared brick and blockwork.



- Rapid setting for short programme periods
- Factory produced for consistency of proportioning
- Ideal for rapid fixing corner beads, drip beads, stop beads or expansion beads
- Ready mixed – only water required to be added on-site for ease of use
- Cost-effective solution

#### Cement Based

Supplied in 20kg bags.

Coverage: Based on average usage for fixing beads, 1 bag of **weberend bead adhesive** is sufficient for approx 45 linear metres of bead in sporadic dabbing.

# Ancillary Products

## weber accélérateur monocouche



### About this product

**weber accélérateur monocouche** is an initial set accelerator solution for monocouche coloured renders to speed up the time to scrape during colder application periods.



- As a liquid component, it can directly replace a proportion of the product gauging water
- If added at the correct dose, it will achieve 20°C scrape times when working at 5°C
- Colourless liquid has no effect on the appearance of the finished product

#### Essentially non-hazardous

Supplied in 20 litre plastic containers yield: 0.2 litres of product per 25kg bag of monocouche.

## triple strength medusa



### About this product

**triple strength medusa** is an admixture in white powder form. Its addition to a mortar mix will improve the water repellence of the finished work.



- Provides increased water repellence
- Assists in providing even suction in undercoats
- Reduces water permeability
- Reduces surface water absorption

#### Essentially non-hazardous

Supplied in 330g sachets (30 per carton).  
Coverage: One 330g sachet is sufficient for a mix containing 50kg cement.

# Ancillary Products

## weberend aid



### About this product

**weberend aid** is a preparatory key coat for rendering, consisting of polymer modified cement and sand mix. The powder blend includes an integral bonding agent so that it requires only the addition of clean water on-site.



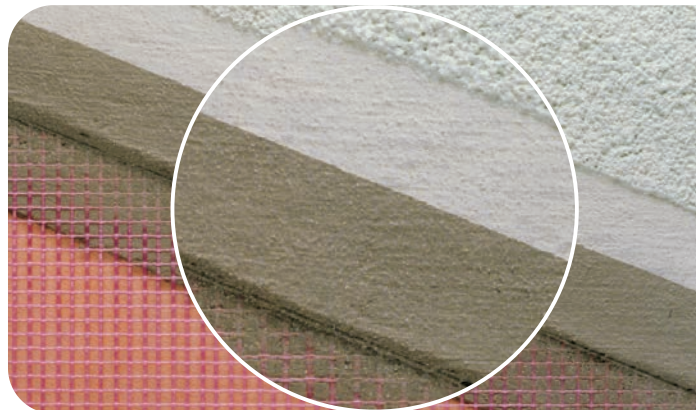
- Provides a good key for rendering onto smooth or otherwise unsuitable but sound substrates
- Equalises suction on mixed backgrounds
- Provides excellent suction control across both high and low suction substrates
- Resists the penetration of external water to improve the weather resistance of rendering systems
- Quality controlled and factory blended to give a consistently high quality product
- Easy to apply by hawk and trowel, roller or open hopper spray gun

#### Cement Based

Supplied in 25kg bags.

Coverage: 75/m<sup>2</sup> per 25kg bag.

## weber PR310



### About this product

**weber PR310** is an effective method of preparing substrates by reducing suction prior to the application of many Weber finishes.



- Low viscosity
- Practical benefits of ease of application, speed, economy and long shelf-life
- Established track record in varying climatic conditions
- Will assist in ensuring that the subsequent finishes will have a minimum life of 10 years

#### Essentially non-hazardous

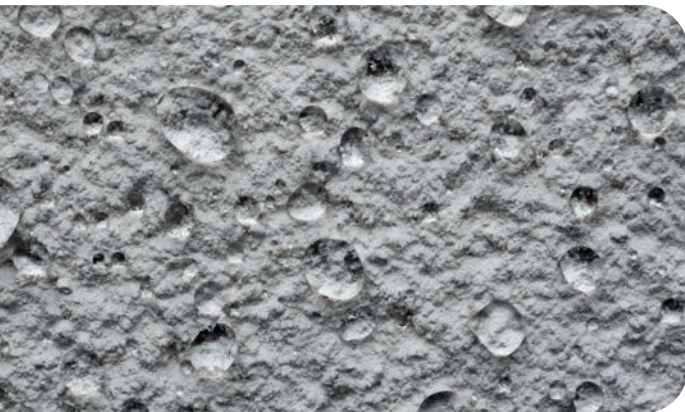
Supplied in 10 litre plastic buckets.

