

BRANZ Appraised Appraisal No. 456 (2024)

NU-THERM EIFS WALL CLADDING SYSTEM

Appraisal No. 456(2024)

This Appraisal replaces BRANZ Appraisal No. 456 (2005)

BRANZ Appraisals

Technical Assessments of products for building and construction.



Ezymix Limited

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BRANZ

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Product

- 1.1 NU-THERM EIFS Wall Cladding System is a cavity-based exterior insulation and finishing system [EIFS] wall cladding. It is for use on residential and light commercial type buildings where domestic construction techniques are used.
- 1.2 The system consists of expanded polystyrene (EPS) sheets fixed over polystyrene battens to form the cavity. The coating system consists of 8 mm thick fibreglass mesh reinforced, polymer-modified cement-based plaster, which is finished with a latex exterior paint system. The plaster finish can be textured to give either a sponge or adobe appearance.

Scope

- 2.1 NU-THERM EIFS Wall Cladding System has been appraised as an external wall cladding system for buildings within the following scope:
 - the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1 for timber-framed buildings; or,
 - the scope limitations of NASH Building Envelope Solutions Paragraph 1.1 for steel-framed buildings; and,
 - with a risk score of 0-20, calculated in accordance with NASH Building Envelope Solutions or NZBC Acceptable Solution E2/AS1, Table 2; and,
 - situated in NASH Standard Part 2 or NZS 3604 Wind Zones up to, and including, Extra High.
- 2.2 NU-THERM EIFS Wall Cladding System must only be installed on vertical surfaces (except for tops of parapets, sills and balustrades, which must have a minimum 10° slope and be waterproofed in accordance with the Technical Literature).
- 2.3 The system is appraised for use with aluminium window and door joinery that is installed with vertical jambs and horizontal heads and sills. (*Note: The Appraisal of NU-THERM EIFS Wall Cladding System relies on the joinery meeting the requirements of NZS 4211 for the relevant Building Wind Zone.*)
- 2.4 Installation of components and accessories supplied by Ezymix Limited must be carried out only by Ezymix Limited approved applicators.





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Building Regulations

New Zealand Building Code (NZBC)

3.1 In the opinion of BRANZ, the NU-THERM EIFS Wall Cladding System, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet or contribute to meeting the following provisions of the NZBC:

Clause B1 STRUCTURE: Performance B1.3.1, B1.3.2 and B1.3.4. NU-THERM EIFS Wall Cladding System meets the requirements for loads arising from self-weight, wind, impact and creep [i.e. B1.3.3 (a), (h), (j) and (q)]. See Paragraphs 10.1-10.4.

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.1 (c) 5 years. NU-THERM EIFS Wall Cladding System meets these requirements. See Paragraphs 11.1 and 11.2.

Clause E2 EXTERNAL MOISTURE: Performance E2.3.2. NU-THERM EIFS Wall Cladding System meets this requirement. See Paragraphs 16.1-16.5.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. NU-THERM EIFS Wall Cladding System meets this requirement.

Technical Specification

4.1 System components and accessories supplied by Ezymix Limited are as follows:

Plasters

- Adhesive Mortar Coarse (AMC) is a polymer-modified, Portland cement-based plaster comprising a fine or very fine sand and additives. It is supplied in 25 kg bags and mixed on-site with clean water. It is trowel or pump-applied as a scratch coat in a 3-5 mm thick layer followed by the embedment of fibreglass mesh reinforcement in the outer surface.
- Sponge Finish is a polymer-modified, Portland cement-based plaster comprising a fine sand, hydrated lime and additives. It is available in either 1 mm Sponge or 2 mm Sponge. The product is supplied in 25 kg bags and is mixed on-site with clean water. It can be trowel or pump-applied to a thickness of 1-2 mm (1 mm Sponge) and 2-3 mm (2 mm Sponge).

