

**I R Group Ltd**

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**HUIA RANGE SCHOOL**

**BLOCKS A & B UNDERFLOOR INSULATION**

Prepared for  
**Huia Range School Board of Trustees**  
**Cole Street**  
**Dannevirke**

# Tender Response Form

**For:**  
Huia Range School Board of Trustees  
Cole Street  
Dannevirke

**Tenders sent to:**  
ian@irgroup.co.nz

**Tender For: Huia Range School Blks A&B Underfloor Insulation**  
I / we the undersigned do hereby tender and offer to undertake the works described in the attached documentation in accordance with the conditions herein for the sum of

Block A inc Hall	\$ .....
Block B	\$ .....
Sub total	\$ .....
GST	\$ .....
Total	\$ .....
	=====

**Tender Information**

**Tenderer:** .....  
**Address:** .....  
**Phone:** ..... **Fax:**.....  
**Date:** ..... **Signature:**.....

**Tenderers Remarks:**

# Minor Works Contract

Relating to:

**Huia Range School**  
**Blks A&B Underfloor Insulation**

Huia Range School Board of Trustees

as Principal

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*[insert name of Contractor]*

as Contractor

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**Dated**

**Parties:**

Huia Range School Board of Trustees (**Principal**)

[insert name of Contractor] (**Contractor**)

The Principal engages the Contractor to provide the Works described below and the Contractor agrees to provide the Works for the sum of \$[insert agreed contract price], or such greater or lesser sum as shall become payable under the Contract (**Contract Price**) together with goods and services tax, and in accordance with the terms and conditions set out in the Contract.

**Works:** The Contractor shall achieve Completion of the following Works by the Completion Date:

Further details of the scope of Works and a copy of the Contractor's quote are annexed to this Contract.

**Warranties, documents and other information:** The Contractor shall provide the following prior to Completion:

Warranties for the insulation and installation

**Authorised Representative:** Ian Rattray who is authorised to act on behalf of the Principal in respect of the Works.

**Contract Term:** From [insert date] (**Commencement Date**) to [insert date] (**Completion Date**). To be confirmed

For and on behalf of the Principal by its authorised signatory(ies):

For and on behalf of the Contractor by its authorised signatory(ies):

\_\_\_\_\_  
Print Name:

Date:

Address for notices:

Email:

\_\_\_\_\_  
Print Name:

Date:

Address for notices:

Email:

## CONTRACT TERMS AND CONDITONS

### 1. FORMATION OF THE CONTRACT

- 1.1 This contract for the provision of Works as described in the contract (**Contract**) will arise on the Contractor signing the Contract and will embody the terms of the Contract and the following terms and conditions (including any Appendices).
- 1.2 The Principal may cancel a Contract by notice to the Contractor if the Contractor has not signed the Contract and delivered it to the Principal within ten (10) working days of the date of issue of the Contract.
- 1.3 No payment otherwise due under the Contract shall become payable until the Contractor has signed the Contract and delivered it to the Principal.

### 2. General responsibilities

- 2.1 The Contractor shall:
- (a) complete, handover to the Principal, and remedy defects in the Works and provide all services, labour, materials, plant and everything, whether of a temporary or permanent nature required by the Contract;
  - (b) comply with all proper instructions issued by the Principal in relation to the Contract or the Works;
  - (c) comply with all applicable statutes, regulations, codes of practice, bylaws of government, local and other public authorities that may be applicable to the Works; and,
  - (d) on behalf of the Principal obtain all necessary consents producer statements and compliance certificates required by relevant authorities and pay all required consent fees.
- 2.2 The Contractor shall commence Works on the Commencement Date or as soon as reasonably practicable thereafter, and shall then proceed with the execution of the Works with due diligence.
- 2.3 The Contractor shall achieve Completion of the Works, by the Completion Date.
- 2.4 Completion is when the Principal certifies that the Works are complete, including the Contractor having provided all warranties, documents and information stated in the Contract as being required for Completion (**Completion**).
- 2.5 The Completion Date is subject to adjustment for any extensions of time which may be granted by the Principal.
- 2.6 The Contractor shall promptly remedy all defects in the Works identified by the Principal at Completion.

### 3. information

- 3.1 The Principal shall use reasonable endeavours to provide to the Contractor upon request, all relevant information in its possession which relates to the Works. The Contractor shall not, without the Principal's prior written consent, use information provided by the Principal for purposes unrelated to the Works.
- 3.2 The Principal makes no warranty as to the sufficiency or accuracy of such information. The Contractor shall be responsible for the interpretation of all such information for the purposes of the Works.

### 4. variations

- 4.1 The Contractor shall carry out any variations to the Works (provided that such variations are within the scope of the Contract) instructed in writing by the Principal. The Contractor must not vary the Works without an instruction in writing from the Principal.
- 4.2 The value of the variation must be agreed, or failing agreement, determined by the Principal based on what is fair and reasonable in the circumstances. Unless directed otherwise, the value of the variation shall be agreed or determined prior to the Contractor commencing the varied work. The value of variations will be added to or deducted from the Contract Price.

