Fencing Scoping Guide: M-241

For the 2019/20 Financial Year Only

Effective from 1 October 2019
Version – 6

Kāinga Ora
Homes and Communities

Fencing Scoping Guide M-241

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Document Control		
Document Name	**Fencing Scoping Guide** – for Kāinga Ora properties for **2019-20** financial year	
Kāinga Ora Business Group	People and Homes – Maintenance and Upgrade	
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Final Approved By	Stacey Marsh	Quality Homes Advisory team Manager
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments:	Updated for Kāinga Ora. Minor formatting changes.	

For existing Kāinga Ora – Homes and Communities properties

Note:

Changes since last edition shown in orange.

All previous Scoping Guides, Specifications and drawings are superseded.

Contains colour illustrations - colour printing is recommended.

1. Introduction

Kāinga Ora – Homes and Communities' role is to provide safe, healthy, fit-for-purpose and sustainable housing for people in need, for the duration of their need.

2. Purpose

This *Kāinga Ora Fencing Scoping Guide (M-241)* is specifically designed to provide guidance for Contractors in compiling a site specific scope/s **for the repair, replacement or upgrade of existing and non existing fencing works on Kāinga Ora properties**

The scoping guide provides for a range of component items and actions and their associated Job Codes. The Contractor must select the appropriate items and actions from this range that are required in the circumstances (specific to the property and programme), to complete a scope that will be submitted to Kāinga Ora for approval.

3. General Guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in scoping activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works. The Persons Conducting Business or Undertaking (PCBUs) Kāinga Ora and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of the work package.

Please note – Any Health and Safety issue requiring immediate response should be removed from this scope and treated as a separate urgent (URG) works order. These are to be advised to the Kāinga Ora Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Cost-effective Solutions

Where there is an option to either repair or replace a component or item, the Contractor must identify where full replacement of the item is more cost-effective than repairing it and propose replacement as part of the scope. These proposed replacements shall be agreed with the Kāinga Ora representative and included in the approved scope before replacement is undertaken. If the proposed solution may also affect scopes for other work programmes, details should be forwarded to Kāinga Ora for consideration.

3.3 Supporting Documentation

This *Kāinga Ora Fencing Scoping Guide (M-241)* should be read in conjunction with other Kāinga Ora PBMC Reference Material. Current versions of the following documents will provide valuable information and context to assist the Contractor in completing and submitting appropriate and accurate scopes. All Contractors' Scopers should have access to copies of current versions of all the following Reference Materials when undertaking scoping on site.

Reference Material	Purpose
Kāinga Ora Amenity Condition Manual (ACM-200)	Provides guidance on what Kāinga Ora determines is an acceptable or unacceptable condition for specific componentry of a property.
Kāinga Ora Supplier Code of Conduct (M-360)	Provides Kāinga Ora expectations with regard to behaviour and conduct while on site.
Kāinga Ora Asbestos Management & Control Policy (HS-213)	Provides Kāinga Ora expectations with regard to the safe management and control of asbestos which is a hazardous material.
Kāinga Ora Lead-based Paint Management & Control Policy (HS-214)	Provides Kāinga Ora expectations with regard to the safe management and control of lead based paint which is a hazardous material.
Kāinga Ora Maintenance & Programmed Work Specification (M-215)	Provides a detailed description on a trade basis, of how the relevant work must be undertaken.
Kāinga Ora Standard Drawings (M-215a)	These drawings illustrate how specific items should be constructed/installed on a property.
Kāinga Ora Method of Measurement (M-216) (included in the Kāinga Ora Schedule of Rates).	Provides instruction on how specific property features are to be measured. The Method of Measurement is particularly relevant to scoping as it defines how to measure the quantity of specific material and/or quantum of work required under a specific Work Order.

Kāinga Ora Building Materials Procurement Schedule (M- 217)	Provides a full list of the materials, products and their costs that Kāinga Ora procures under a national supplier agreement and which must be used when undertaking the relevant work.
Kāinga Ora Schedule of Rates (M-218)	Provides a description of a particular maintenance activity and cost.
Customer and Contractor Agreement Form (M-323)	This form confirms the process for achieving tenant agreement for the Contractor to work on the property and to use certain facilities.

3.4 Kāinga Ora Contact Details

Any questions regarding this Work Programme are to be addressed to:

Email: planned.programmes@kaingaora.govt.nz

3.5 Kāinga Ora Internal Process for Scoping

Key parts of the business are involved in the Planned Programmes fencing process, the primary roles involved are:

- **Asset / Portfolio Managers** – Confirm property inclusion in the Programme
- **Asset Management Coordinators** – Liaise with private owners, when the scope is received and assist with negotiations. Upon scope approved by the private owner the work is released to the PBMC for completion.
- **Planned Programmes Team** – This team receives the scoped work order from the Contractor for fencing upgrade work and reviews it to see that the Contractor has achieved the requirements of this Scoping Guide, before authorising. They check appropriate use of schedule of rates and review all variation requests from Contractors. This team monitors the programme process against agreed targets.
- **Regional Maintenance Team -** This team receives the scoped work order for fencing repairs and replacement from the Contractor and reviews it to see that the Contractor has achieved the requirements of this Scoping Guide, before authorising. They check appropriate use of schedule of rates and review all variation requests from the Contractors. This team monitors the programme process against agreed targets.

4. Scoping for Fencing 2019-20

This Scoping Guide shall be used by Kāinga Ora staff and Contractors to achieve the correct

fencing solution for each Kāinga Ora property. For the 2019-20 year the following fencing is covered by the following sections within this document:

- Section 5.0 – Shared Boundary Fencing, and
- Section 6.0 – Driveway Safety Fencing.

5. Scoping for Shared Boundary Fencing 2019-20

The following Scoping Guidelines shall be used by Kāinga Ora staff and Contractors to achieve the correct boundary fencing for each shared Kāinga Ora property.

This Section is specifically designed to provide guidance for Contractors in compiling a site specific scope for the repair or replacement works to boundary fencing between Kāinga Ora properties only – i.e. "shared" properties. The Scope of Works will include the associated fencing for that property – such as street front, waterway, esplanade, walkway (street to street), Auckland Transport and Kiwi Rail properties. However this Scope includes some private owner boundary fencing – that is private owner fencing such as industrial properties, Council owned properties such as Parks/Reserves and Council housing.

5.1 Scoping Outcome

Repair, replace or upgrade existing boundary fence(s) on the nominated Kāinga Ora properties as follows:

Repair

Fencing shall be retained and repaired to make good like-for-like when it meets both of the conditions:

- It is **more than 900mm** in height, and
- The value of repairs is **less than 50% of the cost** of replacing the relevant length of fencing in full.

Examples

The fencing pictured below shows existing boundary fencing that is a minimum of 900mm in height and can be repaired in sections or isolated areas.

Above – Photos show existing boundary fencing with a minimum of 900mm in height and can be repaired in sections or isolated areas.

Left Photo – An example of completed work, repairs have been carried out on an existing fence line.

Above: Minor repairs can be carried out to bring this fence up to the required standard. The strainer wires require tensioning

Above: Minor repairs have been carried out on the mesh fence. A new post has been installed along with a small section of new mesh.

Replacement Fencing

Existing fencing shall be replaced when either:

- It is less than 900mm in height, OR
- The value of repairs is **more than 50% of the cost** of replacing the relevant length of fencing in full.

Examples

The following shows fencing that does not meet the criteria above and shall therefore be removed and new fencing acceptable to Kāinga Ora is to be installed.

Above: Both fence lines are less than 900mm in height and should be replaced.

Above: Repairs to this fence line would exceed more than 50% of the replacement cost.

Upgrade / No Longer Fit for Purpose Fencing

The following are examples of fencing which is no longer fit for purpose and fencing which is deemed as an upgrade:

- Hedges are to be removed and replaced with a timber fence
- Where mesh fencing is beyond repair or the value of repairs is **more than 50% of the** cost of replacing the relevant length of fencing in full
- All corrugated iron fencing shall be replaced with timber fencing
- Height changes from 1m or 1.2m up to 1.8m
- There is no fencing on the boundary

Refer to the New Selection Flow Chart on the following page for height requirements.

Above: Hedges are not fit for purpose and shall be scoped for removal and replaced with timber fencing.

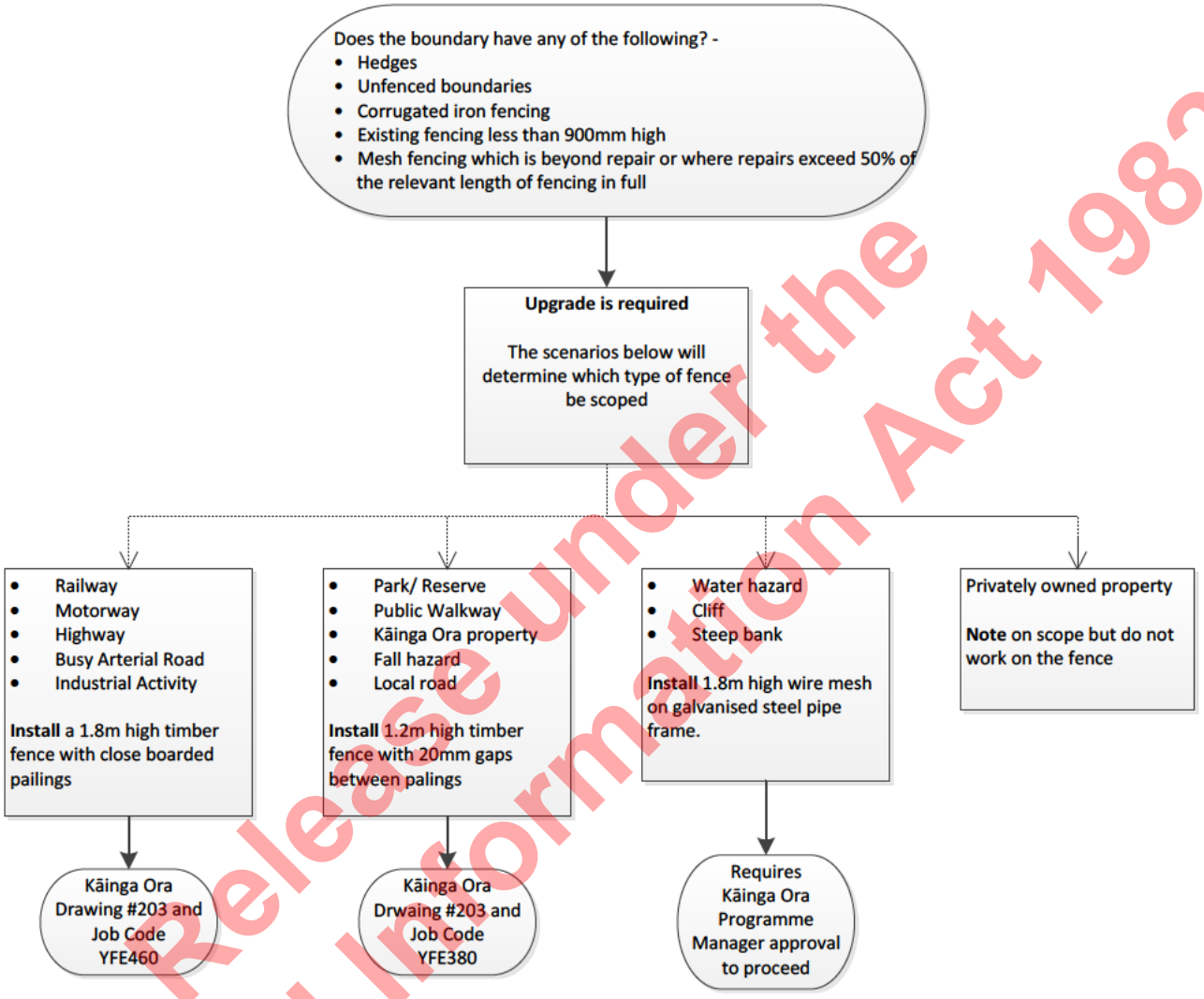
Above: Corrugated fences are not acceptable and shall be replaced with timber fences.

Above: The fences are beyond repair and should be upgraded to 1.2m timber paling fences.

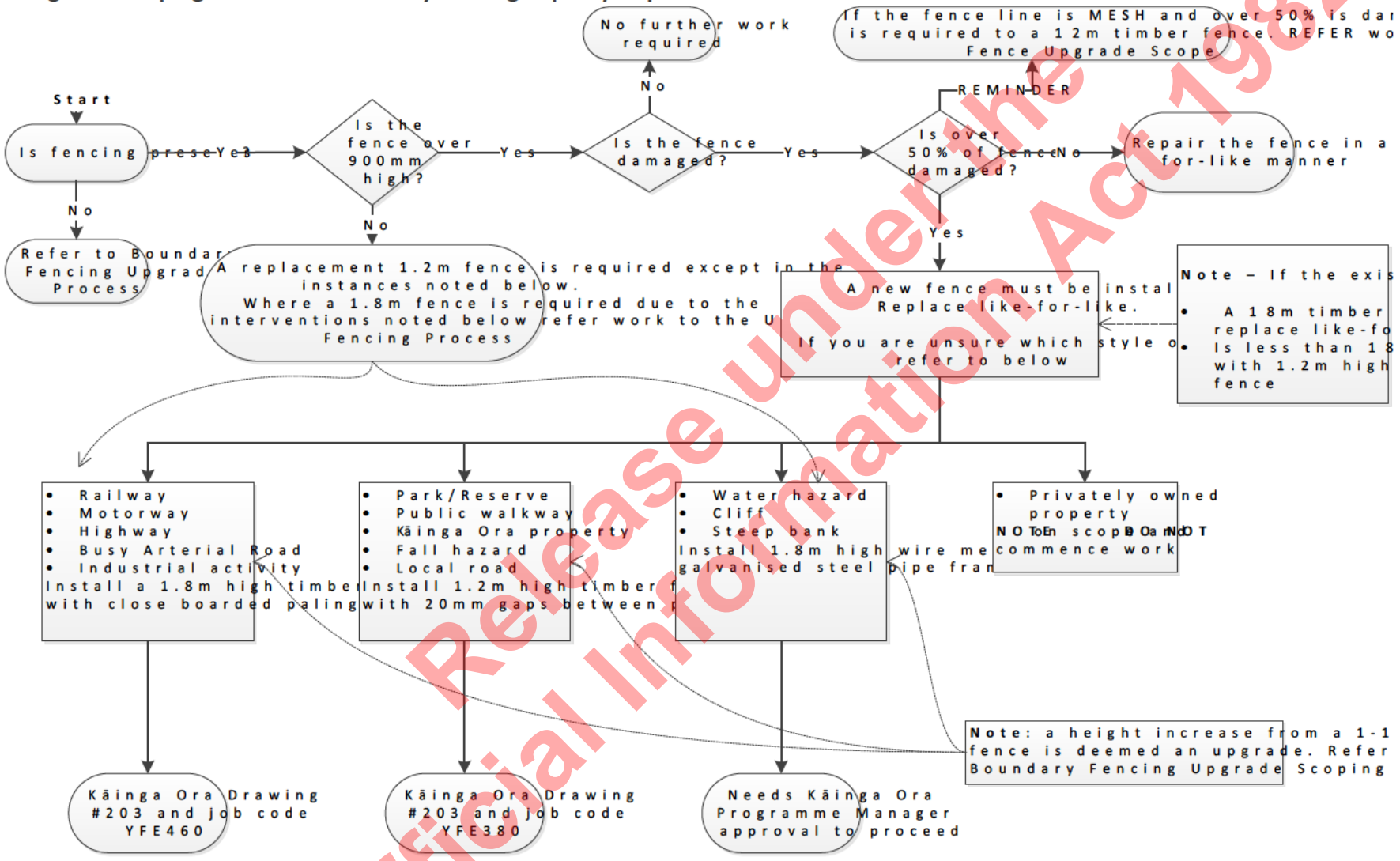
Right: The mesh is below 900mm an upgrade to a 1.2m timber paling fence is required.

New Fencing Selections

Kāinga Ora Boundary Fence Upgrade Scoping Process



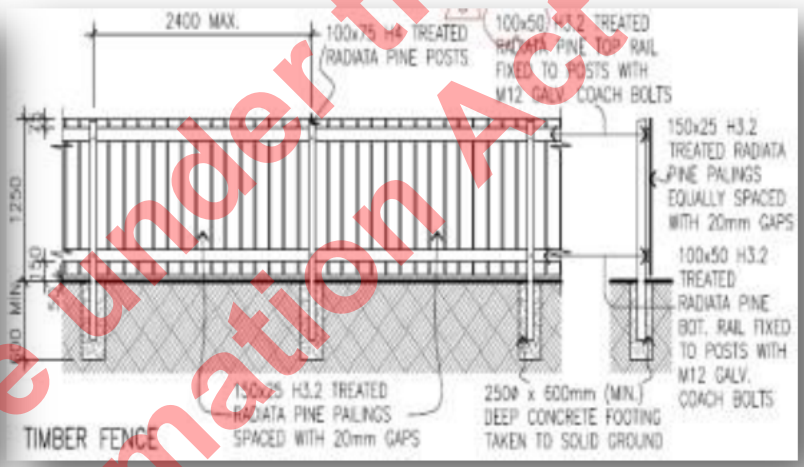
Kāinga Ora Scoping Process for Boundary Fencing Repairs/ Replacement



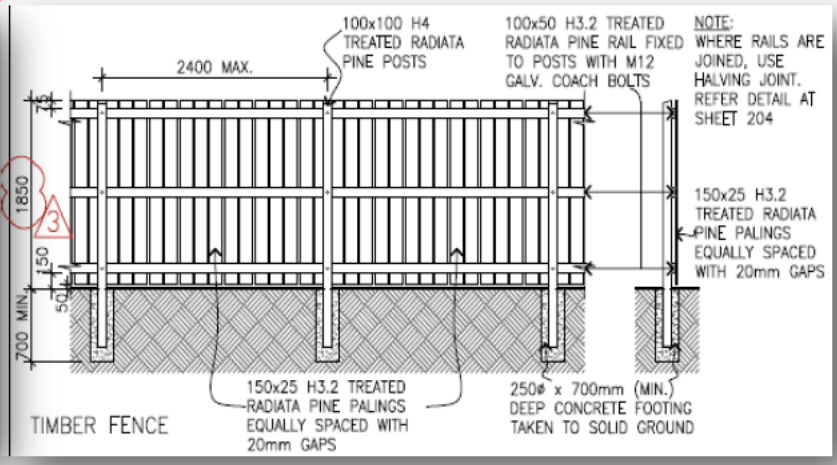
5.2 New Fencing Types

Please note – all new fencing shall be located in accordance with Section 6 – Driveway Safety Fencing of this document. For additional guidance where required please refer to the relevant Kāinga Ora representative. Any new fencing scopes that include privately and publicly owned property boundaries – including Council parks and reserves, walkways, and industrial properties must be approved by the Kāinga Ora representative in order to obtain neighbours approval prior to construction.

1. **1.2m High Timber Fence** – with 20mm gaps between palings (as per *Timber Fence sheet 203 Rev 3 Kāinga Ora Standard Drawings* and Job Code YFE380).