Accessories

- **Reinforcing mesh** alkali-resistant fibreglass mesh with a nominal mesh size of approximately 4 mm square or 6 mm square and a weight of 150 g/m².
- **uPVC components** sill flashing, jamb flashing, head flashing, base caps, cavity closer, vermin tray/ventilated cavity closure, Z-flashing and horizontal and vertical control joint flashings.
- Washers 43 mm diameter, high density polyethylene washers or 40 mm diameter polypropylene washers.
- 4.2 Accessories used with the system which are supplied by the applicator are:

Polystyrene Sheets and Cavity Battens

- Cavity battens manufactured from high density (Class H) expanded polystyrene (EPS) with an approximate density of 24 kg/m³. The battens are 20 mm thick by 50 mm wide.
- EPS sheets 40 or 60 mm thick Class S with an approximate density of 16 kg/m³, or 40 or 60 mm thick Class H with an approximate density of 24 kg/m³. The sheets are supplied in lengths ranging from 2.4 to 3.6 m x 1.2 m wide and are manufactured to meet the requirements of AS 1366 Part 3.

Sheet and Cavity Batten Fixings

- Cavity batten and EPS sheet fixings (steel frame) minimum fixings for non-structural claddings shall be Class 3 for climate zones B, C and D (as outlined in NZS 3604). 8 g x 90 drill point, 10 g x 90 drill point or equivalent with a minimum framing penetration of 3 threads at 150 mm centres to sides, 300 mm centres in the middle with 40 mm plastic washer on external corner fixings.
- Cavity batten fixings [timber frame] 30 x 2.5 mm hot-dip galvanised flat head nails.
- EPS sheet fixings (timber frame) 90 x 3.55 mm (for 40 mm thickness) and 125 x 5.3 mm (for 60 mm thickness) hot-dip galvanised flat head nails.



Other

- Waterproof membrane tapes tapes covered by a valid BRANZ Appraisal for use as waterproofing membranes over tops of plastered parapets, balustrades, fixing blocks and the like.
- Flexible sealant sealant complying with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions, or sealant covered by a valid BRANZ Appraisal for use as a weather sealing sealant for exterior use.
- Adhesive EPS compatible adhesive for gluing uPVC components to the EPS sheets.
- 4.3 Accessories used with the system which are supplied by the building contractor are:
 - Flexible wall underlay building paper complying with NZBC Acceptable Solution E2/AS1 Table 23 or NASH Building Envelope Solutions, Table 23, or a breather-type membrane covered by a valid BRANZ Appraisal for use as a wall underlay.
 - Flexible building underlay support polypropylene strap, 75 mm galvanised mesh, galvanised wire, or additional vertical battens for securing the flexible building underlay in place and preventing bulging of the bulk insulation into the drainage cavity. [Note: Mesh and wire galvanising must comply with AS/NZS 4534.]
 - **Rigid wall underlay** plywood or fibre cement sheet complying with NZBC Acceptable Solution E2/AS1, or NASH Building Envelope Solutions, Paragraph 9.1.7.2, or rigid sheathing covered by a valid BRANZ Appraisal for use as a rigid air barrier system.
 - Flexible sill and jamb flashing tapes flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1 Paragraph 4.3.11 or NASH Building Envelope Solutions, Paragraph 4.2.10, or flexible flashing tapes covered by a valid BRANZ Appraisal for use around window and door joinery openings.
 - Window and door trim cavity air seal air seals complying with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.6 or NASH Building Envelope Solutions Paragraph 9.1.6, or self-expanding, moisture cure polyurethane foam air seals covered by a valid BRANZ Appraisal suitable for use around window, door and other wall penetration openings.
 - Joinery head flashings as supplied by the joinery manufacturer or contractor.

Paint System Specification

• A latex exterior paint system complying with any of Parts 7, 8, 9 or 10 of AS 3730 must be used over the finishing plasters to make the system weathertight and give the desired finish colour to exterior walls. Paint colours must have a light reflectance value (LRV) of 40% minimum regardless of gloss value. Proprietary paint systems have not been assessed and are outside the scope of this Appraisal.

Handling and Storage

- 5.1 Handling and storage of all materials supplied by Ezymix Limited or the approved applicator, whether on-site or off-site, is under the control of the applicator. Dry storage must be provided on site for the fibreglass mesh and bags of plaster. EPS sheets and battens, uPVC flashings and profiles must be protected from direct sunlight and physical damage, and should be stored flat and under cover.
- 5.2 Handling and storage of all materials supplied by the building contractor, whether on-site or off-site, is under the control of the building contractor. Materials must be handled and stored in accordance with the relevant manufacturer's instructions.
- 5.3 Bags of Ezymix plaster must be used within the designated shelf life of six months from the date of manufacture.

