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Building Product Information Sheet | Class 1

Product Name:

Firth RibRaft HotEdge® and HotEdge Extra®

Product Line: Part of the Firth RibRaft floor slab insulation range

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

Firth floor slab insulation range has been designed to be used with Firth RibRaft and RibRaft-X-Pod flooring systems subject to specific engineering design.

The RibRaft HotEdge solutions are coated with a plaster coating and aluminium profiles for external corners. The HotEdge insulated perimeter beam range can be used with perimeter beam base insulation (HotEdge Base), or full slab base insulation or used individually to provide the desired floor R-value.

Firth provide a H1 software on its website to calculate concrete RibRaft Floor R values in accordance with the provisions of H1.

Building Product Warranty statements are available on the Firth website.

Product Identifier:

Place of Manufacture: Aotearoa New Zealand

Legal & Trading name of Manufacturer(s): Fletcher Concrete and Infrastructure Limited

Address for Service: 810 Great South Road

Penrose Auckland

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

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Relevant Building Code Clauses:

Firth RibRaft HotEdge range is a floor slab insulation product, designed to enhance the thermal properties of RibRaft floors.

With appropriate design, construction, and maintenance (see below), Firth RibRaft HotEdge range can demonstrate compliance with:

- B2- Durability: Performance clauses B2.3.1(b) and B2.3.2.
- E2- External moisture: Performance clauses E2.3.2 and E2.3.3
- F2- Hazardous materials: Performance clauses F2.3.1
- H1- Energy Efficiency H1.3.1 (a) and H1.3.2E

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

To ensure compliance with the NZBC, design shall be conducted by suitably qualified persons familiar with a range of NZ Design Standards. For structures within the scope of NZS3604, and where HotEdge Extra is located below the wall bottom plate, 140mm framing shall be used or the interaction between bottom plate and foundation is subjected to specific engineering design considering actions on the bottom plates and anchorage of hold down bolts. Construction shall be conducted by appropriately skilled persons in strict accordance the designer's specification, Firths installation guide, and good trade practice.

Durability - B2: The HotEdge range is manufactured from XPS profiles and plaster coated. Upon completion 2 coats of acrylic paint shall be applied.

External Moisture E2 - HotEdge profiles are moisture resistant and post installation painted. The product is installed against and in full contact with the concrete perimeter beam. To provide moisture protection of the framing bottom plate, detailing shall be in accordance with E2/AS3.

Hazardous Building Materials - F2: the RibRaft Hotedge profiles are manufactured from EPS, and inert non-toxic material.

Energy Efficiency - Compliance with the required R-value is determined by calculations conducted in accordance with H1. Firth website provides a calculator to assist with these calculations.

Limitations on the use of the building product:

The Firth RibRaft HotEdge systems have been designed to be used with Firth Ready mixed concrete.

The system has a thin plaster coating so should not be used in highly abrasive environments.

The system should be used where normal ground conditions exist. It should not be used where ground conditions are aggressive and likely to deteriorate the plaster coating.

It should not be used in situations likely to deteriorate XPS such as environments subject to petroleum based solvents.

PVC sheathed electrical cables should not be allowed in direct contact with XPS.

Dated: 08.11.2023

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

Provided on the Firth Website is software to calculate the expected floor R-value for a range of scenarios.

The Firth RibRaft Technical Manual (August 2023) provides additional information.

Installation requirements:

Firth RibRaft HotEdge is normally a specifically designed element so installation shall be in accordance with the designer's specifications and details. Installation information is also provided in *Firth RibRaft HotEdge installation guide* (refer Firth website).

Maintenance Requirements:

Firth RibRaft HotEdge range shall be maintained by annual inspection and cleaning as necessary. Repairs to the plaster coating can be made with Firth TIDYUP[©] as required. Re-coat the painted surface as required or typically on a 10 year cycle.

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

Dated: 08.11.2023