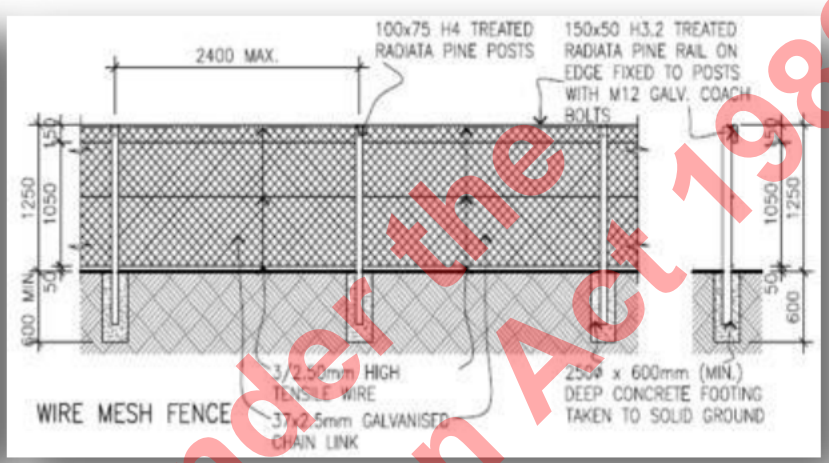


2. **1.8m High Timber Fence** – with 20mm gaps between palings (as per Timber Fence sheet 203 Rev 3 Kāinga Ora Standard Drawings and job code YFE460).



3. **1.8m High Wire Mesh Fence** – chain-link mesh with galvanised pipe rail posts and three strainer wires (as per Kāinga Ora Job Code YFE850).

   Please note – This fencing requires specific review and approval of scope by the Kāinga Ora representative before installation.



6. Scoping for Driveway Safety Fencing

This section is specifically designed to provide guidance for Contractors in compiling a site specific scope of works **for the repair, replacement and new works for Driveway Safety fencing to Kāinga Ora properties**.

6.1 Scoping Outcome for Driveway Safety Fencing

Kāinga Ora is committed to ensure its properties have suitable amenity to reduce the risk of young children being run over on driveways, by providing physical separation of child play areas and driveways.

The key design principle is to separate the driveway of the Kāinga Ora property from an area where children can play.

6.2 Definitions

The following definitions apply to this section –

1. **Children** - This Scoping Guide is targeted for Kāinga Ora properties that are likely to have tenants with children under the age of 5 years old.
2. **Driveway Safety Fencing** – All fencing works directly related to the separation of driveways from play areas as well as minor repairs to existing perimeter fencing of the play area.
3. **Driveway** – For this Scoping Guide, driveway refers to the area of the site to be used for vehicle parking and maneuvering.
4. **Isolated Driveway** – A driveway which is physically separated from the play area.
5. **Non Driveway Safety Fencing** – All fencing works not directly related to the separation of the driveway from a play area (such as new or repairs to boundary fencing) shall be scoped but submitted as a separate Boundary Fencing Works order.
6. **Play Area** – An external area suitable for children to play that vehicle cannot enter and is directly accessible from at least one door of the dwelling.
7. **Pool Gate** – A self closing gate that cannot be opened by children. These gates shall have self closing hinges with an automatic closing latch of min height of 1200mm. Gates should open away from the driveways and into the play area where practicable. Use Kāinga Ora procured item. Refer to the *Kāinga Ora Building Materials Procurement Schedule (M-217).*

6.3 Driveway Safety Design Principles for Existing Properties

The following principles shall be applied –

1. Vehicles should be permanently separated from the outdoor play area.
2. This means the driveway shall be separated from the play area by physical barrier – e.g. a fence, house, or wall.
3. There shall be at least one door leading directly from the house to the outdoor play area. This could be an exterior door or a ranch slider but must not access into the driveway.
4. External access into and out of the outdoor play area shall be provided by at least one pool gate. This is to also provide access for lawn mowers to all yard spaces.
5. Doors separating any stand alone external garage from the play area should be lockable. **Please note** – this does not apply to internally accessed garage doors.

The following additional design principles should also be provided "where ever possible":

6. A cost effective solution should be utilised.
7. This means using common sense to provide cost efficient solutions that achieve the goals identified items 3.1.1 to 3.1.3 of this document – e.g. side yard wing fencing may be an appropriate solution.
8. There should be direct visibility of the play area from the dwelling. This means line of sight through a window or external door to the play area.
9. New gates where provided shall if possible be installed over existing paths.
10. Note: Existing paths don't necessarily require a pool gate to be provided.
11. Existing fencing should be complete, secure and of a design which discourages climbing by children under 5 years.
12. This means fencing shall be a minimum of 900mm high, and ideally – but not compulsory have 100mm max opening space between any elements, and ideally be designed to prevent toehold (i.e. 37.5mm max diameter for mesh openings).
13. Where possible, reduce the length of the existing driveway to 12m by fencing across the end of the driveway - unless this is impractical due to blocking off garaging, adequate parking, car manoeuvring areas or driveway slope, and Town Planning constraints.

6.4 Driveway Safety Fencing Specifications

Contractors shall execute the works as defined in Section 3.0 above in accordance with the following Specifications.

1. Existing fencing defining the separation of the driveway from the play area shall be considered acceptable if:
   - The fencing is Structurally Sound
   - Dense hedges and shrubs where it is unlikely that a child can get through are acceptable.
2. New fencing defining the separation of the driveway from the play area shall:
   - Be 1200mm high measured from ground level to top of the fencing
   - Be selected to match the existing fencing on the property (replace like for like), but relevant to height regulations.
   - Where no existing fencing exists, be selected in the following order of preference taking into consideration specific, relevant local conditions and compliant with the Building Act:

     1st Timber paling

     2nd Galvanised Pool fencing
3. Gates defining the separation of the driveway from the play area shall:
   - All new external access into the play from the driveway area is to be via a child proof gate.
   - Use Kāinga Ora procurement gates (i.e. 1250mm high Pool gate with self closing latch and catch YGT800).
   - All access to play areas is to be for pedestrians only. No vehicle access is to be provided under any circumstances.
   - For example if there are tubular-framed wire mesh double gates of the type that allow vehicle access into the play area, they are to be removed and fencing and gates to be installed as above.
   - Tenant objections to this are secondary to the safety of children – vehicles shall not have access to the play area and all other areas except the driveway, car park, and if present, garage or carport.
   - All external access gates shall wherever possible open in towards the fenced play area.

- No exterior access gates shall be fitted with a cabin hook or any other device that may be used to hold them open.

6.5 Driveway Safety Fencing Repairs

1. Repairs to Driveway Safety Fencing :
   - All repairs to existing driveway safety fencing, as well as "minor" repairs to existing boundary fencing shall be identified and included within the Driveway Safety Fencing scope.
2. Repairs to non Driveway Safety Fencing :
   - All repairs (other than minor as mentioned above) to non Driveway Safety Fencing shall be scoped within a separate Boundary Fencing works order. Contractors are requested to identify and scope for these boundary fencing repair works that they regard as necessary for the property.

7. Fencing Scope Documentation

The Driveway Safety Fencing Scope shall be scoped on a separate Works Order while all other Fencing works shall be on a separate Fencing Works order and the two scopes submitted together.

For All Driveway Safety Works & Boundary Fencing Upgrades

The following items shall be supplied with every Driveway Safety Fencing Scope submitted to Kāinga Ora for approval:

Aerial Photo Site Plan Showing:

- Existing and proposed fencing layout for driveway separation, including the location of any proposed repairs;
- Existing and proposed placement of all gates;
- Vehicle driveways and parking areas, if not clearly identifiable;
- Location of all Exterior doors.

Additional Photographs of the property to

show:

- The extent and context of the driveway and yard space;
- House frontage and backyard, identifying positions of exterior doors gates;
- External buildings;

- Any other significant or relevant feature.

For All Other Fencing Works

The following items shall be supplied **only for any replacement boundary fencing** proposed within the Scope submitted to Kāinga Ora for approval. Note this information **is not required** for like-for-like repairs.

1. Photographs of the property to show the extent and context of the existing fencing when replacement is required, including external buildings and any hazard or significant or relevant feature.
2. Comments including yard location in accordance with the Kāinga Ora method of measurement when replacement is proposed.

8. General Items

8.1 Fencing Notes

1. **Operational** – No new fences shall interfere with the normal operation of other equipment on the property, e.g. tilting garage doors, gates, driveways etc.
2. **Private Owner** – Boundary fencing shared with a Private Owners will be covered in "Business as Usual" processes to follow the requirements of the *Fencing Act*.

8.2 Fencing Specifications

Contractors shall execute the works as defined by the Scoping Guidelines in Section 5 of this document strictly in accordance with the following documents:

- ***Kāinga Ora Maintenance & Programmed Work Specification (M-215)*** – Section 8302 Landscape Construction - to reference how to undertake any new & remedial works.
- ***Kāinga Ora Standard Drawings (M-215a)*** – for construction details.
- ***Kāinga Ora Building Materials Procurement Schedule (M-217)*** – Utilise Job Codes as per sections YFE and YGT.

8.3 Fencing Job Code Selections

The following tables have been prepared to assist Contractors select the most appropriate Job Code for main works items to ensure consistency within Scoping.

No.	New Fencing Items	Table 1
1.	**New Wing Fencing** Supply & fit 1.2m timber wing fence between house and adjoining boundary.  Above: Each section of the wing fence is < 2.4m long; therefore an additional component payment is available.	**Job Code/s** YFE380 YFE610 **ACM** 84.1 **MPWS** 8430
2.	**Gates** A pool gate is to be used where required as part of a fenced play area. A pedestrian gate/s can be metal or timber (only use on boundary fencing which is up to 1.2m)	**Job Code/s** YGT codes **ACM** 88.1 **MPWS** 8430
3.	**Boundary Fencing – Construct:** ✓ 1.2m Timber fencing - YFE380 ✓ 1.8m Timber fencing – YFE460 ✓ 1.8m Pipe mesh fencing – YFE850	**Job Code/s** YFE codes **ACM** 48.3 **MPWS** 3820 & 5521

No.	Boundary Clearance and Fence Demolition Item	Table 2
1.	**Boundary Clearance** The clear fence line code includes removing sections of incomplete fencing. When necessary this can be in conjunction with the Fence Demolition codes. **Clear Hedge Line** These codes allow for the removal of heavy vegetation and hedges (various codes cover varying heights). Also roots to .200mm deep below ground, sundry debris, incomplete remains of fencing and fence posts and foundations. **Please Note -** Additional clearance costs for unusual circumstances to be pre- agreed and approved with Kāinga Ora at time of scope submission (photos to be included).	**Job Code/s** YFE050 - 070 **ACM** 83.1 & 84.1 **MPWS** 8430 & 8434
2.	**Fencing – Demolition:** ✓ 1m Demolish fence (this code also allows for the removal of 1.2m fencing) ✓ 1.8m Demolish fence The fence demolish codes allow for the removal of all types of fencing. Asbestos sheeting is to be measured separately.	**Job Code/s** YFE100 - 110 **ACM** 84.1 **MPWS** 8430 & 8434

No.	Fencing Repairs	Table 3
1.	**Individual Components - 1m High Fence** Including 1m : ✓ Individual palings ✓ Post/s ✓ Run of palings ✓ Rail/s	**Job Code/s** YFE300 - 320 **ACM** 40.1 **MPWS** 8430
2.	**Individual Components – 1.2m High Fence** Including 1.2m : ✓ Individual palings ✓ Post/s ✓ Run of palings ✓ Rail/s	**Job Code/s** YFE355 - 370 **ACM** 40.1 **MPWS** 8430
3.	**Individual Components – 1.8m High Fence** Including 1.8m : ✓ Individual palings ✓ Post/s ✓ Run of palings ✓ Rail/s	**Job Code/s** YFE400 - 420 **ACM** 40.1 **MPWS** 8430

9. Records

Retain all records within Kāinga Ora's records system - refer 'Records retention and disposal' (R-105).

10. Version control

Details of previous versions are stored in Kāinga Ora's document management system (Objective). Refer to header and footer information for reference document elements or for any queries contact Atamai@kaingaora.govt.nz.

Housing New Zealand
Housing New Zealand Corporation

Insulation Inspection & Scoping Guide: M-242

FOR THE 2019-20 FINANCIAL YEAR ONLY

For existing Housing New Zealand Properties

Effective from 1 July 2019

Version: 7

Note :

Changes since last edition shown in brown.

All previous Scoping Guides, Specifications and drawings are superseded.

Contains colour illustrations - colour printing is recommended.

Insulation Inspection & Scoping Guide M-242

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Document Control		
Document Name	**Insulation Inspection and Scoping Guide** – for Housing New Zealand existing properties for 2019-20 financial year	
Housing New Zealand Business Unit	People and Property – Quality Homes Advisory Team	
Author/s	John Duncan	Position: Standards Advisor
Version No.	7	Status: Current
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Peer Reviewer/s and Sections Reviewed	Graeme Bush	PBMC Technical Manager
Final Approved By	Stacey Marsh	Quality Homes Advisory Team Manager
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments	Minor formatting changes.	Section 5.2.1 and 5.2.2 updated insulation thickness to 120mm.

1. Introduction

Housing New Zealand's role is to provide ~~dry, warm,~~ safe, healthy, ~~and~~ fit-for-purpose and sustainable housing for people in need, for the duration of their need.

The *Residential Tenancies (Amendment) Act (RTA) and new Residential Tenancies Regulations* come into effect on 1st July 2016. From that date, Housing New Zealand must ensure all properties have ceiling and underfloor insulation that meets the 1978 insulation standard at the time of installation. Additionally, all new tenancies from 1st July 2016 must state in the tenancy agreement the location, type and condition of insulation installed in the ceiling, walls and underfloor. If the insulation does not meet the standard prescribed in the regulations, Housing New Zealand must retrofit or upgrade the insulation within 90 days of the signing of the tenancy agreement. Where insulation is retrofitted, the refit must comply with the Housing New Zealand standard i.e. the 2008 insulation standard.

Overseeing proper insulation checks at the time of vacancy is critical for Housing New Zealand to meet new *RTA* requirements. It is also critical that eAM Attributes get updated based on the most recent information.

2. Purpose

This *Insulation Inspection & Scoping Guide (M-242)* is specifically designed to provide guidance for Contractors in undertaking the inspection and scoping of **Ceiling, Wall and Underfloor Insulation** to support the requirements of the *RTA*.

Contractors will usually undertake the Insulation Inspection as part of the Void property scoping process. Based on this guide, Contractors will select the appropriate items (job codes) to reflect the insulation type and condition, which they will submit to Housing New Zealand on the work order. Housing New Zealand will in turn create a new work order for our insulation contractor to undertake the required insulation work.

3. General guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in scoping activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works. The Persons Conducting Business or Undertaking (PCBUs) Housing New Zealand and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of the work package.

Please note: any Health and Safety issue requiring immediate response should be removed from this scope and treated as a separate urgent (URG) works order. These are to be advised to the Housing New Zealand Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Supporting documentation

This Guide should be read in conjunction with other Housing New Zealand Reference Material. Current versions of the following documents will provide valuable information and context to assist the Contractor in completing and submitting appropriate and accurate work orders. All Scopers, Contractors, Tradesmen and associated parties are to have copies and/or immediate access to all this information on site and are to be working strictly in accordance with those instructions.

Reference Material	Purpose
Housing New Zealand Amenity Condition Manual (ACM-200)	Provides guidance on what Housing New Zealand determines is an acceptable or unacceptable condition for specific componentry of a property.
Housing New Zealand Supplier Code of Conduct (Unique document code to be confirmed)	Provides Housing New Zealand expectations with regard to behaviour and conduct while on site and the safe management and control of asbestos and lead based paint which are hazardous materials.
Housing New Zealand Asbestos Management & Control Policy (HS-213)	Provides Housing New Zealand expectations with regard to the safe management and control of asbestos which is a hazardous material.
Housing New Zealand Lead-based Paint Management & Control Policy (HS-214)	Provides Housing New Zealand expectations with regard to the safe management and control of lead based paint which is a hazardous material.
Housing New Zealand Maintenance & Programmed Work Specification (M-215)	Provides a detailed description on a trade basis, of how the relevant work must be undertaken.
Housing New Zealand Method of Measurement (M-216) (included in the Housing New Zealand Schedule of Rates).	Provides instruction on how specific property features are to be measured. The Method of Measurement is particularly relevant to scoping as it defines how to measure the quantity of specific material and/or quantum of work required under a specific Work Order.
Housing New Zealand Building Materials Procurement Schedule (M-217)	Provides a full list of the materials, products and their costs that Housing New Zealand procures under a national supplier agreement and which must be used when undertaking the relevant work.
Housing New Zealand Schedule of Rates (M-218)	Provides a description of a particular maintenance activity and cost.

Reference Material	Purpose
Tenant and Contractor Agreement Form (M–323)	This form confirms the process for achieving tenant agreement for the Contractor to work on the property and to use certain facilities.

3.3 Housing New Zealand contact details

Any questions regarding this *Housing New Zealand Insulation & Inspection Scoping Guide (M-242)* are to be addressed to the Regional Maintenance Team.

4. Insulation inspection

4.1 Inspection outcome

The insulation work is designed to provide improved insulation and energy efficient outcomes to assist tenants to more effectively and efficiently heat their properties to comfortable temperatures that assist the health and wellbeing of the occupants and for Housing New Zealand to meet the requirements of the *Residential Tenancies Act*.

This document defines how Housing New Zealand staff, PBMC Contractors and the *Housing New Zealand National Supply Agreement (NSA)* Insulation Contractor will achieve the desired outcome for existing Housing New Zealand properties.

4.2 Inspection outline

The PBMC Contractor is to conduct a visual inspection of the ceiling space and underfloor area from the access points to reasonably determine the type and condition of the insulation as per the requirements of Table 4.3 within this document.

Based on the finding of the PBMC inspection of the ceiling space and underfloor, two Schedule of Rates (Job codes) are to be selected for inclusion on the work order to indicate the location, type and condition of the existing insulation. These are outlined in Table 4.3.

These Schedule of Rates are valued at $0.01 and will enable Housing New Zealand to:

- update the insulation information in the Housing New Zealand system
- populate the insulation type and condition on the tenancy agreements in accordance with the requirements of the *Residential Tenancies Act*, and
- signal the need to raise a work order to repair, top up or install any insulation that is not at the required *Residential Tenancies Act* standards.

Please note:

1. All vacant properties must undergo this inspection to meet *Residential Tenancies Act's* requirements (even if no insulation work is found to be required).
2. The insulation inspection schedule of rates are to be populated on the vacant property work order when the scoping details are first sent to Housing New Zealand and are to remain on the work order otherwise the work order will be rejected by Housing New Zealand's system.