Technical Literature

- 6.1 This Appraisal must be read in conjunction with:
 - NU THERM Technical Manual, Version 9, dated August 2024.
- 6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.



Design Information

Framing

Timber Framing

- 7.1 Timber framing must comply with NZS 3604 for buildings or parts of buildings within the scope limitations of NZS 3604. Buildings or parts of buildings outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NZS 3604. In all cases studs must be at maximum 600 mm centres. Dwangs must be fitted flush between the studs at maximum 800 mm centres.
- 7.2 Timber framing must have a maximum moisture content of 24% at the time of the cladding application. (*Note: If EPS sheets are fixed to framing with a moisture content of greater than 24%, problems may occur at a later date due to excessive timber shrinkage.*)
- 7.3 Timber wall framing behind the NU-THERM EIFS Wall Cladding System must be treated as required by NZBC Acceptable Solution B2/AS1.

Steel Framing

- 7.4 Steel framing must comply with NASH Standard Part Two for buildings or parts of buildings within the scope limitations of NASH Standard Part Two. Buildings or parts of buildings outside the scope of the NASH Standard Part Two must be to a specific design in accordance with AS/NZS 4600 and AS/NZS 1170. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NASH Standard Part Two. In all cases, studs must be at maximum 600 mm centres. Dwangs must be fitted flush between the studs at maximum 800 mm centres.
- 7.5 The minimum framing specification is 'C' section studs and nogs with overall section size of 75 mm web and 32 mm flange. Steel thickness must be minimum 0.75 mm (base metal thickness).

EPS Sheet Setout

- 7.6 All vertical EPS sheet edges must be supported and fixed through the cavity battens to the framing. Horizontal sheet edges must be supported at fixing locations with cavity spacers 100 mm long maximum, in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.2 (f) or NASH Building Envelope Solutions 9.1.9.2 (g). At the base of the wall, the EPS sheets must hang 50 mm below the supporting framing.
- 7.7 Additional framing will be required at soffits, internal and external corners, and window and door openings for the support and fixing of sheet edges.

General

7.8 The finish coat colours must have a light reflectance value of 40% minimum, regardless of gloss value.

General

- 8.1 Punchings in the vermin tray/ventilated cavity closure provide a minimum ventilation opening area of 1,000 mm² per lineal metre of wall, in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.8.3 (b) and NASH Building Envelope Solutions Paragraph 9.1.9.3(b).
- 8.2 The ground clearance to finished floor levels as set out in NZS 3604 or NASH Standard Part Two must be adhered to at all times. At ground level, paved surfaces, such as footpaths, must be kept clear of the bottom edge of the cladding system by a minimum of 100 mm, and unpaved surfaces by 175 mm, in accordance with the requirements of NZBC Acceptable Solution E2/AS1 Table 18, or NASH Building Envelope Solutions Table 18.
- 8.3 At balcony, deck or roof/wall junctions, the bottom edge of the NU-THERM EIFS Wall Cladding System must be kept clear of any adjacent surface, or above the top surface of any adjacent roof flashing by a minimum of 35 mm, in accordance with the requirements of NZBC Acceptable Solution E2/AS1 Paragraph 9.1.3 or NASH Building Envelope Solutions Paragraph 9.1.3.



- 8.4 All external walls of buildings must have barriers to airflow in the form of interior linings with all joints stopped for wind zones up to, and including, Extra High. Unlined gables and walls must incorporate a rigid sheathing or an air barrier which meets the requirements of NZBC Acceptable Solution E2/AS1 Table 23, or NASH Building Envelope Solutions Table 23. For attached garages, wall underlays must be selected in accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.3.4, or NASH Building Envelope Solutions Paragraph 9.1.3.4. Where rigid wall underlays are used, the cladding fixing lengths must be increased by a minimum of the thickness of the underlay.
- 8.5 Where penetrations through the NU-THERM EIFS Wall Cladding System are wider than the cavity batten spacing, allowance must be made for airflow between adjacent cavities. A minimum 10 mm gap must be left between the bottom of the vertical cavity batten and the head flashing to the opening.
- 8.6 Where the system abuts other cladding systems, designers must detail the junction to meet their own requirements and the performance requirements of the NZBC. These details are outside the scope of this Appraisal.