### 5. TERMS OF PAYMENT

- 5.1 The Contract Price is the sum stated in the Contract, subject to such adjustments as provided for in the Contract.
- 5.2 The Contractor must provide the Principal with a payment claim within five (5) working days of Completion, for the full amount of the Contract Price.
- 5.3 The Contractor's payment claims must not be in the form of a GST invoice. The payment claims must be addressed to the Principal and must identify the Works carried out, detail the amounts claimed for payment and show any amendments to the original Contract Price.
- 5.4 The Principal shall issue to the Contractor a payment schedule within 15 working days of receipt of the payment claim. The payment schedule shall indicate the amount of the payment claim which the Principal proposes to pay to the Contractor (**Scheduled Amount**).
- 5.5 Where the Scheduled Amount is less than the amount claimed in the payment claim, the payment schedule must indicate:
- (a) the manner which the Principal has calculated the Scheduled Amount; and
  - (b) the Principal's reasons for the difference between the Scheduled Amount and the amount of the payment claim; and
  - (c) where the difference is because the Principal is withholding payment on any basis, the Principal's reasons for withholding payment.
- 5.6 On receipt of a payment schedule, the Contractor may then issue to the Principal a GST invoice for the Scheduled Amount. The Principal shall pay the invoice by the 20<sup>th</sup> day of the month following the month of issue to the Principal of the invoice for the Scheduled Amount.

### 6. INSurance

- 6.1 The Contractor shall arrange and maintain public liability insurance and motor vehicle third party liability insurance of no less than \$1,000,000 in the joint names of the Contractor and the Principal until final completion of the Works. These insurances must cover both the Contractor and the Principal for any liability for loss or damage to any property, or injury or illness or death to any person that arises from the carrying out of the Works.
- 6.2 The Principal shall arrange and maintain contract works insurance in the joint names of the Contractor, subcontractors and the Principal, until Completion of the Works, to cover loss or damage in accordance with its insurance policies. The insurance shall also cover loss or



- damage resulting from an act or omission of the Contractor in the course of remedying defects. Details concerning these insurance policies are set out in Appendix 4.
- 6.3 Where the Works are in the nature of additions, alterations, repairs, or maintenance to an existing structure, or where the Works are in the vicinity of another structure in the care of the Principal, the Principal will effect insurance under clause 6.2 and will include cover for the replacement values nominated in Appendix 4 in respect of:
- the existing structure;
  - other structures in the vicinity; and
  - any contents which are owned by the Principal and contained within the existing or other structures,
- (d) in each case as identified in Appendix 4.
- 6.4 The Contractor must pay the full amount of any of the Principal's insurance policy deductibles or excesses where the loss, damage or liability arises out of an act or omission of the Contractor in which event the Contractor must pay the amount stated in Appendix 4 as the nominal deductible (Nominal Deductible) as applicable. The Nominal Deductible will be in each case an amount which is equal to the actual insurance policy deductible or excess.
- 7. INDEMNITY**
- 7.1 The Contractor shall indemnify the Principal against any liability, loss, damage, claims, costs and expenses incurred in connection with any faulty workmanship, defects or non-compliance of the Works, any other breach by the Contractor of any term of the Contract or the negligent or wrongful act or default of the Contractor or any of its employees, subcontractors or agents in performing obligations under the Contract.
- 7.2 This clause 7 survives termination or expiry of the Contract.
- 8. CONFIDENTIALITY**
- 8.1 The Contractor must use its best endeavours to keep confidential all matters relating to the Contract. The Contractor must not disclose any information related to the Contract except to the extent that the disclosure of that information is necessary for the Contractor to carry out its obligations under this Contract, to enforce any of its rights under it or where disclosure is required by law.
- 8.2 This clause 8 survives termination and expiry of the Contract.
- 9. HEALTH AND SAFETY**
- 9.1 The Contractor warrants that it and any of its employees, agents and subcontractors have complied and will comply with the Health and Safety at Work Act 2015 and all other regulatory provisions for health and safety in connection with the Works (including the Principal's Health and Safety Requirements as revised from time to time and available on the Ministry of Education's website under the following link: [www.education.govt.nz/school/property/health-and-safety-management/](http://www.education.govt.nz/school/property/health-and-safety-management/) and the Principal's Asbestos Handling Requirements as revised from time to time and available on the Ministry of Education's website under the following link: [www.education.govt.nz/school/property/state-schools/fixing-issues/asbestos](http://www.education.govt.nz/school/property/state-schools/fixing-issues/asbestos)
- 9.2 The Contractor warrants that it and any of its employees, agents and subcontractors have complied and will comply with all the Principal's protocols, rules and regulations for health and safety in connection with the Works.
- 9.3 Prior to commencing the Works, the Contractor shall prepare and submit to the Principal a site specific risk assessment and a site specific health and safety plan appropriate to the scope of the Works, and shall comply with any such plan in the performance of the Works. Acceptance by the Principal of the site specific risk assessment and a site specific health and safety plan shall not relieve the Contractor of any obligation or liability under the Contract or at law.
- 10. termination**
- 10.1 Either party may terminate the Works by immediate notice if the other party materially breaches the Contract, including but not limited to the Contractor failing to perform the Works by the Completion Date or to the standard required by this Contract.
- 10.2 Termination shall not prejudice or affect the accrued rights or claims and liabilities of the parties.
- 11. dispute resolution**
- The parties shall attempt to settle any dispute which arises between them by way of good faith discussions. If an agreement cannot be reached within 20 working days of any dispute being notified by one party to the other party, then the parties may by agreement refer the dispute to mediation, failing which either party may refer the matter to other forms of dispute resolution.
- 12. privity of contract**
- 12.1 Where the Principal is a School Board of Trustees, the obligations of the Contractor and any of its subcontractors under the Contract shall for the purposes of the Contracts (Privity) Act 1982 be deemed to be for the benefit of the Ministry of Education (including, its successors and assigns) and shall be enforceable by the Ministry of Education against the Contractor or any of its subcontractors but not so as to impose any greater liability on the Contractor or its subcontractors towards the Ministry of Education than the Contractor owes or owed to the Principal.
- 12.2 Where the Principal is the Ministry of Education, the obligations of the Contractor and any of its subcontractors under the Contract shall for the purposes of the Contracts (Privity) Act 1982 be deemed to be for the benefit of the School Board of Trustees (including, its successors and assigns) and shall be enforceable by the School Board of Trustees against the Contractor or any of its subcontractors but not so as to impose any greater liability on the Contractor or its subcontractors towards the School Board of Trustees than the Contractor owes or owed to the Principal.
- 13. acknowledgment**
- 13.1 The Contractor acknowledges and agrees that it:
- is qualified to carry out the Works;
  - has no, and is not aware of any conflict of interest, that it has not disclosed in writing to the Principal prior to signing this Contract, including but not limited to any personal or professional relationship that the Contractor (or its directors, majority shareholders, or individual owner(s)) has with any member of the School Board of Trustees or a school staff member, and the Contractor undertakes to advise the Principal immediately if any conflict of interest should arise;
  - is not the subject of any claim brought by the Ministry of Education or any School Board of Trustees for defective workmanship, and will notify

