NEW ZEALAND'S SPECIALISTS IN EXTERIOR PLASTER SYSTEMS & MATERIALS

Specialized
CONSTRUCTION PRODUCTS

TRUSTED QUALITY AND PERFORMANCE

TESTED & MADE IN NEW ZEALAND
FOR NEW ZEALAND CONDITIONS

Outstanding products

THAT STAND THE TEST OF TIME

Welcome to Specialized Construction Products, New Zealand's largest manufacturer and provider of exterior plaster cladding systems and cement based preparation compounds.

Choosing an exterior cladding solution is one of the most important decisions you need to make. From aesthetics, energy efficiency and living or working in a healthy environment, you need to select a cladding system you can trust – one you can trust for quality, and long-term performance.

At Specialized Construction Products, we understand the demands of tomorrow's buildings, and the diverse New Zealand weather conditions our buildings face. The products we have designed and developed, including New Zealand's first BRANZ appraised lightweight aerated concrete panel system, provide the very best and most aesthetically appealing exterior plaster cladding systems on the market today.

The following pages will help you to make an informed choice about the type of plastered cladding system that's right for you. If you would like to discuss any of our systems in more detail, or if you need further information, please don't hesitate to call us.

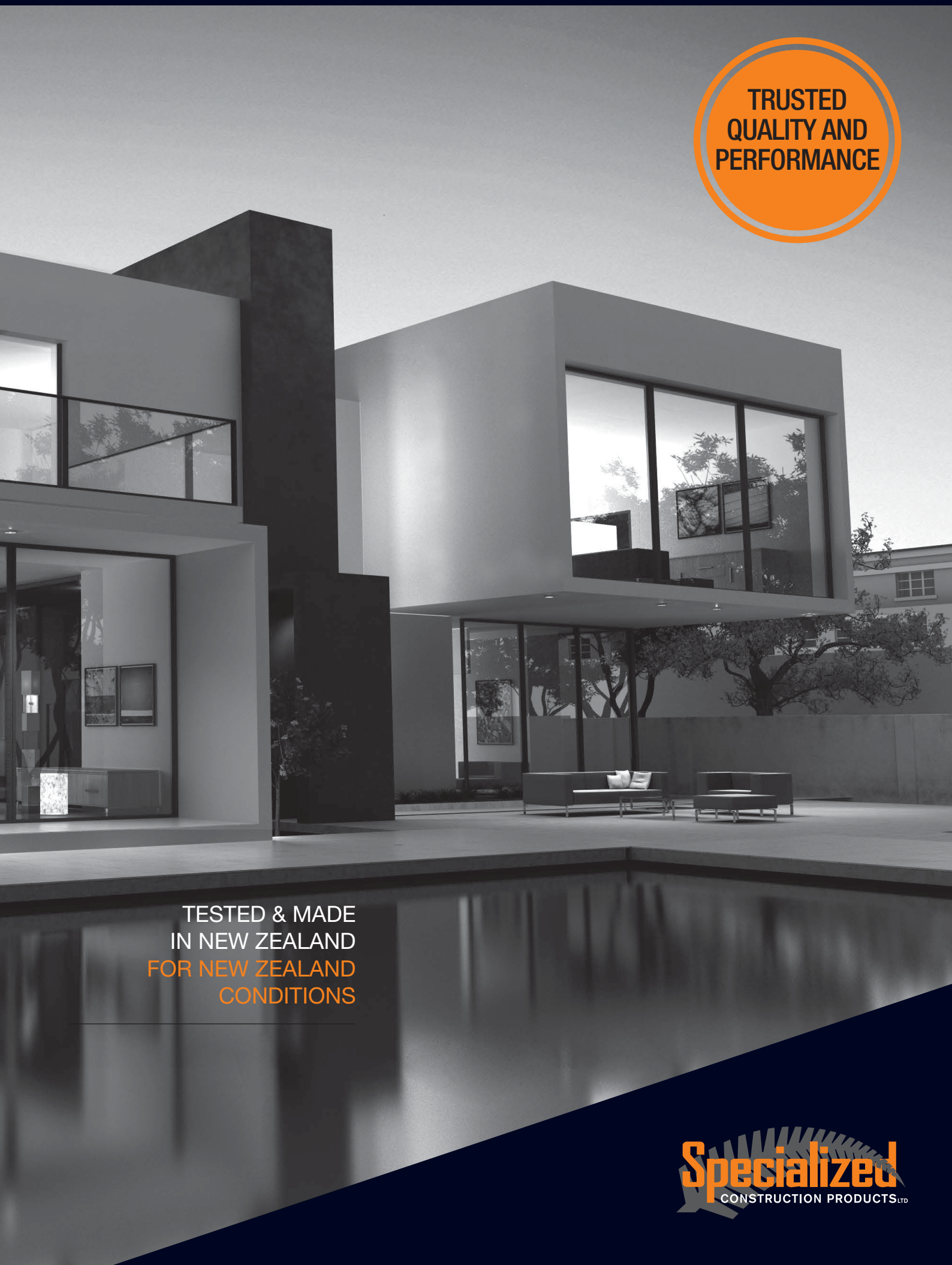
Architects, specifiers, builders and residential property owners know they can trust Specialized Construction Products, because they are tested and made in New Zealand, for New Zealand conditions.

www.specialized.co.nz

BRANZ Appraised

Tested and made in New Zealand for New Zealand conditions, and BRANZ Appraised for peace of mind certainty.

