BUILDING COMMUNITIES NATIVE INSPECTION SERVICES INITIATIVE GUIDE

CMHC—HOME TO CANADIANS

Canada Mortgage and Housing Corporation (CMHC) is the Government of Canada's national housing agency. We help Canadians gain access to a wide choice of quality, affordable homes.

Our mortgage loan insurance program has helped many Canadians realize their dream of owning a home. We provide financial assistance to help Canadians most in need to gain access to safe, affordable housing. Through our research, we encourage innovation in housing design and technology, community planning, housing choice and finance. We also work in partnership with industry and other Team Canada members to sell Canadian products and expertise in foreign markets, thereby creating jobs for Canadians here at home.

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In everything that we do, we are helping to improve the quality of life for Canadians in communities across this country. We are helping Canadians live in safe, secure homes. CMHC is home to Canadians.

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NATIVE IN/PECTION SERVICES INITIATIVE (NISI) GUIDE

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Cette publication est aussi disponible en français sous le titre : Guide sur l'initiative des services d'inspection par les Autochtones (ISIA)

The information contained in this publication represents current research results available to CMHC, and has been reviewed by a wide spectrum of experts in the housing industry. Readers are advised to evaluate the information, materials and techniques cautiously for themselves and to consult appropriate professional resources to determine whether information, materials and techniques are suitable in their case. The drawings and text are intended as general practice guides only. Project and site-specific factors of climate, cost, esthetics and so on must be taken into consideration. Any photographs in this book are for illustration purposes only and may not necessarily represent currently accepted standards.

This research project was funded by Canada Mortgage and Housing Corporation ("CMHC"). The contents, views and editorial quality of this report are the responsibility of the authors and CMHC accepts no responsibility for them or any consequences arising from the reader's use of the information, materials and techniques described herein.

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CANADA MORTGAGE AND HOU/ING CORPORATION

When Canada Mortgage and Housing Corporation needed to develop a practical information and resource tool for First Nations technical services groups and individuals participating in the Native Inspection Services Initiative (NISI), we recognized the benefit of having it developed by First Nation technical service providers.

Through a Request for Proposals, the involvement of Southern First Nations Secretariat (SFNS), Ontario was obtained.

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/OUTHERN FIR/T NATION/ /ECRETARIAT

The Southern First Nations Secretariat was very pleased to have the opportunity to develop the Native Inspection Services Initiative (NISI) Guide. Through the hard and determined work of our staff members, we believe that a guide has been prepared that will be of great benefit to those individuals completing inspections under NISI agreements. The Staff of the Southern First Nations Secretariat would like to recognize the contribution of R.E.I.C. Consulting Limited of Aurora, Ont. and all of those individuals who took the time to complete the questionnaires regarding the NISI Guide. Your assistance in the completion of the guide was greatly appreciated.

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PREFACE

Over the years, First Nations throughout Canada have become increasingly interested in being involved in inspecting renovations and new homes in their territories.

To address this desire, CMHC developed the Native Inspection Services Initiative (NISI) in 1995, to provide greater First Nation involvement in inspections for CMHC programs and to help build First Nation inspection capacity. Building inspection capacity is an important step in improving First Nations' housing quality.

This *Guide* explains the requirements of NISI and is a reference guide to inspection for NISI Inspectors and organizations.

CMHC will continually update the *Guide* and comments and suggestions for improvement are welcome. We plan to put the *Guide* and updates to it on our Web site, at

www.cmhc-schl.gc.ca

in the near future.

Section 1

INTRODUCTION CMHC ON-REJERVE HOUJING PROGRAMJ

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CMHC ON-REJERVE HOUJING PROGRAMS

Section 1

Canada Mortgage and Housing Corporation is a federal government agency governed by the National Housing Act (NHA). The NHA sets out the programs that CMHC delivers to help Canadians meet their housing needs. CMHC has adapted some programs to meet First Nation housing needs. The programs are:

- 1. Non-Profit On-Reserve Rental Housing Program (under Section 95 of the NHA)
- 2. Loan Insurance Program: Homeownership On-Reserve (under Section 10 of the NHA)
- 3. Loan Insurance Program: Rental On-Reserve (Section 10)
- 4. Residential Rehabilitation Assistance Program (RRAP) On-Reserve
- 5. Residential Rehabilitation Assistance Program (RRAP) Conversion On-reserve
- 6. Shelter Enhancement Program On-Reserve
- 7. Home Adaptations for Seniors Independence (HASI) On-Reserve
- 8. Direct Lending Program

NISI Inspectors and Inspection Services should understand CMHC's on-reserve housing programs for First Nations. This section of the Guide briefly describes each CMHC on-reserve housing program.

NON-PROFIT ON-REJERVE RENTAL HOUJING PROGRAM (JECTION 95)

This program, under Section 95 of the National Housing Act, provides subsidies for loans to First Nations to provide subsidized rental accommodation.