the Principal immediately if any such claim is brought; and

- (d) has complied, and will comply, with all Ministry of Education police vetting requirements before it or any of its employees, subcontractors or consultants access the school to carry out the Works. Details may be found on the following web site: <http://www.education.govt.nz/school/property/state-schools/project-management/boards-of-trustees-role/police-vetting/>

**14. general**

- 14.1 The Contract is governed by New Zealand law, and the New Zealand courts have non-exclusive jurisdiction in respect of this Contract.
- 14.2 This Contract evidences the entire agreement between the Contractor and Principal in connection with the Works and supersedes and extinguishes all prior agreements (including any quotes provided by the Contractor) between the Contractor and Principal relating to such matters.
- 14.3 The Contractor shall not assign the Contract without the Principal's prior written approval. A change in the management or control of the Contractor or the sale of the major part of the Contractor's business or assets will be deemed to be an assignment for the purposes of this clause.
- 14.4 The Contractor shall not subcontract any part of this Contract or the Works without the Principal's prior written consent. Where the Principal consents to the Contractor subcontracting any of its obligations under this Contract to a third party, the Contractor will remain fully responsible for all obligations to the Principal under the Contract.
- 14.5 The Principal may set-off any amounts owing to the Contractor under this Contract against any amounts owing to the Principal by the Contractor under this Contract.
- 14.6 Any notice to be given under the Contract must be in writing and must be delivered or sent by post or e-mail to that party's address for notices set out in the Contract. In the case of notice by email, confirmation of receipt from the recipient is required to confirm the delivery of the notice.

## APPENDIX 4 – PRINCIPAL ARRANGED INSURANCE

**Principal arranged contract works insurance:** In accordance with clause 6.2, the insurance policies are:

for clause: 6.2 Construction Material Damage; and  
for clause: 6.3(a) and (b) – Material Damage Insurance Policy

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### **Details of Principal arranged construction insurance:**

Lead insurer is: Vero Insurance New Zealand Limited of Private Bag 92 – 237, Auckland.

The Nominal Deductibles are:

For damage arising out of the works: **\$5,000** or **\$25,000** for loss arising from testing and commissioning

For other claims **\$5,000**

*[Note: to obtain contract works insurance contract works insurance for your project, the Ministry requires that the details of the contract are entered into the Ministry's contract works insurance broker's website. The Ministry's insurance broker's website can be accessed via: [www.education.govt.nz/school/property/state-schools/project-management/project-managers-role/procurement/insurance/](http://www.education.govt.nz/school/property/state-schools/project-management/project-managers-role/procurement/insurance/)]*

## **Huia Range School: Blks A & B Underfloor Insulation**

### **Extent of Work**

This contract is for the supply and installation of “Expol” underfloor insulation to all subfloor cavities to Blocks A (including the Hall) and B at Huia Range School Cole Street Dannevirke.

Allow to supply all materials, plant, labour and equipment to carry out the works to the very best of trade practice and in accordance with the attached manufacturer's instructions.

- 1) Allow for standard R1.4 “Expol” tiles.
- 2) Allow to treat all cables and underground service with the correct treatment prior to fitting the insulation.
- 3) Removal all off cuts and debris associated with the works and dispose of them off site at an approved refuse site.
- 4) Refer attached marked up plans for scope of work



## **Preliminary and General**

### **1) Extent of Work**

Refer to the attached page(s).

### **2) General**

The following documents shall form part of the Contract:

- a) The attached MOE Conditions of Contract for minor works.
- b) The accompanying Tender Form.
- c) The accompanying Specification.
- d) The accompanying Drawings with any subsequent Drawings.
- e) Any written correspondence, instructions and variations issued subsequent to the signing of the contract.
- f) The letter of acceptance.
- g) Any written notice to tenderers recording adjustments to drawings and or specification prior to the signing of the contract.