NEW ZEALAND'S SPECIALISTS IN EXTERIOR PLASTER SYSTEMS & MATERIALS



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EzPanel

LIGHTWEIGHT CONCRETE CLADDING SYSTEM

The EzPanel system is a cavity-based autoclaved aerated concrete (AAC) panel system which when finished with a layer of fibreglass reinforced polymer modified plaster creates a lightweight, highly durable exterior cladding. As well as providing advantages to the exterior envelope by way of increases in impact resistance and performance during fire, EzPanels will not rot, are pest resistant and have excellent sound insulation properties. The exterior nature of the EzPanels also places their fantastic insulation characteristics as close as possible to where temperatures fluctuates, reducing ongoing energy consumption compared to most conventional exterior wall systems.

AAC products have been produced worldwide for more than 80 years and offer considerable advantages over other construction materials, one of the most important being its very low environmental impact. AAC's high resource efficiency gives it low environmental impact in all phases of its life cycle, from processing of raw materials to the disposal of AAC waste on site during construction. In the manufacturing process, no pollutants or toxic by-products are produced.

The EzPanel system weighs approximately 80% less than standard brick veneer construction, negating the need for additional expensive engineering and support over windows and rooflines. In addtion to this, EzPanel's unique penetration flashing system creates a dry cavity, reducing the need for soffit-line and window-head weepholes that are prevelant in plastered brick and other AAC panel systems.

EzPanels are quick and easy to install and the surface of the panels can be easily channeled and finished to create negative grooves and details that are expensive and difficult to create in other plaster based exterior claddings.

The EzPanel system carries a 15-year performance guarantee, plus a 5-year workmanship guarantee from your LBP Registered Plasterer.

BRANZ Appraised
Appraisal No: 649-2009

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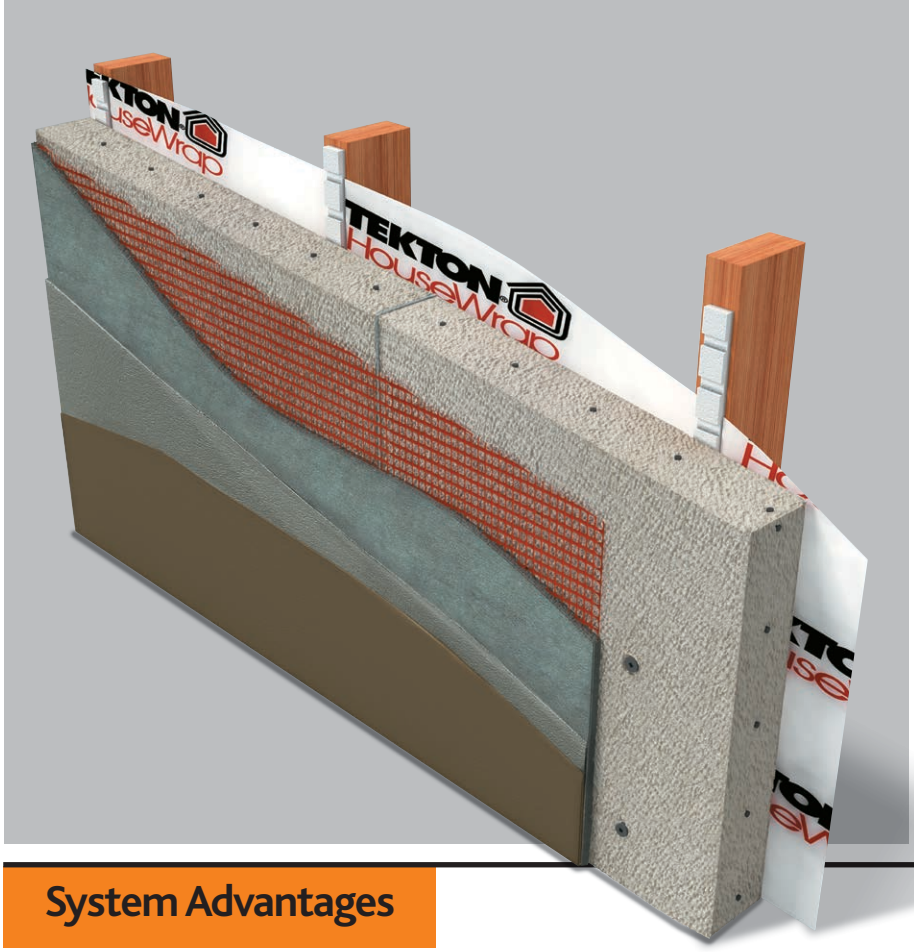