Program objectives

The objectives of the program are:

- To assist First Nations in building, buying or rehabilitating affordable rental housing.
- To assist in the administration of suitable, adequate and affordable rental housing.

How the program works

CMHC provides an ongoing operating subsidy to First Nations to assist with project financing. The subsidy is for the duration of the loan, to a maximum of 25 years.

How CMHC sets the subsidy

- 1. Monthly cash flows for the project are calculated as follows:
 - *Loan repayment:* principal and interest payments.
 - Operating expenses: insurance, maintenance costs, audit costs and replacement reserve for ongoing project operations.
 - Revenues: monthly rents collected from tenants or revenues generated from the First Nation council and paid on behalf of tenants.
- 2. The subsidy is determined by:

Subsidy = (Loan Repayment+Operating Expenses)—Revenue.

Other notes

Sources of financing for the project can be CMHC's Direct Lending Program or financial institutions such as chartered banks, credit unions and trust companies. CMHC provides loan insurance. Loan security is provided by a First Nation Resolution (commonly referred to as a Band Council Resolution or BCR) and a Ministerial Loan Guarantee from Indian and Northern Affairs Canada.

Eligible

- New construction units using traditional or innovative technologies.
- New manufactured homes, mobile or modular, single or double width.*
- Acquisition and relocation of existing units.
- Acquisition and improvement of existing units.
- A combination of the above.

Notes

- New mobile homes must conform to the CAN/CSA-Z240MH Series-94 standards.
- New modular homes must conform to CSA A277.
- Set up and anchorage for new and relocated homes must meet local/provincial/territorial requirements (where they exist) or be in accordance with CSA standard CAN3-CSA-Z240.10-M94.

LOAN INJURANCE PROGRAM: HOME OWNER/HIP ON-REJERVE (JECTION 10)

This loan insurance program is for First Nation people on-reserve who:

- Are interested in building or purchasing a new home.
- Already own a home on the First Nation reserve and want major upgrades or improvements.
- Want to purchase or improve existing units.

People applying for this program must meet eligibility and affordability criteria.

How the program works

The criteria are:

- Either a certificate of possession or right of possession of the land from the First Nation.
- A minimum of five per cent of the lending value or approved costs of the home.

Applicants work with an Approved Lender to determine the amount of financing. If the Lender approves the application, CMHC provides loan insurance to the Lender. As Reserve lands cannot be mortgaged, a loan agreement with the Approved Lender, secured by a First Nation Resolution (commonly referred to as a BCR) and a Ministerial Loan Guarantee from Indian and Northern Affairs Canada, replaces the normal mortgage security.

Eligible

- New construction units using traditional or innovative technologies.
- New manufactured homes, mobile or modular, single or double width.*
- Acquisition and relocation of existing units.
- Refinancing and improvement of existing units.
- Purchase and improvement of existing units.

Notes

- New mobile homes must conform to the CAN/CSA-Z240MH Series-94 standards.
- New modular homes must conform to CSA A277.
- Set up and anchorage for new and relocated homes must meet local/provincial/territorial requirements (where they exist) or be in accordance with CSA standard CAN3-CSA-Z240.10-M94.

LOAN INJURANCE PROGRAM: RENTAL ON-REJERVE PROGRAM (J'ECTION 10)

This loan insurance program is for First Nations Councils that want funds to:

- Build rental projects in their communities.
- Carry out major upgrades or improvements to existing rental units.
- Purchase and carry out major upgrades or improvements to existing rental units.

How the program works

To be eligible, the First Nation must:

- Have unencumbered land available for building new units.
- Have at least 15 per cent of the lending value or approved costs available as a down payment.
- Meet the Approved Lender's requirements.

The First Nation works with an Approved Lender and the application is sent to CMHC. If CMHC approves the application, it insures the loan for the Approved Lender.

Security for the loan is made by a loan agreement with the Approved Lender, secured by a First Nation Resolution (commonly referred to as a Band Council Resolution) and a Ministerial Loan Guarantee from Indian and Northern Affairs Canada.

Eligible

- New construction units using traditional or innovative technologies.
- New manufactured homes, mobile or modular, single or double width.*
- Acquisition and relocation of existing units.
- Refinancing and improvement of existing units.
- Improvement or renovation of existing units.
- Combination of the above.

Notes

- New mobile homes must conform to the CAN/CSA-Z240MH Series-94 standards.
- New modular homes must conform to CSA A277.
- Set up and anchorage for new and relocated homes must meet local/provincial/territorial requirements (where they exist) or be in accordance with CSA standard CAN3-CSA-Z240.10-M94.

RE/IDENTIAL REHABILITATION A//I/TANCE PROGRAM (RRAP) ONRE/ERVE

This CMHC program offers financial assistance to individuals or families with limited incomes for basic facilities or to complete major repairs in one or more of the following areas:

- Structural
- Electrical
- Plumbing
- Heating
- Fire safety

Assistance may also be given to deal with overcrowding problems.