### **3) Examine the Site**

Tenderers shall examine the site and building before tendering. The submitting of a tender will be taken as an indication that the tenderer has visited the site and made himself familiar with any matters that might affect the fulfilment of his part of the contract and has made due allowance in his tender for these. No consideration shall be granted for any misunderstandings as to the work to be performed or the materials used.

### **4) Temporary Services**

#### Water

The contractor may draw water from the employers existing reticulation.

#### Latrine

The contractor may use an existing toilet at the discretion of the employer, and must keep it in a clean and tidy condition.

#### Electric Power

The contractor may use the existing power supply during the course of the contract, unless special loadings are required, in which case the contractor shall make the necessary arrangements and pay all costs.

**5) Work Programme**

The successful contractor is to arrange with the school and supervisor, approved dates and times within the specified time when work can be actioned.

**6) Insurances**

As per the conditions of contract, the Contractor is to carry a General Public Liability Insurance policy with a minimum cover of \$2,000,000.00.

The contractor shall insure separately the Contractors Plant and Equipment.

**7) Noise**

No radio or other noise not strictly associated with the works shall be audible in any room outside the contractors working and storage area.

**8) Scaffolding and Hoarding**

The contractor shall provide for the erection of all necessary gantries, cranes, staging, ladders, moving sections, chutes and any other scaffolding to permit the proper and efficient erection of the work.

**9) Dimensions and Setting Out**

Check and confirm all building dimensions on site. The contractor shall accept full responsibility for the final dimensions. All work shall be set out accurately and in accordance with the plans. Any errors shall be made good at the contractor's expense.

**10) Existing Services**

Any damage incurred to existing services shall be made good to the supervisor's approval and at no cost to the employer.

**11) Care of the Site**

The contractor shall regularly remove all debris, rubbish, and surplus materials, including that of subcontractors as they accumulate. The site shall be as tidy as possible at all times.

Upon completion of the contract works, the contractor shall take down and remove all plant, gear, temporary work, rubbish, debris and surplus materials from the site, and make good.

At the conclusion of the contract, the contractor shall leave the site in such a condition, as new, and to the supervisor's approval.

**12) Workmanship**

Workmanship shall be consistent with good trade practice to produce sound and well finished work, and to the requirements and standards demanded by the supervisor.

**13) New Zealand Standards**

It is the sole responsibility of the main contractor to ensure that the complete contract works are executed according to the relevant New Zealand standards, and local and national regulations.

**14) Protection**

The contractor shall be held responsible for the protection of persons or property in the immediate vicinity of, or liable to be affected by his operations. To that end, he shall provide a suitable temporary fence around the entire construction zone, at a minimum orange plastic safety mesh supported on tensioned wire over waratah stays and all necessary coverings, guards and the like, and display suitable and sufficient warning notices. The fences and signs shall be maintained throughout the contract.

**15) Bylaws and Regulations**

The whole of the operations shall be carried out in compliance with regulations of all public bodies having jurisdiction in the matter, and the contractor shall pay all and any fees which may be payable in respect thereof.

**16) Labour and Materials**

The contractor is to supply all labour, plant and sundry items as later detailed which are the best of their respective kinds.

Only first class tradesmen are to be employed on this contract and any defective or improper workmanship shall be reinstated by the contractor in an approved manner at the contractor's expense.

**17) Damage**

The Contractor shall be responsible for the loss or damage which may be caused to the property of the employer in his carrying out of this contract and the contractor shall make good such loss or damage at his own expense, to the satisfaction of the employer.

**18) Behaviour Generally**

Any behaviour by workers on the site that could be considered sexist, racist, obscene or beyond the limits of normal, acceptable behaviour will not be tolerated.

The supervisor reserves the right to exclude any such offending persons from the site area.

Wherever possible, contact between workers and school children should be kept to an absolute minimum. If the contractor finds that the school children are being a nuisance within the building site area, he is to notify the supervisor and the principal immediately in order that steps be taken to remedy the situation.

Under no circumstances whatsoever is the contractor and or employees thereof, permitted to have physical contact with, admonish or discipline any children that may from time to time enter the site area and or act in a manner that is a nuisance to the contractor and his staff. Report any such incidence to the principal immediately.

**19) Smoking**

Smoking is not permitted on any school site. This is a matter of Law and not negotiable.

**20) Foreman**

The contractor shall provide at all times an efficient foreman who shall have the power to receive and carry out the instructions of the supervisor or his agent.

## **21) Compliance Certificate**

The contractor shall complete the enclosed compliance certificate, stating that the all work carried out in the execution of the contract works by all contractors involved in such work, has been carried out in accordance with the contract documentation. This certificate shall be delivered to the employer or his agent before the issuing of the completion certificate.

## **22) Health & Safety at Work Act: 2015**

You will be required to comply with the requirements and recommendations of the Health and Safety at Work Act: 2015 and any subsequent amendments. Your personnel will be responsible for Health and Safety compliance on site. While work is in progress, the project manager and/or an outside agency may randomly audit health and safety procedures. Asbestos discovery is to be notified to the project manager immediately and relevant Worksafe protocols must be followed. Any accident, incident or near miss must be notified to the project manager immediately.