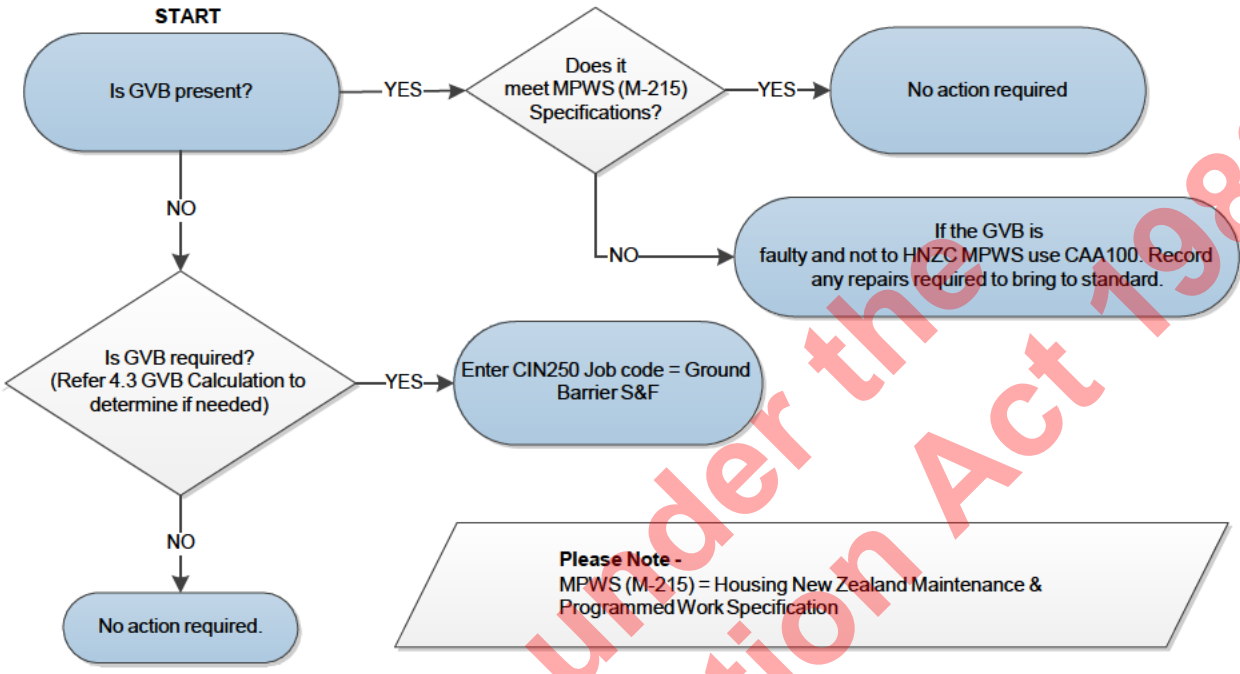
3. This insulation inspection occurs at the time the vacant property is being scoped and the insulation inspection schedule of rates represents the condition and type of insulation at that time. If, however, this work order includes work to fix any issues with the insulation then the insulation inspection schedule of rates are to instead represent the type and condition of the insulation as a result of this work having been completed.
4. The insulation inspection schedule of rates for those vacant properties managed under the three work order system (currently those in the Auckland Region) need to only be included on the IA0005 internal Schedule of Rates work order (i.e. the work order where the property is not tenanted). The insulation inspection schedule of rates are not required on the IA0005 (i.e. exiting tenant is living in the property) or IA0007 (i.e. new tenant is living in the property) work orders.
5. If issues occur with the Insulation Work Orders, refer to section 7 for additional information around possible causes.
6. If an insulation inspection schedule of rate is included on other work orders types then the work order will be subject to the same validation as a VSC work order (e.g. the work order must contain an insulation inspection schedule of rate for both the ceiling and underfloor).

This document excludes:

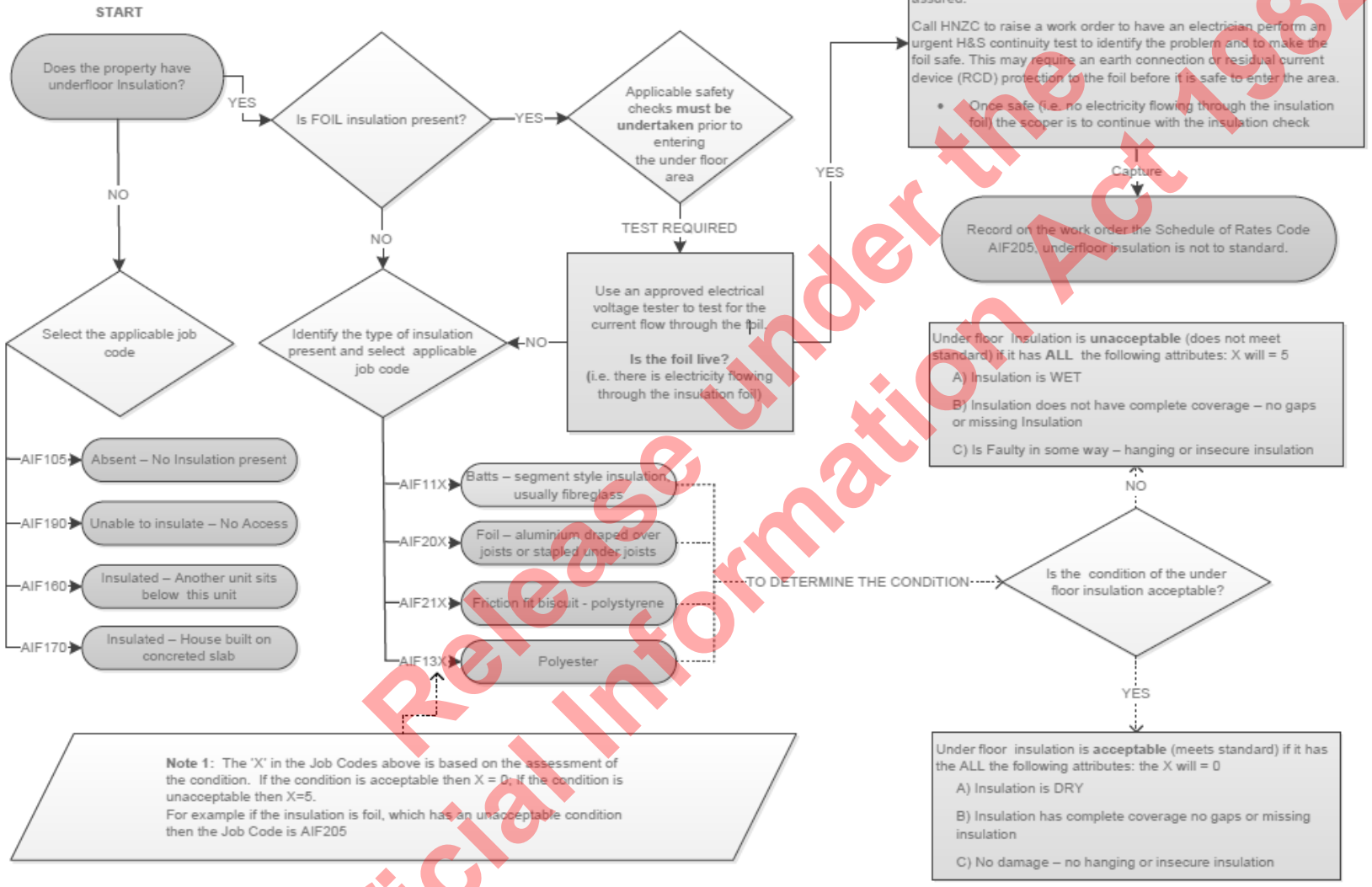
- External wall insulation, unless wall linings are removed as part of other work.
- Any work/s to existing open fireplaces.
- Other energy-efficiency measures outside of insulation and ground vapour barriers.

4.3 Housing New Zealand insulation inspection flow charts

Housing New Zealand
Ground Vapour Barrier (GVP) Insulation Inspection Flowchart



Housing New Zealand
Under Floor Insulation Inspection Flowchart



4.4 Nominated Contractor / Supplier details

The following nominated *Housing New Zealand National Supply Agreement* Insulation Contractor is to be used to undertake the complete detailed scoping, supply, installation and certification of these nominated items:

Housing New Zealand nominated insulation contractor
Insulation
Smart Energy Solutions 9(2)(a)

5. Scoping for insulation works

5.1 Scoping outcome

Once it has been determined by the PBMC scoper that the insulation **does not meet** the required *Residential Tenancies Act* standard, Housing New Zealand will create a new work order (with the schedule of rate AIS400) to scope and have the insulation brought to the required *Residential Tenancies Act* standard as outlined in 5.2 – Scoping Table of this document.

The PMBC Contractor will engage the *Housing New Zealand National Supply Agreement* Insulation Contractor to provide a detailed scope of works for the supply and installation of missing or damaged or new insulation as per the *Housing New Zealand Maintenance & Programmed Work Specification (M-215)* Section 4710 and *InZone Industries Ltd – Housing New Zealand Retro-fit Projects: Specific Insulation Product Requirements – June 2017* (refer to the Appendix of this document).

The work will be carried out by the *Housing New Zealand National Supply Agreement* Insulation Contractor.

5.2 Scoping table

No.	Insulation Scoping Table	
5.2.1	**Ceiling Insulation** Where existing insulation is either absent or less than 120mm thick, provide new polyester blanket or loose wool ceiling insulation to R2.9 product values respectively in climate zones 1 and 2 and R3.3 product values for zone 3 properties (refer to Section 5.3 of this document – Figure B1 for a diagram clarifying the climate zones). **Please note** – Where small area of insulation are missing the *Housing New Zealand National Supply Agreement* Insulation Contractor will make good in accordance with *New Zealand Standard NZS 4246 – Installing Insulation*.	**Job Code/s** CIN151 – 152 165 - 170 **ACM** 47.1 **MWPS** 4798

No.	Insulation Scoping Table	
5.2.2	**Ceiling Downlights** Where existing ceiling insulation is more than 120mm thick ensure there are adequate clearances around any ceiling downlights in accordance with *New Zealand Standard NZS 4246 – Installing Insulation*. **Please note** – When existing insulation is less than 120mm and new blanket insulation is being provided, remove existing downlights, patch holes, paint ceiling and & replace lighting with Housing New Zealand procured light emitting diode (LED) bulkhead fitting to all ceilings.	**Job Code/s** CAA100, CLI100-200 & ELF520 - 530 **ACM** 47.1 **MWPS** 4798
5.2.3	**Wall Insulation** Where perimeter internal wall linings are removed, provide new polyester friction fit R2.0 wall insulation to exposed perimeter walls. Include building wrap to perimeter walls in accordance with *New Zealand Standard NZS 4246 – Installing Insulation*. **Please note** – Building consent will be required and should be included within major works programmes (e.g. Methamphetamine and Earthquake Prone Buildings). For other properties Building Consent should be discussed with Regional Maintenance Team.	**Job Code/s** CIN180, 300 - 400 **ACM** 47.3 **MWPS** 4798
5.2.4	**Ground Vapour Barrier (GVB)** GVB is to be installed where: • Ventilation openings of 3500mm² per m² of floor area cannot be provided • Vents are generally spaced more than 1.8m from another • Or the subfloor is particularly wet; advise HNZC where further investigation is required. To determine if ground vapour proof barrier is required the following Calculation should be undertaken: (Clear vent area in sq.mm / 2) x Total number of vents Measure the footprint of the dwelling and subtract porch and external entrance areas Sub-Floor area in m² If the value is <3500 sqmm per m², VPB is required **Example -** Measure vent size = 120mm x 240 mm = 28800 mm² (/2) = 14400mm² Number of vents = 25 House size = 10m x 10m = 100m² Total ventilation per m² = 14400mm² x 25 = **3600mm²**	**Job Code/s** CIN150 Repairs CAA100 & 200 **ACM** **41.1**

No.	Insulation Scoping Table	
	The value is greater than 3500mm² per m²; Ground Vapour Barrier is NOT required. **Please note** – Only measure the clear grill area of the vent. Do not measure from the outside edges of the vent itself. Repairs to existing GVB maybe required in the following instances: • Tape is missing on seams • The GVB is insufficiently pinned or weighted down along the overlaps and edges • GVB is damaged or has lifted • Is in poor condition generally	**MWPS 4710**
5.2.5	**Underfloor Insulation** Where underfloor insulation is absent or areas of the insulation is missing provide new friction fit semi-rigid R1.9 underfloor insulation. For Foil – **if more than 20%** of the underfloor foil insulation is damaged or missing, or if the foil test 'live' in the H&S test, remove all foil and replace with procured friction fit semi-rigid R1.9 underfloor insulation. For Foil – if less than 20% of the underfloor foil insulation is damaged or missing, replace only the damaged or missing areas with procured friction fit semi-rigid R1.9 underfloor insulation.	
5.2.6	**Insulation Inspection** • The applicable insulation inspection schedule of rates for ceiling and under floor are to be included in the work order. This to capture the insulation type and condition in the property taking into account any insulation work that is carried out. • When there is more than one type of insulation in the ceiling or under floor then insulation type selected from the insulation inspection schedule of rates should reflect the majority of insulation in that location. • If the correct Job Codes are not provided then an error message will be returned. • Refer to section 7 for more information.	
	The ceiling insulation inspection schedule of rates to indicate the insulation is of acceptable standard are:	**Job Code**
	Ceiling batts - segment style insulation, usually fiberglass.	*AIC110*
	Ceiling Fluff - blown in loose material, usually macerated paper or Insulfluff	*AIC120*
	Polyester Blanket	*AIC130*
	Wool - either wool batts or blanket, including wool polyester mix	*AIC140*
	Unable to insulate - Skillion Roof	*AIC150*

No.	Insulation Scoping Table	
	Insulated - another unit sits above	*AIC160*
	Insulated - Concrete ceiling	*AIC170*
	Unable to insulate - low pitch or flat roof	*AIC180*
	Unable to insulate - No Access	*AIC190*
	The under floor insulation inspection schedule of rates to indicate the insulation is of acceptable standard are:	**Job Code**
	Batts - segment style insulation, usually fiberglass	*AIF110*
	Polyester	*AIF130*
	Insulated - Another unit exists below this unit	AIF160
	Insulated - house built on concrete slab	AIF170
	Unable to insulate - No Access	AIF190
	Foil - aluminium foil draped over joists or stapled under joists	*AIF200*
	Friction fit biscuit - polystyrene	*AIF210*
5.2.7	**Scoping Fee/Futile Charge** Where it is found that there is no insulation work to be undertaken then a scoping fee maybe charged on the work order. In the case where entry could not be gained to the Rental Property at the time arranged a futile call charge maybe raised on the work order (Limit one charge per work order).	**Job Code/s** AES600 **ACM** **MWPS**
5.2.8	**Associated Works Items** The *Housing New Zealand National Supply Agreement* Insulation Contractor will also scope to ensure that the following items are present and functioning correctly. Make good or replace with new items as required as per *Housing New Zealand Maintenance & Programmed Work Specification (M-215)*: 1. Provide insulation suppliers nominated high wind polyester segment insulation to underfloor areas in very high wind areas or those exposed to high winds without enclosed foundation. 2. Provide polythene ground vapour barriers where required – e.g. to very wet underfloor areas or those with inadequate natural ventilation. 3. Rubbish removal from subfloor and ceiling spaces where required – should be undertaken by PBMC. **Provide manhole access to either ceiling or underfloor where not provided and readily undertaken – e.g. into gib ceiling linings and sheet subfloor perimeter linings, but not through concrete ring foundations.**	**Job Code/s** CIN620 CIN250 KCH050 CIN610 **ACM** 47.1 – 47.2 **MWPS** 4798

6. New Zealand Climate Zones diagram

New Zealand Building Code Climate Zones (refer to Figure B1 on page 32 of the New Zealand Standard NZS 4218 – Thermal Insulation – Housing and Small Buildings – copied below).

Zone 1	Norther North Island – Northland to Franklin and Thames Coromandel inclusive
Zone 2	Rest of North Island but excluding Central Plateau – i.e. Ruapehu and Taupo
Zone 3	Central Plateau of North Island, plus South Island

6.1 Figure B1 – Climate Zones – New Zealand Standard 4218:2009 – Thermal Insulation – Housing and Small Buildings

7. Possible error messages with Scoping Codes

The following error messages are relating to the Insulation Inspection Schedule of Rate Job Codes contained on a Work Order, and may be sent to you by the Housing New Zealand system if the following situations occur.

Error Message	**EBS_EXT_WO56** Work Order Number - <Work Order Number>: The Work Order contains multiple Ceiling Insulation Job Codes.
Causes	More than one AIC (ceiling insulation code) row has been entered into the Work Order. **For example:** AIC110 Ceiling Batts and AIC220 Ceiling Fluff are entered into the same Work Order.
Action Required	There should only be one value per insulation location (ceiling or under floor). Please select either the SOR code that best represents the insulation in the ceiling space, or the SOR code that represents the insulation that is of the poorest quality is entered.
Error Message	**EBS_EXT_WO57** Work Order Number - <Work Order Number>: The Work Order contains multiple Floor Insulation Job Codes.
Causes	More than one AIF (Floor insulation code) row has been entered into the Work Order. **For example:** AIF110 and AIF130 are entered into the same Work Order.
Action Required	There should only be one value per insulation location (ceiling or under floor). Please select either the SOR code that best represents the insulation in the under floor insulation, or the SOR code that represents the insulation that is of the poorest quality is entered.
Error Message	**EBS_EXT_WO60** Work Order Number - <Work Order Number>: The Work Order is missing the Ceiling Insulation Job Code.
Causes	There is no Ceiling Job Code giving the status and/or type of insulation (included exceptions) **or** The Job Code entered into the Work Order is not a recognised Job Code by the Housing New Zealand system.
Action Required	Refer to Table 4.3 HNZC Ceiling Insulation Inspection Flowchart and 5.2.5 Insulation Inspection of this document to get a list of Job Codes to use.
Error Message	**EBS_EXT_WO59**

	Work Order Number - <Work Order Number>: The Work Order is missing the Floor Insulation Job Code.
Causes	There is no Floor Job Code giving the status and/or type of insulation (included exceptions) **or** The Job Code entered into the Work Order is not a recognised Job Code by the Housing New Zealand system.
Action Required	Refer to Table 4.3 HNZC Under Floor Insulation Inspection Flowchart and 5.2.1 and 5.2.2 of this document to get a list of Job Codes to use.
Error Message	**EBS_EXT_WO58** Work Order Number - <Work Order Number>: The Work Order contains multiple Ceiling and multiple Floor Insulation Job Codes.
Causes	More than one AIC (Ceiling insulation code) row and more than one AIF (Floor insulation code) row has been entered into the Work Order.
Action Required	There should only be one value per insulation location (ceiling or under floor). Please select the Schedule or Rate (SOR) code for each location that either; best represents the insulation in the ceiling space, or the SOR code that represents the insulation that is of the poorest quality is entered.
Error Message	**EBS_EXT_WO4** Work Order Number - <Work Order Number>: The Work Order Property Reference (<Property Reference Number>) is invalid and the Work Order cannot be updated.
Causes	The Property Reference Number linked with the Work Order no longer matches.
Action Required	While this error message is not unique to the work orders relating to insulation, and may occur even if no insulation Job Codes have been used. If this error message occurs please ensure the property reference is still present on the work order.
Error Message	**EBS_EXT_WO61** Work Order Number - <Work Order Number>: The Work Order must contain both Ceiling Insulation and Floor Insulation Job Codes.
Causes	The VSC Priority Work Orders must have both a Ceiling Insulation Job Code, and a Floor Insulation Job Code.
Action Required	Refer to 4.3 Insulation Flow Charts
Error Message	**EBS_EXT_WO63** Work Order Number - <Work Order Number>: The Work Order has insulation work completed but is missing the condition Ceiling and Floor Insulation Job Codes.
Causes	This error message will appear when a Job Code like CIN% to install insulation, for example, is used but the updated Ceiling and/or Floor Insulation Job Codes have

	not been added to the Work Order.
Action Required	Refer to 4.3 Insulation Flow Charts
Error Message	**EBS_EXT_WO62** Work Order Number - <Work Order Number>: The Work Order relates to Insulation and is missing the condition Ceiling and Floor Insulation Job Codes.
Causes	This error will appear where the Job Code AIS400 exists in the PO Line related to the Work Order.
Action Required	Refer to 4.3 Insulation Flow Charts

8. Records

Retain all records within Housing New Zealand's records system - refer 'Records retention and disposal' (R-105).

9. Version control

Details of previous versions are stored in Housing New Zealand's document management system (Objective). Refer to header and footer information for reference document elements or for any queries contact OurSpace@hnzc.co.nz.

Appendix

The following supplier's product information and installation instructions are appended for reference –

InZone Industries Ltd – Housing New Zealand Retro-fit Projects: Specific Insulation Product Requirements – June 2017

Please note – All scoping to be undertaken in accordance with theses documents.

