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1.0 INTRODUCTION

1.1 Product Description

When selecting the exterior cladding on a home, there are many options available, though with today's busy lifestyle it is important to choose not only a cladding that looks smart on day one, but will keep on looking smart without continual time-consuming maintenance.

Palliside weatherboards are a solid, smart looking cladding, which provides the natural shadow-lines and definition of timber weatherboards with a low maintenance finish. This ensures the product will keep on looking good without the continual maintenance often associated with weatherboards.

Palliside can be handled and worked like timber with no requirement for special tools, though unlike timber once it's up it requires only an occasional wash down to uphold its smart looks.

Designed and manufactured in New Zealand specifically for the rigours of this country's unique climate, Palliside weatherboards have a strong cellular core and a tough co-extruded outer layer. This outer layer provides additional impact and scratch resistance as well as excellent Ultra-Violet protection.

Palliside's uPVC cellular foam construction absorbs most expansion and contraction within itself[1] and allows the board to be face nailed without the need of pre-drilling or expansion slots.

Palliside weatherboards are 5.8m long with a double profile. This enables them to be installed quickly and boards can be joined off stud[2] further helping to reduce wastage.

Palliside weatherboards are available in two profiles and in a range of colours (refer to paragraph 5.6). The **Rusticated** profile is available in a ***smooth*** or ***woodgrain*** finish. The **Traditional** (bevel-backed) profile is available in a ***smooth*** finish only. A full range of custom designed accessories is also available to complement and finish the Palliside weatherboard system.

Forget the thought of rotting, peeling weatherboards and forget the sanding, scraping and painting. Get on with life with Palliside, the Smart Choice in Weatherboards.