Coverage: 0.25 litre/m<sup>2</sup>.



# Ancillary Products

## weberend protect



### About this product

**weberend protect** is a surface treatment for protecting render from liquid ingress, including water, oil and graffiti whilst maintaining the surface aesthetics and allowing the substrate to breathe.

It is highly water and weather resistant preventing build-up of dirt and other contaminants. For use with **weberpral M**, **weberpral D**, **weberpral MF** and **webertherm XP** systems.



- Water beads on the surface resisting water ingress, protecting the building substrate, keeping it cleaner and drier
- Provides an invisible defence against the elements retaining the original appearance of the substrate
- Vapour permeable – allowing the substrate to breathe
- Use to protect new render or use after **weber CL150** is used to clean existing render
- UV resistant – coating does not degrade in UV light

#### Essentially non-hazardous

Non-flammable, non-toxic – VOC free.

Supplied in 5L or 25L containers.

Coverage when treating weberpral renders is typically 5m<sup>2</sup> per litre.

## weber CL150



### About this product

**weber CL150** is a water-based masonry wash containing carefully selected biocides effective against a broad range of bacterial, fungal, algal, yeast and mould species. It is used as a cleaner and steriliser for most substrates including masonry and render. It is effective against green, black and other organic growth on walls, particularly prior to the application of decorative finishes.



- Fast acting
- Simple application
- Established track record in varying climatic conditions
- Untinted versions show no residue after treatment
- Ready for use
- 25 litre tinted version for easy identification of coated areas
- After cleaning a rendered surface, Weber recommend application of **weberend protect** to resist water ingress and keep the render cleaner for longer

#### Water based (contains biocides)

Supplied in 5 and 25 litre bottles.

Coverage: 0.1 litre/m<sup>2</sup>.

# Good Site Practice

By following good site practice issues relating to structural movement, cracking and organic growth can be minimised ensuring a durable, low maintenance finish. It is important to carry out a thorough assessment of the background involved and get organised on-site prior to the application of any render materials. This section details rules to follow to ensure a good finish, minimise time on-site and a happy customer.

The substrate should be constructed of durable and moderately strong materials specifically designed to receive modern renders. They should be clean, suitably dry, sound and free from anything that may interfere with the adhesion, such as oil, grease, organic matters and soluble salts.

## Strength

The substrate should be designed and constructed so that it adequately supports and restrains the rendering. The substrate, including any joints in masonry, should be no weaker than the rendering material used.

## Suction

Good adhesion of a cement render is greatly reliant on the suction in the substrate. Excessive suction will impair the hydration of the rendering and therefore affect its bond with the substrate. On the other extreme, low suction substrates will not offer sufficient capillary action to gain a good bond.

## Key

For the background to give the support it must provide an open or preformed textured surface to allow the render material to penetrate and promote aggregate interlock between the render and the substrate.

## Blockwork

Generally a block is manufactured with an open texture or a designed key for rendering. Relying on the raking of mortar joints is not sufficient to provide the key alone.

Smooth dense blocks with little mechanical key should have the key enhanced by an application of **weberend aid** stipple coat.

The strength and density of the blockwork should be assessed in regard to its compatibility with the proportion of cement content of the chosen rendering. Low density blockwork such as Aerated Autoclaved in some cases may not be compatible with a render mix having a cement:lime:sand ratio stronger than a 1:1:6 for example.