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June 2017

InZone
INDUSTRIES LTD

27 Birmingham Road
East Tamaki, Auckland 2013
PO Box 204 289, Highbrook
Auckland, New Zealand 2061
Phone: +64 9 2732308

HOUSING NEW ZEALAND RETRO-FIT PROJECTS:
SPECIFIC INSULATION PRODUCT REQUIREMENTS

SUITABLE FOR ALL HOUSING NEW ZEALAND RETRO-FIT HOUSES

Job Code	R-Value	Product Description
CIN152	R 3.3	Mammoth Ceiling Blanket: Polyester 200mm, One Layer Blanket (Climate Zone 3)
CIN151	R 2.9	Mammoth Ceiling Blanket Polyester 185mm, One Layer Blanket (Climate Zone 1 & 2 option only)
	R2.9	Mammoth Skillion Roof Sections: Polyester 115mm
	R3.3	Mammoth Skillion Roof Sections: Polyester 165mm
CIN165	R 2.9	Loose ceiling insulation where access is minimal (loose fill blown) – (Climate Zones 1 & 2)
	R 2.0	Mammoth Friction Fit Airlay Wall Sections: Polyester 90mm, **Self-supporting.**
CIN170	R 3.3	Loose ceiling insulation where access is minimal (loose fill blown) - Zone 3
CIN210	R 1.9	Mammoth Friction Fit Airlay Underfloor Sections: Polyester 90mm, **Self-supporting.**
CIN250		250 micron polythene moisture barrier over existing ground with all joints lapped 100mm and sealed with pressure sensitive tape. Include for taping around piles and other penetrations
CIN610		Supply and fit manhole for both (a) subfloor and (b) ceiling where required
CIN230		Remove underfloor foil insulation and strapping taking care not to damage wiring or plumbing, including checking if electrically live, remove or flatten remaining staples flush with timber and dispose
CIN620		Supply and fit perimeter subfloor lining to under floor insulation in high wind areas
CAA100		Carpentry day work hourly rate
		Building Paper (stapled in)

* For Mammoth R1.9 insitu wall system performance see summary table overleaf.
* The price difference between wall products is dependent on product density i.e. R 2.0 has approximately 33% more fibre than R 1.9 and R 2.5 having approximately 100% more fibre than R 1.9.

CONTACT DETAILS

For supply and/or install quotes and for alternate solutions to project specific issues contact:

9(2)(a)

InZone INDUSTRIES LTD
smart energy SOLUTIONS
Mammoth MODERN INSULATION

InZone INDUSTRIES LTD

Supporting Technical Information For Wall Systems

3 Prerequisites for Friction Fit Specification to Achieve High Performance Wall Systems

1. Touches all six faces* for complete contact without air pockets. Sits flush and square between nogs and studs.
2. Friction fit pads must be self-supporting without the use of any staples.
3. Wall insulation should have no visible folds or creases.

* "Six Faces" refers to nogs, studs, plasterboard & building wrap

"AIR-LAY" Advantage for walls

InsulPro Manufacturing Ltd manufacture a unique medium density, Mammoth "Air-Lay" insulation pad that has been designed to be friction fitted between studs and nogs to create a smooth, seamless fit without creases, tucks or gaps. It is made in New Zealand from 100% lofted, thermally bonded polyester fibres. Its seamless fit and lack of staples/straps supports higher thermal performance across the system – providing higher construction R-values.

Note: due to the manufacturing process and the use of recycled fibre content, product batches may experience colour variations as shown in the images above. This does not affect product thermal performance or durability.

BRANZ Independent Testing

BRANZ was contracted to test Airlay Friction Fit pads in a variety of wall systems insitu within one of their test houses to determine the installed system performance.

The construction value results for R1.9 Airlay Friction Fit installed in 90mm timber framing are shown below in contrast to the construction system performance using generic insulation as shown in the industry "House Insulation Guide".

Mammoth Airlay System Insitu Performance Results

System R-Values: 90mm Timber Framed – cavity, studs 400, dwangs 600

	Mammoth Airlay		BRANZ House Insulation Guide (Generic*)			
Insulation Product R-Value	R1.9	R2.0	R1.8	R2.0	R2.2	R2.4
Brick Veneer	**2.25**	**2.25**	1.7	1.9	2.0	2.1
Weatherboard	**2.15**	**2.20**	1.9	2.0	2.1	2.2
Plywood	**1.95**	**2.05**	1.7	1.8	1.9	2.0

* The test results in light red are installed system R-values specific to Mammoth Airlay products from independent testing. The numbers in grey are estimations published in BRANZ House Insulation Guide which assume a generic insulation products.

For more information on Mammoth Air-Lay Friction Fit products and the independent testing contact

9(2)(a)

Housing New Zealand
Housing New Zealand Corporation

Mechanical Extraction Scoping Guide: M-243

FOR THE 2019-20 FINANCIAL YEAR ONLY

For existing Housing New Zealand Properties

Effective from 1 July 2019

VERSION 5

Note :

Changes since last edition shown in brown.

All previous Scoping Guides, Specifications and drawings are superseded.

Contains colour illustrations - colour printing is recommended.

Mechanical Extraction Scoping Guide 2019-20 M-243

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Document Control		
Document Name	**Mechanical Extraction Scoping Guide** – for Housing New Zealand properties for 2019-20 year	
Housing New Zealand Business Unit	Property Services Group – Quality Homes Advisory Team	
Author/s	John Duncan	Position: Standards Advisor
Version No.	5	Status : Current
Issue Date	1 July 2019	
Peer Reviewer/s and Sections Reviewed	Graeme Bush	PBMC Technical Manager
	Stacey Marsh	Quality Homes Advisory Team Manager
Consulted/feedback provided by	Maintenance Managers NTC Register ITC Register Maintenance Documents Inbox Register (feedback from HNZ staff and PBMCs)	
Final Approved By	Stacey Marsh	Quality Homes Advisory Team Manager
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments:	Minor formatting changes.	

1. Introduction

Housing New Zealand's role is to provide ~~dry, warm,~~ safe, healthy, ~~and~~ fit-for-purpose and sustainable housing for people in need, for the duration of their need.

2. Purpose

This Scoping Guide is specifically designed to provide guidance for Contractors in compiling a site specific scope of works for **Mechanical Extraction and Associated Installation Works**.

The Scoping Guide provides for a range of component items, actions and their associated job codes. The Contractor must select the appropriate items and actions from this range that are required in the circumstances (specific to the property and programme), to complete a scope that will be submitted to Housing New Zealand for approval. Where relevant, the scoping guide may also indicate component items and actions that are not to be included in a Scope.

3. General guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in scoping activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works. The Persons Conducting Business or Undertaking (PCBUs) Housing New Zealand and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of the work package.

Please note – Any Health and Safety issue requiring immediate response should be removed from this scope and treated as a separate urgent (URG) works order. These are to be advised to the Housing New Zealand Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Cost-effective solutions

Where there is an option to either repair or replace a component or item, the Contractor must identify where full replacement of the item is more cost-effective than repairing it, and propose replacement as part of the scope. These proposed replacements shall be agreed with the Housing New Zealand representative and included in the approved scope before replacement is

undertaken. If the proposed solution may also affect scopes for other work programmes, details should be forwarded to Housing New Zealand for consideration.

3.3 Supporting documentation

This Scoping Guide should be read in conjunction with other Housing New Zealand PBMC Reference Material. Current versions of the following documents will provide valuable information and context to assist the Contractor in completing and submitting appropriate and accurate scopes. All Contractors' Scopers should have access to copies of current versions of all the following Reference Materials when undertaking scoping on site.

Reference Material	Purpose
Housing New Zealand Amenity Condition Manual (ACM-200)	Provides guidance on what Housing New Zealand determines is an acceptable or unacceptable condition for specific componentry of a property.
Housing New Zealand Supplier Code of Conduct	Provides Housing New Zealand expectations with regard to behaviour and conduct while on site.
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Housing New Zealand Schedule of Rates (M-218)	Provides a description of a particular maintenance activity and cost.
Housing New Zealand Tenant and Contractor Agreement Form (M–323)	This form confirms the process for achieving tenant agreement for the Contractor to work on the property and to use certain facilities.

3.4 Housing New Zealand contact details

Any questions regarding Voids are to be addressed to the Regional Maintenance Team directly and for any questions regarding ~~the Warm and Dry~~ a planned programme refer to the Planned Programmes Team on:

Email: planned.programmes@hnzc.co.nz

3.5 Housing New Zealand internal process

Many teams in Housing New Zealand are involved in the Planned Programmes process, the primary roles involved are:

- **Asset / Portfolio Managers** – Confirm property inclusion in the programme.
- **Regional Maintenance / Planned Programmes Teams** – These teams receive the scoped work order from the Contractor and review it to see that the Contractor has achieved the aims of this Scoping Guide, before authorising. They check appropriate use of schedule of rates and review all variation requests from Contractors during the course of the work. This team also monitors the programme process against agreed targets.

3.6 Tenant decisions

Mechanical extraction interventions should be included on the scope **ONLY** if they are agreed to by the tenant. These amenity items (provision of bathroom and kitchen extraction systems where required) require tenant approval and/or declined confirmation on the *Tenant and Contractor Agreement form (M-323)*.

Please note – where the tenant declines any or all of these interventions the reasons for declining shall be stated on the *Tenant and Contractor Agreement form (M-323)* before it being returned to the Housing New Zealand representative.

4. Scoping for mechanical extraction

4.1 Scoping outcome

Outcome

The mechanical extraction components are designed to collect and remove the two primary sources of moisture within a house – namely bathrooms and kitchens, with the extraction systems being located directly over the primary source – i.e. showers and stoves.

This *Mechanical Extraction Scoping Guide (M-243)* defines how Housing New Zealand Staff and Contractors will achieve the desired outcome in terms of existing Housing New Zealand properties. This Scoping Guide shall be used for the supply and installation of all mechanical extraction works to all Housing New Zealand properties – i.e. Void, Planned Programme properties and Maintenance works.

4.2 Scoping tables

No	Mechanical Extraction Scoping Table	
4.2.1	**Kitchen Mechanical Extraction Systems** (Void 6.13) Ensure appropriate procured mechanical ventilation systems are complete and operational to all kitchens. All works are to be undertaken by the nominated supplier strictly in accordance with the manufacturer's installation instructions. **Please Note** – Advise the Housing New Zealand representative if unable to fit mechanical ventilation in the kitchen.	**Job Code/s** EFN231, 351, 361 & 380 **ACM** 76.3 **MWPS** 7687HV
4.2.2	**Non Standard Kitchen or Bathroom Extraction Systems** (Void 6.13) Provide non standard system to kitchen and/or bathroom to meet specific situation as recommended by Hometech.	**Job Code/s** EFN500 **ACM** 76.2 – 3 **MWPS** 7687HV
4.2.3	**Bathroom Mechanical Extraction Systems** (Void 6.13) Ensure appropriate procured mechanical extraction systems are complete and operational to all bathrooms. All works are to be undertaken by the nominated supplier strictly in accordance with the manufacturer's installation instructions. **Please Note** – Advise the Housing New Zealand representative if unable to fit mechanical ventilation in the bathroom.	**Job Code/s** EFN200, 290 & 310 **ACM** 76.2 **MWPS** 7687HV
4.2.4	**Scaffolding and Edge Protection** Provide appropriate scaffolding, edge protection or alternate safety items as per the *Housing New Zealand Maintenance & Programmed Work Specification (M-215)* and current Health and Safety requirements.	**Job Code/s** RMS060 - 080 **ACM** **MWPS**
4.2.5	**Existing Kitchen Range-hood Filter Clean** (Void 6.14) All existing kitchen range hoods shall have washable filters and grilles cleaned or replaced. Replace filters that are unable to be cleaned.	**Job Code/s** KCH270 **ACM** 76.3 **MWPS** 7687HV

4.3 Scoping requirements

New works

For properties where there is currently no mechanical ventilation systems to either of the kitchen range or shower, the nominated new services shall be provided in accordance with the *Housing New Zealand Maintenance & Programmed Work Specification (M-215),* manufacturers literature and Job Codes above.

Existing works

For properties where there are existing mechanical services, those services shall be inspected to review that both their condition and functional performance is adequate and should be repaired as required. If repair not suitable, then replace.

Filter clean

All existing kitchen range-hood filters shall also be cleaned and/or replaced as required at the time of scoping by the Housing New Zealand Contractor. Nominated Supplier will supply replacement filters only. This is for all Housing New Zealand properties and programmes.

4.4 Nominated sub-contractor / supplier details

The following nominated sub-contractor is to be used by the PBMC to undertake the complete scoping, supply, installation and certification of these nominated items:

Housing New Zealand Nominated Contractor/Supplier Details
Mechanical Extraction
Hometec Limited 9(2)(a)

5. Records

Retain all records within Housing New Zealand's records system - refer 'Records retention and disposal' (R-105).

6. Version control

Details of previous versions are stored in Housing New Zealand's document management system (Objective). Refer to header and footer information for reference document elements or for any queries contact OurSpace@hnzc.co.nz.

Appendix

The following nominated supplier's product information and installation instructions are appended for reference –

- *Hometech Product Technical Specification for Housing New Zealand Existing Dwellings and Individual Procurement Codes – dated 1 May 2018 (Version 4)*
- *Hometech Scopers Guide to Installation – dated July 2018.*

Please note – All scoping to be undertaken in accordance with theses documents.

HOMETECH PRODUCT TECHNICAL SPECIFICATION for HOUSING NEW ZEALAND EXISTING DWELLINGS AND INDIVIDUAL PROCUREMENT CODES

Existing HNZ Dwellings (Excludes New Build)

2018/2019

Date	01/05/2018
HomeTech Revision ID	01/05/2018 V4

WHAT WE CAN DO FOR YOU

Proven Performance

HomeTech is a long-established NZ privately owned business supplying mechanical extraction and daylighting solutions to homes across New Zealand. As the third longest supplier to Housing New Zealand (since 2003), we have supplied and installed over 70,000 products to the property portfolio.

HomeTech's proprietary flashing system for our ventilation roof penetrations is BRANZ Appraised so specification of our systems can be made in confidence. We back that up with a 10 year warranty on our products and installation. Our certified installers are specialists and we provide on-going training to ensure that our quality exceeds the clients expectations.

Scoping Services

Our company scopes Housing New Zealand properties to recommend and provide mechanical extraction to required areas. Whether existing or new builds, there is a procurement ventilation product to suit the majority of situations. As part of our ongoing commitment, we actively educate and train other HNZ contractors on recognising the best system for the project.

Specification & Design

Design of ventilation systems is undertaken for new builds and existing multi-story dwellings that are part of the HNZ portfolio. With a range of available products, we have built standard systems that make it easier for specifiers to chose the right product and for constructors to become familiar with timing and installation on site. All systems comply with Housing New Zealand specification documents and to the New Zealand Building Code. Further information can be found on the HomeTech website www.hometech.co.nz

Project Management

Part of our role as a supplier and installer, is to facilitate project management of our install from the beginning, till when we are completed on site. Our nationwide service to Housing New Zealand includes providing electrical installation for existing properties. At any one time, we could be managing around 1000 installs across the country from various contractors. Our administration team have "smart systems" which enable us to track these projects effectively.

For further information including CAD drawings and technical specifications, visit **www.hometech.co.nz**

CONTENTS

1 SPECIFYING MECHANICAL EXTRACTION

2 KITCHEN VENTILATION

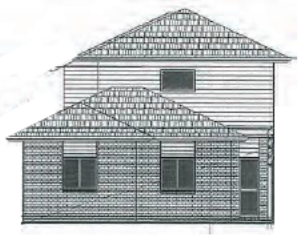
2.1 Kitchen Rangehood Ventilation - EFN231
2.2 Kitchen Rangehood Ventilation with Bulkhead - EFN351
2.3 Kitchen Rangehood Ventilation with Ceiling Plate - EFN361
2.4 Kitchen Rangehood Alternative - Ceiling Filter Box - EFN380
2.5 Kitchen Rangehood Alternative - Ceiling Fan Box - EFN500

3 BATHROOM VENTILATION

3.1 Bathroom Mechanical Extract Ventilation with Delay Timer - EFN200
3.2 Bathroom Mechanical Two Room Extract Ventilation - EFN290
3.3 Bathroom Mechanical Extract Ventilation - Flat Roof - EFN310

1.0 SPECIFYING MECHANICAL EXTRACTION FOR EXISTING HNZC PROPERTIES

Version: 01/05/2018 V4

SINGLE STOREY DWELLINGS	BATHROOM VENTILATION	BATHROOM VENTILATION LIMITATIONS	KITCHEN VENTILATION	KITCHEN LIMITATIONS
	**Preferable Solutions** • EFN200 - Mechanical Extraction with delay timer through he roof. • EFN310 - Mechanical Extraction with flat roof • EFN290 - Mechanical Extraction two rooms, back to back.	• Ceiling space less than 350mm requires notification to HomeTech. • Shallow roof pitch requires over flashing. Notify HomeTech to scope. • Asbestos roof. Unable to cut holes. Refer back to HNZ Contractor for specialist removal.	**Preferable Solutions** • EFN231 - Standard Rangehood Extract System through roof. • EFN361 - Rangehood with a cover plate, (when an old non-procurement Rangehood is removed and exis ing ceiling plate can't be covered). **Alternative Solutions** • EFN231 - Standard Rangehood Extract System through wall or soffit. • EFN380 - Alternative Kitchen Ventilation - Ceiling Filter Box (top floor or single level dwelling). • EFN351 - Rangehood with bulkhead up to 4m long extracting out exterior wall (lower level or single level through wall) for stove on internal wall	• Window blend stove, use alternative solu ion EFN380 - Alterna ive Kitchen Ventilation - Ceiling Filter Box. • Stove positioned on the cooking island worksta ions use alternative EFN380. • Where there are overhead obstructions, use alternative EFN380 or EFN351 Bulkhead installation. • Asbestos roof. Unable to cut holes. Refer back to HNZ Contractor for specialist removal.
TWO LEVEL DWELLINGS 	**Preferable Solutions** • EFN200 - Mechanical Extraction with run-on timer (top floor). • EFN290 - Mechanical Extraction two rooms, back to back (top floor). **Alternative Solutions** • The wet room is an interior room on the ground level. Refer back to HomeTech to scope and price.	• Ceiling space less than 350mm, requires notification to HomeTech. • Shallow roof pitch, requires over flashing. No ify HomeTech to scope. • Asbestos, concrete or brick exterior cladding requires specialised contractor services.	**Preferable Solutions** • EFN231 - Rangehood Extract System (top floor hrough roof, lower level through wall). • EFN361 - Rangehood with a cover plate, (top floor through roof, lower level through wall). • EFN351 - Rangehood wi h a bulk head up to 4m long ducting out exterior wall (lower level through wall) for stove on internal wall. **Alternative Solutions** • EFN380 - Alternative Kitchen Ventilation - Ceiling Filter Box (top floor only) for window above stove. • EFN500 -Alternative Kitchen Ventilation - Lower Storey with window in front of stove and not enough room to fit a Rangehood. Fanbox hrough wall.	• Window behind stove, specify EFN380 - Alternative Kitchen Ventilation - Ceiling Filter Box (top level) • Stove positioned on the cooking island worksta ions use alternative EFN380 (top level) • Asbestos roof. Unable to cut holes. Refer back to HomeTech. • Two story window in front of stove use alternative EFN500. • Check for exterior cladding and obstructions when exiting on an exterior wall.
MULTI LEVEL DWELLINGS Excluded from 2015-2016 Scope 	• It is preferable that Hometech scopes any multi-level apartment blocks.		• It is preferable that Hometech scopes any multi-level apartment blocks.	

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN231
HNZ Price	

TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

2.1 KITCHEN RANGEHOOD VENTILATION - THROUGH ROOF | HNZ CODE: EFN231

Product Suitability: Single level properties | Top floor installations

Product Description

Provide procured mechanical range hood extract ventilation system ducted to the exterior roofline. The white canopy rangehood has twin filters with three layers of micro mesh, LED lighting and a 3 speed push-button control. Dimensions: 597mm W x 500mm D

Applications

The Rangehood Kitchen Ventilation system is installed in the majority of situations such as;

- single level properties
- top floor Installatlons

Limitations

- The base of the canopy should be approximately 700mm to 800mm above the stove surface. Note that framing will determine height tolerance.
- If the installation cannot be installed through the roof, refer to alternative products as detailed on HomeTech's reference guide "Scoping and Specifiying mechanical ventilation".