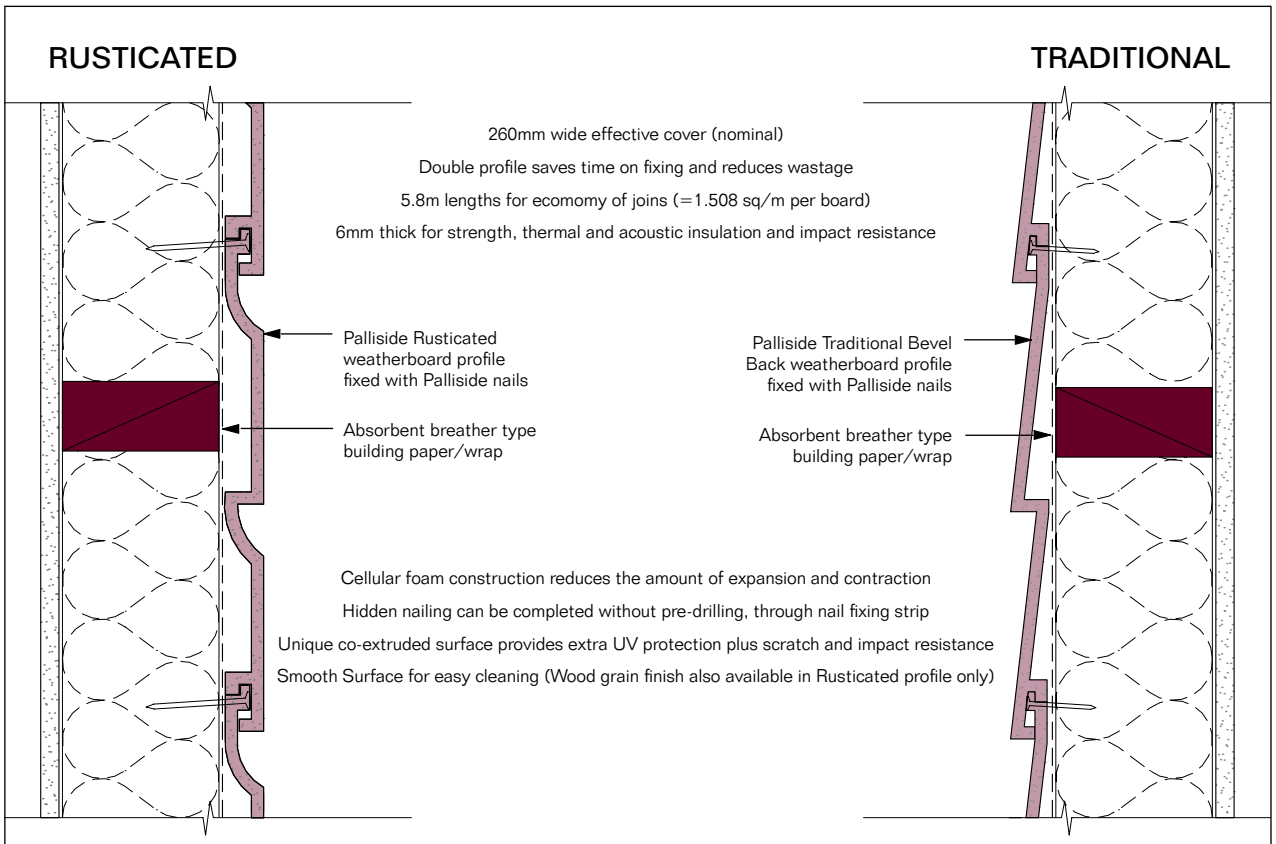

DIAGRAM A – Wall Section

[1]Palliside weatherboards have a thermal expansion coefficient of 3 x 10^{-5} per °C
[2]Providing that the flat soaker joining option is selected

1.2 Product Information

Palliside is suitable as an exterior cladding subject to the design scope and details specified in this technical guide.

Over time there will be gradual fading and chalking of colours as is standard with all exterior pigmented finishes. This will not affect the long-term durability and weather protection of Palliside. Chalking can be removed by periodic cleaning (refer to paragraph 4.1 in this technical guide).

1.3 Our Quality 25-Year Product Guarantee

Subject to the above product information, if Palliside is used and installed according to Dynex's published recommendations, we guarantee Palliside to be free from defects in materials for a period of 25 years from the date of purchase.

If you feel that our guarantee has not been fulfilled, do not attempt repairs or replacement. In the first instance contact the product installer and discuss with them your concerns. If required, they may wish to contact Dynex who will then institute timely response including an inspection of the installation if required. Proof of the product purchase date may be required.

If Palliside has been used and installed in accordance with the requirements of this guarantee (set out above) but does not comply with that guarantee, we will replace the product or refund its purchase price.

This guarantee is given to consumers as defined in and who have the rights under the Consumer Guarantees Act 1993, and should be read with the statutory consumer guarantees contained in that Act.

1.4 Independently Assessed

As well as our own testing, Palliside Weatherboards have undergone independent structural, durability and weathertightness assessment at BRANZ.

Two BRANZ Appraisal Certificates are available on request.

Palliside Weatherboard System for Direct Fix Construction (Appraisal Certificate No. 490 (2005)).

Palliside Weatherboard System for Cavity Construction (Appraisal Certificate No. 491 (2005)).

1.5 Continual Improvement

Dynex Extrusion Limited value feedback and correspondence that helps to ensure that the product literature is accurate and kept up to date.

If you believe there is an area we have over looked or have any suggestions that will assist others in working with and installing Palliside please let us know.

To contact us, please refer to contact details shown on the back page of this document.

2.0 SCOPE AND SPECIFICATION

2.1 Site Requirements

The site on which the building (to be clad in Palliside) is situated must comply with the requirements of NZBC Acceptable Solution E1/AS1

Foundation design, in all cases, must be either timber or concrete pile, or concrete slab in accordance with NZS 3604.

2.1.1 Ground Clearances

Minimum ground clearances specified in Table 18 of NZBC Acceptable Solution E2/AS1 must be observed when setting out Palliside weatherboards. Weatherboards must be kept clear of paved surfaces by a minimum of 100mm and unpaved by a minimum of 175mm. The setting out must also take into consideration the chosen starting accessory ensuring that the base of the board has a minimum overhang of at least 50mm below the bottom plate.

2.1.2 Ground Level Timber Framing

When installing Palliside direct to the frame on a concrete slab the setting out of framing at ground floor level needs to be offset horizontally by a minimum of 6mm to prevent capillary action. (Refer design detail DF05)

Palliside weatherboards must overlap the timber floor structure by at least 50mm.
Note: This offset is not required when installing Palliside over a drained cavity.

2.2 Structure Requirements

Palliside may be installed utilising one of the following methods:

- **Fixed directly to timber frame**
- **Fixed to timber frame over a drained cavity**
- **Fixed to steel framing with the allowance for a thermal break between the framing and the Palliside**
- **Fixed over battens on concrete or masonry walls**

2.2.1 Frames

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 NZS 4203. 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 600mm centres. Dwangs must be fitted flush between the studs at maximum 800mm centres.

All framing must be true to provide a level surface for fixing. As a guide a deviation of 4mm measured from a 2.4m straight edge is the maximum deviation recommended.

A maximum moisture content of 18% is required prior to final straightening and application of the building paper/ wrap and Palliside.

2.2.2 Timber Treatment

Timber wall framing must be treated as required by NZS 3602.

2.2.3 Steel Framing

Steel framing must be to a specific design meeting the requirements of the NZBC.