Block manufacturers can advise on the recommended mortar/render strengths for the chosen block. Strength or classification of renders is detailed in the product datasheet which can be found at [www.uk.weber](http://www.uk.weber)

## Concrete

Concrete offers minimal suction and generally insufficient key for the rendering to adhere. The aggregate should be exposed during construction of the concrete, or after the concrete has cured by the use of bush hammering or other suitable mechanical means. Alternatively, the concrete should be coated with a **weberend aid** to provide key for the subsequent render application. No-fines concrete will provide a satisfactory key. Please note that advice should be sought regarding concrete curing agents that may interfere with the bond of the **weberend aid** application.

## Brickwork

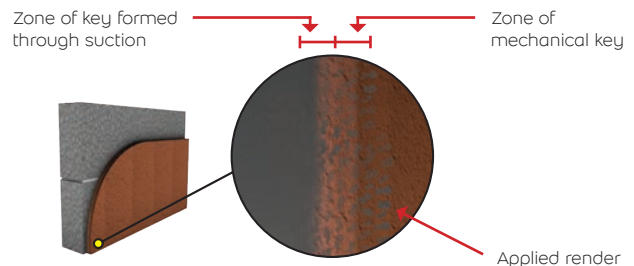
To provide key, new brickwork should be laid with the mortar joint recessed 10-12mm by width and depth squarely.

Existing brickwork will require the joints raking back to the above dimensions. If the joint is too hard, the key should be provided by a stipple coat of **weberend aid**.

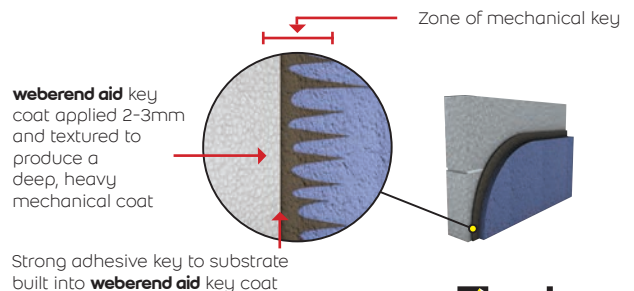
Some common bricks may contain deleterious sulphate salts. If possible, advice should be sought from the brick manufacturer regarding their use as a substrate for rendering in that location, particularly in high exposure or potentially damp areas.

An application of **weberend aid** will deter sulphates from crystallising and impairing the bond of the render.

### Section through substrate with suitable key and suction



### Section through substrate requiring mechanical key





# Good Site Practice

## Storage of Blockwork

The most common cause of cracking results from the initial drying out of background materials. The BRE publication Understanding Dampness (BR466) states that where a concrete block has moisture content greater than 12% by volume, action is required. This must be reduced below 8% before excess shrinkage will subside. Blocks that are left out uncovered during inclement weather will absorb moisture and exceed 12% moisture. If the moisture content is above 12% the blocks must be allowed to dry before use. To avoid these problems the blocks should be covered with waterproof sheeting when stored on-site.



## Mortar Mixes

A significant proportion of masonry contraction is due to the mortar. The effects of this shrinkage and the stresses caused can be reduced by ensuring mortar joints are weaker than the masonry units. Typically a mortar with a cement:lime:sand ratio of 1:1:6 will be suitable. If the strength of the mortar is too strong it will cause large amounts of stress to build and will cause the blocks to crack.



## Building Practice

Infilling or coursing with dissimilar materials should be avoided. Different types of blocks expand and contract at different rates creating increased stresses which can cause cracks to develop.



Blockwork should be laid in a regular brick bond pattern and perp joints should not clash.



## Protecting the Substrate

Once the blockwork has been built and is awaiting rendering, temporary guttering socks should be used to direct rainfall from areas of the wall. If one area of the wall is allowed to become soaked while the adjacent area is dry, the differential movement will cause stresses to increase and cracks to form.





