

EPSFOAM under slab sheets (EPS &XPS)

BPIR Declaration

Version: V1

Designated building product: Class 1

Declaration

EPSFOAM NZ LTD has provided this declaration to satisfy the provisions of Schedule 1(d) of the building (Building Product Information Requirements) Regulations 2022.

Product/system

Name	EPSFOAM under slab sheets (EPS &XPS)
Line	EPSFOAM under slab https://epsfoam.co.nz/insulation/ EPSFOAM xps under slab https://epsfoam.co.nz/extruded-polystyrene-sheets/ EPSFOAM drainage board EPSFOAM polystyrene sheets Grade available (S, M,H,VH AND BLACK PEARL) Sizes available (from 2400x1200 to 4800x1200) Thickness available 10-1000mm EPSFOAM xps Size available 2400x600mm Thickness available 10-100mm
Identifier	EPSFOAM under slab EPSFOAM black pearl EPSFOAM xps

Description

EPSFOAM Under Slab Insulation...

Offers excellent compressive strength.

Moisture resistant

Delivers excellent thermal performance.

Has a 50-year warranty when installed and used correctly

Is available in multiple sizes, strength and thermal performance options.

Scope of use

EPSFOAM eps and xps sheets can be used in

under slab, Masonry wall, insulation, cladding ,light weight fill, Killion roof insulation

Conditions of use

EPSFOAM eps and xps must be kept away from fire, petroleum based solvent and direct sunlight.

EPSFOAM eps must be handled with care.

Relevant building code clauses

B1 Structure – B1.3.1, B1.3.2, B1.3.3 (a, b, f, g, h, m, q), B1.3.4

B2 Durability – B2.3.1 (a), B2.3.2 (a, b)

E2 External moisture – E2.3.3, E2.3.7

F2 Hazardous building materials – F2.3.1

H1 Energy efficiency – H1.3.1 (a, b), H1.3.2E

Contributions to compliance

EPSFOAM eps Sheet complies with manufacturing standard AS 1366 Part 3 1992

EPSFOAM eps 50-year warranty when installed and used correctly.

Excellent compressive strength

Excellent thermal performance

Supporting documentation

The following additional documentation supports the above statements:

None added.

For further information supporting EPSFOAM under slab sheets (EPS &XPS) claims refer to our website.

Contact details

Manufacture location	New Zealand
Legal and trading name of manufacturer	EPSFOAM NZ LTD
Manufacturer address for service	80B HUNUA ROAD PAPAKURA
Manufacturer website	www.epsfoam.co.nz
Manufacturer email	epsfoam@xtra.co.nz
Manufacturer phone number	09 299 6901
Manufacturer NZBN	9429033642246

Responsible person

As the responsible person as set out in Regulation 3, I confirm that the information supplied in this declaration is based on information supplied to the company as well as the company's own processes and is therefore, to the best of my knowledge, correct.

I can also confirm that EPSFOAM under slab sheets (EPS & XPS) is not subject to a warning or ban under [s26 of the Building Act](#).

Signed for and on behalf of **EPSFOAM NZ LTD**:

Your Name Kulwinder Bath
YOUR POSITION Managing Director
Month Year May 2024

EPSFOAM NZ LTD
80b Hunua road, Papakura Auckland 2104 New Zealand
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Appendix

Note: The below appendix includes information relating to BPIR Ready.

Publishing this information is not a requirement under BPIR. Its inclusion here is to provide a reference for how this BPIR summary was generated as well as to help summary creators understand the performance clauses suggested by BPIR Ready.

BPIR Ready selections

Category: Foundation systems

Building code performance clauses

B1 Structure

B1.3.1

Buildings, building elements and *sitework* shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during *construction* or *alteration* and throughout their lives.

B1.3.2

Buildings, building elements and *sitework* shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during *construction* or *alteration* when the *building* is in use.

B1.3.3

Account shall be taken of all physical conditions likely to affect the stability of *buildings, building elements* and *sitework*, including:

- (a) self-weight
- (b) imposed gravity loads arising from use
- (f) earthquake
- (g) snow
- (h) wind
- (m) differential movement
- (q) time dependent effects including creep and shrinkage

B1.3.4

Due allowances shall be made for:

- a. the consequences of failure,
- b. the intended use of the *building*,
- c. effects of uncertainties resulting from *construction* activities, or the sequence in which *construction* activities occur,
- d. variation in the properties of materials and the characteristics of the site, and
- e. accuracy limitations inherent in the methods used to predict the stability of *buildings*.

B2 Durability

B2.3.1

Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:

- (a) the life of the building, being not less than 50 years, if: those building elements (including floors, walls, and fixings) provide structural stability to the building, or those building elements are difficult to access or replace, or failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building

B2.3.2

Individual *building elements* which are components of a *building* system and are difficult to access or replace must either:

- (a) all have the same durability
- (b) be installed in a manner that permits the replacement of building elements of lesser durability without removing building elements that have greater durability and are not specifically designed for removal and replacement

E2 External moisture

E2.3.3

Walls, floors, and structural elements in contact with, or in close proximity to, the ground must not absorb or transmit moisture in quantities that could cause undue dampness, damage to *building elements*, or both.