The minimum framing specification is ‘C’ section studs and dwangs of overall section size of 75mm web and 32mm flange. Steel thickness must be minimum 0.55mm.

Studs must be at maximum 600mm centres. Dwangs must be fitted flush between the studs at maximum 800mm centres.

When fixing Palliside directly to steel framing a thermal break (barrier) must be used for each framing member with a minimum thickness of 10mm (Refer diagram B).

Palliside is fixed to the steel frame over this thermal barrier, using minimum self drilling SS304 grade countersunk square drive screws or equivalent. The length of the fixing must take into account the thickness of the thermal break and have a minimum 10mm penetration through the frame.

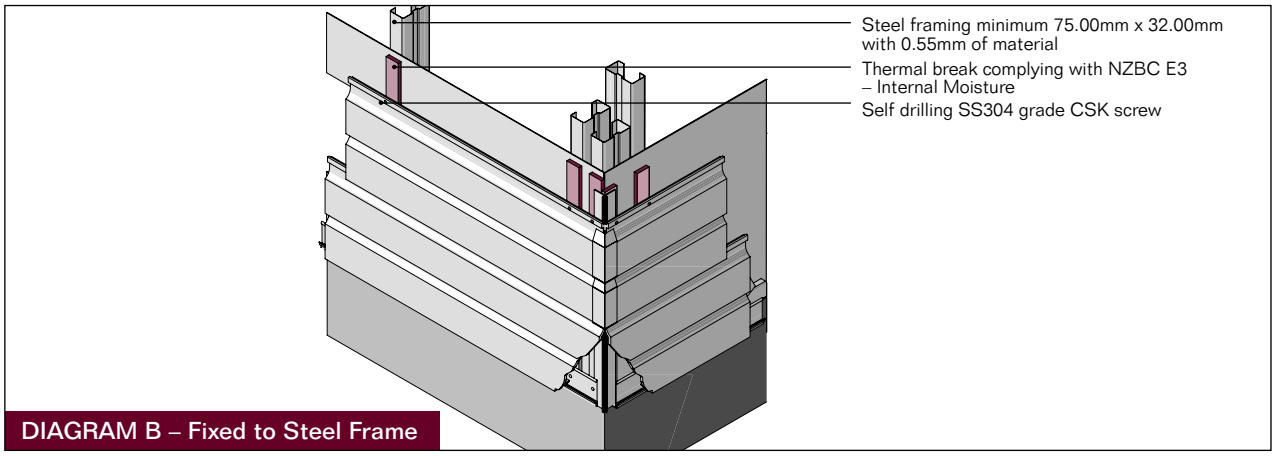

DIAGRAM B – Fixed to Steel Frame

2.3 Bracing

Palliside weatherboards do not have any bracing qualities and cannot be used as a substitute for bracing panels.

2.4 Wind Loading

The Palliside weatherboard system has been structurally tested by BRANZ and meets all the requirements for Building Wind Zones up to and including Very High (VH) as defined by NZS3604.

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. Where rigid sheathings are used, the fixing length must be increased by a minimum of the thickness of the sheathing.

2.5 Establishing Weathertightness Risk

As with all exterior claddings a risk assessment of the proposed design needs to be carried out in accordance with Tables 1 and 2 of NZBC Acceptable Solution E2/AS1.

Once the risk score for each elevation has been defined, the decision can be made whether to install Palliside weatherboards **direct to the frame** or over a **drained cavity**.

- **For elevations with a score calculated at between 0 and 12 points Palliside weatherboards can either be installed direct to the frame or over a drained cavity.**
- **For elevations with a score calculated between 13 and 20 points Palliside weatherboards must be installed over a drained cavity.**

2.5.1 Jointing Limitation – Direct to the Frame Weathertightness Risk Score 7-12

When installing Palliside direct to the frame the Palliside moulded flat soaker is only suitable for installations up to 6 points.

For elevations calculated between 7 and 12 points the Palliside 2-Part Flat Jointer must be used as the jointing option (with the base of this jointing option fixed on the stud before cladding of weatherboards commences)

Note: When installed over a drained cavity the Palliside moulded flat soaker is suitable for all elevation scores up to 20 points.

2.6 Weathertightness

It is the responsibility of the Architect/Designer to recommend an appropriate solution for any flashing detail relevant to the project that is not covered in this document. This may include the need for customised flashings.

It is the responsibility of the Builder/Product Installer to ensure that Palliside is installed weathertight using relevant flashing detail in accordance with this document and/or E2/AS1.