# Winter Working



It is appreciated that the greatest challenge to the applicator is the variability of the climatic conditions during the winter period. Following the guidance as below will minimise and reduce issues resulting from poor weather.

During the product selection process for works that are programmed to be carried out through winter months the benefits of cement technology should be considered over that of synthetics. The versatility of the chemical set which occurs with cement binders is in comparison to the reliance of air drying and evaporation with synthetic finishes.



**webermineral TF** is a polymer-modified, coloured mineral render for use as a decorative finish. This product has been specifically formulated to be weather resistant, fast-setting and suitable for use for temperatures above 1°C. These characteristics allow for the product to be much more versatile in a winter application scenario.



**weber accélérateur monocouche** is a liquid component that is used to replace a proportion of the gauging water in products mineral renders. This product is not antifreeze however it will speed up the initial set time to replicate the same setting as would be typical during summer months. If the correct dose is added it is anticipated that a 20°C scrape time will be achieved at 5°C. This will leave the products less susceptible to Lime Bloom.

## Protection of Substrate

Building fabric exposed to rain and allowed to become saturated will be subject to a greater amount of movement due to drying shrinkage than one that is protected from the elements. This will put additional strain on the building envelope increasing the risk of cracking within the substrate; this will inevitably be reflected in the applied render.

Protecting elevations during the construction programme has the additional benefit of helping to enable application to continue during inclement or cold weather.

## Low Temperature

Do not work with frosted materials, on frosted substrates or apply any formless wet materials in temperatures below 5°C or if low temperature can be expected during the drying or curing period. If using **webermineral TF** temperatures should be greater than 1°C.



In cold weather or if frost is forecast, stop work in time or allow the material to set sufficiently to prevent frost damage. The drying conditions will vary according to wind, temperature and humidity. In frosty weather, where temperature cannot be met, work should only proceed when suitable protection is provided and the temperature is raised.

## Inclement Weather

Do not work during rainfall or if rainfall is anticipated during initial set. Do not allow rain to strike newly applied material. Absorption properties of the background are critical; if the area is left unprotected and is affected by excessive amounts of moisture this will hinder the drying and setting process of products and thus may result in a detrimental impact on bond and adhesion between interfaces and coats.

In addition it is likely to have a negative impact on the final aesthetics particularly consistency of colour and texture.

## Protection of Finished Surfaces

Newly applied renders must be protected from damage. Artificial enclosures round scaffolding may be formed using tarpaulins, close mesh netting, polythene or other suitable material to overcome adverse weather conditions.

## Hot Weather Working

**Hot weather can affect newly applied materials, causing synthetic materials to dry and cementitious materials to 'pick up' or stiffen much quicker than normal. Warm, dry conditions with stiff breezes can equally provide rapid drying conditions.**

In hot weather, application of both renders and finishes should be carried out in the shade following the sun around the building. We do not recommend applying our products in temperatures over 30°C. During periods of sustained hot and dry weather, the substrate may need cooling with an even mist spray of clean water before application to avoid retained heat affecting freshly applied render. This should be done in a controlled manner, so as to avoid saturating the substrate as this can induce cracking and/or inhibit the bond of the materials to the wall. This advice is particularly relevant when rendering onto aerated autoclaved blocks.



Cementitious products need to retain water for sufficient time to enable the cement to hydrate fully in order to reach full strength. Rapid drying conditions may therefore leave render materials weak. During hot, rapid drying weather cement based products may need to be actively cured by mist spraying with clean water two times a day for three days after application. This is particularly relevant when working internally. In common with all cementitious mixes, renders will not achieve full strength for approximately 28 days. During this period the finished work is more vulnerable to damage.