You must implement a site specific health and safety plan that is appropriate and adequate to the hazards and circumstances. The health and safety plan must include,

- lines of accountability and responsibilities for the supervision of all personnel
- a list of all hazards identified and control measures to be taken to manage the hazards including:
- hazards that the contractor is bringing onto or creating on site (e.g. hazardous substances, noise, dust, electrical hazards etc.)
- safety provisions for both personnel on site and those in the vicinity who may be affected by the work
- the requirement for safety equipment
- emergency procedures the plan for site access, restricted areas, security and control
- training, experience and qualifications of personnel (including Certificates of Competence) the process for reporting and recording of accidents/incidents
- the process for involving employees in the improvement of health and safety
- the process for the ongoing identification/management of hazards during the contract and the periodic updating of the Site Health and Safety plan.



The Contractor is required to seek a copy of the owners health and safety policy and make himself aware of any hazards that may be present on the site.

**23) Defects Liability Period**

There is no defect liability period for this project.

**24) Asbestos**

The contractor is required to immediately notify the supervisor, if the presence of asbestos is suspected or detected during construction.

**25) Contractors Animals**

Due to a number of problems having been experienced in the past in relation to contractors pets, particularly dogs, on site during the course of the project, The Ministry of Education Central South Office requests that all contractors and related persons refrain from bringing animals on to the school site at all times during the contract.

**26) Police Vetting**

As a result of an amendment to The Education Act 1989, Boards of Trustees are now required to obtain a police vet from the NZ Teachers Council on all persons working on a school site that are not registered teachers.

This requirement applies to all contractors and their employees who will be on site regularly, as well as your subcontractors and their employees.

You will be required to furnish a list of all workers that will be on site throughout the execution of the work, and distribute Police vet forms to these persons and return the forms to the school to enable the vetting process to be completed.

Any person who turns up on site to work and is not on the list will not be allowed on site.

All information received by the school will be treated in the strictest confidence and will be held in a secure file by the school.

# UNDERFLOOR INSULATION

DO IT

YOURSELF

TODAY



EXPOL **UNDERFLOOR** INSULATION is perfect for your existing or new home. Placed snugly between the floor joists it will ensure your home is protected from the extreme outdoor temperatures, for life.



# THE ultimate choice.

## EXPOL UNDERFLOOR INSULATION



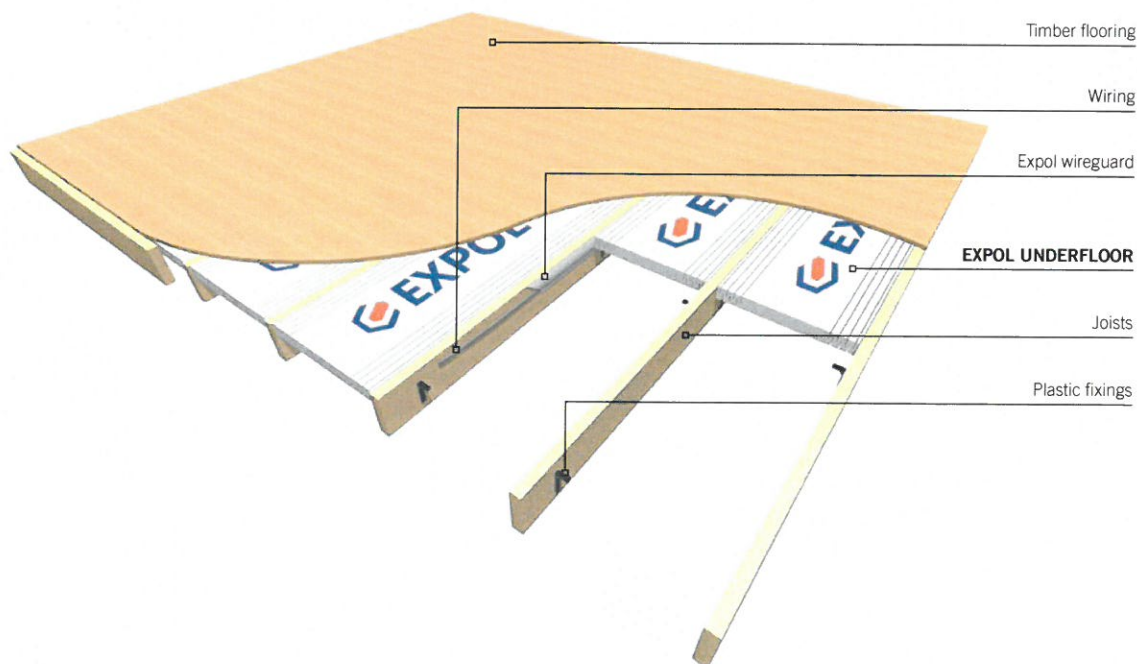
EXPOL UnderFloor Insulation has been designed to insulate your home. By fitting EXPOL snugly between the timber floor joists, you are making the 'ultimate choice' for your new or existing house.

Rigid polystyrene panels are 1.2 metres long and 60mm in thickness, produced in four standard widths to fit between most standard joists.

All EXPOL panels are concertina cut on both sides to allow for a compression of up to 20mm for ease of installation, and to ensure a snug fit between the joists.

EXPOL UnderFloor is ideal for both retro-fitting under existing floors and new floor installations. EXPOL is backed by a BRANZ appraised 50 year limited product warranty.

To ensure you select the right product designed to withstand the external conditions found under your house, choose EXPOL, solid insulation.



