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



Building Product Information Sheet | Class 1

Product Name:

Firth RibRaft HotEdge Base®

Product Line: Firth RibRaft floor slab insulation range

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

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

The HotEdge Base is designed to provide insulation to the base of the perimeter foundation beam of a Firth RibRaft floor. The system can be used in association with Firth RibRaft HotEdge (refer separate Building Product Information sheet). The full range of floor edge insulation, perimeter beam base insulation, or full slab base insulation can be used individually or in combination.

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

Dated: 08.11.2023

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



Relevant Building Code Clauses:

Firth RibRaft HotEdge Base insulation product is designed to enhance the thermal properties of Firth RibRaft and X-Pod floors.

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

- B1- Structures Performance clauses B1.3.1 to B1.3.4
- B2- Durability: Performance clauses B2.3.1 and B2.3.2.
- 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. Construction shall be conducted by appropriately skilled persons in strict accordance the designer's specification, Firths installation guide, and good trade practice.

Structure – B1: Compliance is determined by ensuring that bearing pressures acting on HotEdge Base are consistent with those associated with good ground (150Kpa dependable ultimate, 100Kpa serviceability).

Durability – B2: HotEdge Base is a durable product and will achieve compliance when designed and installed appropriately (refer this document)

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 Base system has been designed to be used with Firth Ready mixed concrete. The system is for use with Firth RibRaft floors, with a level platform suitable for full contact of the HotEdge Base constructed below.

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 polystyrene.

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

Design requirements that would support 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.

Private Bag 99904, Newmarket, Auckland 1149

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



Installation requirements:

Firth RibRaft HotEdge Base 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 Base is located below the perimeter foundation beam. Soil coverings shall be reinstated if removed to ensure the systems remains buried below ground and not exposed to UV light.

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