## Movement Control

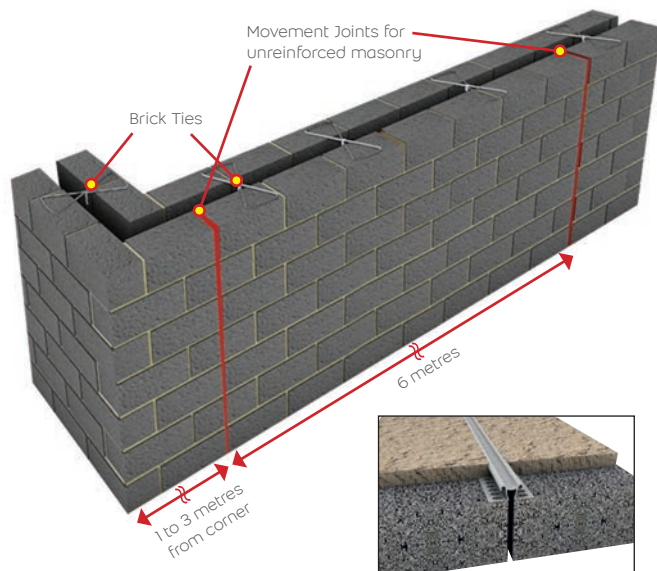
Weber renders are manufactured from carefully selected and graded aggregates to minimise drying shrinkage of the applied render. Providing that good practice, appropriate design and suitable preparation is undertaken, the rendering will be fully bonded to the substrate and restrained from movement by that surface and will not crack. It is therefore most important that stress/crack control is considered prior to construction of the substrate in order to reduce the likelihood of cracking.

When the construction is correctly divided into appropriate panels separated by suitable movement joints, the stresses caused by drying shrinkage and normal building movement will dissipate to the detailed relief joints. Movement joints are not a requirement in the render alone as this is fully bonded to the substrate. They should however, reflect and follow through from the relief joints detailed in the construction.

### Movement Joints

Guidance on the placement of movement joints should be gained from the specified block manufacturer and used in conjunction with the BS EN 1996 (EC6) Design of masonry and BS 6093:2006 +A1:2013 Code of Practice for design of joints and jointing in building construction.

The guidance given in these standards is that joints should usually be included at 6m intervals and 3m from corners, however, this will vary depending upon the type of construction and the strength of the brick or block.



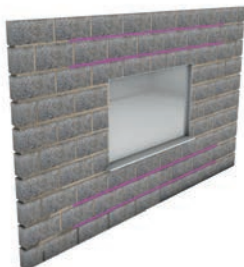
# Movement Control

## Mortar Bedding Joint Reinforcement

The exact spacing of joints can be adjusted by the use of mortar bedding joint reinforcement. The amount and positioning of this reinforcement should be detailed by the block manufacturer. In Weber's experience cracking of the substrate can be considerably minimised if mortar bedding joint reinforcement is used, specifically:

1

At weak points in the construction, such as above and below window and door openings.



2

To increase the spacing of movement joints beyond that recommended for reinforced masonry.



3

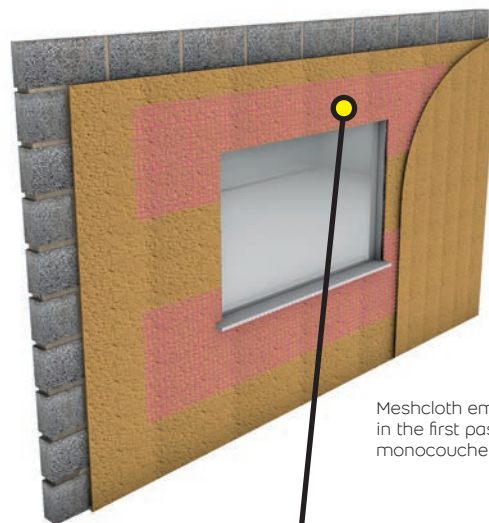
In long panels where movement joints are impractical.