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- To be ducted vertically to exterior with proprietary HomeTech roof flashing (BRANZ Appraisal 665) and cowl wherever possible.
- Installed as per the HomeTech Scoper's Guide to Installation.

Electrical Connection by HomeTech

- All fans to be connected to an isolating switch as per AS/NZS 3000:2007.
- Electrical approval AS/NZS 335.2.31.2001.
- Isolation switch location as per HomeTech's Rangehood Switching diagram in the Scoper's Guide to Installation.
- Electrical COC is provided on completion of work.

Warranty

- Rangehood parts and fan - 5 years
- Roof flashing and installation - 10 years

Standard Components

Range Hood Filter code: ATFL5382601 to suit RWC3CL6WH Range Hood

HagerBlue Standard Switch - HNZ Procurement Item

Branz Appraised Roof Flashing by HomeTech - Appraisal No 665

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN351
HNZ Price	

TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

2.2 KITCHEN RANGEHOOD VENTILATION WITH BULKHEAD | HNZ CODE: EFN351

PRODUCT SUITABILITY: Stove on internal kitchens in single level dwellings

Product Description

Provide procured mechanical range hood extract ventilation system ducted to the exterior wall with up to a 4 metre bulkhead. The canopy Rangehood has twin filters with three layers of micro mesh, LED lighting and a 3 speed push-button control. Dimensions: 597mm W x 500mm D

Applications

The Rangehood Kitchen Ventilation system is installed in situations such as;

- ground floor installations where it is not possible to go through the roof.
- single level dwellings where the stove is on the internal wall and it is not possible to go through the roof or immediate outside wall.

Limitations

- The base of the canopy should be approximately 700mm to 800mm above the stove surface. Note that framing will determine height tolerance.
- Additional costs may occur for concrete / brick / asbestos exterior claddings.

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- Installed as per the HomeTech Scoper's Guide to Installation.

Electrical Connection by HomeTech

- All fans to be connected to an isolating switch as per AS/NZS 3000:2007.
- Electrical approval AS/NZS 335.2.31.2001.
- Isolation switch location refer to HomeTech's Rangehood Switching diagram in the Scoper's Guide to Installation.
- Electrical COC is provided on completion of work.

Warranty

- Rangehood parts and fan - 5 years

Standard Components

Range Hood Filter code: ATFL5382601 to suit RWC3CL6WH Range Hood

HagerBlue Standard Switch - HNZ Procurement Item

Weatherproof cowl with 150mm spigot diameter

Exterior fixed grill with 150mm spigot diameter (used when outlet protected from weather)

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN361
HNZ Price	

TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

2.3 KITCHEN RANGEHOOD VENTILATION WITH CEILING PLATE | HNZ CODE: EFN361

PRODUCT SUITABILITY: Ceiling Platecovers holes single level properties | Top floor installa ions

Product Description

Provide procured mechanical range hood with ceiling plate extraction system ducted to the exterior roof. The ceiling plate is specified to cover larger existing ducting holes from prior products.

The white canopy rangehood has twin filters with three layers of micro mesh, LED lighting and a 3 speed push-button control. Dimensions: 597mm W x 500mm D

Ceiling Plate for Rangehood

Applications

The Rangehood Kitchen Ventilation with ceiling plate is installed in situations such as;

- when the ceiling ducting hole is larger than required for the replacement procurement model Rangehood
- single level properties
- top floor installations only

Limitations

- The base of the canopy should be approximately 700mm to 800mm above the stove surface. Note that framing will determine height tolerance.

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- To be ducted vertically to exterior with proprietary HomeTech roof flashing (BRANZ Appraisal 665) and cowl wherever possible.
- Installed as per the HomeTech Scoper's Guide to Installation.

Electrical Connection by HomeTech

- All fans to be connected to an isolating switch as per AS/NZS 3000:2007.
- Electrical approval AS/NZS 335.2.31.2001.
- Isolation switch location refer to HomeTech's Rangehood Switching diagram in the Scoper's Guide to Installation.
- Electrical COC is provided on completion of work.

Warranty

- Rangehood parts and fan - 5 years
- Roof flashing and installation - 10 years

Standard Components

Range Hood Filter code: ATFL5382601 to suit RWC3CL6WH Range Hood

HagerBlue Standard Switch - HNZ Procurement Item

Ceiling Plate for Rangehood

Branz Appraised Roof Flashing by HomeTech - Appraisal No 665

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN380
HNZ Price	

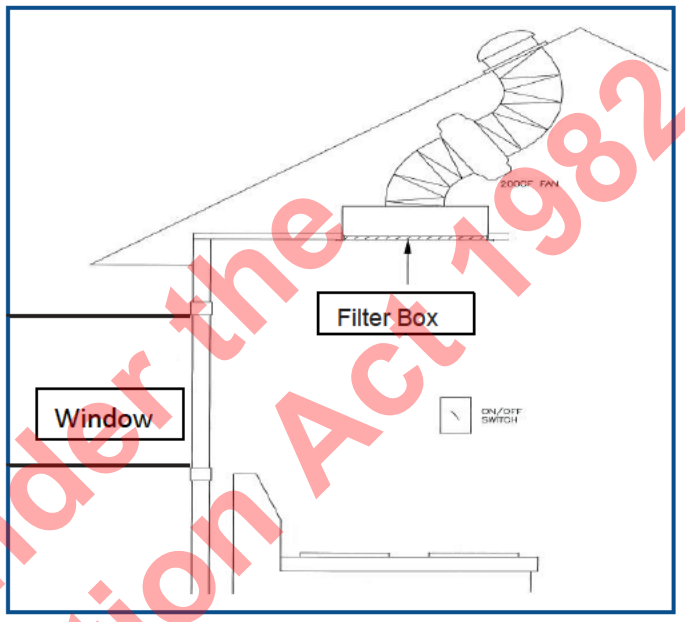
TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

2.4 KITCHEN RANGEHOOD ALTERNATIVE - CEILING FILTER BOX | HNZ CODE: EFN380

PRODUCT SUITABILITY: Window to behind stove | Top floor installations | Cooking Island

Product Description

In-line extract fan exhausting from filter box at ceiling, to exterior roof-line for installations where there is a window above the stove. The system provides a maximum exhaust rate of 700m/hr and is suitable for filtering grease and the extraction of steam or odours when cooking. The filter is removable for easy cleaning or replacement.



Applications

The Ceiling Filter Box is used as an alternative to a range hood, where the range hood cannot be installed in situations such as;

- when a window is directly to rear of the stove
- the stove is positioned on a cooking island workstation or half wall.

Limitations

- Requires a ceiling void of more than 500mm.
- Filter box may not be exactly centred over the stove due to ceiling joists.
- Cannot be installed when a kitchen is on the ground floor of two-level dwelling.

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- To be ducted vertically to exterior with proprietary HomeTech roof flashing and cowl wherever possible.
- Installed over the cooktop within the safe zone as per the HomeTech Scoper's Guide to Installation.

Electrical Connection by HomeTech

- All fans to be connected to an isolating switch as per AS/NZS 3000:2007.
- Isolation switch location refer to HomeTech's Rangehood Switching diagram in the Scoper's Guide to Installation.
- Electrical COC is provided on completion of work.

Warranty

- Mechanical Extract Fan and filter box - 5 years
- Roof flashing and installation - 10 years

Standard Components

Range Hood Filter code:
ATFL5382601 to suit
RWC3CL6WH

Range Hood
HagerBlue Standard
Switch - HNZ
Procurement Item

Branz Appraised Roof
Flashing by HomeTech -
Appraisal No 66

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN 210
HNZ Price	

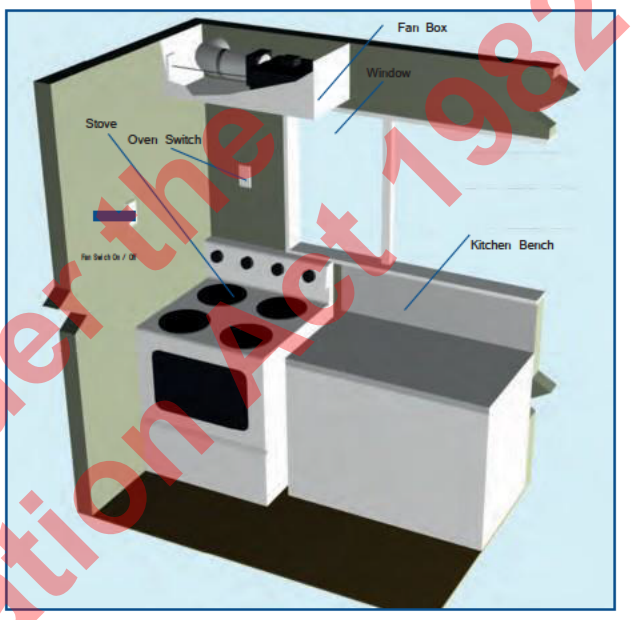
TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build

2.5 KITCHEN FAN BOX VENTILATION - GROUND LEVEL INSTALL OF TWO LEVEL PROPERTY

PRODUCT SUITABILITY: Ground Level Installation of two level properties | Stove behind window (less than 497mm)

Product Description

Provide kitchen fan box mechanical extract ventilation to exterior wall. Dimensions 907L x 310H x 410D. The Fan box is fitted with a centrifugal fan and rangehood filter that is suitable for the filtering of fat, grease and the extraction of steam or odours when cooking. The filter is removable for easy cleaning or replacement.



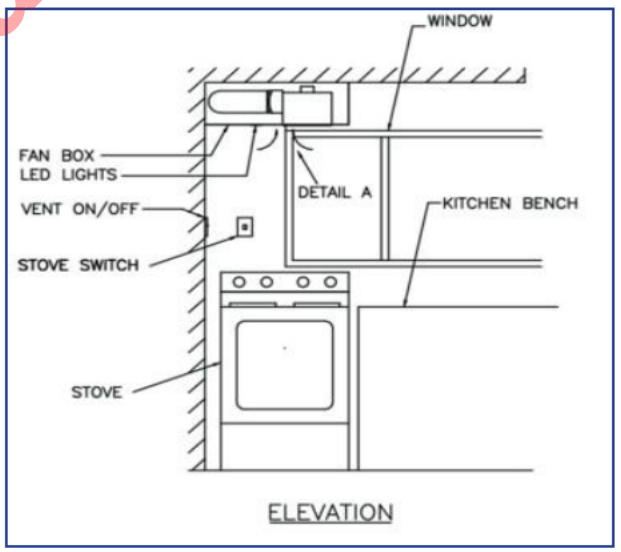
Applications

The Fan Box is an alternative to a range hood, where the procurement item EFN231 Range hood or a Ceiling Filter Box (EFN380) cannot be installed in situations such as:

- When a window is directly behind the stove in the ground level of a two level property. The wall space must be less than 497mm which is the standard space for a range hood installation.
- Can be used in single level installations when no other HNZC procurement item is suitable.
- Vents to exterior wall using 150mm centrifugal fan.

Limitations

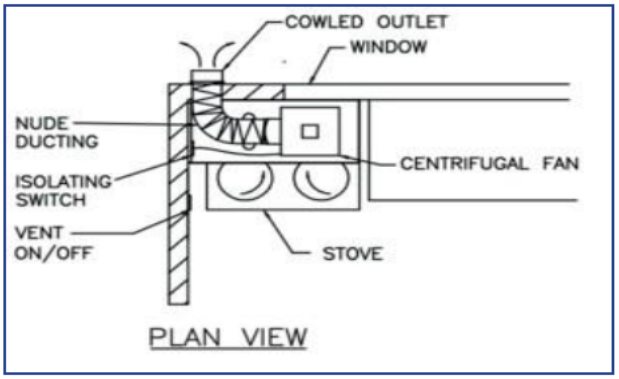
- Electrical supply may require surface capping.
- Additional costs may occur when exterior cladding is brick, concrete or asbestos.



Installation

To be carried out by HomeTech to manufacturer's recommendations:

- Installed as per HomeTech's Scopers Guide to Installation 2015.



Electrical Connection by HomeTech

- All fans to be connected to an isolation switch as per AS/NZS 3000:2007.
- Isolation switch as per the above diagram.
- Electrical COC is provided on completion of work.

Warranty

- Mechanical Fan - 5 Years

For further information including CAD drawings and technical specifications, visit **www.hometech.co.nz**

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN200
HNZ Price	

TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

3.1 BATHROOM MECHANICAL EXTRACT VENT WITH DELAY TIMER | HNZ CODE : EFN200

PRODUCT STABILITY: Single level properties | Top Floor installations

Product Description

Roof mounted inline fan system venting to external roof cowl, used to provide mechanical bathroom extract ventilation. Minimum exhaust rate of 50L/s at ceiling diffuser. System uses a seven minute run-on. Not suitable as a replacement for kitchen ventilation.

Applications

The bathroom mechanical extract ventilation system is suitable for;

- single level properties
- top floor Installations
- where the ceiling space is a minimum of 350mm
- in wet rooms
- laundries

Limitations

- Where a sloping ceiling exists, HomeTech to be engaged prior to ceiling lining.
- A 20mm air gap under the door should be made for replacement air to the space.

Installation

To be carried out by procurement ventilation contractor HomeTech Ltd to manufacturer recommendations.

- Roof mounted system installed using proprietary HomeTech Branz Appraised roof flashing and cowl.
- Ceiling diffuser to be located on outside edge of shower enclosure or over centre of a shower over bath layout. Refer to HomeTech's Scopers Guide to Installation.

Electrical Connection by HomeTech

- Where possible, all fans wired by HomeTech to operate from independent switch with 7 minute run on timer.
- Isolation switch located in roof cavity clear of ceiling insulation by minimum of 200mm.
- Electrical COC is provided on completion of work.
- 240 volt, 50 Hertz, 40 Watt max

Warranty

- Mechanical Extract Fan - 5 years
- Roof Flashing and penetrations - 10 years

Standard Components

150mm Paltech Diffuser
Product Code: 3VS6CD

HagerBlue Double Switch
HNZ Procurement Item

150mm Fire Rated
Nude Duct

Branz Appraised Roof
Flashing by HomeTech -
Appraisal No 665

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN290
HNZ Price	

TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

3.2 BATHROOM MECHANICAL TWO-ROOM EXTRACT VENTILATION | HNZ CODE: EFN290

PRODUCT SUITABILITY: Single level properties | Top floor installations | Rooms back to back i.e. Bathroom and Laundry

Product Description

Roof mounted inline fan system venting to external roof cowl, used to provide mechanical bathroom extract ventilation. The motor services two rooms back-to-back. Minimum exhaust rate of 38L/s at ceiling diffuser.

Applications

The two-room mechanical extract ventilation system is suitable for;

- back to back rooms that require exhaust ventilation
- single level properties
- top floor Installations
- where the ceiling space is a minimum of 350mm
- in wet rooms such as bathrooms
- laundries

Limitations

- Where a sloping ceiling exists, the application is not able to be done.
- A 20mm air gap under the doors should be made for replacement air to both rooms.

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- Roof mounted system installed using proprietary HomeTech Branz Appraised roof flashing and cowl.

Electrical Connection by HomeTech

- Where possible, all fans wired by HomeTech to operate from independent switch with 7 minute run on timer, operable from either space.
- Isolation switch located in roof cavity clear of ceiling insulation by minimum of 200mm.
- Electrical COC is provided on completion of work.
- 240 volt, 50 Hertz, 40 Watt max
- HagerBlue Standard switch for each room, HNZ procurement item.

Warranty

- Mechanical Extract Fan - 5 years
- Roof flashing and installation - 10 years

Standard Components

150mm Paltech Diffuser
Product Code: 3VS6CD

HagerBlue Standard
Switch per room
- HNZ Procurement Item

150mm Fire Rated
Nude Duct

Branz Appraised Roof
Flashing by HomeTech -
Appraisal No 665

Date	01/05/2018
Sheet Revision ID	01052018 V4
HNZ Procurement Code	EFN310
HNZ Price	

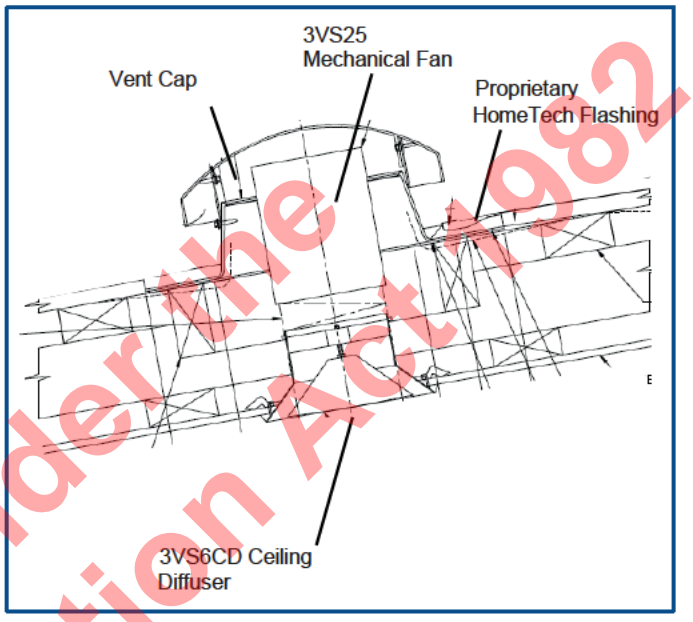
TECHNICAL SPECIFICATION | Existing HNZ Dwellings (Excludes New Build)

3.3 BATHROOM MECHANICAL EXTRACT VENT - FLAT ROOF | HNZ CODE: EFN310

PRODUCT SUITABILITY: Flat roof | Sloping Ceiling wi h less than 350mm

Product Description

Roof mounted inline fan system, venting to external roof cowl, used to provide mechanical extract ventilation. Suitable for sloping ceiling installations. Minimum exhaust rate of 50 l/s per room at ceiling diffuser. System uses a seven minute run-on timer switch.



Applications

The bathroom mechanical extract vent system is suitable for;

- flat roof
- sloping ceiling installations

Limitations

- Where a sloping ceiling exists, HomeTech to be engaged prior to ceiling and wall lining to enable separate fan switch.
- A 20mm air gap under the door should be made for replacement air to the space.

Installation

To be carried out by HomeTech to manufacturer's recommendations:

- Roof mounted system installed using proprietary HomeTech Branz Appraised roof flashing and cowl.
- Ceiling diffuser to be located on outside edge of shower enclosure or over centre of a shower over bath layout. Refer to HomeTech's Scopers Guide to Installation.

Electrical Connection by HomeTech

- Where possible, all fans wired by HomeTech to operate from independent switch with 7 minute run on timer, operable from either space.
- Isolation switch located in roof cavity clear of ceiling insulation by minimum of 200mm.
- Electrical COC is provided on completion of work.
- 240 volt, 50 Hertz, 40 Watt max

Warranty

- Mechanical Extract Fan - 5 years
- Roof flashing and installation - 10 years

Standard Components

150mm Paltech Diffuser
Product Code: 3VS6CD

HagerBlue Standard
Switch per room
- HNZ Procurement Item

Branz Appraised Roof
Flashing by HomeTech -
Appraisal No 665

Curtain Scoping Guide: M-244

For the 2019/20 Financial Year Only

Effective from 1 October 2019
Version – 7

Kāinga Ora
Homes and Communities

Curtain Scoping Guide 2019-20 M-244

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Appendix 13

For existing Kāinga Ora – Homes and Communities properties

Note:

Changes since last edition shown in orange.