Electrical Cables

8.7 PVC sheathed electrical cables must be prevented from direct contact with the polystyrene. When cables must penetrate the EPS for exterior electrical connections, the cable must be directly supported by passing through an electrical conduit.

Control Joints

- 9.1 Control joints must be constructed in accordance with the Technical Literature, and be provided as follows:
 - Horizontal control joints at maximum 7 m centres.
 - Vertical control joints at maximum 20 m centres; aligned with any control joint in the structural framing; where the system abuts different cladding types, or where the system covers different structural materials.

[Note: Horizontal and vertical control joints must be located over structural supports. The design of vertical control joints where the system abuts different cladding types is outside the scope of this Appraisal and is the responsibility of the designer, see Paragraph 8.6.]

Inter-storey Junctions

9.2 Inter-storey junctions must be constructed in accordance with the Technical Literature. Interstorey joints must be provided to limit continuous cavities to the lesser of 2-storeys or 7 m in height, in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.1.9.4(b) and NASH Building Envelope Solutions Paragraph 9.1.10.4(b).

Structure

Mass

10.1 The mass of the NU-THERM EIFS Wall Cladding System is approximately 9 kg/m², therefore it is considered a light wall cladding in terms of NZS 3604 and NASH Standard Part Two.

Impact Resistance

10.2 The system has adequate resistance to impact loads likely to be encountered in normal residential use. The likelihood of impact damage to the system when used in light commercial situations should be considered at the design stage, and appropriate protection such as the installation of bollards and barriers should be considered for vulnerable areas.

Wind Zones

10.3 NU-THERM EIFS Wall Cladding System is suitable for use in all Wind Zones of NZS 3604, up to, and including Extra High where buildings are designed to meet the requirements of NZBC Acceptable Solution E2/AS1 Paragraph 1.1 or NASH Building Envelope Solutions Paragraph 1.1.

EPS Sheet Fixing

10.4 EPS sheets must be fixed through the cavity battens and cavity spacers to the wall framing at maximum 150 mm centres to the sheet edges and 300 mm centres in the body of the sheet.



Durability

11.1 NU-THERM EIFS Wall Cladding System meets the performance requirements of NZBC Clause B2.3.1
(b) 15 years for the cavity system and plaster finish, and the performance requirements of NZBC Clause B2.3.1
(c) 5 years for the exterior coating system.

Serviceable Life

- 11.2 NU-THERM EIFS Wall Cladding System is expected to have a serviceable life of at least 30 years, provided the system is maintained in accordance with this Appraisal, and the EPS sheets, fixings and plaster are continuously protected by a weathertight coating and remain dry in service.
- 11.3 Micro-climatic conditions, including geothermal hot spots, industrial contamination and corrosive atmospheres, and contamination from agricultural chemicals or fertilisers can convert mildly corrosive atmosphere into aggressive environments for fasteners. The fixing of NU-THERM EIFS Wall Cladding System in areas subject to micro-climatic conditions requires specific design in accordance with NZS 3604 Paragraph 4.2.4, and is outside the scope of this Appraisal.

Maintenance

- 12.1 Regular maintenance is essential to ensure the performance requirements of the NZBC are continually met, and to ensure the maximum serviceability of the system.
- 12.2 Regular cleaning (at least annually) of the paint coating is required to remove grime, dirt and organic growth and to maximise the life and appearance of the coating. Grime may be removed by brushing with a soft brush, warm water and detergent. Paint systems must be re-coated at approximately 5-10 yearly intervals in accordance with the paint manufacturer's instructions.
- 12.3 Annual inspections must be made to ensure that all aspects of the cladding system, including the coating system, plaster, flashings and any sealed joints remain in a weatherproof condition. Any cracks, damaged areas or areas showing signs of deterioration which would allow water ingress, must be repaired immediately. Sealant, coatings and the like must be repaired in accordance with the instructions of Ezymix Limited.
- 12.4 Minimum ground clearances as set out in this Appraisal and the Technical Literature must be maintained at all times during the life of the system. [Note: Failing to adhere to the minimum ground clearances given in this Appraisal and the Technical Literature will adversely affect the long term durability of the NU-THERM EIFS Wall Cladding System.]