System Advantages

- At their core EzPanels are reinforced with a high strength wire mesh making them extremely impact resistant and easy to handle on site.
- Unlike Bricks and other AAC systems, the EzPanel system incorporates its own, state of the art penetration flashing system to ensure all windows and doors are adequately sealed to stop water intrusion. The penetration flashings that are required for this system are installed by the certified contractor and act as a means of secondary weather defence.
- The EzPanel system has been appraised by the Building Research Association of New Zealand (BRANZ) Appraisal No. 649 (2009) and carries a 15 year materials guarantee, backed by Specialized Construction Products Limited.
- As the EzPanel system is able to be installed 'free hanging' over the surface of its cavity, unlike bricks it does not require a strip footing or heavy metal lintels over windows to support its weight. It also does not require extra structural engineering when walls become higher than 2.4m which helps to reduce on site construction costs.
- The basic material components that are used to produce EzPanels (i.e. sand and cement) give the finished system the same robust characteristics as plastered brick. However, due to the size and lightweight nature of the EzPanels they are extremely quick and cost-effective to install when compared with traditional plastered brick claddings.
- The open celled nature of the EzPanels gives them very good resistance to the transmission of airborne sound and helps to increase the thermal capacity of the exterior envelope.
- EzPanels will not burn and therefore have an ignitability index of zero.
- The EzPanel system is typically applied over the surface of a 20 or a 40mm cavity that is created using ultra high density EPS foam battens. The battens act as a shock absorber between the framing and the panels and enable the certified contractor to easily straighten walls before the cladding is installed.
- The EzPanel certified installer takes full responsibility for creating the cavity behind the EzPanel System. By having a cavity behind the system any moisture that may penetrate the system for any reason, is able to escape uninhibited without wetting or affecting the structural framing of the building.
- Lightweight fixings such as downpipes and lights can be fixed directly into EzPanel without having to fix toggles or masonry anchors in the wall.
- The surface of the EzPanels can be easily routed or channeled to create negative grooves/ lines in the surface of the finished product which are difficult and expensive to create in other exterior plastered cladding systems.
- Even after prolonged exposure at 100% RH or after being continually wet and then dried during controlled durability testing there is little discernable change in the nature of the product.

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AeroBrick

LIGHTWEIGHT PLASTERED BRICK VENEER

AeroBrick – Autoclaved Aerated Concrete (AAC) – is a lightweight, incombustible building material that simultaneously provides structure, as well as additional improvements in thermal efficiency and acoustic performance.

Weighing up to 70% less than traditional bricks, the AeroBrick system is a quick to install, cost-effective, alternative to traditional brick veneer. Installed over a 40-75mm drainage cavity, the reduced weight of the AeroBrick system allows it to be installed to greater heights without additional engineered footings and cost prohibitive structural steel reinforcing. The system has been extensively tested and appraised by BRANZ to provide the very best junction design solutions for most types of composite building materials available in New Zealand today.

The AeroBrick system will appeal to any client/end user who desires the more robust and solid nature of traditional plastered brick veneer, yet seeks the optimal protection and peace of mind offered by the controlled installation of a guaranteed, proprietary lighter weight alternative.

The AeroBrick system carries a 15-year performance guarantee, plus a 5-year workmanship guarantee from your LBP Registered Plasterer.

BRANZ Appraised
Appraisal No: 883 -2015

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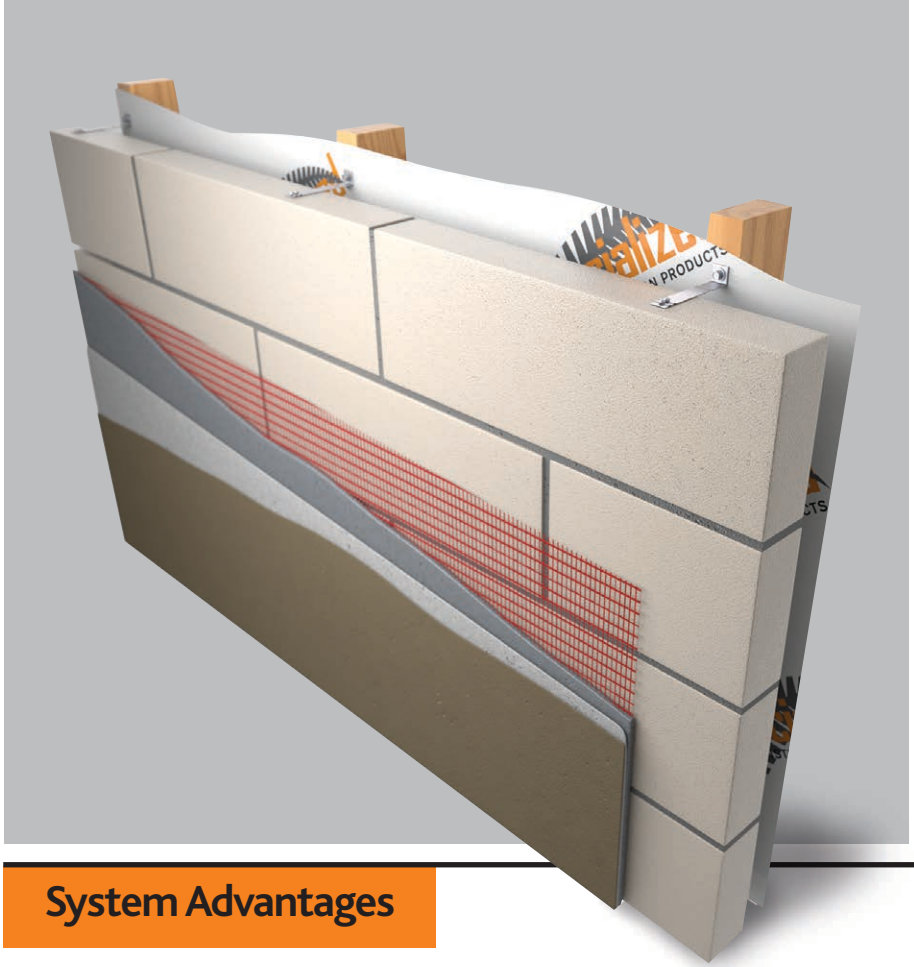