E2.3.7

Building elements must be constructed in a way that makes due allowance for the following:

- a. the consequences of failure:
- b. the effects of uncertainties resulting from *construction* or from the sequence in which different aspects of *construction* occur:
- c. variation in the properties of materials and in the characteristics of the site.

F2 Hazardous building materials

F2.3.1

The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.

H1 Energy efficiency

H1.3.1

The *building* envelope enclosing spaces where the temperature or humidity (or both) are modified must be constructed to

- (a) provide adequate thermal resistance
- (b) limit uncontrollable airflow

H1.3.2E

Buildings must be constructed to ensure that their building performance index does not exceed 1.55.

EPS THERMAL CHART

THICKNESS	BLACK PEARL	S GRADE	H GRADE	VH GRADE 28KGS
20MM	R0.62	R0.52	R0.55	R0.58
30MM	R0.96	R0.78	R0.83	R0.88
40MM	R1.30	R1.05	R1.11	R1.17
50MM	R1.61	R1.31	R1.38	R1.47
60MM	R1.93	R1.57	R1.66	R1.71
70MM	R2.26	R1.84	R1.94	R2.05
80MM	R2.58	R2.10	R2.22	R2.35

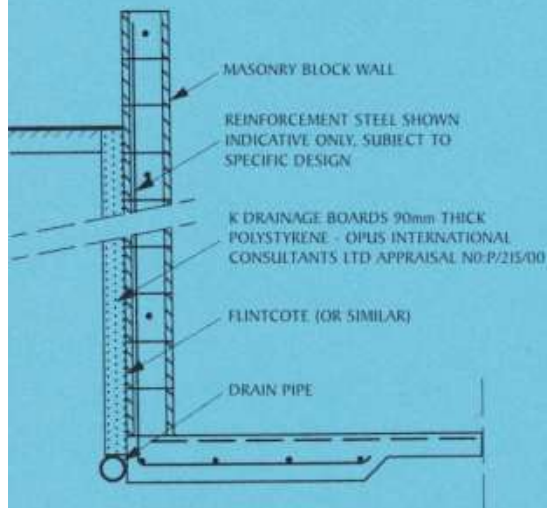
90MM	R2.90	R2.36	R2.50	R2.64
100MM	R3.22	R2.63	R2.77	R2.94
110MM	R3.54	R2.89	R3.05	R3.14
120MM	R3.87	R3.15	R3.33	R3.42
150MM	R4.83	R3.94	R4.16	R4.28

EPS XPS R VALUE CHART

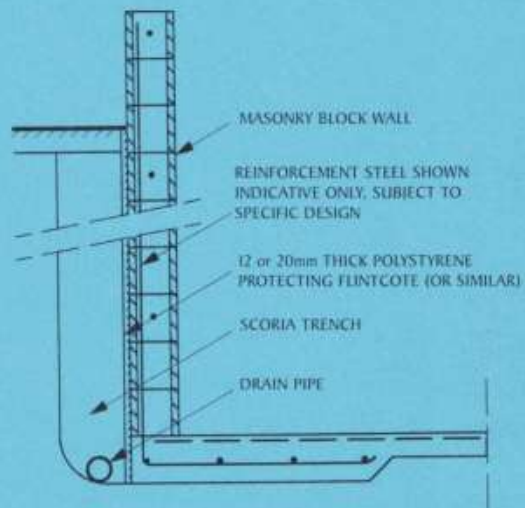
Compressive strength 459 kpa @10%

THICKNESS	R VALUE
25MM	0.92
30MM	1.11
40MM	1.48
50MM	1.85
60MM	2.22
70MM	2.59
75MM	2.77
80MM	2.96
90MM	3.33
100MM	3.70

POLYSTYRENE FLINTCOTE PROTECTION DRAINAGE BOARD



K DRAINAGE BOARD - SECTION
NOT TO SCALE



POLYSTYRENE PROTECTION SHEETS - SECTION
NOT TO SCALE

Sheets provide protection against scoria or hard fill from damaging the waterproof protection exterior of a concrete wall.

KOOLFOAM DRAINAGE BOARD

Benefits

Water permeable
Appraisal No P/215/00 by Opus Int.
Equivalent flow to that of sand

Impact

Reduces risk of wall damage when backfilling

Insulation

Light weight, requires only one person to install and can be cut by hand saw

Eco Friendly

No CFC's, no irritation substance, no decomposition, made from 100% recycled material.

Cost Savings

Less labour
Less scoria

Black Pearl Masonry Wall Options: Available in 2.4 and 2.7 lengths

Panel Width mm	Panel Width mm	Thickness mm	R Value
355	555	40	R1.30
355	555	45	R1.45
355	555	50	R1.61
355	555	60	R1.93

Black Pearl Cavity Wall and Mono Pitch Roof Insulation Panels: Standard panels are 1.2 long with concertina cuts for compression fit

Panel Widths mm	Thickness mm	R Value
360 and 560	70	R2.26
560 and 860	90	R2.90
560 and 860	100	R3.22