**EXPOL**  
INSULATION

- Expol Solid Insulation **WILL NOT SAG** over time
- BRANZ appraised 50 year limited product warranty
- Cooler in summer ■ Easy to install ■ Warmer, dryer floors

## NEW AND EXISTING FLOORS



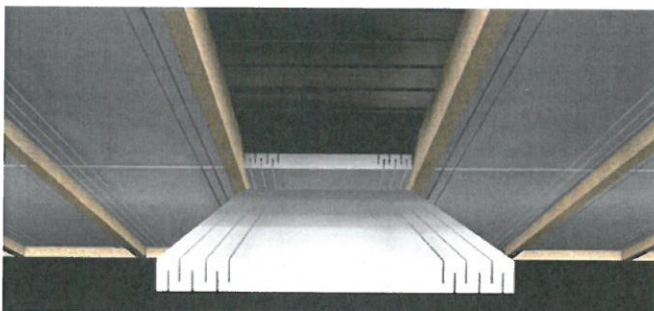
### NEW FLOORS

- Great for pole houses and exposed timber floors
- Exceeds the minimum R Value for timber floors
- Improves the insulation rating of your home
- For technical information please refer to our BRANZ appraisal



### EXISTING FLOORS

- Great for polished floor areas in bungalows & villas
- Non allergenic and non irritating
- Excellent thermal properties
- No more drafty floors
- Insulate with EXPOL for a dryer, healthier home



### RIGID POLYSTYRENE SIZES:

<b>360</b>	<b>1200 x 360 x 60mm</b>	<b>12 per bag</b>	<b>Covers 5.18m<sup>2</sup></b>
<b>410</b>	<b>1200 x 410 x 60mm</b>	<b>11 per bag</b>	<b>Covers 5.41m<sup>2</sup></b>
<b>470</b>	<b>1200 x 470 x 60mm</b>	<b>10 per bag</b>	<b>Covers 5.64m<sup>2</sup></b>
<b>560</b>	<b>1200 x 560 x 60mm</b>	<b>9 per bag</b>	<b>Covers 6.05m<sup>2</sup></b>

- Save on power bills
- Safe, will not itch and non allergenic
- Flame retardant
- Product & bag are recyclable
- Insulation performance is **NOT** affected by ageing or moisture

MINIMUM  
**R VALUE 1.4**



## Easy Step Guide



Looks like you are about to take the next step to creating a healthier home environment. That's great news for you and your family.

Whether you are choosing to have EXPOL professionally installed or going it alone, you will not go past **EXPOL UnderFloor Insulation**.

To assist you, we've developed an easy step guide - follow it and you can't go wrong.

Don't forget to pick up your **EXPOL UnderFloor Easy Measure Ruler**, which is also available online at [www.expol.co.nz](http://www.expol.co.nz). Use it to measure the underfloor joist sizes, so you can purchase the correct panels for your DIY Insulation project.

For more detailed project information refer to [www.expol.co.nz](http://www.expol.co.nz)



### Step 1



Place your Easy Measure Ruler against one side of the joist. The opposite joist will fall within one of our 4 panel sizes. Joist sizes can vary, so be sure to measure more than one. You may need a few different panel sizes to complete the job.

### Step 2



If the panel is too wide, simply slice down the appropriate concertina edge, leaving the panel approximately 5mm oversized to ensure a firm fit.

### Step 3



EXISTING FLOOR



NEW FLOOR

Slide the panel between the joists. The concertina designed cuts will ensure a tight fit.

The panel should be pushed up hard against the bottom of your floor leaving no air gap.

A minimum gap of 150mm must be left around metal heating flues, OA rated recessed down lights and ceiling exhaust fans, and a 50mm gap is required around brick / concrete chimneys.

### Step 4



#### Fixings:

Once the panel is installed, tack 2 **EXPOL** fixings in opposite corners to ensure **EXPOL UnderFloor** will stay in place for the lifetime of your home.

### Step 5



#### Electrical:

For cables that come into **DIRECT** contact with **EXPOL UnderFloor**, place **EXPOL Wire-guard** around the wires before installation. Do not use a staple gun to fix the Wireguard. Always exercise caution working around electrical wiring.

### Step 6



#### Pipes & Plumbing:

For obstacles such as pipes and plumbing, use your sharp knife to cut the panel and notch around the difficult areas. For future maintenance, leave 100mm clearance around pipes and plumbing.



## EXPOL PACK CALCULATOR

Area to be insulated Based on perimeter		Number of Packs Required			
m2	feet2	360mm	410mm	470mm	560mm
10	108	2	2	2	2
20	215	4	4	4	4
30	323	6	6	6	5
40	431	8	8	8	7
50	538	10	10	9	9
60	646	12	12	11	10
70	753	14	13	13	12
80	861	16	15	15	14
90	969	18	17	16	15
100	1076	20	19	18	17
110	1184	22	21	20	19
120	1292	24	23	22	20



### WIREGUARD

To separate electrical cables from EXPOL UnderFloor insulation use EXPOL Wireguard, a waxed paper strip for wrapping around PVC cables before installing EXPOL UnderFloor. Each bag contains 1/2 metre of Wire Guard. Additional Wire Guard can be purchased in 20 metre rolls from your supplier.

### FIXINGS

Non corrosive nylon fixings with a stainless steel nail are available for purchase from your supplier.

### NEW FLOORS

When insulating new floors, simply nail two fixings per panel at opposite corners and install from above.

### RECOGNISED INSTALLERS

If you would prefer to have EXPOL Underfloor insulation installed by a recognised installer, refer to our website for an installer near you or phone **0800 UNDERFLOOR**.

