# **SPECIFICATIONS**

# **BIFORM COMPOSITE DECKING**

## 1. GENERAL

This section relates to the fabrication and installation of BiForm composite decking. It includes:

- spaced boarding to interior and exterior decks
- steps and landings
- concealed clip systems for fixing decking
- decking systems over waterproof membrane

# 1.1 ABBREVIATIONS AND DEFINITIONS

The following abbreviations apply specifically to this section:

HDPE High Density Polyethylene SED Specific Engineering Design

#### **Documents**

#### 1.2 DOCUMENTS

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

NZBC D1/AS1 Access routes NZBC D1/VM1 Access routes

NZS 3602 Timber and wood based products for use in buildings

NZS 3604 Timber-framed buildings

AS/NZS 3661.1 Slip resistance of pedestrian surfaces- Requirements

AS/NZS 4663 Slip resistance of pedestrian surface materials Part 1- Requirements,

Appendix A- Methods for the measurement of the coefficient of friction of

wet surfaces.

# 1.3 MANUFACTURER/SUPPLIER DOCUMENTS

Manufacturer's and supplier's documents relating to this part of the work:

BiForm Composite Decking Installation Guide, Specification, Care and Maintenance

Recommendations, and Material Safety Data Sheet.

BRANZ Appraisal No. 680 (2015) BiForm Wood Plastic Composite Decking.

Manufacturer/Supplier contact details

Company: BIFORM LTD
Web: www.biform.co.nz
Email: info@biform.co.nz
Telephone: 0800 449 274

## Warranties

## 1.4 WARRANTY – MANUFACTURER/SUPPLIER

Provide a BiForm manufacturer/supplier warranty:

25 years limited liability: For materials

- Provide this warranty on the manufacturer/supplier standard form.
- Commence the warranty from the date of the practical completion of the contract works.

#### Requirements

#### 1.5 QUALIFICATIONS

Workers / Installers to be experienced, competent trades people familiar with the materials and techniques specified.

#### 1.6 NO SUBSTITUTIONS

Substitutions are not permitted to any of the specified systems, components and associated products listed in this section.

# 1.7 CARE AND MAINTENANCE INSTRUCTIONS

Provide BiForm Care and Maintenance Guide document before practical completion of the contract for issuing to the building owner.

## 2. PRODUCTS

#### Materials

## 2.1 BIFORM COMPOSITE DECKING

BiForm composite decking compromised of 30% recycled HDPE and 60% waste timber fibre. Boards are solid extruded sections with a ridged finish on one side and a brushed, smooth finish on the other side. Boards can be installed with either side faced up. Refer to WEBSITE for profile, dimensions, colour range etc.

## Components

## 2.2 BIFORM CONCEALED FIXING SYSTEM

BiForm concealed fixing system comprised of black HDPE, supplied with blackened 304 grade stainless steel square drive 6 gauge x 40mm screws for fixing to timber joists. Blackened 316 grade stainless steel screws to be used for decking located in Zone D and Zone E exposure zone and areas where microclimatic considerations apply, requiring SED, in accordance with NZS 3604.

# 2.3 BIFORM COMPOSITE DECK SURFACE FIXING SCREWS

## 130 x 19 Profile

BiForm composite deck screws are comprised of 316 grade stainless steel square drive 10 gauge x 50mm winged deck screws for fixing the edge and perimeter boards.

## 140 x 25 Profile

BiForm composite deck screws are comprised of 316 grade stainless steel square drive 10 gauge x 65mm winged deck screws for fixing the edge and perimeter boards.

# 3. EXECUTION

#### **Conditions**

## 3.1 DELIVERY, STORAGE AND HANDLING

Take delivery of BiForm composite decking materials and store flat and keep dry.

Protect finished surfaces, edges and corners from damage.

Store boards off the ground and provide right supports along the length of a standard 4.85m long board.

Reject and replace goods that are damaged or will not provide the required finish.

#### 3.2 PRE-INSTALLATION REQUIREMENTS

Check work previously carried out and confirm it is of the required standard for this part of the work.

For decking laid on timber framing joist spacing to be at a maximum of 400mm centres for BiForm 130 x 19mm profile and a maximum of 450mm for BiForm 140 x 25mm profile. Minimum clearance between boards and surface beneath the deck to be 300mm. When laid over sealed substrates the minimum clearance is to be 50mm. Timber framing to comply with NZS 3602.

For decking laid on steel framing consult with BiForm for installation requirements.

For decking laid on DPC and concrete or waterproof membranes fixed over treated timber use "Biform Stack N Pack" joist mounts and consult with BiForm for installation requirements. Timber battens to comply with NZS 3602.

# 3.3 PRE-COATING/FINISHING REQUIREMENTS

Check work previously carried out and confirm it is of the required standard for specified finish. Carry out such additional preparatory work as required to bring the substrate to suitable condition.

## 3.4 EXPANSION AND CONTRACTION

Control longitudinal expansion and contraction of the boards of the boards at the time of laying. This can be achieved after laying the boards by docking the boards to length when cool and contracted, and installing the perimeter board at this time without expansion gaps. Avoid butt joins. Refer to BiForm for particular requirements.

# Installation - general

# 3.5 LAYING OUT BIFORM BOARDS

Lay all boards in the same direction as the grain. This will ensure consistency of look across the deck.

# 3.6 INSTALL TIMBER BATTENS - CONCRETE SUBSTRATE

Loose lay the battens on DPC or waterproof membrane using "Biform Stack N Pack" joist mounts at a maximum 400mm centres for BiForm 130 x 19mm profile and 450mm centres for

BiForm 140  $\times$  25mm profile along the direction of the fall, to BiForm requirements. Timber battens to comply with NZS 3602. LOSP treated timber battens not to be used with membrane systems.

# Installation- screw fixing system

# 3.7 SURFACE SCREW FIXING OF BIFORM COMPOSITE DECKING

Use BiForm composite deck screws as per article 2.3. Pre-drill and countersink fixings to reduce risk of splitting when screwing directly in to BiForm composite decking. Avoid butt joins. Adjust driver to low or medium torque setting when fixing screws. Screws should finish flush and not be "over driven" in to the decking.

#### 3.8 INSTALL BIFORM FASCIA BOARD

When using BiForm decking board as a fascia screw fix board at not more than 400mm centres in accordance with BiForm requirements. Surface fixing of these boards to be carried out when the boards are warm and expanded.

## Installation- breaker board and steps

#### 3.9 INSTALL BIFORM BREAKER BOARD

Install breaker boards as laid out and detailed on the drawings. Provide double joists to provide fixing for boards in accordance with BiForm requirements. Fix breaker boards to joist using manufacturer's recommended composite screw fixings in accordance with BiForm requirements.

# Completion

#### 3.10 ROUTINE CLEANING

Carry out routine trade cleaning of this part of the work including periodic removal of all debris, unused and temporary materials and elements from the site.

## 3.11 DEFECTIVE OR DAMAGED WORK

Repair damaged or marker elements. Replace damaged or marked elements where repair is not possible or will not be acceptable. Leave work to the standard required for following procedures.

#### 3.12 PROTECTION

Provide the following temporary protection of the finished work: Protect from dust and damage wile remainder of works are being carried out.

# 4. SELECTIONS

For further details on selections go to www.biform.co.nz

Substitutions are not permitted to the following, unless stated otherwise.