Interior Surface Finishes

- 13.1 The NU-THERM EIFS Wall Cladding System contains polystyrene which is a foamed plastic. When used on walls, the EPS, including any surface lining product enclosing the insulation from the adjacent occupied space, must achieve the Group Number for internal surface finish requirements as specified in NZBC Acceptable Solution C/AS1 Paragraph 4.2.2.1 or C/AS2 Paragraph 4.17.2 and Table 4.3.
- 13.2 EPS used with the system must meet the flame propagation criteria of AS 1366 as specified in NZBC Acceptable Solution C/AS1 Paragraph 4.2.2 or NZBC Acceptable Solution C/AS2 Paragraph 4.17.2.

Control of External Fire Spread

14.1 Refer to NZBC Acceptable Solutions C/AS1 and C/AS2 for fire resistance rating and control of external fire spread requirements for external walls.

Vertical Fire Spread

14.2 This Appraisal only covers buildings 10 m or less in height. NZBC Functional Requirement C3.2 identifies that external vertical fire spread to upper floors only needs to be considered for buildings with a building height greater than 10 m. Control of external vertical fire spread is therefore outside the scope of this Appraisal.



Horizontal Fire Spread

14.3 The NU-THERM EIFS Wall Cladding System contains materials not tested or classified as noncombustible and is therefore not suitable for use on external walls where a Fire Resistance Rating (FRR) is required.

External Cladding Systems

14.4 The NU-THERM EIFS Wall Cladding System contains materials not tested or classified as noncombustible which are suitable for use on external walls in accordance with NZBC Acceptable Solution C/AS1 Table 5.3.1.1 or C/AS2 Section 5.8.

Prevention of Fire Occurring

15.1 Separation or protection must be provided to the NU-THERM EIFS Wall Cladding System from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Acceptable Solution C/AS1 and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

External Moisture

- 16.1 NU-THERM EIFS Wall Cladding System, when installed in accordance with this Appraisal and the Technical Literature, prevents the penetration of moisture that could cause undue dampness or damage to building elements.
- 16.2 The cavity must be sealed off from the roof and sub-floor space to meet code compliance with NZBC Clause E2.3.5.
- 16.3 NU-THERM EIFS Wall Cladding System allows excess moisture present at the completion of construction to be dissipated without permanent damage to building elements to meet code compliance with NZBC Clause E2.3.6.
- 16.4 The details given in the Technical Literature for weather sealing are based on the design principle of having a first and second line of defence against moisture entry for all joints, penetrations and junctions. The ingress of moisture must be excluded by detailing joinery and wall interfaces as shown in the Technical Literature. Weathertightness details that are developed by the designer are outside the scope of this Appraisal and are the responsibility of the designer for compliance with the NZBC.
- 16.5 The use of NU-THERM EIFS Wall Cladding System where there is a designed cavity drainage path for moisture that penetrates the cladding does not reduce the requirement for junctions, penetrations and the like, to remain weather resistant.

Internal Moisture

- 17.1 NU-THERM EIFS Wall Cladding System alone does not meet NZBC Acceptable Solution E3/AS1 Paragraph 1.1.1(a). Buildings must be constructed with an adequate combination of thermal resistance and ventilation, and space temperature must be provided to all habitable spaces, bathrooms, laundries and other spaces where moisture may be generated or may accumulate.
- 17.2 The EPS cavity battens will act as a thermal break to steel framing in accordance with NZBC Acceptable Solution E3/AS1.

Water Vapour

17.3 NU-THERM EIFS Wall Cladding System is not a barrier to the passage of water vapour, and when correctly installed will not create or increase the risk of moisture damage resulting from condensation.



Installation Information

Installation Skill Level Requirement

18.1 All design and building work must be carried out in accordance with the Technical Literature and this Appraisal. All building work must be undertaken by Ezymix Limited approved applicators. Where the work involves Restricted Building Work (RBW), this must also be completed by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant License Class.

