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4381EF EQUUS FIXPLUS DECK & TILE SUPPORT SYSTEM

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4381EF EQUUS FIXPLUS DECK & TILE SUPPORT SYSTEM

1 GENERAL

This section relates to the supply and installation of **EQUUS FixPlus** proprietary height adjustable support systems for floating decks and paved patios.

It includes:

- support systems for self-supporting natural stone/concrete pavers
- support systems for self-supporting tiles
- support systems for raised floors/decks with timber or aluminium joists

1.1 RELATED WORK

Refer to ~ for ~

1.2 ABBREVIATIONS AND DEFINITIONS

Refer to the general section 1232 INTERPRETATION & DEFINITIONS for abbreviations and definitions used throughout the specification.

The following definitions apply specifically to this section:

Self-supporting: Self-supporting tiles/stone/pavers are those individually structurally suitable to span between the deck supports. Sometimes referred to as "structural".

Documents

1.3 DOCUMENTS

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

NZBC B2/AS1	Durability
NZBC E2/AS1	External moisture
NZS 3604	Timber-framed buildings
AS/NZS 1170.1	Structural design actions - Part 1: Permanent, imposed & other actions
AS/NZS 2908.2	Cellulose-cement products - Part 2: Flat sheets

1.4 MANUFACTURER/SUPPLIER DOCUMENTS

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

Equus Fixplus Pedestal and Tile Support System Brochure
Equus Fixplus Product Data Sheets
Equus Fixplus Installation Guide

Manufacturer/supplier contact details

Company: Equus Industries Ltd
Web: <https://equus.nz/>
Email: tech.support@equus.co.nz
Telephone: +64 (0)3 353 2434

Warranties

1.5 WARRANTY - MANUFACTURER/SUPPLIER

Provide a material manufacturer/supplier warranty:

20 years For Equus Fixplus Pedestal Support System components

- Provide this warranty on the Equus standard form (if not available then use the standard form in the general section 1237WA WARRANTY AGREEMENT)
- Commence the warranty from the date of practical completion of the contract works.

Refer to the general section 1237 WARRANTIES for additional requirements.

1.6 WARRANTY - INSTALLER/APPLICATOR

Provide an installer/applicator warranty:

5 years For installation of Equus Fixplus Pedestal Support System

- Provide this warranty on the installer/applicator standard form (if not available then use the standard form in the general section 1237WA WARRANTY AGREEMENT)
- Commence the warranty from the date of practical completion of the contract works.

Refer to the general section 1237 WARRANTIES for additional requirements.

Requirements

1.7 QUALIFICATIONS GENERALLY

Refer to 1270 CONSTRUCTION for requirements relating to qualifications.

1.8 NO SUBSTITUTIONS

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

Compliance information

1.9 INFORMATION REQUIRED FOR CODE COMPLIANCE

Provide the following compliance documentation:

- Manufacturer's, importer's or distributors warranty
- Installer's warranty

2 PRODUCTS

Materials

2.1 DECK SUPPORT SYSTEM

Equus FixPlus components comprised of high-density UV resistant polypropylene injection moulding to comply with [NZBC B2/AS1](#) Durability requirements, including adjustable pedestals fitted with components to support different surfaces. Complete with all required accessories to complete installation. Refer to SELECTIONS for type.

Components - general

2.2 BASIC PEDESTAL, BS60

Equus FixPlus, BS60 Basic Pedestal Set.

BS60-03, 50-75mm high

BS60-04, 73-110mm

Base diameter of 187mm and head diameter of 116mm with laying surface of base 30cm².

Complete with 4mm removable tabs spacing.

Suitable for internal and external applications with natural stone, ceramic tiles, composite materials and can be used for timber decking in conjunction with basic parallel connector.

2.3 BASIC SELF LEVELLING PEDESTAL, SL60

Equus FixPlus, SL60 Basic Self Levelling Pedestal System.

SL60-01, 42-48mm high

SL60-02, 48-60mm high

SL60-03, 60-85mm

SL60-04, 83-120mm

Base diameter of 187mm and head diameter of 116mm with laying surface of base 30cm². Allows auto slope correction on surfaces of up to 5% gradient. Complete with 4mm removable tabs spacing.

Suitable for internal and external applications with natural stone, ceramic tiles, composite materials and can be used for timber decking in conjunction with basic parallel connector.

2.4 MAXI SELF LEVELLING PEDESTAL, SL110

Equus FixPlus, SL110 Maxi Self Levelling Pedestal System.

SL110-04 ,85-135mm high

SL110-05 ,130-180mm high

SL110-06, 180-228mm

SL110-07, 224-272mm

Base diameter of 187mm and head diameter of 116mm with laying surface of base 30cm². Allows auto slope correction on surfaces of up to 5% gradient. Complete with 4mm removable tabs spacing.