2.7 Fire Properties

Palliside weatherboards are suitable for use as an exterior wall cladding system when restricted to:

- **Single storey buildings 1m or more from the boundary for all purpose groups.**
- **Buildings up to 7m high, 1m or more from the boundary, for all purpose groups other than SC and SD.**
- **Fully sprinklered buildings up to 25m high, 1m or more from the boundary for all purpose groups other than SC, SD, SA and SR.**
- **Buildings containing purpose group SH, with a building height less than 10m and located 1 m or more from the boundary.**

Fire Indices: AS1530.3	
Ignitibility	0
Spead of flame	0
Heat evolved	0
Smoke developed	8

The product is not easily ignited. It shrinks, melts and flows away from the heat source. Palliside is self-extinguishing and ceases to burn upon removal of the heat source.

Please contact Dynex Extrusions Limited if measurements are required for AS/NZS 3837.

2.8 Building Paper or Building Wrap

When installing Palliside direct to the frame an **absorbent** breather-type building membrane complying with NZBC Acceptable Solution E2/AS1 Table 23 must be installed over the framing.

Note: Some synthetic building wraps are not suitable for use with direct fixed non-absorbent claddings (such as uPVC, Steel or Aluminium), as they do not have a minimum absorbency rating of 100g/m².

In the situation where Palliside weatherboards are to be installed over a drained cavity it is not necessary for the building paper/wrap to be absorbent.

The installer needs to ensure that the method of fitting the building wrap is addressed in accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.7.

It must be installed as tight as possible, be continuous around corners, lapped 75mm at horizontal joints and 150mm over studs at vertical joints. Special care should be taken above and around all openings and all punctures or tears must be repaired.

2.8.1 Dressing Around Openings

The installer needs to ensure that the method of fitting the building wrap around openings is addressed in accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.5.

Flashing tapes across the sill and at corners of openings shall be installed in accordance with the relevant manufacturer or distributors instructions.

2.8.2 Air Barriers

In accordance with NZBC Acceptable Solution E2/AS1, any exterior walls that are not to have an internal lining (such as attic spaces or gable ends) must have a rigid sheathing or air barrier complying with Table 23 fixed to the framing prior to fixing the cladding or cavity battens.

2.8.3 Airseals

Windows, doors and other penetration openings shall be fitted with flexible air seals that comply with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.6.

2.9 Joinery Fabrication.

When selecting new aluminium joinery with Palliside weatherboards, ensure your selected aluminium joinery fabricator is aware of the depth of the Palliside jamb detail.

While there is a difference between the depth of the traditional and rusticated profiles, the Palliside jamb flashing base is suitable for use with either profile and has a depth of 26mm. This is important for window fabrication to ensure the window is set out correctly.

Depth to allow for Aluminium Joinery Fabrication

Palliside Profile Type	Depth of Profile[1]	Fabricator to allow[2]	
		Direct Fix	Drained Cavity[3]
Rusticated	17.8mm	26mm	46mm
Traditional	21.0mm	26mm	46mm

2.9.1 Aluminium Joinery Fabrication Parameters

The aluminium fabricator must ensure that all aluminium joinery is sized to allow for a minimum flange overhang of the cladding material or associated back flashing of 10mm at the jamb and 8mm at the sill, as specified in NZBC Acceptable Solution E2/AS1 Paragraph 9.1.10.

Joinery must be fabricated ensuring there are no screws that sit proud to the head of the joinery.

Window sizing must allow for the provision of an airseal complying with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.6 to be applied after the windows have been installed.

2.9.2 Head Flashings

We recommend the use of the Palliside 2-Part uPVC head flashing base for above joinery combined with either a uPVC or Aluminium cap. If the Aluminium cap is preferred, then time may need to be allowed to get the cap powder-coated to match the selected joinery.

2.10 Non-standard Weatherboard Installation

2.10.1 Timber Facings and Corners

If preferred a series of drawings are available covering the use of timber facings and a planted sill to provide additional character to the finish around openings.

These drawings can be accessed from the products website (Refer design details DF33-35 or DC33-35).

A drawing is also available showing the use of a timber boxed corner (Refer design details DF32 or DC32).

2.10.2 Curved Walls

Palliside can be installed horizontally along a curved wall providing the radius of the wall is at least 3.0m. For best results it is recommended that the weatherboards are fixed using screws over a rigid sheathing such as plywood to smooth out the radius between studs.

Consideration needs to be made regarding the effect of curved walls on other accessories such as corner options.

2.10.3 Vertical and Diagonal Installation.

Note: The Architect/Designer is responsible for structural and weathertightness design implications when installing Palliside in either a vertical or diagonal configuration.

While it is possible to install Rusticated Palliside weatherboards vertically such applications require careful consideration in both their design and installation. The tapering nature prevents the traditional profile from being installed vertically.

