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SHADOWCLAD ADDITIONS AND ALTERATIONS

I. INTRODUCTION

Throughout the life of a building, homeowners may take the opportunity to complete additions and alterations to suit their ever-changing family size and home use. Where additions and/or alterations to the building are made that will affect the structural stability of the building, the weathertightness of an elevation, fire safety or other circumstances identified in Schedule 1 of the New Zealand Building Act 2004 a building consent will be required.

All additions and alterations need to comply with the NZBC and, as such, need to be completed in accordance with the Shadowclad Specification and Installation Guide and, where necessary, specific design details produced by your design professional. This information bulletin is not intended to be comprehensive but has been created to highlight for building owners some of the key considerations in relation to additions and alterations to a building fully, or partially clad in Shadowclad.

2. REQUIREMENTS UNDER THE NEW ZEALAND BUILDING CODE?

In accordance with Ministry of Business, Innovation and Employment's (MBIE) guidance documents "Building work that does not require a building consent" it is important to note that¹;

As a home or building owner, you are responsible for:

- **determining whether or not your building work is exempt from requiring a building consent or not**
- **making sure that any exempt building work complies with the Building Code and other relevant legislation.**

Even if your building work is exempt, you can still apply for a consent from your local building consent authority, if you would like extra peace of mind that your plans are compliant.

Carter Holt Harvey Plywood (CHH Ply) recommends that prior to embarking on additions or alterations you take advice from an appropriately qualified building professional on how to ensure your additions or alterations comply with the NZBC and Building Act.

After the building work is completed, if the building complied with the Building Code immediately before the work commenced, the building must continue to comply. If the building did not comply immediately before the work began, the building must continue to comply at least to the same extent as it did previously (i.e. you cannot make the building a lower standard than prior to commencing the work).

3. ADDITIONS AND ALTERATIONS TO SHADOWCLAD CLAD BUILDINGS

All additions and alterations shall comply with the requirements of the NZBC and be completed in accordance with CHH Ply literature and specific design details as required. Whilst many additions and alterations will require building consent and form part of restricted building work some general guidance is provided below on some of the key issues that arise for some of the more typical alterations that are carried out. CHH Ply recommends engaging a suitability qualified building design professional to ensure that any additions or alterations meet the requirements of the New Zealand Building Code.

¹Page 10, Building work that does not require a building consent – Exemptions Guidance for Schedule 1 of the Building Act 2004. Fifth edition – August 2020, First Published March 2014

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4. TYPICAL ADDITIONS AND ALTERATIONS TO SHADOWCLAD CLAD BUILDINGS

There are some instances that may be considered typical additions and alterations that can be completed without a building consent. These instances include the addition of decks that are not more than 1.5m above the ground, removing a window and adding a door, or the addition of lightweight awnings, and hand rails.

When considering these additions and alterations specific consideration shall be given to the maintaining the weathertightness of the building as a whole including any localised effects to the installed Shadowclad from the proposed additions or alterations.

Ensure any additions and alterations comply with the Shadowclad Specification and Installation Guide and, where necessary, specific design details produced by your design professional.

a. Addition of non-cantilevered decks not more than 1.5m from the ground

The concept of outdoor living and indoor-outdoor flow are becoming more and more common in New Zealand properties. If you are considering adding a deck to an existing building, and a building consent is not required, it is important that the installation does not affect the weathertightness of the building. The Shadowclad Specification and Installation Guide details important considerations. Some of the key issues to be aware of are:

- Deck clearances to cladding – A minimum 12mm clearance between the deck framing/decking and the cladding to allow the free drainage of external moisture and to prevent debris build up at the deck/cladding junction
- Ground clearances – A minimum of 100mm between paved ground and the bottom edge of the cladding
 - A minimum of 175mm between unpaved ground and the bottom edge of the cladding
- Support requirements for deck members
 - Ensure that any additional support does not adversely affect the cavity from draining and venting
 - It is CHH Ply's recommendation that, where possible, if a deck is being added to an existing structure it is self-supporting

b. Removing a window and adding a door

Where a window is being removed to cater for a door and both the window and door are of the same opening width, the replacement will typically be completed as an alteration. It is important to ensure that where the Shadowclad sheets are cut or machined to accommodate this, appropriate consideration is given to the Shadowclad Specification and Installation Guides details including. Some key matters to be aware of are:

- Sheet Cuts:
 - Coat all sheet cuts with a preservative timber treatment such as Soudal Metalex clear
 - After applying Soudal Metalex clear apply the surface coating (e.g. paint or stain) to cut edges
- Fastener Material Type
 - Galvanised fasteners or better to be used (stainless steel annular groove nails required in sea spray zones and Microclimatic

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locations and with H3.2 CCA treated Shadowclad Ultra)

- Sheet Fastener Pattern
 - Around sheet edge -maximum 150mm centre spacing
- Window/Door head and sill detailing to meet the requirements of Acceptable Solutions E2/AS1 or an Alternative Solution such as that supplied by the Window Association of New Zealand (WANZ)
- Appropriate Jamb Details must be used

c. Removing a window and adding a door

The addition of lightweight awnings and or handrails to buildings systems is becoming common place in New Zealand. It is important that any alterations to the building envelope do not adversely affect the weathertightness of the building envelope. Consideration shall be given to the support requirements for these additions to remove the possibility of trapping moisture against the face of the cladding and also ensuring that any support mechanisms do not adversely affect the cavity from draining and venting. Consideration should also be given to direction of fall, and other opportunities for moisture entrapment. Any alterations to the installed Shadowclad sheets shall comply with the Shadowclad Specification and Installation Guide.

5. RAIN SCREENS

CHH Ply do not recommend the addition of rain screens to Shadowclad. All compliance testing to Verification Method E2/VM1 has been completed to details provided in the Shadowclad Specification and Installation Guide. The addition of rain screens may cause moisture to be trapped against the Shadowclad face and also affect the ability to appropriately provide the required level of maintenance. Rain screens to Shadowclad must be the subject of specific design

7. MAINTENANCE AND GENERAL REPAIRS AND REPLACEMENT

CHH Ply have developed information bulletins to provide further guidance around both maintenance and general repairs and replacements, including penetrations. Please refer to the respective Shadowclad information bulletins for further information.

8. REFERENCES AND SOURCES OF INFORMATION

- Shadowclad Specification and Installation Guide for cavity wall construction
- NZBC Clause E2 External Moisture
- NZBC Acceptable solution, E2/AS1
- NZS3602:2003 'Timber and Wood-based Product for use in Buildings'
- The Building Act 2004 Section 112 Alterations to existing buildings
 - www.legislation.govt.nz/act/public/2004/0072/latest/DLM306875.html
- Building work that does not require a building consent – Exemptions Guidance for Schedule 1 of the Building Act 2004. Fifth edition – August 2020, First Published March 2014