System Installation

Building Underlay and Flexible Sill and Jamb Tape Installation

- 19.1 The selected building underlay and flexible sill and jamb tape system must be installed by the building contractor in accordance with the underlay and tape manufacturer's instructions prior to the installation of the cavity battens and the rest of the NU-THERM EIFS Wall Cladding System. Flexible building underlay must be installed horizontally and be continuous around corners. Underlay must be lapped 75 mm minimum at horizontal joints and 150 mm minimum over studs at vertical joints. Generic rigid wall underlays must be installed in accordance with NZBC Acceptable Solution E2/AS1 or NASH Building Envelope Solutions and be overlaid with a flexible wall underlay. Proprietary systems shall be installed in accordance with the manufacturer's instructions. Particular attention must be paid to the installation of the building underlay and sill and jamb tapes around window and door openings to ensure a continuous seal is achieved and all exposed wall framing in the opening is protected.
- 19.2 Where studs are at greater than 450 mm centres and a flexible wall underlay is being used, a building underlay support must be installed in accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.8.5 or NASH Building Envelope Solutions Paragraph 9.1.9.5.

Aluminium Joinery Installation

19.3 Aluminium joinery and associated head flashings must be installed by the building contractor in accordance with the Technical Literature. A 7.5-10 mm nominal gap must be left between the joinery reveal and the wall framing so a PEF rod and air seal can be installed after the joinery has been secured in place.

NU-THERM EIFS Wall Cladding System

- 19.4 The system must be installed in accordance with the Technical Literature by Ezymix Limited approved applicators.
- 19.5 The NU-THERM EIFS Wall Cladding System plaster system must only be applied when the air and substrate temperature is within the range of +5°C to +30°C.

Inspections

19.6 The Technical Literature must be referred to during the inspection of NU-THERM EIFS Wall Cladding System installations.

Finishing

19.7 The paint suppliers instructions must be followed at all times for application of the paint finish. The plaster must be cured a minimum of 7 days before commencing painting.

Health and Safety

20.1 Safe use and handling procedures for the components that make up the NU-THERM EIFS Wall Cladding System are provided in the relevant manufacturer's Technical Literature.



Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

- 21.1 The following testing has been completed by BRANZ:
 - Tests to determine the bond strength of Adhesive Mortar Coarse (AMC) to EPS sheet.

Other Investigations

- 22.1 A durability opinion has been provided by BRANZ technical experts.
- 22.2 BRANZ expert opinion on NZBC E2 code compliance for NU-THERM EIFS Wall Cladding System was based on evaluation of all details within the scope against NZBC Acceptable Solution E2/AS1, as stated within this Appraisal. The details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for drained cavity claddings.
- 22.3 Site inspections have been carried out by BRANZ to assess the practicability of installation, and to examine completed installations.
- 22.4 The manufacturer's Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

- 23.1 The manufacture of the plasters has been examined by BRANZ, including methods adopted for quality control. Details regarding the quality and composition of the components and accessories used with the system were obtained by BRANZ and found to be satisfactory.
- 23.2 The quality of materials, components and accessories supplied by Ezymix Limited is the responsibility of Ezymix Limited.
- 23.3 Quality on-site is the responsibility of the applicator.
- 23.4 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and joinery, building underlays, flashing tapes, air seals and joinery head flashings, in accordance with the instructions of Ezymix Limited.
- 23.5 Building owners are responsible for the maintenance of NU-THERM EIFS Wall Cladding System installations in accordance with the instructions of Ezymix Limited.

Sources of Information

- AS 1366:1992 Rigid cellular plastic sheets for thermal insulation.
- AS 3566-2002 Self-drilling screws for the building and construction industries.
- AS/NZS 1170:2002 Structural design actions.
- NASH Building Envelope Solutions 2019.
- NASH Standard Part 2: 2019 Light Steel Frame Buildings.
- NZS 3603:1993 Timber Structures Standard.
- NZS 3604:2011 Timber-framed buildings.
- NZS 4211:2008 Specification for performance of windows.
- Ministry of Business, Innovation and Employment Record of amendments Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.





In the opinion of BRANZ, NU-THERM EIFS Wall Cladding System is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Ezymix Limited**, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

- 1. This Appraisal:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the Technical Literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
- 2. Ezymix Limited:
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions;
 - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
- 3. BRANZ makes no representation or warranty as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by Ezymix Limited.
- 4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
- 5. BRANZ provides no certification, guarantee, indemnity or warranty, to Ezymix Limited or any third party.

For BRANZ

Claire Falck Chief Executive Date of Issue: 06 September 2024