Careful consideration needs to address the method of flashing around openings, avoiding the scallop of the profile finishing at the side of a window. A custom-made window flashing system may be required to complete this method of installation to the satisfaction of the applicable Building Consent Authority.

[1]Nominal

[2]In addition to depth of framing and internal lining

[3]Providing the jamb flashing base and nominal 20mm cavity are used. If jamb flashing base is not used, allow for profile depth plus cavity depth

- **For vertical installation the weatherboard should be installed so the lap of the weatherboard is placed away from the prevailing wind.**
- **Dwangs must be reduced to 600mm and the weatherboards installed over a drained cavity with vertical battens spaced as required at the weatherboard cover width of 260mm centres.**

Diagonal installation of Palliside weatherboards is possible and as per vertical installation requires careful consideration into the detailing around openings.

- **For diagonal installation the weatherboard should be installed so the lap of the weatherboard is placed away from the prevailing wind.**
- **Dwangs must be reduced to 600mm and the weatherboards installed over a drained cavity with vertical battens spaced at 300mm centres with each weatherboard fixed at every batten.**

2.11 Scaffolding

Palliside weatherboards must be installed from the base up. For applications where the wall cannot be accessed from ground level such as 2-storey applications, a freestanding scaffold is required.

Unlike many other claddings, selecting Palliside ensures that scaffolding can be removed quickly once the weatherboards (including trims) have been installed, as there is no need for painting, staining or plastering.

2.12 Drained Cavities

2.12.1 WANZ WIS Approach

It is recommend that the principles of the Window Association of New Zealand - Window Installation System are adopted when specifying Palliside to be installed over a drained cavity. These principles are shown in relevant Palliside design details for installation around windows.

2.12.2 Layout

A drawing showing typical cavity batten layout (Refer design detail DC39) can be accessed from the product website and the following should be applied:

(a) • All Vertical battens must be installed at a maximum 600mm centres.

(b) • A continuous horizontal batten is permissible at the soffit only.

(c) • An additional run of vertical battens shall be allowed for at the side of openings.

(d) • Horizontal spacers are required to allow Palliside horizontal starting trims to be fixed at the required 300mm centres providing they are:

i) A maximum 100mm in length

ii) Installed with a minimum slope of 5°

iii) Spaced at least 100mm away from any vertical batten or edge of window opening

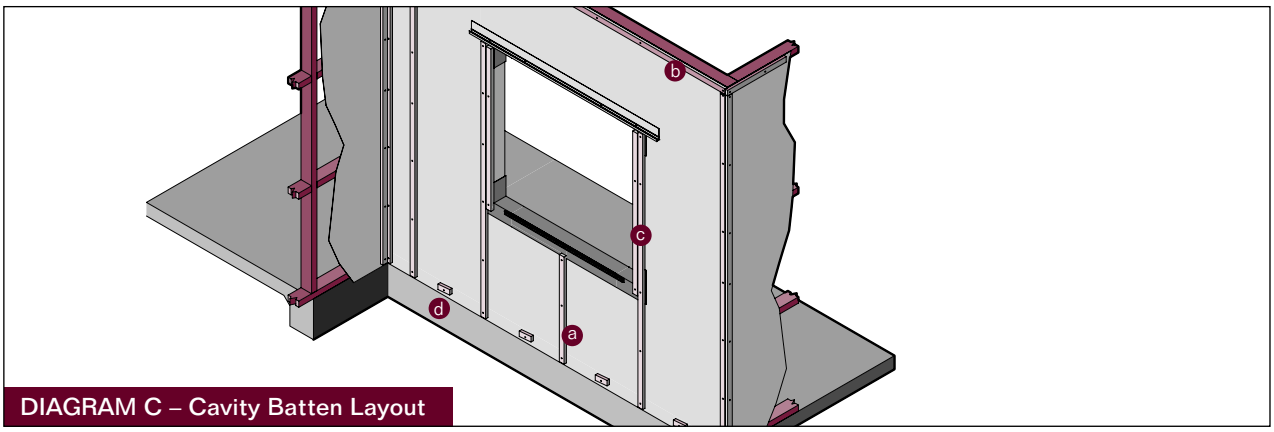

DIAGRAM C – Cavity Batten Layout

2.12.3 Cavity Battens

In accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.8.4

Cavity Battens should:

a) Be nominal 20mm (between the limits of 18mm and 25mm) in thickness.

b) Be at least the same width as the stud.

c) Be made of timber treated as required by NZS 3602.

2.12.4 Fixing of Battens.

Battens can either be temporarily fixed in place prior to the installation of Palliside weatherboards and accessories, or structurally fixed (allowing for the installation of Palliside weatherboards using a standard 40x2.5mm Palliside nail).