System Advantages

- AeroBrick is a high-quality, lightweight brick veneer system that once completed weighs approximately 55kg/m^2. When compared with traditional, heavy-weight brick veneer that weighs approximately 160kg-220kg/m^2 the reduction in weight places AeroBrick in the medium weight cladding classification provided in NZS3604. Due to the reduced weight of the AeroBrick system it has the potential to be used on construction that may be prone to ground movement or where excessive weight is an issue.
- The AeroBrick system has been appraised by BRANZ to achieve a maximum height of 7.5m above its foundation support, except at gable ends and some piers where this height may be up to 10.0m. This enables the quick and easy construction of two storey walls without having to incorporate additional engineering at inter-storey and foundation levels.
- The reduced weight and increased size of AeroBrick (one AeroBrick has the same volume as approximately 6.5 standard bricks) ensures the costs to lay the system are kept to a minimum.
- Unlike traditional plastered brick veneers, AeroBrick is constructed on site using a systems approach which ensures one business entity is responsible for the entire cladding system from start to finish – from laying the bricks to completing the plasterwork.

This also ensures AeroBrick can be backed by a full 15-year systems warranty issued by Specialized Construction Products Ltd.

- AeroBricks are manufactured with a proprietary water repellent that not only ensures the constructed system won't hold moisture, but also enables the bricks to be left outside uncovered during periods of inclement weather without holding up the construction process.
- The AeroBrick system has attained a full BRANZ appraisal (No. 883 - 2015) which ensures the system completely complies with the New Zealand Building Code.
- As part of the appraisal process BRANZ was requested to peer review a comprehensive set of AeroBrick construction detail drawings and junction design solutions for intersections with New Zealand's most common types of composite building materials. This set of detailed drawings allows designers and architects to freely specify and detail the system in the knowledge that a third party has critiqued and approved the details they are providing.
- Due to the inert nature of AeroBrick, the system does not require a multitude of expansion joints. Expansion joints are only required in walls longer than 12m in length.

- To reduce costs and increase speed during the construction process both the EzPanel or ThermaShell systems can be used above windows, over gable ends and up steeply pitched rooflines eliminating expensive steel lintels and additional engineering without changing the outward appearance of the system.

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Masonry Levelling Compound

The MLC masonry and brick plaster system is a BRANZ appraised solid plaster and finishing system for use over a solid backing of concrete masonry, clay brick veneer, in-situ or pre-cast concrete. Manufactured under strict quality controls, MLC is a preblended, cement–based plaster that can be easily applied as a single levelling/flanking coat over a variety of masonry back-grounds to produce a high-quality, even and true surface.

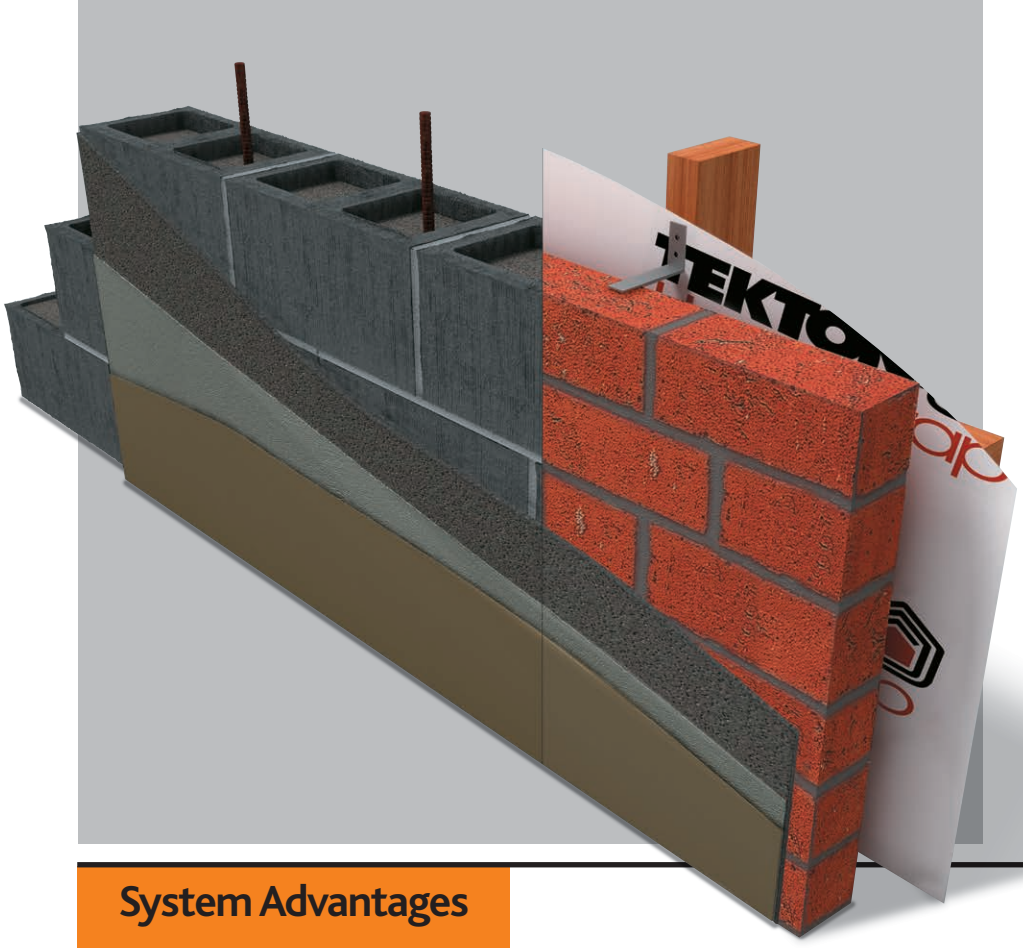
The specially developed plaster mix contains a blended mix of aggregates, cement, proprietary ingredients and a unique fibre reinforcement which allows for easy application as a thin levelling coat for concrete block, brick walls and masonry surfaces. The fibre reinforcement that MLC contains not only relieves curing stresses, but also provides an excellent surface key for a variety of conventional plaster finishes.