All previous Scoping Guides, Specifications and drawings are superseded.

Contains colour illustrations - colour printing is recommended.

Document Control		
Document Name	Curtain Scoping Guide – for Kāinga Ora properties for 2019-20 financial year	
Kāinga Ora Business Unit	People and Homes – Maintenance and Upgrade	
Version No.	7	Status : Current
Issue Date	1 October 2019	
Peer Reviewer/s and Sections	Natasha James	Manage, Information and Documents - Maintenance
Final Approved by	Stacey Marsh	Quality Homes Advisory team Manager
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments	Updated to Kāinga Ora. Minor formatting changes.	

1. Introduction

Kāinga Ora – Homes and Communities' role is to provide safe, healthy, fit-for-purpose and sustainable housing for people in need, for the duration of their need.

2. Purpose

This *Kāinga Ora Scoping Guide (M-244)* is specifically designed to provide guidance for Contractors in compiling a site specific scope of works for **Curtains and Associated Tracks**.

The guide provides for a range of component items and actions and their associated rates. The Contractor must select the appropriate items and actions from this range that are required in the circumstances (specific to the property and programme), to complete a scope that will be submitted to Kāinga Ora for approval. Where relevant, the guide may also indicate component items and actions that are not to be included in a scope.

3. General guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in scoping activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works. The Persons Conducting Business or Undertaking (PCBUs) Kāinga Ora and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of the work package.

Please note – Any Health and Safety issue requiring immediate response should be removed from this scope and treated as a separate urgent (URG) works order. These are to be advised to the Kāinga Ora Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Cost-effective solutions

Where there is an option to either repair or replace a component or item, the Contractor must identify the circumstances where full replacement of a component or item is more cost effective than a repair and propose replacement as an alternative to repair as part of the initial scope. These proposals shall be agreed with the Kāinga Ora Planned Programmes Project Manager and included as part of the approved scope before work is undertaken. If the proposed solution is likely to be incorporated in a large proportion of programme scopes, then a blanket approval and instruction may be sought from the relevant Kāinga Ora representative to include in all the required programme scopes.

3.3 Supporting documentation

This Kāinga Ora Curtain Scoping Guide (M-244) is meant to work in conjunction with other Kāinga Ora PBMC Contract Reference Material. Current versions of the following Reference Material documents will provide valuable information and context to assist the Contractor in completing and submitting appropriate and accurate programme scopes. All Contractors' Scopers should have access to copies of current versions of all the following Reference Materials when undertaking scoping on site.

Reference Material	Purpose
Kāinga Ora Amenity Condition Manual (ACM-200)	Provides guidance on what Kāinga Ora determines is an acceptable or unacceptable condition for specific componentry of a property.
Kāinga Ora Supplier Code of Conduct (M-360)	Provides Kāinga Ora expectations with regard to behaviour and conduct while on site.
Kāinga Ora Asbestos Management & Control Policy (HS-213)	Provides Kāinga Ora expectations with regard to the safe management and control of asbestos which is a hazardous material.
Kāinga Ora Lead-based Paint Management & Control Policy (HS-214)	Provides Kāinga Ora expectations with regard to the safe management and control of lead based paint which is a hazardous material.
Kāinga Ora Maintenance and Programmed Work Specification (M-215)	Provides a detailed description on a trade basis, of how the relevant work must be undertaken.
Kāinga Ora Method of Measurement (M-216) (included in the Kāinga Ora Schedule of Rates).	Provides instruction on how specific property features are to be measured. The Method of Measurement is particularly relevant to scoping as it defines how to measure the quantity of specific material and/or quantum of work required under a specific work order.

Kāinga Ora Materials Procurement Schedule (M-217)	Provides a full list of the materials, products and their costs that Kāinga Ora procures under a national supplier agreement and which must be used when undertaking the relevant work.
Kāinga Ora Schedule of Rates (M-218)	Provides a description of a particular maintenance activity and cost.
Harvey Furnishings Product Images (M-232)	Provides information on individual product specifications, costs and photos of the products.
Kāinga Ora Customer and Contractor Agreement Form (M–323)	This form confirms the process for achieving tenant agreement for the Contractor to work on the property and to use certain facilities.
Kāinga Ora Curtain Measurement Sheet – October 2019	Provides a template of certain criteria for the Contractor to populate so that the curtain manufacturer can produce curtains to suit.

3.4 Kāinga Ora contact details

Any questions regarding Voids are to be addressed to the Void Specialist or Regional Maintenance team directly. Any questions regarding a planned programme are to be referred to the Planned Programmes team on:

Email: planned.programmes@kaingaora.govt.nz

3.5 Kāinga Ora internal process

Many teams in Kāinga Ora are involved in the Planned Programmes process, the primary roles involved are:

- **Asset / Portfolio Managers** – Confirm property inclusion in the programme.
- **Regional Maintenance or Planned Programmes teams** – These teams receive the scoped work order from the Contractor and review it to ensure that the Contractor has achieved the aims of this *Kāinga Ora Curtain Scoping Guide (M-244)*, before authorising. They check appropriate use of schedule of rates and review all variation requests from Contractors during the course of the work. This team monitors the programme process against agreed targets.

3.6 Tenant decisions

Curtains interventions should be included on the scope **ONLY** if they are agreed to by the tenant. These amenity items (removal of existing curtains, blinds and track and replacement with new thermal curtains where required) require tenant approval and/or declined confirmation on the Kāinga Ora Customer and Contractor Agreement form (M-323).

Please note – where the tenant declines any or all of these interventions the reasons for declining shall be stated on the Kāinga Ora Customer and Contractor Agreement form (M-323) before it being returned to the Kāinga Ora representative.

4. Scoping for curtains

4.1 Scoping outcome

The curtain components (curtains and track) are designed to improve the thermal performance of the house by reducing the interior heat loss through windows of the habitable rooms of a house.

This *Kāinga Ora Curtain Scoping Guide (M-244)* defines how Kāinga Ora staff and contractors will achieve the desired outcome in terms of thermal curtains and the associated tracks to habitable room windows of its existing properties.

This guide shall be used for the supply and installation of all curtains to all Kāinga Ora programmes – i.e. Void properties, Planned Works Programmes and Maintenance works.

4.2 Scoping outline

<table>
<tr><th>No.</th><th colspan="2">Item (Void Scoping Guide (M-219) Item Reference Shown)</th></tr>
<tr><td rowspan="3">1.</td><td>Curtains

Ensure procured curtains and tracks are fitted and complete in accordance with the Kāinga Ora Method of Measurement (M-216) to all habitable rooms – i.e. Living room, dining room and bedrooms only.

Kitchens, bathrooms, toilets and laundries are to be excluded.

Please note: for any rooms not identified, stairs and hallway windows may be included at the Contractors discretion; note that stairwells shall be excluded if they cannot be reached by standing on the floor.</td><td>Job Code/s
For Vacant Properties Use CHM260 – 270

For Tenanted Properties Use CHM275 – 280

Removal Codes CHM294 -296</td></tr>
<tr><td>All works are to be undertaken by the nominated supplier.

Remove existing non-procured curtains and tracks if required.

Please note: refer to clause 3.6 of the Kāinga Ora Curtain Scoping Guide M-244 prior to removal and new curtains for tenanted properties.</td><td>ACM
55.12</td></tr>
<tr><td>Codes are available to maintain existing curtains:

KCH505 – Curtain Wash | CHM290 – Repair Curtain Track | CAA100 & 200 – Other Repairs

Refer to 4.4 Scoping Outline/Requirements for BUY-IN situations.</td><td>MPWS
5530L</td></tr>
</table>

4.3 Scoping requirements and associated scoping notes

1. **Habitable Rooms** – These include the living room, dining room and bedrooms, service rooms are excluded. For rooms not nominated, stairs and hallway windows may be included at the Contractors discretion; please note stairs shall be excluded if they cannot be reached.

2. **New Works** – For habitable rooms of properties where there are no curtains or track, the Contractor is to scope for the supply and installation of new thermal curtains and track in accordance with the Kāinga Ora Maintenance & Programmed Work Specification (M-215), Kāinga Ora Building Materials Procurement Schedule (M-217) and associated Job Codes, product specifications and nominated supplier data sheets.

3. **Nominated Subcontractor** – All work is to be undertaken by the nominated subcontractor (including curtain track, curtains, fixings and hanging).

4. **Scoping** - Main contractors may be required to do the scoping on behalf of the nominated subcontractor. All scoping shall be undertaken in accordance with the nominated subcontractor scoping process chart and instructions – refer to Kāinga Ora Curtain Measurement sheet – October 2019.

5. **Curtain Track** – All new curtains shall have new, procured track installed unless an acceptable track is currently in place. A non-procured track is acceptable if it meets the required overhang and surface-mount standards, and if that track is functional for the new curtains. Functional is defined as face-fixed tracks that are complete with the required number of freely-moving glides and both end caps. A repair code is available for repairs to tracks.

6. **Pelmets** – Any existing pelmets with complete tops and functional tracks are to be retained wherever possible. Pelmets shall be retained even if this means the required overhang cannot be achieved. New track may be top-fixed where they are being used under a pelmet.

7. **Existing Curtains** – Any existing tenant- supplied or non-procurement curtains, nets, blinds and track or drapes are to be removed. For apartments check with Kāinga Ora contact before removing blinds and track. Kāinga Ora recommends to Contractors that if these are in good condition, they be returned to the tenant (if the house is tenanted), dispose of these curtains.

   Please note – Refer to clause 3.6 Tenant decisions of the Kāinga Ora Curtain Scoping Guide M-244 prior to the removal of blinds and curtains in tenanted properties.

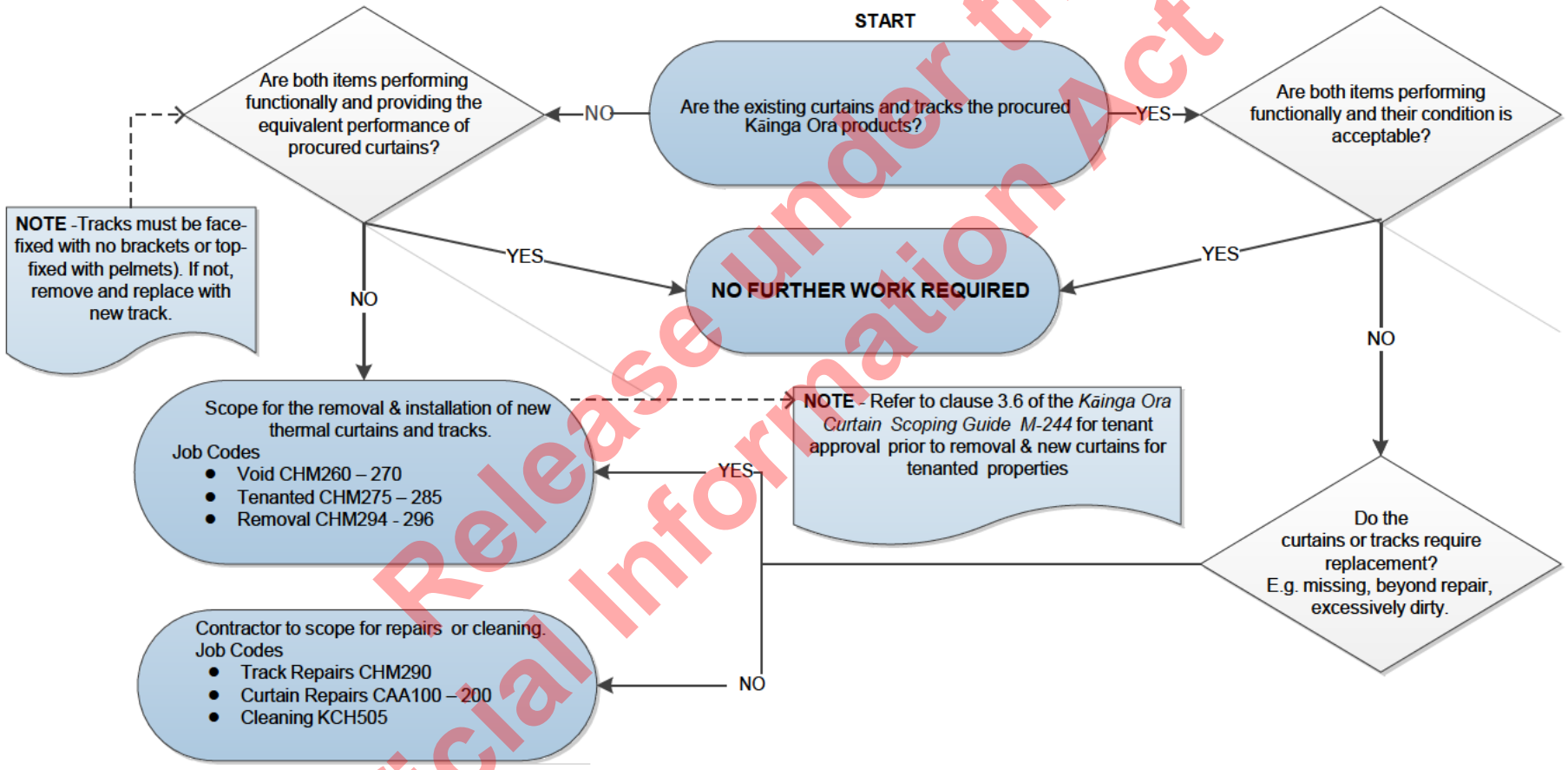
8. **Dirty Curtains** – Any acceptable Kāinga Ora-approved thermal curtains that are considered particularly dirty or mouldy shall be scoped for replacement and referred to the Kāinga Ora Project contact for approval, prior to undertaking the works.

9. **Contractor Concerns** – Contractors are to raise any issues or concerns regarding the application of these scoping guidelines to any property, with the Kāinga Ora Planned Programmes Project Manger for clarification
10. **Cleaning Curtains** – Codes are available to clean curtains.
11. **Damaged Curtains –** All acceptable Kāinga Ora-approved thermal curtains that are significantly damaged and/or torn shall be scoped for replacement and referred to the Kāinga Ora Project contact for approval, prior to undertaking the works.

    Please note – Damage flag D should be utilized on scope sheet for these instances.

4.4 Scoping outline / requirements

Kāinga Ora Curtain Scoping Flowchart



4.5 Nominated sub-contractor / supplier details

The following nominated sub-contractor is to be used by the PBMC to undertake the complete scoping, supply, installation and certification of these nominated items:

Kāinga Ora Nominated sub-contractor / supplier	
Curtains	
Harvey's Furnishings Ltd 9(2)(a)	Harvey's Furnishings Ltd 9(2)(a)

5. Records

Retain all records within Kāinga Ora's records system - refer 'Records retention and disposal' (R-105).

6. Version control

Details of previous versions are stored in Kāinga Ora's document management system (Objective). Refer to header and footer information for reference document elements or f or any queries contact Atamai@kaingaora.govt.nz.

Appendix

The following appended template has been produced for the population of certain curtain requirements/features by the Contractor, so that the curtain manufacturer can produce the curtains to suit –

- Kāinga Ora Curtain Measurement Sheet – October 2019.

Kāinga Ora Curtain Measurement Sheet - Version October 2019

Contractor: _____ **Scoper:** _____

Address: _____ **Phone:** _____

Contact: _____ ***Please circle: VACANT / TENANTED*** **Job Number:** _____

Location	Window Width	Window Height	Restrictions Left	Restrictions Right	Track Reqd Yes / No	Number of Curtains	Flooring Type Carpet/Vinyl	PELMET Y / N	TOPFIX Y / N	OTHER COMMENTS

Location:

LI1, lounge one
LI2, lounge two
LI3, lounge three
D1, Dining room one
D2, Dining room two

- Any other rooms - note as Hall or Entrance etc
- if more than one curtain in lounge repeat LI1 for all windows
- if more than one lounge LI2 for each window in second lounge
- if more than one curtain in Bedroom repeat B1 for all windows

B1, Bedroom one
B2, Bedroom two
B3, Bedroom three

Only window measurements required - all additional calculations done by Harvey Furnishings
Important to note on ALL FULL drop measurements - note the floor covering type - this alters the calculations.

Housing New Zealand
Housing New Zealand Corporation

Heating Scoping Guide: M-245

FOR THE 2018-19 FINANCIAL YEAR ONLY

For existing Housing New Zealand Properties

Effective from 1 July 2018

VERSION 5

Note :

Changes since last edition shown in brown.

All previous Scoping Guides, Specifications and drawings are superseded.

Heating Scoping Guide 2018-19 M-245

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Document Control		
Document Name	**Heating Scoping Guide** – for Housing New Zealand properties for 2017/18 financial year	
Housing New Zealand Business Unit	People and Property – Standards Team	
Author/s	John Duncan	Position: Standards Advisor
Version No.	5	Status : Current
Issue Date	1 July 2018	
Peer Reviewer/s and Sections Reviewed	Lisa Sosich	Standards Advisor
	Maintenance Documentation Consultation Group	
Final Approved By	Renelle Gronert	Manager Standards
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments:	Notes: Formatting changes to the Scoping Table, Zone Tables and Nominated Contractor/Supplier Details.	Sections: Sections: 5.1 and 5.2 have been swapped so that the Zone Map is before the Zone tables. Section 6.1 (4) additional note added in regards to gas heater replacement.

1. Introduction

Housing New Zealand's role is to provide warm, dry and safe fit-for-purpose housing for people in need, for the duration of their need.

2. Purpose

This Scoping Guide is specifically designed to provide guidance for Contractors in compiling a site specific scope of works for closing off existing open fireplaces and reviewing and upgrading existing heating source works where required. These works are designed for selected Housing New Zealand properties to achieve compliance with the *Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (including 2011 Amendments)*.

The scoping guide provides for a range of component items and actions and their associated rates. The Contractor must select the appropriate items and actions from this range that are required in the circumstances (specific to the property and programme), to complete a scope that will be submitted to Housing New Zealand for approval. Where relevant, the scoping guide may also indicate component items and actions that are not to be included in a Scope.

3. General guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in scoping activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works. The Persons Conducting Business or Undertaking (PCBUs) Housing New Zealand and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of the work package.

Please note – Any Health and Safety issue requiring immediate response should be removed from this scope and treated as a separate urgent (URG) works order. These are to be advised to the Housing New Zealand Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Cost-effective solutions

Where there is an option to either repair or replace a component or item, the Contractor must identify where full replacement of the item is more cost-effective than repairing it, and propose replacement as part of the scope. These proposed replacements shall be agreed with the

Housing New Zealand representative and included in the approved scope before replacement is undertaken. If the proposed solution may also affect scopes for other work programmes, details should be forwarded to Housing New Zealand for consideration.

3.3 Supporting documentation

This *Heating Scoping Guide (M-245)* should be read in conjunction with other Housing New Zealand PBMC Reference Material. Current versions of the following documents will provide valuable information and context to assist the Contractor in completing and submitting appropriate and accurate scopes. All Scopers, Contractors, Tradesmen and associated parties are to have copies and/or immediate access to all this information on site and are to be working strictly in accordance with those instructions.