### SPECIFIERS, ARCHITECTS AND PLANNERS

For all specifying information, relevant product testing and other detailed information please refer to MasterSpec documents on [www.expol.co.nz](http://www.expol.co.nz) or contact EXPOL for an electronic copy.

### INSULATION STANDARD

EXPOL UnderFloor insulation complies with the Australian and New Zealand Standard AS/NZS 4859.1:2002

### MANUFACTURING STANDARD

All panels have a yellow stripe down one edge to confirm compliance with manufacturing standard AS 1366 Part 3 1992 for SL grade.

Only Trust **BRANZ**  
Appraised Products



### ABOUT EXPOL

Proudly 100% New Zealand owned and operated with nationwide coverage and distribution. We recycle all off cut material and promote recycling wherever possible in our production line.

For an obligation free quote FREE call **0800 UNDERFLOOR** or [www.expol.co.nz](http://www.expol.co.nz) for more detailed information.

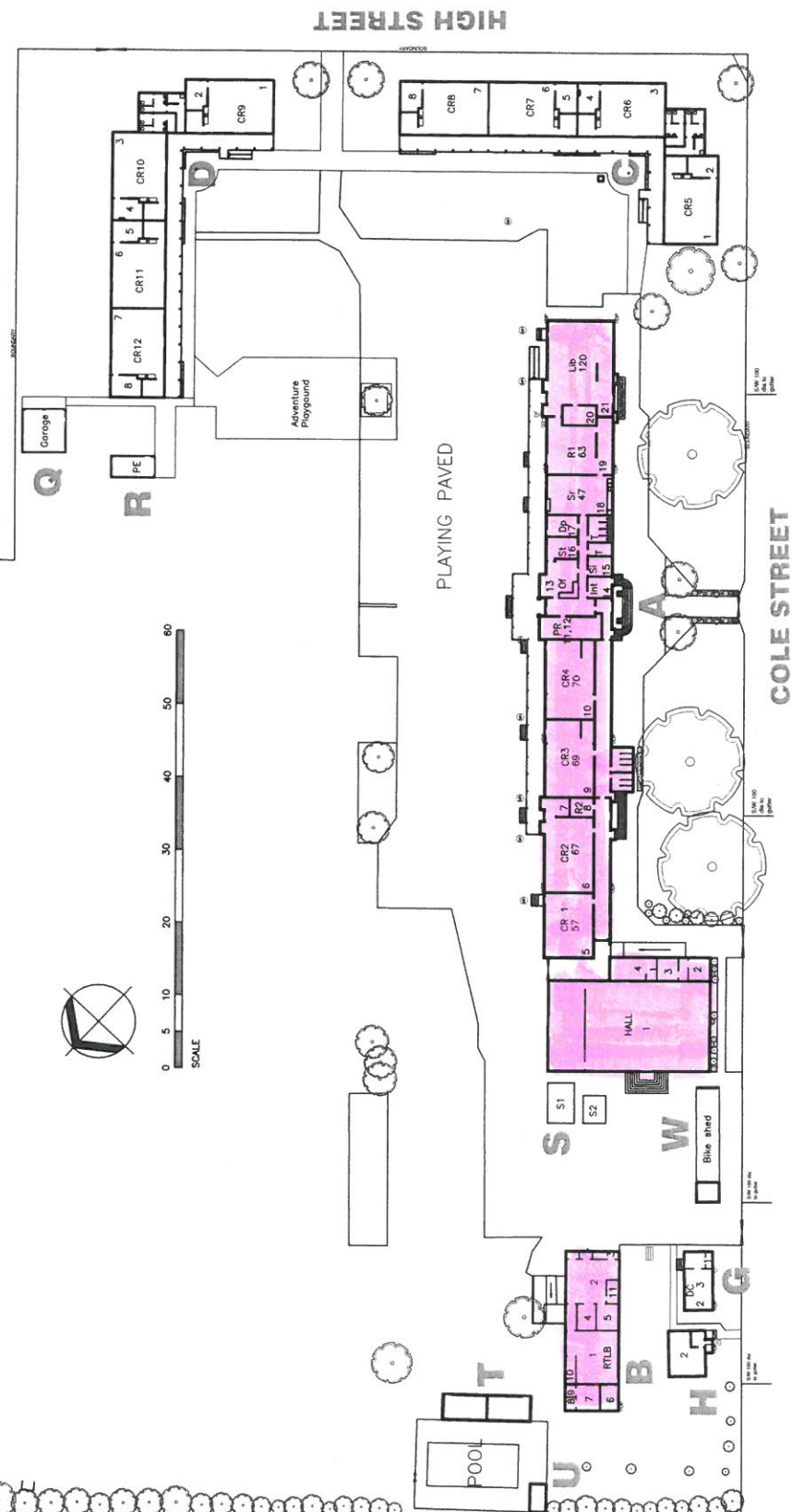
EXPOL LTD P: +64 9 634 3449 F: +64 9 634 0756 E: [sales@expol.co.nz](mailto:sales@expol.co.nz)