MLC can be placed using a steel trowel and conventional hand plastering techniques or can be spray applied using a plastering pump. MLC must be applied a minimum of 4mm thick to ensure it maintains its cohesive strength and can be applied up to 50mm thick in one coat. Once the MLC has dried it is then over coated with the chosen finishing plaster before the walls are painted with a 100% acrylic paint system.

The MLC system carries a 15-year performance guarantee, plus a 5-year workmanship guarantee from your LBP Registered Plasterer.

BRANZ Appraised
Appraisal No: 839 -2013

TRUSTED QUALITY AND PERFORMANCE



System Advantages

• Specialized Construction Products Masonry Levelling Compound (MLC) has attained a full BRANZ appraisal. This ensures the system completely complies with the New Zealand Building Code and is suitable in every respect for the extreme environment created by New Zealand's diverse weather conditions.

• During the appraisal process MLC was extensively tensile bond strength tested to ensure the adhesion of the product remained exceptionally high even under the most trying of circumstances.

• Unlike traditional 10mm Solid Plaster, the MLC system carries a full 15-year systems warranty backed by Specialized Construction Products Ltd.

• Due to the proprietary nature of the MLC system, it does not need to be moist cured or left for long periods of time between coats to ensure shrinkage cracking does not occur. This simple fact allows the plastering process to continue without the unnecessary delays that sometimes come with the curing related stoppages common with traditional solid plastering systems.

• The MLC compound is manufactured in a strictly quality controlled environment from the very best selection of raw materials available. This ensures every bag of plaster is exactly the same and every bag used on site can be traced back to its point of origin. In direct contrast to this, solid plaster is traditionally mixed in a concrete mixer using a shovel or bucket as a measuring device to load whatever sand and cement combination has been delivered to the building site.

• The MLC compound contains a special proprietary fibre reinforcement that not only relieves curing stresses but allows the system to bridge and fill large undulations in most masonry substrates without any fear of cracking. It is for this reason that MLC plaster can be placed up to 50mm thick in one coat.

• The curing time of the MLC system will vary due to various constraints such as ambient air temperature, relative humidity and surface temperature, but in general as long as it is lightly hosed down with fresh water 12 hours prior to painting, it can be painted after the finish coats have cured for a minimum of 72 hours.

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ThermaShell

EXTERIOR INSULATION AND FINISHING SYSTEM

ThermaShell is an exterior insulation and finishing system (EIFS) which incorporates the latest in both thermal insulation and cavity based cladding technology to provide a lightweight, cost-effective, plastered exterior cladding for residential and light commercial construction. The ThermaShell system is based on a 75mm substrate of Neopor®, graphite composite EPS which offers far higher insulating properties than typical EPS based claddings. This simple fact ensures the ThermaShell system will greatly reduce the ongoing costs associated with the energy used to heat or cool your building throughout its entire life cycle.

The ThermaShell system incorporates a BRANZ (Building Research Association of New Zealand) tested and appraised primary and secondary means of weather defence against water penetration by separating the cladding from the external wall framing with a nominal 20mm drained cavity. This ensures the dwelling will comply with the latest requirements of the New Zealand building code and ensures it has been formally tested to give long lasting durability even in New Zealand's most extreme weather conditions.

The ThermaShell system carries a 15-year performance guarantee, plus a 5-year workmanship guarantee from your LBP Registered Plasterer.