- **A structural batten must be minimum "H3.1 treated Number 1 framing grade quality" and must be fixed at maximum 500mm centres using 60x2.8mm HDG flat head nails (or 64mm x2.8mm air driven nails)[4].**

2.12.5 Vermin-proofing.

The requirements for Vermin-proofing are set out in NZBC Acceptable Solution E2/AS1 Paragraph 9.1.8.3.

The Palliside weatherboard system includes a vermin tray that meets requirements of this clause and can be attached to the base of the starter strip, glued to other starting options or nailed in place where required.

Vermin-proofing is required behind all gaps greater than 4mm.

2.12.6 Inter-Storey Junction Requirements

When installing Palliside over a drained cavity and the wall to be clad is greater than 2 storeys in height, NZBC Acceptable Solution E2/AS1 paragraph 9.1.9.4 stipulates that a horizontal inter-storey drainage flashing is required. The requirements for this can be accessed via the Palliside website (Refer design detail DC42).

2.13 References

- **NZS 3602: 2003 Timber and Wood-Based Products for use in Building**
- **NZS 3603: 1993 Timber Structures Standard**
- **NZS 3604: 1999 Timber Framed Buildings**
- **NZS 4203: 1992 General Structural Design and Design Loadings for Buildings**
- **NZS 4211: 1985 Specification for Performance of Windows**
- **Compliance Document for the New Zealand Building Code External Moisture Clause E2, Department of Building and Housing, Third Edition July 2005**
- **New Zealand Building Code Handbook and Approved Documents, Building Industry Authority, 1992**
- **The Building Regulations 1992, up to and including October 2004 Amendment**

[4]This method has been verified by BRANZ. A copy of the results of test report ST0605 is available on request

3.0 DESIGN DETAILS

3.1 Designing with Palliside Using the Interactive House

A wide range of specific two and three dimensional details are available for designing with Palliside for both direct fix and drained cavity construction. These details are accessible from the product website **www.palliside.co.nz** in several formats to ensure there is one to suit your preference.

While these should be included within the plan details when preparing drawings for a building consent application, they are also available when required to support information covered in the technical and installation literature for Palliside.

Please be aware that in many cases, the details show an indicative method of how to meet the requirements of NZBC Acceptable Solution E2/AS1. Alternative methods of installation may be possible, providing that they demonstrate the use of robust weathertightness principles.

The inclusion of these details does not exempt the installer from familiarising themselves with the information covered in this document but instead should enhance this documents use.