Suitable for internal and external applications with natural stone, ceramic tiles, composite materials.

2.5 MAXI RAFT SELF LEVELLING PEDESTAL, SLW110

Equus FixPlus, SLW110 Maxi Raft Self Levelling Pedestal System.

SLW110-04 ,85-135mm high

SLW110-05 ,130-180mm high

SLW110-06, 180-228mm

SLW110-07, 224-272mm

Base diameter of 187mm and head diameter of 116mm with laying surface of base 30cm². Allows auto slope correction on surfaces of up to 5% gradient. Complete with WC9801 basic parallel connector.

Suitable for internal and external applications for raised floor applications for wood or aluminium joists.

2.6 BASIC & MAXI PEDESTAL EXTENSIONS

Equus FixPlus, polypropylene extension sleeves used to connect to fixed pedestals or added together to raise the fixed modules.

M06050, 50mm high extension for Basic Series Pedestals

M06075, 75mm high extension for Basic Series Pedestals

M11095, 95mm high extension for Maxi Series Pedestals

2.7 BASIC DISC

Equus FixPlus, polypropylene Basic Disc DC9801, a replacement disc for the BS60 pedestal, compatible for connection to replaceable grout tabs or basic parallel connector.

2.8 RUBBER SHIM

Equus FixPlus, Basic Rubber Shim HC9801 is attached to the basic disc as a contact between tiles or beams above and used to preventing unwanted sound and shock. The rubber shims can also be used to compensate for 1mm discrepancies between tiles.

Compatible with BS60, SL60, SL110 and SLW110 series pedestals.

2.9 MAXI SELF LEVELLING DISC PAD

Equus FixPlus, polypropylene Self Levelling Disc Pad is a replacement disc for the SL60, SL110 and SLW110 pedestals for connection to replaceable grout tabs or basic parallel connector.

2.10 LATERAL FLOORING - LATERAL DISC & SUPPORT

Equus FixPlus, polypropylene Lateral Disc LD0001 and Lateral Support LD0002 for raised floor installations requiring lateral support.

Compatible with BS60, SL60, SL110 and SLW110 series pedestals with either tiling / paving systems or timber/aluminium joists systems over.

2.11 REPLACEABLE GROUT TABS - FOR TILING/PAVING SYSTEMS

Equus FixPlus polypropylene removable grout tabs TC0002 - 2mm, TC0003 - 3mm & TC0004 - 4mm thick can be inserted and removed from the basic pedestal disc. Compatible with BS60, SL60, SL110 and SLW110 series pedestals.

2.12 BASIC PARALLEL CONNECTOR (BEAM JOINT) - FOR JOIST INSTALLATION

Equus FixPlus polypropylene Basic Parallel Connectors WC9801, create a connection for connecting timber or aluminium floor/ deck joists to the pedestal feet. Available with the SLW110 pedestal set and compatible as an additional part for with BS60, SL60 and, SL110 series pedestals.

2.13 MAXI RAFT DISC & MAXI BEAM JOINT CONNECTOR - FOR JOIST INSTALLATION

Equus FixPlus polypropylene Maxi Raft Disc W14001 and Maxi Beam Joint W14002 are replacement disc compatible with SL110 and SLW110 with adjustable beam width for connecting different sized timber or aluminium floor/ deck joists to the pedestal feet.

Accessories

- 2.14 BASIC ADJUSTMENT TOOL
Equus FixPlus Basic Adjustment Tool for use with BS60 Series.

3 EXECUTION

Conditions

- 3.1 DELIVERY, STORAGE & HANDLING OF PRODUCTS
Refer to 1270 CONSTRUCTION for requirements relating to delivery, storage and handling of products.
- 3.2 ROUTINE MATTERS
Refer to 1250 TEMPORARY WORKS & SERVICES for protection requirements.
Refer to 1270 CONSTRUCTION for requirements relating to defective or damaged work, removal of protection and cleaning.
- 3.3 PRE-INSTALLATION REQUIREMENTS - GENERAL
Check work previously carried out and confirm it is of the required standard for this part of the work.

Confirm the suitability of tiling or natural stone paving for use over Equus Fixplus deck support system. Ensure they are self-supporting.
- 3.4 PEDESTAL LAYOUT
Before commencing work confirm the proposed setting out of pedestals. Confirm maximum load of pedestal to determine whether intermediate pedestals are required. Ensure pedestal configurations will not impede critical water flows
For tiling/paving, consider pattern of tiles, location of cut tiles and other visual considerations of the finished work. Generally the minimum cut size of tile is 20cm but is dependent on the tile type, confirm with tile manufacturer.