BRANZ Appraised
Appraisal No: 510-2013

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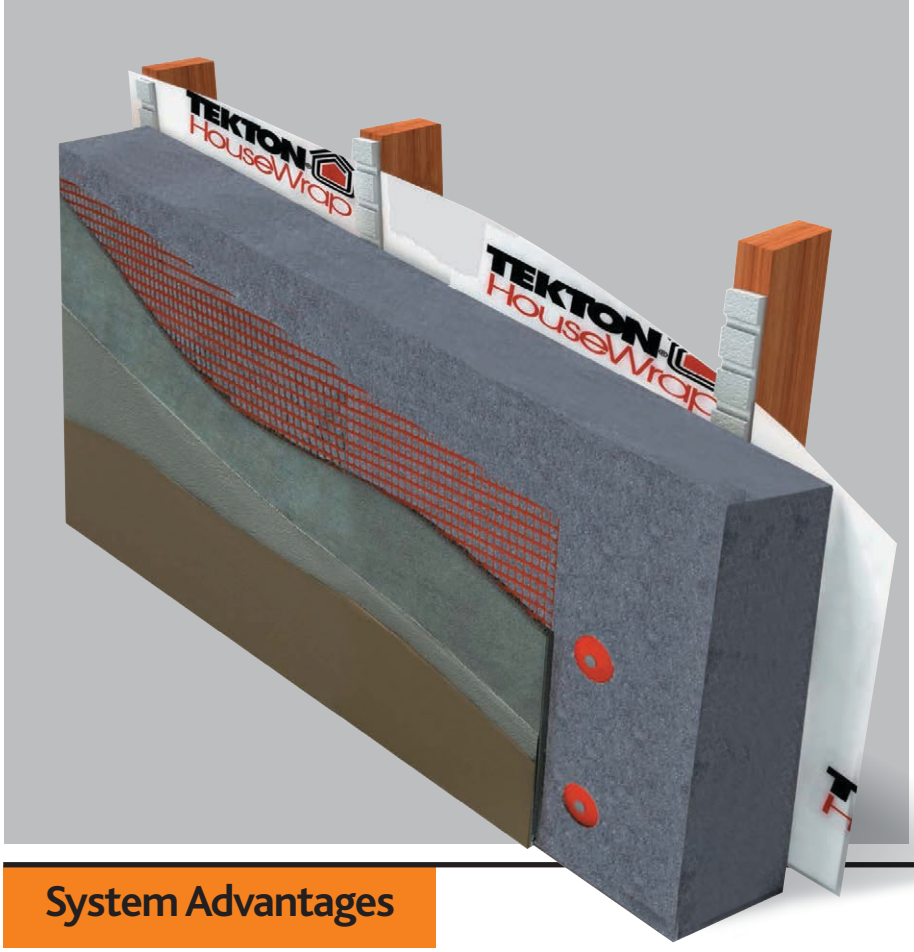

System Advantages

- Following the guidelines of New Zealand's Thermal Insulation Standard (NZS 4218:2009) conservatively the thermal calculation for 75mm ThermaShell system (over a 20mm cavity) installed over the surface of a wall incorporating an R=2.2 wall batts reaches a minimum of R= 3.44. The increase in thermal insulation offered by the ThermaShell system will not only keep your dwelling substantially warmer during the winter months and cooler in summer, it will also greatly reduce the costs associated with energy consumption over the life of the building.
- Structural Raking tests that have been conducted with Exterior Insulation and Finishing Systems clearly show that the cladding is semi-flexible. Therefore, unlike bricks and other rigid substrates, the system is able to move independently from the framing. In practice, the screw fastenings are able to move a little within the Neopor® substrate which greatly reduces the likelihood of stress fractures that commonly occur in most rigid claddings – even when earthquake style movements occur.
- ThermaShell is extremely lightweight and as a finished system weighs approximately 9-10kg/m^2. By comparison, an average un-plastered brick veneer weighs approximately 170kg/m^2. When this figure is extrapolated out an average 160m^2 single level New Zealand home a brick veneer cladding will weigh over 25 tonnes more than the ThermaShell alternative.
- It is a scientific fact that the external location of the Neopor® EPS foam insulation puts the insulation in the best place: as far toward the outside of the building as possible where the temperature fluctuates. This reduces the amount of energy that is needed to maintain a constant temperature inside the home, and does not leave cold spots like some in-wall insulation that tends to slump over time. By insulating externally you are also able to take full advantage of the thermal mass created by the framing and internal linings of the home. Thermal mass works by using a simple principle of physics, which is that heat will move from warmer surfaces to cooler surfaces. When the sun is shining into a room or you're heating a room with an appliance the air is warm and heat will be absorbed by the walls, floor and other surfaces in the room. This can enable you to use simple means such as natural sunlight to heat well positioned portions of the home or if you choose to cool the interior with air conditioning it will allow the building to stay cooler for longer periods using less energy to gain the result desired. The external location of the insulation provided by the ThermaShell system will help to keep the energy used to heat or cool the dwelling as low as possible ensuring the dwelling remains energy efficient throughout its entire lifecycle.
- Costings for the ThermaShell system including all the proprietary flashings, plaster and paint (including application) make the overall system extremely cost effective when compared with cladding using plaster bricks and other lighter weight masonry alternatives. Further savings are assured on dwellings greater than a single storey in height, as unlike bricks, the ThermaShell system does not need a substantial strip footing or heavy support lintels above windows and roof lines to support its own weight.
- The substantial thickness of the Neopor® substrate creates extremely deep window reveals giving the system the appearance of plastered masonry.
- The ThermaShell system is the holder of BRANZ (Building Research Association of New Zealand) Appraisal Number 510 and carries a 15-year system guarantee backed by Specialized Construction Products Ltd.
- The ThermaShell system incorporates its own state-of-the-art penetration flashings to ensure all windows and doors are adequately sealed to stop water intrusion. The construction and the ownership of the cavity and installation of the proprietary flashings for the ThermaShell system are accepted by the certified contractor.
- By cladding with ThermaShell not only will owners receive a fully BRANZ appraised dry ventilated cavity system, but the new cladding system will be extremely thermally efficient both in summer and winter.