Reference Material	Purpose
Housing New Zealand Amenity Condition Manual (ACM-200)	Provides guidance on what Housing New Zealand determines is an acceptable or unacceptable condition for specific componentry of a property.
Housing New Zealand Supplier Code of Conduct (Unique document code to be confirmed)	Provides Housing New Zealand expectations with regard to behaviour and conduct while on site.
Housing New Zealand Asbestos Management & Control Policy (HS-213)	Provides Housing New Zealand expectations with regard to the safe management and control of asbestos which is a hazardous material.
Housing New Zealand Lead-based Paint Management & Control Policy (HS-214)	Provides Housing New Zealand expectations with regard to the safe management and control of lead based paint which is a hazardous material.
Housing New Zealand Maintenance & Programmed Work Specification (M-215)	Provides a detailed description on a trade basis, of how the relevant work must be undertaken.
Housing New Zealand Method of Measurement (M-216v8) (included in the Housing New Zealand Schedule of Rates).	Provides instruction on how specific property features are to be measured. The Method of Measurement is particularly relevant to scoping as it defines how to measure the quantity of specific material and/or quantum of work required under a specific Work Order.
Housing New Zealand Building Materials Procurement Schedule (M-217)	Provides a full list of the materials, products and their costs that Housing New Zealand procures under a national supplier agreement and which must be used when undertaking the relevant work.
Housing New Zealand Schedule of Rates (M-218) – plus related Rates Build Up Schedule.	Provides a description of a particular maintenance activity and cost. Also a guide to the breakdown of the cost inputs, including labour and material inputs.
Housing Zealand Gas Conversions	Provides guidance for Contractors in compiling a site

Reference Material	Purpose
Scoping Guide (M-259)	specific scope of works for the conversion of existing gas appliances and fittings to their electric equivalent properties.
Tenant and Contractor Agreement Form (M-323)	This form confirms the process for achieving tenant agreement for the Contractor to work on the property and to use certain facilities.

3.4 Tenant decisions

Heating interventions should be included in the Scope **ONLY** if they are agreed to by the tenant. The heating amenity items (provision of acceptable heating solutions, including closing off of open fireplaces where required) require tenant approval or declined confirmation on the *Tenant and Contractor Agreement Form (M–323)*.

Please note – where the tenant declines any or all of these interventions the reasons for declining shall be stated on the *Tenant and Contractor Agreement Form (M–323)* before it's returned to the Planned Programmes Team.

3.5 Housing New Zealand contact details

Any questions regarding Voids are to be addressed to the relevant Housing New Zealand representative and for any questions regarding the Warm and Dry programme refer to the Planned Programmes Team:

Email: planned.programmes@hnzc.co.nz

3.6 Housing New Zealand internal process

Many teams in Housing New Zealand are involved in the Planned Programmes process. The primary roles involved are:

- **Asset / Portfolio Manager** – Confirm property inclusion in the programme.
- **Planned Programmes Team** – This team receives the scoped work order from the Contractor and reviews it to see that the Contractor has achieved the requirements of this *Housing New Zealand Heating Scoping Guide (M-245)*, before authorising. They check appropriate use of schedule of rates, etc. They also review all variation requests from Contractors during the course of the work. This team also monitors the programme process against agreed targets.

4. Scoping for heating

4.1 Scoping outcome

Outcome

When completed these heating works items are designed to enable the nominated Housing New Zealand properties to comply with the *Resource Management (National Environmental*

Standards for Air Quality) Regulations 2004 (including 2011 Amendments) – often referred to as the *Clean Air Act*. Scoped properties will have appropriate heaters installed in their living rooms, or living-dining area where open-planned space that is in accordance with Section 5 of this document – Housing New Zealand's Acceptable Heating Solutions Guide. This will allow the tenants to more effectively and efficiently heat their properties to achieve comfortable internal temperatures that assist the health and wellbeing of its occupants.

This *Heating Scoping Guide (M-245)* defines how Housing New Zealand staff and Contractors will achieve the desired outcome in terms of existing Housing New Zealand properties. This *Heating Scoping Guide (M-245)* shall be used for the repair and/or supply and installation of new heaters to all Housing New Zealand properties – e.g. Void properties, Planned Programme and Maintenance Works.

4.2 Scoping table

No	Scoping Table	
1.	**Living Room Heating** Ensure any existing Housing New Zealand heating appliances present are fully functional and safe. A heating source must be present in the living room and be in accordance with Section 5 of this document – Housing New Zealand Acceptable Heating Solutions Guide. If the heater does not comply with that table, follow the table instructions to either repair or replace with new Housing New Zealand procured heating solution from the *Housing New Zealand Building Materials Procurement Schedule (M-217).*	**Job Code/s** EHT HOF & HSF **ACM** 85-77 **MWPS** 7701, 7673 & 7556
2.	**Fireplace Closure** Ensure all existing open fire places are to be closed off and works are completed in accordance with the *Housing New Zealand Maintenance & Programmed Work Specification (M-215* and job code i.e. includes capping the top of the chimney and boarding up of the fire place with a plywood panel.	**Job Code/s** CMS200 **ACM** 75.2 **MWPS** 3820 & 7556
3.	**Closed Up Fireplace Check** Ensure all previously boarded up fireplaces are still securely boarded up and chimney capped in accordance with the *Housing New Zealand Maintenance & Programmed Work Specification (M-215).*	**Job Code/s** CAA 100 **ACM** 75.2 **MWPS** 3820 & 7556

5. Housing New Zealand acceptable heating solutions guide

5.1 New Zealand climate zones diagram

New Zealand Building Code Climate Zones (refer to Figure B1 on page 32 of the *New Zealand Standard NZS 4218 – Thermal Insulation – Housing and Small Buildings* – copied below).

- **Zone 1** – Northern North Island – Northland to Franklin and Thames Coromandel inclusive.
- **Zone 2** – Rest of North Island but excluding Central Plateau – i.e. Ruapehu and Taupo.
- **Zone 3** – Central Plateau of North Island, plus South Island.

5.2 Housing New Zealand acceptable heating solutions guide for 2018-19 year

The existing living room heat source is to comply with the tables below which define Housing New Zealand acceptable heating solutions for the period 1 July 2018 to 30 June 2019.

Please note – These tables are to be read in conjunction with the supporting notes below.

Scoping Table of Housing New Zealand Acceptable Heating Solutions for 2018-19 Year

Zone 1	Existing Heating Type – Acceptable Solutions Key Principles
Close off any open fireplaces and replace with electric heater (where no other Housing New Zealand heater provided) for all properties within Zone 1 (please Section 5.1 for climate zones). **Retain** existing heaters where functioning. **Repair** heaters wherever cost effective. Electric heaters have a limit of $80 for repair, otherwise replace. For **other** heaters, provide a report to the Housing New Zealand representative for all major repairs over $300 for approval prior to undertaking. **Replace** non-functioning heaters with like-for-like procured heater to all properties within Zone 1 i.e. replace a heat pump with a heat pump, heater with a heater. Except for gas heaters in these cases consult with the Housing New Zealand representative.	
Electric Heater **Code/s** EHT360-370	**Acceptable** in all properties when existing is functional. **Remove** any non-functioning heater and replace with procured electric heater from the Housing New Zealand Building Materials Procurement Schedule (M-217). **When a 3.5kW electric heater is to be replaced please contact a HNZ representative.**
Open Fire **Code/s** EHT360-370 CMS200	**Not acceptable**. Close off in accordance with the Housing New Zealand Maintenance & Programmed Work Specification (M-215). **Provide** and fit procured electric heater from the Housing New Zealand Building Materials Procurement Schedule (M-217).
Heat Pump **Code/s** EHT250-550	**Acceptable** when existing heat pump is functional. Please clean filter of any existing heat pump. **Repair** PBMC to engage their subcontractor to scope for repair of faulty heat pumps. **Advise** the Housing New Zealand representative of any heat pump that requires replacement. Housing New Zealand will arrange directly with their supplier for like-for-like replacement.

Zone 1	Existing Heating Type – Acceptable Solutions Key Principles
Wood / Multi Burner Free-Standing or Insert **Code/s** HSF050	**Acceptable** when existing burner is functional. **Repair** in first instance for costs up to $300. For more expensive repairs provide remedial works report and costs as per Job Code. **Advise** the Housing New Zealand representative if any wood burner requires replacement.
Mains Connected Gas Heater **Code/s -** None	**Acceptable** when existing gas heater is functional and exhaust is externally flued. If not functional or exhaust is not externally flued refer to the Housing New Zealand Gas Conversion Scoping Guide (M-259).
No Heater Present	**Provide** and fit procured electric heater from the *Housing New Zealand Building Materials Procurement Schedule (M-217).*
All Other Situations	**Consult** with Housing New Zealand contact.

Zone 2	Existing Heating Type – Acceptable Solutions Key Principles
Close off any open fireplaces and replace with electric heater where the property has 2 or less bedrooms. For properties with more than two bedrooms consult Housing New Zealand representative (Where no other Housing New Zealand heater provided). **Retain** existing heaters where functioning. **Repair** heaters wherever cost effective. Electric heaters have a limit of $80 for repair, otherwise replace. For **other** heaters, provide a report to the Housing New Zealand representative for all major repairs over $300 for approval prior to undertaking. **Replace** non-functioning heaters with like-for-like procured heater to all properties within Zone 2. i.e. replace a heat pump with a heat pump, heater with a heater. Except for gas heaters in these cases consult with the Housing New Zealand contact **Advise** Housing New Zealand representative of any heat pump that requires replacement. Housing New Zealand will arrange replacement directly with their supplier.	
Electric Heater **Code/s** EHT360-370	**Acceptable** only where the property has 2 or less bedrooms and when existing is functional. **Remove** any non-functioning fan/panel heater and replace with procured convection fan heater for properties with 2 or less bedrooms. **Consult** with Housing New Zealand representative for preferred solution for properties with 3 or more bedrooms or when a 3.5kW electric heater is required.

Zone 2	Existing Heating Type – Acceptable Solutions Key Principles
Open Fire **Code/s** EHT360-370 CMS200	**Not acceptable.** Close off in accordance with Housing New Zealand Maintenance & Programmed Work Specification (M-215). **Provide** and fit procured electric heater for properties with 2 or less bedrooms. **Consult** with Housing New Zealand representative for preferred solution for properties with 3 or more bedrooms.
Heat Pump **Code/s** EHT250-550	**Acceptable** when existing heat pump is functional. Clean filter of any existing heat pump. **Repair** in first instance for costs up to $300. Where repairs will exceed this provide remedial works report & costs as per Job Code. **Advise** the Housing New Zealand representative of any heat pump that requires replacement. Housing New Zealand will arrange directly with their supplier for like-for-like replacement.
Wood / Multi Burner Free-Standing or Insert **Code/s** HSF050	**Acceptable** when existing burner is functional. **Repair** in first instance for costs up to $300. Where repairs will exceed this provide remedial works report and costs as per Job Code. **Advise** the Housing New Zealand representative if any wood burner requires replacement.
Mains Connected Gas Heater **Code/s -** None	**Acceptable** when existing gas heater is functional and exhaust is externally flued. If not functional or exhaust is not externally flued refer to the *Housing New Zealand Gas Conversion Scoping Guide (M-259).*
No Heater Present **Codes** EHT360-370 TBA	**Provide** and fit procured heater in properties with 2 or less bedrooms. **Consult** with Housing New Zealand representative for preferred solution for 3 bedroom and larger properties.
All Other Situations	**Consult** with Housing New Zealand representative.

Zone 3	Existing Heating Type – Acceptable Solutions Key Principles
Close off any open fireplaces and consult the Housing New Zealand representative for solution. (Where no other Housing New Zealand heater provided). **Retain** existing heaters where functioning. **Repair** heaters wherever cost effective. Provide report to the Housing New Zealand representative for all major repairs over $300 for approval prior to undertaking. **Replace** all non- functioning heaters with procured like-for-like heater for all properties within Zone 3. Except for gas heaters – consult with the Housing New Zealand representative. **Advise** Housing New Zealand representative of any heat pump that requires replacement. Housing New Zealand will arrange replacement directly with their supplier. **FTS Definition** – (Flat single storey) A single storey building comprised of four Lettable units joined together sharing the same structure e.g. roof line.	
Electric Heater **Code/s** EHT360-370	**Acceptable** only for studio and 1 bedroom FTS properties when existing is functional. **Remove** non-functioning electric heater with procured electric heater for studio and 1 bedroom FTS properties. **Consult** with Housing New Zealand representative for properties with 2 or more bedrooms or when a 3.5kW electric heater is required.
Open Fire **Code/s** CMS200 EHT360-370	**Not acceptable.** Close off in accordance with Housing New Zealand Maintenance & Programmed Work Specification (M-215). **Provide** and fit procured electric heater for studio and 1 bedroom FTS properties. For heater replacement to larger properties consult with Housing New Zealand representative.
Heat Pump **Code/s** EHT250-550	**Acceptable** when existing heat pump is functional. Clean filter of any existing heat pump. **Repair** PBMC to engage their subcontractor to scope for repair of faulty heat pumps. **Advise** the Housing New Zealand representative of any heat pump that requires replacement. Housing New Zealand will arrange replacement directly with their supplier for like-for-like replacement.
Wood / Multi Burner Free-Standing or Insert **Code/s** HSF050	**Acceptable** when existing burner is functional. **Repair** in first instance for costs up to $300. Where repairs exceed this, provide remedial works report and costs as per Job Code. **Advise** the Housing New Zealand representative if any wood burner requires replacement.
Mains Connected Gas Heater	Not available.

Zone 3	Existing Heating Type – Acceptable Solutions Key Principles
No Heater Present	**Consult** with Housing New Zealand representative.
All Other Situations	**Consult** with Housing New Zealand representative.

6. Supporting scoping notes

The scoper shall apply the principles to achieve the appropriate works order and heating solution:

6.1 General heating principles

1. All properties must have at least one heating source located in the living room that complies with Table 5.1 above.

   Please note – Housing New Zealand policy is to heat the living room only. All heating solutions are designed around this premise. Additional or upgraded heating may be requested but are approved at the discretion of the Housing New Zealand contact.

2. Any new heating source is to be supplied strictly in accordance with Section 5 of this document – Housing New Zealand Acceptable Heating Solutions Guide.

   Please note – any exception needs approval by the Housing New Zealand representative. They may also make changes from this *Heating Scoping Guide (M-245)* on a case by base basis for specific properties or tenancies.

3. General principles as follows – Any existing functional heaters shall be retained, apart from open fireplaces which shall be closed off. Repair existing heater when ever it is cost effective (i.e. less than $300). Replace heater when repair is not cost effective in accordance with Housing New Zealand representative's advice. Remove old heater. Recycle where ever possible.

4. Housing New Zealand preference is to replace "like-for-like" – i.e. replace electric for electric, wood-burner for wood-burner, ~~gas for gas~~ unless otherwise noted by Scoping Tables. Exception is for gas fittings – consult with Housing New Zealand representative.

   Please note – any replacement of an existing heat pump, wood burner or gas heater (gas heaters are not to be replaced with gas, an alternative will need to be selected) will require approval by Housing New Zealand Representative. "Like-for- like" replacement refers to type and does not necessarily mean the same model or brand – refer to latest *New Zealand Building Materials Procurement Schedule (M-217)*.

   All works to be undertaken strictly in accordance with the current *Housing New Zealand Maintenance & Programmed Work Specification (M-215)* and the current *New Zealand Building Materials Procurement Schedule (M-217)*.

5. When scopers encounter any mains supplied **un-flued** gas heaters they shall advise the Housing New Zealand representative for possible replacement.

6. The tenant must have an operational Housing New Zealand acceptable heater at all times so if a replacement solid fuel burner or insert is to be provided, the existing fireplace and chimney must not be closed off until the new heat source is operational.
7. **Repairs** – Before any heat pump, wood burner or gas heater replacement is undertaken, repairs to existing heaters should be scoped by an accredited person on the Scope sheet. The full cost for the repairs shall be provided to the Housing New Zealand representative, along with a cost estimate for full removal and replacement with new procured item for comparison.

   When such repair or replacement heating solution is proposed by the scope, the Housing New Zealand representative must give approval before the recommended repairs or new heater works are undertaken.

   Please note – repairs to any faulty electric heaters (excluding heat pumps) should not be considered over a capped limit of $80 as it is more effective to replace than repair when not functioning.

6.2 Electric heaters

1. All acceptable electrical heating solutions must be securely wall fixed and hard wired (permanently fitted, rather than plugged in). Include separate circuit and 20A MCB as per the *Housing New Zealand Maintenance & Programmed Work Specification (M-215)* Section 7701 – Electrical. Locate on interior wall wherever possible.
2. Any electric heater with rating less than 2.0kw shall be replaced with procured electric heater.

6.3 Heat pump

1. When an existing heat pump is considered uneconomic to repair, the PBMC is to advise the Housing New Zealand representative that a new heat pump is required and that the Housing New Zealand representative will arrange for the new heat pump installation separate to the PBMC Scope.
2. Any new or replacement heat pumps are to be scoped, supplied and installed strictly in accordance with the *Housing New Zealand Maintenance & Programmed Work Specification (M-215)* and the *New Zealand Building Code* **by the nominated contractor**.
3. **Repair of heat pumps** – PBMC shall seek repair quote from their local service provider and submit major repairs over $300 on works order to the Housing New Zealand representative, who will provide approval confirmation prior to repair or replacement being undertaken.

6.4 Open fireplaces and wood burners

1. All new wood-burners and/or inserts are to be scoped, supplied and installed strictly in accordance with the Housing New Zealand Maintenance & Programmed Work Specification (M-215), New Zealand Building Code and local Territorial Authority regulations. All new installations to be approved by the Housing New Zealand representative prior to installation. Housing New Zealand's preference is for any new inserts to utilise existing chimney flue and hearth where ever possible.

2. All open fire places are to be closed off at both hearth and chimney top (refer Job Code CMS200) for all regions in New Zealand. Any removed fireplace must be replaced by an approved alternate heating solution, prior to close off. This work shall be co-ordinated to ensure no property has a fireplace closed off before the new heating solution is fitted and operational. Tenants require an operational and approved heating source available at all times.

3. Any new fireplace insert or free standing wood burner is to comply with current local Territorial Authority requirements for consents, installation and achieve the *Resource Management (National Environmental Standards for Air Quality) Regulations 2004 (including 2011 Amendments)*. Contractor to provide all consents, fees, etc. Refer to the *Housing New Zealand Maintenance & Programmed Work Specification (M-215)*.

   Please note – utilise the procured wood burner to all areas including West Coast – i.e. no multi-burners to be installed by the Housing New Zealand.

4. Use only the procured wood burners and respective Job Codes.

   Please note – large wood-burner (HSF320) shall only be used in large Community Group Housing with approval from the Housing New Zealand representative.

5. As any open fireplace is not acceptable within any property, either close off in accordance with the Housing New Zealand Maintenance & Programmed Work Specification (M-215) and Job Code CMS200 – at bottom with ply panel and at top with zinc capping securely fixed and sealed, or ensure existing closure is strictly in accordance with the Housing New Zealand Maintenance & Programmed Work Specification (M-215).

   Please note – ensure zinc cap flashing extends down external chimney/flue so that it can be seen from the ground.

7. Nominated contractor / supplier details

The following nominated Housing New Zealand Supply & Install Contractors may be engaged directly by Housing New Zealand (not PBMC) for these works items:

Electric Supplies	Heat Pumps
Rexel Electrical 9(2)(a)	**Switch** 9(2)(a)
Solid Fuel Supplies	
WH Harris Ltd 9(2)(a)	**Alternative Contact -** 9(2)(a)

8. Records

Retain all records within Housing New Zealand's records system - refer 'Records retention and disposal' (R-105).

9. Version control

Details of previous versions are stored in Housing New Zealand's document management system (Objective). Refer to header and footer information for reference document elements or for any queries contact OurSpace@hnzc.co.nz.

Gas Inspections Guide: M-249

For the 2019/20 Financial Year Only

Effective from 1 October 2019
Version – 6

Kāinga Ora
Homes and Communities

Gas Inspections Guide M-249

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Document Control		
Document Name	Gas Inspection Guide – for Kāinga Ora properties for the 2019-20 financial year	
Kāinga Ora Business Unit	People and Homes – Maintenance and Upgrade	
Version No.	6	Status: Current
Issue Date	1 October 2019	
Peer Reviewer/s & Position	Natasha James	Manager, Information and Documents - Maintenance
Final Approved By	Stacey Marsh	Quality Homes Advisory team
	Monique Fouwler	National Portfolio Manager
	Angela Pearce	National Maintenance and Upgrade Manager
Amendments	Updated for Kāinga Ora. Minor formatting changes.	