Conditions - over waterproof membrane substrate

- 3.5 PRE-INSTALLATION REQUIREMENT - OVER WATERPROOF MEMBRANES
Before commencing work obtain confirmation from project administrator that the installation of the waterproof membrane complies with [NZBC E2/AS1](#). Ensure that the raised floor / deck support system is not attached to or penetrates the waterproof membrane substrate below, if required secure in place with compatible sealant or adhesive.

Installation - general

- 3.6 STANDARDS AND TOLERANCES
Refer to the general section 1270 CONSTRUCTION for general requirements.
- 3.7 INSTALL PEDESTAL SUPPORT SYSTEM
Install raised floor / deck pedestal support system and associated decking/paving/tiling in accordance with Equus Fixplus Installation Guide and the manufacturer's requirements.
- 3.8 PRIOR TO INSTALLATION
Sweep clean substrate / waterproof membrane and ensure it is clear of any foreign objects before commencing installation.

Installation - for tiling and paving systems

- 3.9 SET OUT
Set out for tiling using centre lines in both directions. Commence installation from the centre cross. Confirm whether intermediate pedestals are required.
- 3.10 INSTALL FIXPLUS PEDESTAL JACK & TILES
Install first four pedestal jacks, and intermediate pedestal if required, at the centre cross of set out. Sit the first tile module in place and adjust the height of each pedestal so aligns with datum in both directions. Add the next tile modules by seating one end on the previously laid pedestal and adding new pedestals to opposite end and adjusting height, continue for remainder of tiles until perimeter.

3.11 INSTALL PERIMETER TILES

Perimeter pedestals may require the spacer/lug to be cut or ground off prior to placing tiles. Maintaining required perimeter edge gap, cut the perimeter tiles and install.

3.12 INSTALL LATERAL SUPPORT INSTALLATION

Install Lateral Disc and Lateral Support bracket to the perimeter pedestals in accordance to Equus FixPlus installation requirements where no perimeter edge restraint is provided. Cut tiles and install vertically to the vertical edge of system.

Installation - for timber/aluminium joists**3.13 SET OUT**

Place pedestals on the substrate; the distance apart will depend on the supporting bearer/joist span, maximum load of pedestal and decking loading capacity.

For timber floor/deck joists, confirm the timber span and support spacing is in accordance with [NZS 3604](#), for aluminium floor/deck joists confirm the aluminium span and support spacing is in accordance with structural loading to [AS/NZS 1170.1](#) for permanent and imposed actions.

3.14 FIX JOISTS

Fix joist to top of pedestals using selected FixPlus Basic Parallel Connector or Maxi Beam Joint Connector with self-drilling stainless screws in accordance with the manufacturer's requirements. Adjust the heights of the pedestals so that the joists are completely level.

3.15 INSTALL LATERAL SUPPORT INSTALLATION

Install Lateral Support bracket to the base of perimeter pedestals in accordance to Equus FixPlus installation requirements where no perimeter edge restraint is provided. Install timber / aluminium framing vertically between horizontal joists and lateral support bracket using self-drilling stainless screws.

3.16 INSTALL DECKING

Fix timber / composite decking to the joists using stainless steel screws or clips in accordance with manufacturer's requirements. Leave 12mm gap to edge of cladding in accordance with [NZBC E2/AS1: 7.1.1 Slatted decks](#).

3.17 CLEAN OUT MANHOLES / HATCHES

Provide removable screw-fixed access panels at appropriate locations on the deck for cleaning out of sumps and other similar outlets that require servicing.

Completion**3.18 COMPLETION MATTERS**

Refer to 1270 CONSTRUCTION for completion requirements and if required commissioning requirements.

4 SELECTIONS

For further details on selections go to <https://equus.nz/>
Substitutions are not permitted to the following, unless stated otherwise.

Pedestal support systems - for tiles / pavers / natural stone**4.1 EQUUS FIXPLUS - SELF-SUPPORTING TILES / PAVERS / NATURAL STONE**

Location:	~
Type/Brand:	Equus FixPlus Pedestal System
Overlay type:	
Pedestals:	~ pedestals
Height:	~mm minimum to ~mm maximum substrate to top of pedestal
Grout Tabs	TC004 - 4mm
Components:	~

Pedestal support systems - for timber / aluminium floor / deck joists**4.2 EQUUS FIXPLUS - TIMBER / ALUMINIUM FLOOR / DECK JOISTS**

Location:	~
Type/Brand:	Equus FixPlus Pedestal System
Overlay type:	~
Joist type/spacing:	~ joists @ ~mm centres
Pedestals:	~ pedestals
Height:	~mm minimum to ~mm maximum substrate to top of pedestal
Components:	~
Joist fixings:	~

Overlay systems

4.3 TILES / PAVERS / STONE

Refer to ~ section for paving / tiling overlay

4.4 TIMBER DECKING / COMPOSITE TIMBER DECKING

Refer to ~ sections for timber / composite timber decking overlay