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ThermaShell Reclad

LIGHTWEIGHT BRICK VENEER REPLACEMENT

For anyone who has any concerns or doubts about recladding with bricks, Thermashell Reclad provides an effective solution. Thermashell Reclad is a cavity-based external wall cladding system for residential and light commercial buildings where domestic construction techniques are used. The system uses either 70mm or 90mm Neopor® EPS panels fixed over either a 40-50 mm cavity as a backing substrate that is subsequently plastered to provide a lightweight, durable exterior cladding system.

Thermashell Reclad is fully BRANZ appraised and incorporates a primary and secondary means of weather resistance – your first and second line of defence against water penetration. This is achieved by not only separating the cladding from the external wall framing with a nominal 40 mm drained cavity, but by incorporating proprietary flashings into the system, unlike the original brick wall. Not only will Thermashell Reclad significantly increase the existing thermal envelope of every dwelling to which it is applied, but structural raking tests using EIF Systems have proven that the fixings used are able to move within the substrate. This will reduce the likelihood of future earthquake damage or settlement damage occurring in the cladding even in extreme circumstances.

The ThermaShell Reclad system carries a 15-year performance guarantee, plus a 5-year workmanship guarantee from your LBP Registered Plasterer.

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Smoovit

PREMIXED
ONE-COAT PLASTER

Smoovit is a premixed, one-coat, gypsum based hardwall plaster for flanking and finishing interior concrete blocks, masonry, bricks, metal lathe or plaster board substrates. Smoovit is supplied in two different grades, 'rapid' and '60 minute', which can be used in any combination to prepare and finish internal walls providing an ultra-smooth surface ready for painting or interior decoration.

Smoovit is based on a combination of retarded hemihydrate gypsum, lime and proprietary ingredients. When the product is mixed with cool, clean potable water, it can be applied either by hand or by pump to produce a high-quality, even and true surface.

SPECIFICATIONS

Working Time: (Rapid) Approximately 15-20mins
Working Time: (60) Approximately 30-60mins - time will vary depending on background surface, temperature, humidity and site conditions.
Coverage: Approximately 3m2 @ 10mm thick
Ready for covering: Approximately 48 hours per 3mm thickness @ 20°C and @ 65% RH – care should be taken before applying finishes over Smoovit. Plaster dries from the surface and may not have completely dried to its full depth.

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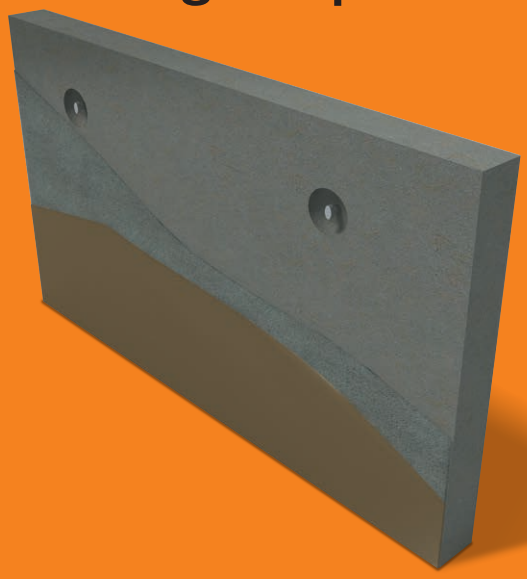
Precast
Skimming Compound



Precast Skimming Compound is a preblended, cement-based plaster that is easily applied using a steel trowel as a thin coat skimming compound to hide pinholes and other manufacturing irregularities in the surface of precast concrete panels or poured insitu concrete surfaces. If it is necessary, Precast Skimming Compound can be sanded flat using a fine grit sandpaper after it has dried to produce a high quality even and true surface ready for painting.

Precast Skimming Compound can be painted with 2-3 coats of a 100% acrylic paint system once the plaster has fully cured.

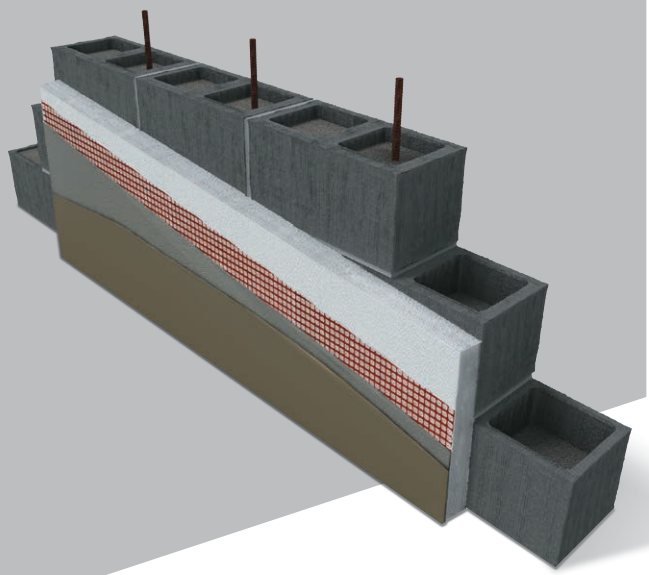
Precast Skimming Compound is guaranteed for 15 years from the date of practical completion.