For existing Kāinga Ora – Homes and Communities properties

Note:

Changes since last edition shown in orange.

All previous Scoping Guides, Specifications and drawings are superseded. Contains colour illustrations - colour printing is recommended.

1. Introduction

Kāinga Ora – Homes and Communities' role is to provide safe, healthy, fit-for-purpose and sustainable housing for people in need, for the duration of their need.

2. Purpose

Kāinga Ora have approximately 7,000 properties that include at least one gas appliance, either a gas stove, hob, space heater or water heater (HWC) which can be either storage or instantaneous. Some properties may have more than one such appliance, e.g. they may have a gas oven or hobs, and/or a gas water heater and/or a space heater.

All these properties are now to be inspected on an annual basis. These Gas Inspections are designed to ensure any gas appliance, as well as the whole gas service installation including pipework and associated fittings, within the nominated properties will be certified annually in accordance with *New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations.*

As stated in *New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations, a 'Certificate of Verification'* for each property is the required outcome to ensure that the gas appliances, pipework and fittings are deemed safe, as defined by that Standard, for that property.

This *Kāinga Ora Gas Inspection Guide (M-249)* defines how Kāinga Ora staff and their external partners, the PBMC contractors and their sub-contractors and certified verifiers will achieve that outcome for Kāinga Ora properties. This guide defines the work items required to be undertaken as routine maintenance and the process for issuing any appropriate work orders to undertake those work items.

This *Kāinga Ora Gas Inspection Guide (M-249)* now supersedes how gas inspections are undertaken in other programmes and works, e.g. the Void Scope.

Please note: replacement of any unsafe gas appliance shall be undertaken under the *Kāinga Ora Gas Conversion Scoping Guide (M-259),* which details the replacement of any gas appliance with the new electric equivalent.

3. General guidance

This section provides general guidance notes for the Contractor to ensure the property will achieve the appropriate outcome.

3.1 Health and Safety

At all times while the worker is involved in inspection activities, they must operate and comply with a work management system that meets all applicable legislative requirements, manages the work and related risks that exist, or will be created as part of scoping works.

The Persons Conducting Business or Undertaking (PCBUs) Kāinga Ora and the Performance Based Maintenance Contractors (PBMC) have an overlapping duty to eliminate or minimise risks to workers and other persons. In meeting health and safety duties the PCBUs will, as far as reasonably practicable, consult, cooperate and coordinate their activities.

Hazard assessment, surveys or investigations attributed to the works being scoped, should identify as part of this process, those activities that have the potential to cause injury or illness to workers, tenants or others, so that controls can be identified as part of any future work packages.

Please note: any Health and Safety issue, identified from the Gas Inspection, requiring immediate response should be removed from this scope and treated as a separate Urgent Health & Safety (URG) works order. These are to be advised to the Kāinga Ora Customer Services Centre on Ph. 0800 888 455 for Monday to Friday 8am-5pm or 0800 801 601 for outside those hours.

3.2 Supporting documentation

This Kāinga Ora Gas Inspection Guide (M-249) is meant to work in conjunction with other Kāinga Ora PBMC Contract Reference Material. Current versions of the following Reference Material Documents will provide valuable information and context to assist the Contractor in completing the inspection. All Contractors' should have access to copies of current versions of all the above Reference Materials when undertaking inspections on site.

Reference Material	Purpose
Kāinga Ora Amenity Condition Manual (ACM-200)	Provides guidance on what Kāinga Ora determines is an acceptable or unacceptable condition for specific componentry of a property.
Kāinga Ora Supplier Code of Conduct (M-360)	Provides Kāinga Ora expectations with regard to behaviour and conduct while on site.
Kāinga Ora Asbestos Management & Control Policy (HS-213)	Provides Kāinga Ora expectations with regard to the safe management and control of asbestos which is a hazardous material.
Kāinga Ora Lead- based Paint Management & Control Policy (HS-214)	Provides Kāinga Ora expectations with regard to the safe management and control of lead based paint which is a hazardous material.
Kāinga Ora Maintenance & Programmed Work Specification (M-215)	Provides a detailed description on a trade basis, of how the relevant work must be undertaken.

Kāinga Ora Method of Measurement (M-216) (included in the Kāinga Ora Schedule of Rates).	Provides instruction on how specific property features are to be measured. The Method of Measurement is particularly relevant to scoping as it defines how to measure the quantity of specific material and/or quantum of work required under a specific Work Order.
Kāinga Ora Schedule of Rates (M-218)	Provides a description of a particular maintenance activity and cost.
Kāinga Ora Building Materials Procurement Schedule (M-217)	Provides a full list of the materials, products and their costs that Kāinga Ora procures under a national supplier agreement and which must be used when undertaking the relevant work.
Kāinga Ora Gas Conversion Scoping Guide (M- 259)	Provides guidance for contractors in compiling a site specific scope of works for the conversion of existing gas appliances and fittings to their electric equivalent properties.
Kāinga Ora Property Gas Inspection – Certificate of Verification (COV) Form	Provides a list of items that require checking as part of the Gas Inspection. The Contractor shall complete these forms and hold in records for Kāinga Ora access when requested.

3.3 Kāinga Ora contact details

For any questions regarding this document please email the Kāinga Ora Maintenance Regional Manager.

4. Inspections and associated works

All nominated items listed in the following sections of this document shall be undertaken within this Gas Inspection and the appropriate work orders created.

4.1 Kāinga Ora gas inspections

All properties nominated by Kāinga Ora for this Routine Works Gas Inspection Works Order are to have all their gas appliances, pipework and associated fittings inspected, any non- compliant, Health and Safety works and associated maintenance works undertaken and a '*Certificate of Verification'* form issued for that property (refer to the Appendix for a copy of the '*Certificate of Verification'* form).

All inspection and associated compliance works are to be undertaken by a qualified 'Competent Person' and/or 'Verifier' (as defined by that Standard) in accordance with *New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations.*

Upon completion of this Gas Inspection all appliances are to be either complaint, or a Urgent Responsive (URS) work order created to identify and undertake any works required for all

appliances, pipework and fittings to be made complaint (refer to section 4.2 for more detailed clarification).

Please note:

1. *Kāinga Ora Schedule of Rates (M-218)* Job Code SMS050 'Gas Whole House – Inspection & Report' shall be used for the annual routine gas inspection. This Job Code includes completion of the *'Certificate of Verification'* in accordance with *New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations*.
2. No other Kāinga Ora Schedule of Rates (M-218) Job Codes apart from following are to be added to the Routine Gas Inspection works order.
3. Upon completion of the inspection the applicable codes from the table below are to be updated in the WO.

SOR Code Description	SOR Code
Instruction: Identify Gas System *(Select one of three options)*	
Gas System - Natural - Connected	AGS100
Gas System - Natural - Disconnected	AGS101
Gas System - LPG	AGS200
Instruction: Identify Pipe Material (Select one of three option)	
Pipe Material – Galvanised Steel	AGP100
Pipe Material – Copper	AGP101
Pipe Material – Others (e.g. PVC)	AGP102
Instruction: Identify Heating System *(If gas system chose the SOR with correct condition code, otherwise select the relevant heating source)*	
Form of Heating 1 - Heater - Gas - Good	AGH010
Form of Heating 1 - Heater - Gas - Average	AGH011
Form of Heating 1 - Heater - Gas - Poor	AGH012
Form of Heating 1 - Heat Pump	AGH020
Form of Heating 1 - Panel Heater - Electric	AGH030
Form of Heating 1 - Open Fire	AGH040
Form of Heating 1 - Pellet Burner	AGH050
Form of Heating 1 - Solid Fuel Burner	AGH060
Form of Heating 1 - Other	AGH070

Instruction: Identify Water Heating System *(If gas system confirm if HWC or Infinity system and chose the SOR with correct condition code)*	
Hot Water Delivery - Gas HWC - Good	AGW010
Hot Water Delivery - Gas HWC - Average	AGW011
Hot Water Delivery - Gas HWC - Poor	AGW012
Hot Water Delivery - Gas Continuous Flow - Good	AGW020
Hot Water Delivery - Gas Continuous Flow - Average	AGW021
Hot Water Delivery - Gas Continuous Flow - Poor	AGW022
Hot Water Delivery - Electric	AGW030
Instruction: Identify Means of Cooking *(If gas system confirm chose the SOR with correct condition code. Otherwise select the relevant cooking means.* ***Please note –*** *More than 1 code acceptable if required - elect means of cooking 2 where applicable)*	
Means Of Cooking 1 - Stove Gas - Good	AGC110
Means Of Cooking 1 - Stove Gas - Average	AGC111
Means Of Cooking 1 - Stove Gas - Poor	AGC112
Means Of Cooking 1 - Hob Gas - Good	AGC120
Means Of Cooking 1 - Hob Gas - Average	AGC121
Means Of Cooking 1 - Hob Gas - Poor	AGC122
Means Of Cooking 1 - Hob Electric	AGC130
Means Of Cooking 1 - Stove Electric	AGC140
Means Of Cooking 2 - Oven Gas - Good	AGC210
Means Of Cooking 2 - Oven Gas - Average	AGC211
Means Of Cooking 2 - Oven Gas - Poor	AGC212

4. Any additional works and parts required (e.g. missing knobs, switch etc.) shall be submitted as a separate URS work order.

5. All nominated properties are to have these verification forms undertaken. Absence of any work required to a property does not mean verification forms shall not be prepared.

6. If scoping for a buy-in property with gas appliances please request for a separate WO to be issued by email request through to gas.reports@kaingaora.govt.nz. Upon completion please email a copy of COV to gas.reports@kaingaora.govt.nz.

4.2 Remedial works required

1. **Unsafe appliances:** at the time of inspection if any appliance is in such a condition that it imposes an immediate Health & Safety risk then a replacement is to be provided. This work is to be undertaken in accordance with the *Kāinga Ora Gas Conversion Scoping Guide (M-259)*.

   Please note: any unsafe gas appliance *(as defined by the New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations)* shall be disconnected and removed while ordering a replacement. Contractors are to ensure that tenants have alternate temporary arrangements in place at all times.

2. **Unsafe gas pipework or fitting works:** at the time of inspection, any gas pipework or fitting (but not appliances) deemed unsafe or non compliant *(as defined by the New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations),* is to be immediately repaired and/or replaced. Refer notes below re URS works order.

The relevant Job Codes to undertake any of these items shall not be added to the Gas Inspection work order but included in a URS work order. Wherever possible complete these works during the inspection. Ring the CHUR Line (phone 0800-888-455) to request a URS work order (invoicing only) to be issued for those completed works.

If the Verifier considers the works cannot be done at the same time as the inspection ring the CHUR line to request a URS work order for those works, including their repair or replacement.

Please note: contractors can apply for an Extension of Time (EoT) to allow for ordering, delivery of appliances and/or replacement parts.

4.3 Additional Health and Safety checks

During the Gas Inspection the following gas related items shall also be included for review and their repair or replacement, if found deficient or defective –

1. Gas stove has anti-tip device fitted;
2. The hot water outlet closest to the HWC is between 45 and 50 degrees Celsius;
3. Gas space heater is securely fixed to wall;
4. When an internal flue is found to a gas space heater, this is to be noted as ‘AGH012 - Form of Heating 1 - Panel Heater - Gas - Poor’ and the Kāinga Ora representative will arrange replacement via the Gas Conversions programme.

Please note: the relevant Job Codes for these additional Health & Safety items shall be telephoned through to the CHUR line, which will let a URS work order. If any other Health and Safety issue is discovered on site that requires a different tradesman to complete the works (e.g. an electrical to repair a faulty switched socket) then the work request shall also be telephoned through to the CHUR line (phone 0800-888-455) for the URS job to be let.

4.4 Certificate of verification

Following inspection and completion of any works as identified above, the PBMC Contractors Verifier shall complete the individual property 'Certificate of Verification' form (Refer to Appendix - *Kāinga Ora Property Gas Inspection – Certificate of Verification*) of the inspection results and any associated works undertaken, for all properties.

Naming Convention for Certificate of Verification: "COV *YEAR - Asset Number – Address*".

Example: COV 2017 - HSS0017225 - 1 LARSEN ST OTARA MANUKAU 2025.

These completed forms shall be held in the PBMC Contractors records ready for access by Kāinga Ora when required.

4.5 Letters to affected tenants

The PBMC Contractors shall send an advisory letter to each affected Kāinga Ora tenant a minimum 14 days prior to undertaking these inspections. That letter shall be on the PMBC Contractor's company letterhead and signed by the Contractors Contracts manager. Any arrangement for access is by consent between the Tenant and Contractor.

The letter shall be on the format as shown in the Appendix (Gas appliance inspections in your home) advising the tenant the PBMC Contractor will be undertaking the gas inspections to that property. The PBMC Contractor shall keep a record of the date these letters were sent to tenants.

5. Gas inspection requirements

Qualified Contractors and Verifiers (as defined by New Zealand Standard NZS 5255:2014 Safety Verification of Existing Gas Installations) are to inspect all gas appliances, including the gas stove, hobs, water heater or space heater, associated gas pipework and fittings included in the property for the various works items, as identified by the above sections.

A *Kāinga Ora Property Gas Inspection – Certificate of Verification Form* (please refer to the Appendix for a copy) is to be provided for every property nominated on the lists.

6. Gas inspection process

The annual Routine Maintenance work orders for Gas Inspections will be bulk let. Contractors are expected to manage the current year and subsequent year's annual inspections from the date of the last inspection. Annual inspections are to be carried out within one month of the last annual inspection.

All Kāinga Ora properties lists will be sent by Kāinga Ora for the forthcoming financial year for each Contractor prior to issue of work orders. The Contractors shall plan their works so that all works are undertaken within the required timeframe.

If a property has become void within 3 months of the next planned annual inspection, complete the annual inspection concurrently with VSC work using the WO issued or request for one to be issued by emailing the Kāinga Ora representative (gas.reports@kaingaora.govt.nz).

Please note: if a nominated property is found not to have gas fittings or meter, this is to be advised to the Kāinga Ora representative (gas.reports@kaingaora.govt.nz) and a futile call charge applied.

If the contractor cannot gain access to property after two attempts, **do not** cancel the works order but contact your local Kāinga Ora representative who will arrange access.

7. Kāinga Ora nominated product and supplier details

Any replacement gas parts are to be supplied strictly in accordance with the Kāinga Ora *Kāinga Ora Building Materials Procurement Schedule (M-217).* The following document provides the nominated procured suppliers' product image sheets for the Kāinga Ora procured products to be utilised.

- *Plumbing World Product Images July 2019 (M-235)* – for gas parts replacement.

8. Records

Retain all records within Kāinga Ora's records system - refer 'Records retention and disposal' (R-105).

9. Version control

Details of previous versions are stored in Kāinga Ora's document management system (Objective). Refer to header and footer information for reference document elements or for any queries contact Atamai@kaingaora.govt.nz

Appendix

The below documents are required to be completed/reviewed as part of the Gas Inspection process.

a) ***Kāinga Ora Property Gas Inspection – Certificate of Verification Form***

The Contractor shall complete these forms and hold in records for Kāinga Ora access when requested.

b) **Letter re Gas Appliance Inspections**

The required format for the letter from the Contractor to the tenant advising them of the proposed inspection.

c) ***Gas Inspections – Tenants Questions and Answers***

For internal use – Kāinga Ora staff please refer to the Annual Gas Inspection Programme page on Atamai for the general questions and respective answers for tenants.

Kāinga Ora Property Gas Inspection – Certificate of Verification

Property ID No		**Date :**	
Property Address			
Summary of Work done at Property			
Declaration	***I hereby declare that subject to any limitations detailed above the Gas Installation or part installation as defined below, has been verified to be safe in accordance with NZS 5255:2014 and NZS 5261***		
Site Engineer name		**Verifier Name**	
Registration No.		**Registration No.**	
Signature		**Signature**	

1.0 Gas System - Test Results

Gas type	Natural / LPG	Meter type	
Duration	Minutes	Isolation valve	Pass / Fail / NA
Test Pressure	Kpa	GMS complies	Pass / Fail / NA
Loss	Kpa	Bottles Secured	Pass / Fail / NA
Working pressure	Kpa	Condensate drains	Pass / Fail / NA
Pipe work labeled	Yes / No		

Comments re further works	

2.0 Gas Space Heater - Test Results

Model		Radiant	Pass / Fail / NA
Compliant	Yes / No	Ignition	Pass / Fail / NA
Customers own	Yes / No	Working pressure	Kpa
Location		Heat Exchanger	Pass / Fail / NA
Age		Down D Diverter	Pass / Fail / NA
Flue type		FFD	Pass / Fail / NA
Flue Location		CO 2 Discharge	Pass / Fail / NA
Flue Condition	Pass / Fail / NA	General Condition	Good / Av / Poor
Terminal Condition	Pass / Fail / NA		

Comments re further works	

3.0 Gas Hot Water Heater - Test Results

Model	.....		Valves Flushed	.....	Yes / No
Compliant	.....	Yes / No	Ignition	.....	Pass / Fail / NA
Location	.....		Working pressure	.....	Kpa
Age	.....		Heat Exchanger	.....	Pass / Fail / NA
Flue type	.....		Down D Diverter	.....	Pass / Fail / NA
Flue Location	.....		FFD	.....	Pass / Fail / NA
Flue Condition	.....	Pass / Fail	CO 2 Discharge	.....	Pass / Fail / NA
Water Pressure	.....	Low /Mains	Isolation Valve	.....	Yes / No
Terminal	.....	Pass / Fail / NA	Tempering Valve	.....	Yes / No
General Condition	.....	Good / Av / Poor			

Comments re further works	

4.0 Gas Oven/Hobs - Test Results

Model	.....		Working pressure	.....	Kpa
Age	.....		Seals	.....	Pass / Fail / NA
Compliant	.....	Yes / No	FFD	.....	Pass / Fail / NA
Customers own	.....	Yes / No	Ignition Anti-	.....	Pass / Fail / NA
Location	.....		tilt Injectors	.....	Pass / Fail / NA
General Condition	.....	Good / Av / Poor	Thermostat	.....	Pass / Fail /NA
				.....	Pass / Fail / NA

Comments re further works	

(Kāinga Ora – Homes and Communities logo) **(PBMC logo)**

@(date)

@(Customer Name)
@(Address)
@.(Suburb)
@(City) @(Post code) Dear

Customer,

Gas appliance inspection in your home

As part of Kāinga Ora – Homes and Communities' ongoing commitment to providing warm, dry and healthy homes, we've been contracted by Kāinga Ora to inspect the gas appliances in your home. The appliances need to be checked to make sure they are fully functional; this is important for your safety and wellbeing.

What is going to happen?

We'll be doing this inspection, with a registered gas inspector and is separate to your annual tenancy inspection undertaken by Kāinga Ora. It may take up 2.5 hours depending on how many gas appliances are in your home.

What happens next?

We've scheduled this gas inspection to take place on:

@date, @day, @year

If the date and time (above) is not suitable, please call us on @PBMC number, as soon as you can to arrange another time.

All our contractors will have Kāinga Ora identification cards. Before you let anyone into your home, please always ask to see this card. If you are still not sure, please call Kāinga Ora on **0800 801 601**.

Questions or need more information?

If you have any questions about the gas inspection or if your home no longer has a gas appliance please also call Kāinga Ora on **0800 801 601**.

Thank you for your support and we look forward to seeing you soon.

Yours sincerely

@Name
@ PBMC Contractor Name