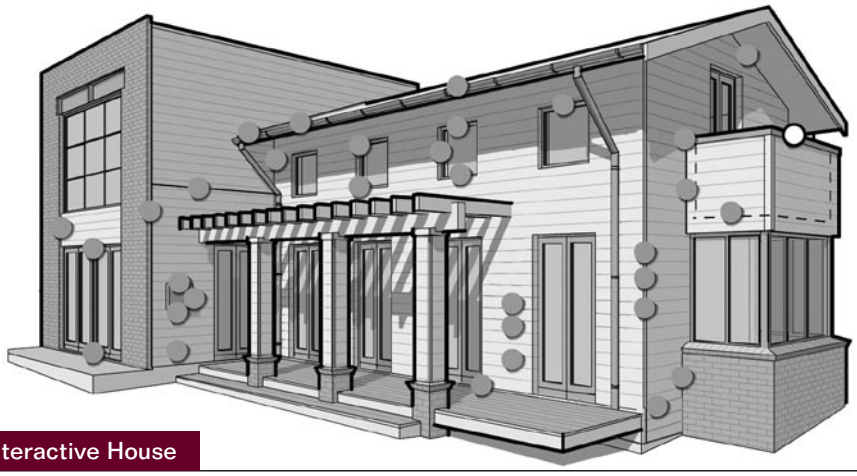

DIAGRAM D – Interactive House

System Details	Direct Fix	Drained Cavity	System Details	Direct Fix	Drained Cavity
Window Head (recommended)	DF01	DC01	Parapet/Enclosed Balustrade	n/a	DC23
Window Sill	DF02	DC02	Parapet/Wall Junction	n/a	DC24
Window Jamb	DF03	DC03	Non-standard Corner	DF25	DC25
Sill Layout	DF04	DC04	Palliside-Brick External Corner	DF26	DC26
Starter Strip	DF05	DC05	Palliside-Brick Internal Corner	DF27	DC27
90° External Corner Soaker	DF06	DC06	Palliside-Brick Inter-storey	DF28	DC28
90° 2-Part External Corner Boxed	DF07	DC07	Palliside-Brick Sill Junction	DF29	DC29
90° 2-Part Internal Corner Boxed	DF08	DC08	Palliside-Brick Vertical Junction	DF30	DC30
Flat Soaker Joint	DF09	DC09	Palliside Above Joinery Between Brick	n/a	DC31
2-Part Boxed Joint	DF10	DC10	90° Boxed Timber Corner	DF32	DC32
Finish at Soffit	DF11	DC11	Timber Facing Window Head	DF33	DC33
Parapet/Enclosed Balustrade	DF12	DC12	Timber Facing Window Head	DF34	DC34
Meter Box Head	DF13	DC13	Timber Facing Window Jamb	DF35	DC35
Meter Box Jamb	DF14	DC14			
Meter Box Base	DF15	DC15	135° 2-Part boxed Corner	DF37	DC37
Non Cantilevered Deck Junction	DF16	DC16	Alternative Cavity Head Flashing Detail	n/a	DC38
Apron Flashing Raked	DF17	DC17	Cavity Batten Layout	n/a	DC39
Apron Flashing Horizontal	DF18	DC18	Window Head Layout	DF40	DC40
Gutter Wall Apron	DF19	DC19	Enclosed Deck Starter Layout	DF41	DC41
Pipe Penetration	DF20	DC20	Inter-storey Drainage Joint	n/a	DC42
Wall Fascia Junction	DF21	DC21	Timber Floor Layout	DF43	DC43
			Door Sill Layout	DF44	DC44

4.0 MAINTENANCE AND PAINTING

4.1 Maintenance and Cleaning

The appearance of Palliside like other exterior finishes is best maintained by periodic cleaning, especially to the south side of the home and areas that do not receive as much sun light. Any build-up of residue, mould or dirt can be removed easily by soapy water or the use of a sprayed on hypochlorite cleaner such as '30 Seconds' followed by washing down with water.

Avoid using abrasive cleaners, which may have a tendency to cause a dulling of the surface of the Palliside finish. Note Cleaning with thinners, petrol or solvents should be avoided.

All areas where flashings, sealants and penetrations occur should be checked regularly to ensure that their integrity is intact. If any deterioration has taken place, sealants should be reapplied or further action taken if required. Checking such areas should form part of a regular maintenance check, which should also include clearing of spouting and blocked pipes.

4.2 Painting Palliside

If required Palliside weatherboards and trims can be painted.

Dark colours must not be used. As a guide colours should have an LRV percentage rating of greater than 55% (white = 100%). For further clarification on the suitability of a colour please contact Dynex Extrusions Ltd.

To prepare the surface prior to painting, either use soapy water or a sprayed-on hypochlorite cleaner such as '30 Seconds' followed by washing down with water. This removes any filmy residue that can prevent the paint from adhering to the boards as well as removing built up residue on weatherboards that have been installed some time ago.

Ensure that any cleaning agent is thoroughly rinsed off and the surface has dried before paint application begins.

Apply two coats of the desired colour using 100% acrylic paint.

4.3 Matching Palliside Colours

If required, trims, etc., can be colour-matched to the Palliside colours. Matching paint formulations can be made up by your local paint manufacturer. For more information on matching paint colours see the paragraph 5.9 of this document.

4.4 Graffiti Removal

Graffiti can be removed by applying the following method. For best results it is necessary to remove any graffiti as soon as possible and preferably within 48 hours of the graffiti taking place.

Using a kitchen Scotch Bright with liberal amount of Methylated Spirits, lightly rub the affected area. Take care not to apply to much pressure which may mark the Palliside if approached to vigorously. Do not become alarmed when the surface appears very messy due to the liquidising of the ink/paint, which causes the graffiti to seemingly spread over a wider area of the surface. Use a rag liberally coated in Methylated Spirits to wipe clean the affected area. Continue this process until the residue has been removed.

Other products available from your local hardware store such as 'Philm Off – Quikleen' or 'De-Solv-It' may also be applied. Like the methylated spirits, the initial contact of the cleaner may give the appearance of causing the graffiti to spread. This will cease and the ink/paint disappear on the continuation of wiping the surface with a rag and cleaner.

When using cleaners it is advisable to wash the surface down immediately once the graffiti has been removed to remove excess cleaner from the weatherboard.

4.5 Replacing damaged weatherboards

Depending on the situation damaged Palliside weatherboards can be repaired or replaced by a skilled tradesman. For further details and suggested procedure on how to repair or replace Palliside weatherboards contact Dynex Extrusions Ltd or visit the website **www.palliside.co.nz.**

5.0 TECHNICAL SUMMARY

5.1 Compliance with the New Zealand Building Code

The Palliside Weatherboard System meets the requirements of the NZBC as an Alternative Solution.