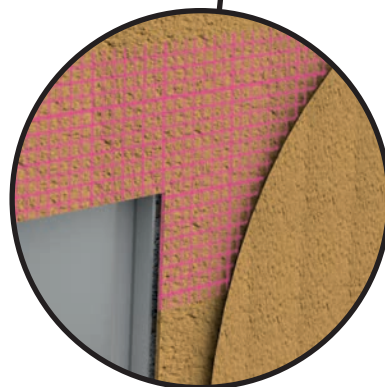
## Glass Fibre Mesh Reinforcement

The render's ability to distribute and resist stresses can be enhanced by the inclusion of glass fibre reinforcement mesh cloth at positions of localised high stress i.e. at the corners of openings, at junctions of differing materials or around crack inducers such as weep holes.

Straight line cracking that can sometimes be seen in completed render panels is not typical of render failure, but rather the reflection of a crack in the substrate. Stress/crack control must be given serious consideration prior to construction.



Meshcloth embedded in the first pass of monocouche render.





# Application

To avoid the risk of cracking, it is essential that certain considerations are taken into account when preparing the substrate and during the application of render.

## Suction Control

Good porosity of the substrate is essential for the render to achieve a good bond. However, if the substrate is too porous it will not allow the render to hydrate sufficiently and if it is too little there will not be a good bond. If either of these situations occur the following best practice should be followed:

- **Low porosity** – this is particularly the case with concrete or some types of brickwork. **weberend aid** should be used to provide a controlled level of porosity and a mechanical key.
- **High porosity** – this is particularly the case with low density blocks. The substrate should be lightly sprayed with a fine mist of clean water evenly before the render is applied. Saturation should be avoided as this will cause excessive shrinkage.



## Masonry with Recycled Content

We are aware that some blockwork is progressively being formulated with varying quantities of recycled materials. These recycled materials can dramatically affect the water absorbency of the block with extreme examples absorbing twice the water volume over a short period. For this reason it is imperative that due care is taken to protect blockwork from the weather in both storage and construction. These blocks often appear similar in appearance to standard masonry. It is therefore essential, prior to rendering, that a suction assessment should be undertaken to ascertain the level of absorbency within the blockwork. Should the level of absorbency be deemed as high, action will be required. In normal circumstances careful controlled dampening with water may suffice, however in more extreme cases an application of **weberend aid** would be needed. If in doubt please contact Weber Technical Services on 01525 718877 .

# Machine Rendering



Application of render products by machine is a new technology which permits safer and more productive utilisation of skilled personnel on-site. Instead of requiring a skilled tradesperson to physically carry or hoist mixed material, modern machinery provides an effective solution by simultaneously mixing and conveying the wet material directly to the designated location. This permits swift spray application to the elevation, thus giving the tradesperson the opportunity to use their levelling and finishing skills to the full.

Sprayed roughcast finishes are made possible only with the machine application approach where panels are applied and finished within hours of starting – truly the fast track method of modern rendering. The UK and Irish market has been very traditional in approach and it has taken many years for a technology that is widely accepted on the continent to be adopted here. The pioneers though have now established the principles and more and more of Weber's recommended applicators have made machine application the very core of their businesses.

## Advantages

- Self-contained diesel driven or Electric 400 volt
- Designed for renders and plasters
- Can pump long distance 20-50 litres a minute (up to 60m dependent on height and material)
- 300-350m<sup>2</sup> of finished work a week including preparation
- Batch mixers or continuous mixer
- Accurate water control
- Uniform product consistency
- Material can be used direct from the pallet
- Easy to clean

## Training

Weber appreciates the importance of training and aims to bridge the skills divide by working closely with applicators and colleges nationwide. The Saint-Gobain Technical Academy at Flitwick runs a range of training and specialist up-skilling courses for the construction industry. The multi-purpose centre has been developed to feature innovation and product demonstration areas, practical workshops, lecture rooms and meeting facilities. Courses can be designed to meet product-specific requirements, or to suit different levels of experience and skills. Many one-day courses follow pre-determined content and are available on scheduled dates throughout the year. Courses are adapted to meet the requirements of applicators, engineers, architects, stockists or distributors.