Insulating
Concrete Formwork

Specialized's Masonry Insulating system provides an easy means of thermally insulating concrete formwork, negating the need to internally strap and line. It is a scientific fact that the external location of the EPS foam insulation puts the insulation in the best place: as far toward the outside of the building as possible where the temperature fluctuates. This reduces the amount of energy that is needed to maintain a constant temperature inside the home, and does not leave cold spots like other in-wall insulation. By insulating externally you are able to take full advantage of the thermal mass created by the masonry construction, a simple principle of physics, which is that heat will move from warmer surfaces to cooler surfaces.

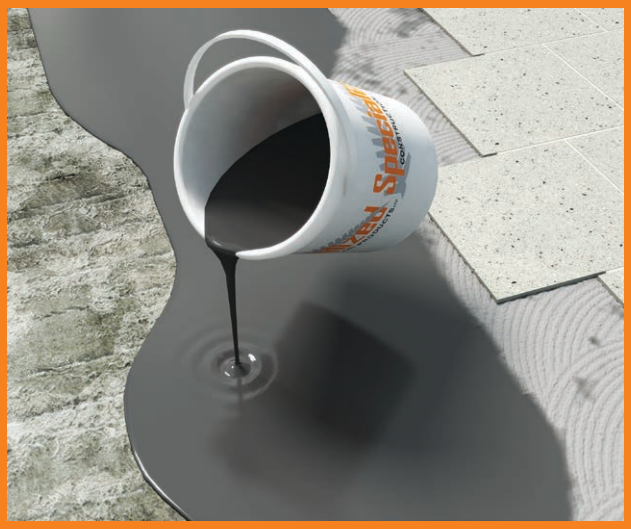
Properly designed masonry homes concentrating on thermal mass will absorb heat during the day, then, as the air temperature drops, the heat will move from the warmer thermal mass of the block to the cooler air and other surfaces in the room. In summer, thermal mass absorbs heat from the inside air, providing a cooling effect during a hot day. In other words, thermal mass evens out variations in temperature and will help to keep you comfortable, day and night, all year round.

By using the thermal mass of the walls you will reduce the energy used to heat or cool the space, ensuring that the building remains energy efficient throughout its entire lifecycle.



PouriteSLC

SELF-LEVELLING FLOOR COMPOUND



Pourite SLC is a one component polymer rich cementitious material which is mixed with clean potable water on site and used to create a low shrinkage, strong-flowing, self-smoothing plaster. Pourite SLC can be easily applied over a variety of properly prepared concrete and masonry surfaces or under-floor heating wires to produce a smooth level surface prior to the application of tiles, vinyl, carpet or other floor coverings.

Pourite SLC can be applied in multiple layers with each layer being no more than 10mm thick, or it can be economically extended with a graded aggregate to fill greater depths.

Pourite SLC is compatible with most commonly used adhesives and can normally receive floor coverings within 24 hours of installation.

SPECIFICATIONS
Application Temperature: 5°C - 30°C
Service Temperature Range: -20°C to 60°C
Coverage: Approximately 1.5kg/m^2/mm
Working Time: Approximately 15 minutes @ 20°C
Walkable: Approximately 3 hours @ 20°C
Ready for Covering: Approximately 24 hours per 3mm thickness @ 20°C and @ 65% RH

Tankit

PENETRATION WATERPROOFING COMPOUND

Tankit is a one component polymer rich cementitious material which is mixed with clean potable water on site to create a unique high-build, low shrinkage membrane. Tankit can be easily applied over a variety of properly prepared concrete and masonry backgrounds to produce a waterproof backing prior to the application of Specialized's wall claddings.
When the Tankit is mixed with water it creates a chemical cure which permits the product to be applied in poor curing conditions. Tankit will exceed the 15-year minimum durability requirements of the New Zealand Building Code Clause B2 providing it has been used in strict accordance with Specialized's written instructions, is used within the design parameters of its specification and is used in conjunction with other approved and correctly installed building systems and materials.

Tankit must be applied in 2 coats and must have a minimum dry thickness of 800µm. Where the product is being used to bridge the gap between different substrates or there is any concern with regard to the potential for ongoing movement in the substrate, Tankit must be reinforced with fibreglass mesh weighing a minimum of 150g/m^2 between the first and second layers.

This system must not be used in situations where water may pond and a minimum slope of 10° is required on all sills and copings. It is also not suitable for vehicular traffic or for use below ground.

PROPERTIES
Application Temperature: 8°C - 30°C
Service Temperature Range: -20°C to 60°C
Dry Film Thickness: 800 – 1000µm
Coverage: Approximately 1.5m2/litre per coat at a film build of 650µm

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