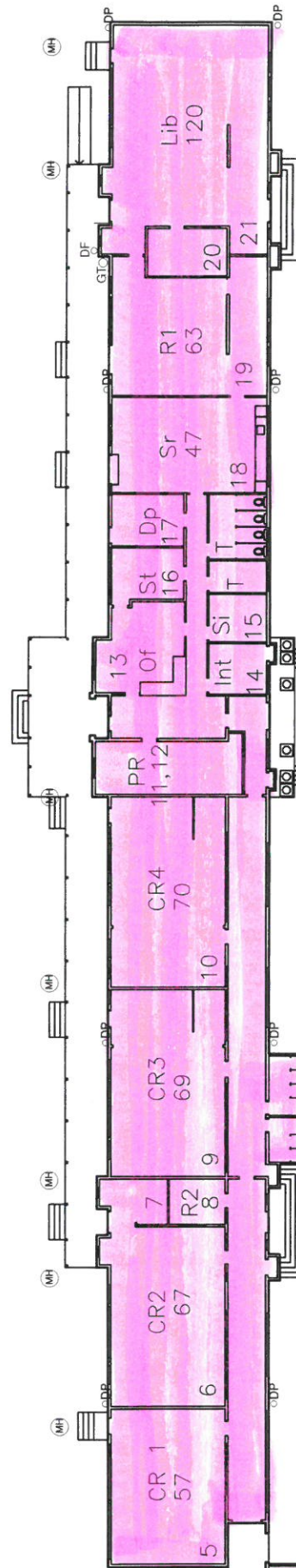
**0800 UNDERFLOOR**  
[www.expol.co.nz](http://www.expol.co.nz)



PLAYING GRASSED

Install underfloor insulation





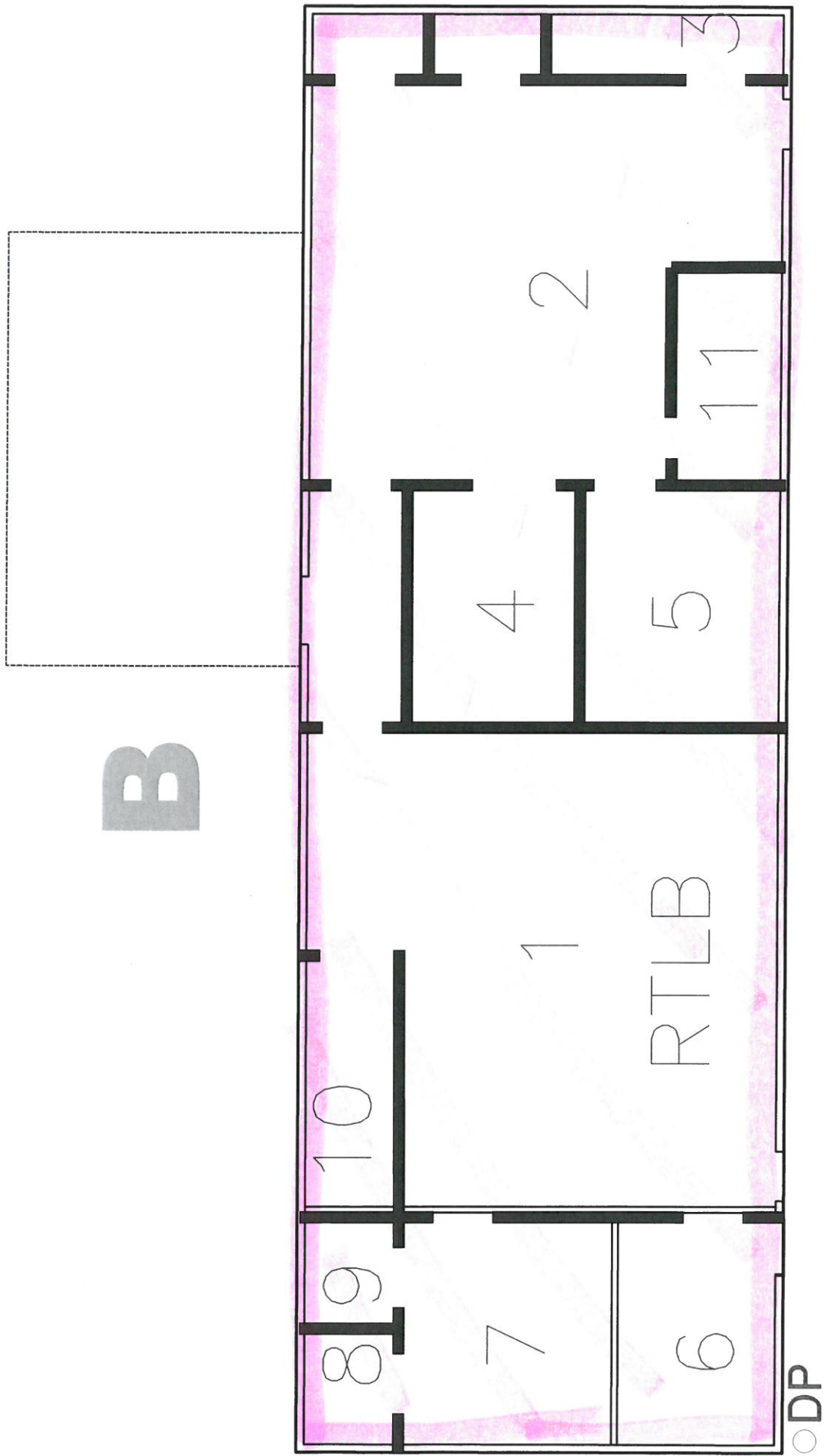
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Exiting inspection chamber

Huia Range School







Huia Range School