### Monocouche

Aimed primarily at those using monocouche materials for the first time, this course explores the fundamental basics of good rendering practice along with the application and finishing techniques associated with these products. A one day course, it includes both theoretical and practical activity. Practical demonstration of machine application techniques are included as part of the course.

### External Wall Insulation

Increasingly popular as the technically superior method of achieving ever more stringent insulation requirements, External Wall Insulation (EWI) has a wide range of possible insulants, systems and finishes. There is a selection of one day courses available to provide an overview of the range of render protected EWI systems along with a guidance regarding the basic principles involved.

### Floor Screeds

The one day **weberfloor** training course is aimed at those using Weber flooring materials for the first time. The products create a smooth surface that is ready for foot traffic after only a few hours and that can be covered with a soft floor covering in 24 hours. The range consists of products for use as floating, un-bonded and bonded screeds including insulated, acoustic or heated floors.



## Projects



**Project:** Driftwood Restaurant, Loch Ryan  
**Client:** Dumfries and Galloway Council  
**Contractor/Architect:** D G First  
**Applicator:** J & J Runcie Plasterers Ltd  
**System:** weberpral M



**Project:** Eco Home, Cork  
**Client:** Gareth Sullivan  
**Architect:** Simply Architecture  
**Applicator:** M S Plastering  
**System:** weberpral MT



# Projects



**Project:** Dettingen Park, Surrey  
**Client:** Barratt (Southern Counties & West London),  
 Persimmon Homes, Wimpey Homes  
**System:** weberpral M with ashlar finish



**Project:** New Housing, Co Down, Ireland  
**Client:** Philip McCullough Developments  
**System:** weberpral D



Photo: Millgate Homes / Tony Mitchell

**Project:** Chart Ridge, Treveaux Hill  
**Client:** Millgate Homes  
**Architect:** Millgate Homes  
**Applicator:** Markham Drylining Ltd  
**System:** weberpral M



**Project:** Hanham Hall, Gloucestershire  
**Client:** Barratt Homes  
**Architect:** HTA Architects  
**Applicator:** Harbour Render Systems  
**System:** weberend MT



# Projects



Photo: HLM Architects / Trevor Burrows Photography

**Project:** Cydon Valley Hospital, Mountain Ash

**Client:** Cwm Taf NHS Trust

**Architect:** HLM Architects

**Contractor:** Vinci Construction UK Ltd

**Applicator:** Emega Ltd

**System:** weberpral M



**Project:** Greenvale Leisure Centre, Northern Ireland

**Client:** Magherafelt District Council & Pulse Fitness

**Architect:** W & M Given Architects

**Contractor:** Heron Brothers

**System:** weberpral D



**Project:** New Homes, St Martin, Looe

**Client:** Barratt-David Wilson Homes, Exeter

**Contractor:** Steve Turton Plastering

**Applicator:** Steve Turton Plastering

**System:** weberpral M



**Project:** Contemporary New Build, Hampshire

**Client:** Private Client

**Architect:** A R Design Studios

**Contractor:** MGS Building & Electrical Contracts Limited

**System:** weberend MT

# Projects



**Project:** Woodward Close Care Home, Winnersh  
**Client:** The Abbeyfield Society  
**Developer:** Castleoak  
**Applicator:** WHS Exterior Rendering Ltd  
**System:** weberend MT



**Project:** The Collection at Fortescue Fields, Norton St Philip  
**Client:** Bloor Homes  
**Architect:** Adam Architecture  
**Applicator:** Burnham Plastering & Drylining Ltd  
**System:** weberpral M



**Project:** Charlton Court, Bath  
**Client:** Private Home  
**Architect:** Mitchell Taylor Workshop  
**Applicator:** North Bristol Plastering  
**System:** weberpral M



**Project:** Westbury Care Home  
**Client:** Westbury Care Home  
**Architect:** Jonathan Lees Architects LLP  
**Applicator:** WHS Exterior Render Ltd  
**System:** weberend OCR with weberplast TF finish



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