5.2 BRANZ Appraisal

Palliside has been appraised by BRANZ and is covered by the following Appraisal Certificate numbers:

Certificate No. 490 (2005)(Palliside Weatherboards installed direct to the frame)

Certificate No. 491 (2005)(Palliside Weatherboards installed over a drained cavity)

5.3 Material

The Palliside weatherboard system comprises extruded foamed uPVC weatherboards with a co-extruded Ultraviolet protection uPVC exterior layer. The range of accessories are either extruded or injection moulded utilising UV protected impact modified uPVC.

5.4 Weight of Board

The Palliside weatherboard system is defined as a light weight wall cladding in accordance with NZS 3604:1999.

Palliside weatherboards have a nominal weight of 7.3kgs per 5.8m weatherboard (4.86kg/m^2) or 1.26kg per lineal metre.

5.5 Durability

Palliside is manufactured from uPVC which is impervious to moisture. Accordingly it will not rot or corrode and Palliside is resistant to attack from termites and vermin.

5.6 Colours

The following colours are available in all weatherboard profile choices (Rusticated Smooth, Rusticated Woodgrain & Traditional). If required a set of samples can be obtained from Dynex Extrusion Ltd.

White	Vanilla Cream	Glade Green	Tea

5.7 Painting

If required, Palliside may be painted. Do not use dark colours due to the subsequent increase in expansion and contraction. For more information on painting see section 4.2 of this document.

5.8 Colourfastness

Palliside has been formulated for use in our harsh climate but like most coloured surfaces incorporating pigments it will experience some colour change with time. The rate of change will be dependent upon the installation situation and will manifest itself as fading or lightening of the surface. Any chalking that may occur but can be removed by periodic cleaning of the product. Any colour change will not affect the performance of the Palliside weatherboards.

If desired, boards may be painted to match the original colour. Refer to painting.

5.9 Matching Palliside Colours

Matching finishes for the Palliside Weatherboard colours can be sourced from your local paint supplier. Details below should provide the supplier with relevant details on matching the chosen Palliside colour.

Palliside Colour	Taubmans/Wattyl	Dulux	Resene
White	White	White	Palliside White
Vanilla Cream	Traditional Cream	NZ Colour Map #17 – Sandspit	Palliside Vanilla Cream
Glade Green	Traditional Green	Corporate Colour 901 (tinting EE6 M1.25 - 1)	Palliside Glade Green
Tea	Traditional Tea	Half Tea (tinting EE8 G1 M3 - 1)	Palliside Tea

5.10 Impact Resistance

Palliside has been tested to and meets the impact requirements of AS 2921 Appendix B for soft body impacts. This test simulates the impact the weatherboards would be subjected to with a large adult falling into the weatherboard with an impact energy of 250J minimum directed between the studs. In addition Palliside meet the hard body impact requirements of 44J which simulates the impact from the likes of stones etc.

5.11 Thermal Resistance

Palliside weatherboards have a thermal resistance of 0.18m^2 °C/W. As such, installations using Palliside require additional insulation to comply with the requirements of NZS4218:1996[1].

When Palliside weatherboards are fixed on 90 x 35mm or 90 x 40mm framing with internal linings of plasterboard or timber the following wall cavity infill requirements apply.

Wall framing infill insulation requirements		
Climate Zone (as per NZS 4218)	R-Value Required M^2 °C/W	Insulation Requirement
1 and 2	1.5	R1.8 Insulation
3	1.9	R2.2 insulation

5.12 Thermal Expansion

Thermal Expansion: 3 x 10^{-5}per °C. The recommendations for fixing allow for this expansion (5mm per length), which takes place primarily in the length of the plank.

Weatherboards must not be cut to a tight fit between accessories. The light colour of the board reflects solar heat keeping the surface temperature of the cladding low and minimising expansion.

5.13 Technical Data Sheet – Fasteners

Refer to Paragraph 1.5 of the relevant installation guide for information on fixings.

5.14 Sealants

MS Sealant colour matched to each Palliside colour (with the exception of white) is now available as part of the Palliside product range.

Otherwise, Neutral Cure and MS Sealants may be used with the Palliside Weatherboard System. These Sealants must meet the requirements of the NZBC. Acid Cure Sealants must not be used with the Palliside Weatherboard System.

5.15 Technical Assistance

For further information visit the website **www.palliside.co.nz** or alternatively contact:

DYNEX EXTRUSIONS LTD
PO BOX 19-133, Avondale, Auckland, New Zealand.
FREEPHONE 0800 439 639

[1]When Palliside weatherboards are installed on a drained cavity the weatherboard thermal resistance is halved.