t: 0800 FIRTH 1 w: firth.co.nz



Building Product Information Sheet | Class 1

Product Name:

Holland® FlowPave 80, Holland® FlowPave 80 Set, PorousPave, Patio Paver, Pixel® Paver, Grass Paver, Gobi® Block

Product Line: Firth Concrete Segmental Permeable Paving (EcoPave®)

Product Description & its intended use (measurements, materials, usage):

Firth Concrete Permeable Paving (EcoPave) is available in a range of colours and designed with the purpose of allowing water to pass through the surface paving layer to the underlying gravel layers. The EcoPave range consists of; Holland® FlowPave 80, Holland® FlowPave 80 Set, PorousPave, Patio Paver, Pixel® Paver, Grass Paver, and Gobi® Block.

Firth manufactures its concrete segmental paving products to NZS3116 with testing to AS/NZS4456 with an independently audited quality management system confirming to AS/NZS ISO9001. Building Product Warranty statements are available on the Firth website.

Product Identifier: N/A

Place of Manufacture:	Aotearoa New Zealand
Legal & Trading name of Manufacturer(s):	FLETCHER CONCRETE AND INFRASTRUCTURE LIMITED
Address for Service:	810 Great South Rd Penrose Auckland, 1061
Website:	https://www.firth.co.nz
Email Address:	info@firth.co.nz
Phone No.:	0800 FIRTH 1 / 0800 347 841
NZBN (If applicable):	N/A



Relevant Building Code Clauses:

t: 0800 FIRTH 1 w: firth.co.nz

Firth manufactures its concrete segmental paving products to NZS3116 with testing to AS/NZS4456 with an independently audited quality management system confirming to AS/NZS ISO9001. With appropriate design, construction, and maintenance, Firth segmental permeable paving can demonstrate compliance with-

- B1-Structure: Performance clauses B1.3.1 to B1.3.4
- B2- Durability: Performance clauses B2.3.1(b) and B2.3.2.
- D1- Assess Routes: Performance clauses D1.3.3(d)
- F2- Hazardous materials: Performance clauses F2.3.1

Statement on how the building product is expected to contribute to compliance:

Concrete segmental permeable paving are products which are combined with other products such as permeable hardfill, permeable bedding sand, geotextiles, and permeable joint sand, to make up a system such as a permeable paved area. To ensure compliance with the NZBC, design needs to comply with International design guidance such as Interlocking Concrete Pavement Institute ICPI Permeable Interlocking Concrete Pavements. The surface units are designed to have strengths compliant with NZS3116.

Installation of the paving system also needs to confirm to Firth installation guidance and local authority specifications.

When paving forms part of the access route to which the public have access compliance with the slip resistance requirements of clause D1 of the NZBC is required.

Structure - B1: The required breaking strength of segmental pavers for the intended purpose is determined by others (Designers) designing to NZS3116 or other recognised design Standard.

Where required, abrasion resistance values are specified as defined in NZS3116. Permeable Bedding, and jointing sand as well as permeable granular materials need to be accordance with Firth installation guides or other recognised permeable pavement design Standard.

Durability - B2: Compliance for segmental pavers requires appropriate specification for the intended purpose as defined in NZS3116 and ensuring all components including underlying ground conditions are suitable.

Access Routes D1- The required surface skid resistance of surfaces for access routes is specified by others (Designer) D1/AS1 provides guidance on the performance of various surface textures. Compliance with D1 is achieved by others (Designer) specifying the required surface texture and/or confirmatory skid resistance testing. Firth Pavers are manufactured with a slip resistance classification of W as required by NZS3116 when tested to AS/NZS4586. Surface treatments such as sealing can reduce the slip resistance and therefore sealing systems need to be selected by the designer and applied by the contractor with care.

Hazardous Building Materials - F2: Firth permeable paving comply with the requirements of section F2.3.1 of the NZBCS.

t: 0800 FIRTH 1 w: firth.co.nz



Limitations on the use of the building product:

Permeable paving should be specifically engineered for both the structural and hydraulic aspects. Some systems are suitable for light traffic. Patio pavers are suitable for residential pedestrian loading only. Pixel® pavers are used in combination with 80mm thick segmental pavers and are used as non-trafficked spacers.

Design requirements that would support the use of the building product:

Concrete segmental paving is a product which is combined with a range of other products such as permeable hardfill, permeable bedding sand, permeable jointing sand, and geotextiles to produce the end-product.

To ensure compliance with the NZBC, design to determine the performance requirements of the concrete segmental permeable paving shall be conducted by suitably qualified persons familiar with a range of NZ Design Standards and the preparation of specifications for construction.

Installation requirements:

Installation of the paving system needs to confirm to the designer's specification and the Firth's Permeable Paving installation guide. The Firth documents are available for free download on the Firth website. When paving forms part of the access route to which the public have access compliance with the slip resistance requirements of clause D1 of the NZBC is required.

Maintenance Requirements:

Firth Concrete Segmental paving products shall be maintained by annual inspection and cleaning as necessary. Recommendations on maintenance are provided in Firth's EcoPave® Installation guide.

Is the building product/building product line subject to warning or ban under section 26? ☐ Yes ☑ No	
If yes, description of warning or ban under section 26: N/A	

Date: 08/11/23