How the program works

- Both household income and the cost of mandatory repairs determine the amount of forgivable assistance.
- The nearest CMHC office will tell interested people whether the first nation, CMHC or a private agent is the delivery agent for the community
- The delivery agent has applications for the program.

Loan assistance according to location

Location	Maximum total loan	Maximum forgivable loan
Zone 1: Southern Canada	\$18,000	\$12,000
Zone 2: Northern Canada	\$21,000	\$14,000
Zone 3: N.W.T., Yukon, Labrador, Nunavut, Northern Ontario	\$27,000	\$18,000

If repair costs exceed the maximum forgivable loans, the applicant may be eligible for a repayable loan. The repayable loan covers the difference between the maximum forgivable loan and the

maximum total loan. A Ministerial Loan Guarantee is required as security for the repayable portion.

Eligible

- Units must be at least five years old.
- There must be at least one qualifying repair from one of the following: structural, electrical, plumbing, heating, fire safety or overcrowding.

Work that starts before approval of a loan does not qualify.

REJIDENTIAL REHABILITATION AJJIJTANCE PROGRAM (RRAP) CONVERJION ON-REJERVE

This program provides financial assistance to First Nation Councils converting a non-residential property to residential.

How the program works

The First Nation chooses a non-residential property for conversion and applies to CMHC for a fully forgivable loan. The maximum forgivable loan depends on the type of unit and geographic zone

The following table shows the assistance available.

Location	Max Loan Per Unit	Max. Loan per Bed Unit / Rooming House
Zone 1: Southern Canada	\$18,000	\$12,000
Zone 2: Northern Canada	\$21,000	\$14,000
Zone 3: N.W.T., Yukon, Labrador, Nunavut, Northern Ontario	\$27,000	\$18,000

Notes

- The forgiveness period for the loan is five years.
- The First Nation must provide a First Nation Resolution (commonly referred to as a Band Council Resolution) and a Ministerial Loan Guarantee from Indian and Northern Affairs Canada with its application.
- The First Nation must sign an agreement to repay.

JHELTER ENHANCEMENT PROGRAM ON-REJERVE

CMHC's Shelter Enhancement Program On-Reserve offers financial assistance for repair, rehabilitation and improvement of existing shelters for women, children and youth who are victims of family violence. This program also helps buy or build new shelters and second-stage housing.

How the program works

A First Nation Council or the Housing Department of the First Nation completes an application and sends it to CMHC. Assistance is a fully forgivable loan, if the First Nation Council meets the program's conditions

Loan assistance according to location

Location	Maximum Loan per Unit /Bed Unit
Zone 1: Southern Canada	\$18,000
Zone 2: Northern Canada	\$21,000
Zone 3: N.W.T., Nunavut, Northern Ontario, Yukon, Labrador	\$27,000

New shelters

- CMHC may contribute up to 100 per cent of the project's capital cost, up to the maximum shown on the chart.
- The First Nation must secure a 15-year Ministerial Loan Guarantee.

Shelter renovation

Maximum loans vary depending on the number of existing units or bed-units and location.

Eligible

 Housing for women, children and youth who are victims of family violence.

Eligible repairs include:

- Bringing units to a minimum level of health and safety.
- Providing accessibility for occupants with disabilities.
- Providing adequate, safe play areas for children.
- Providing an appropriate level of occupant security.

HOME ADAPTATIONS FOR SENIORS INDEPENDENCE (HASI) ON-RESERVE

Home Adaptations for Seniors Independence (HASI) On-Reserve provides financial assistance to First Nation homeowners and landlords help pay for home adaptations for older Aboriginal people. To be eligible, homeowners and landlords must make adaptations that allow older people to live independently in their own homes longer.

How the program works

First Nation homeowners and landlords qualify for assistance if the dwelling to be adapted meets these criteria:

- The occupant of the dwelling is 65 years of age or older.
- The occupant has difficulties with daily living activities because of diminishing abilities brought on by aging.
- The dwelling unit is a permanent residence.

A forgivable loan up to \$2,500 is available. The loan does not have to be repaid if the occupant lives in the unit for at least six months after work is completed. Landlords must not increase the rent when the work is completed.

First Nations residents and landlords complete an application and submit it to the First Nation Council, Housing Department, CMHC or private delivery agent.

Eligible

Eligible adaptations must meet the needs of older Aboriginal people who have an age-related disability. Adaptations include:

- New handrails in hallways and stairways.
- Increased accessibility to kitchen work and storage.
- Lever handles on doors.
- Walk-in showers with grab bars.
- Bathtub grab bars and seats.

Adaptations must be a permanent part of the dwelling. Exceptions can be made for equipment designed to give access to an existing basic facility, such as a bathtub.

DIRECT LENDING PROGRAM

The Direct Lending Program provides financing and renewals for eligible social housing projects at the lowest average financing rate available.

Since the program began, Direct Lending interest rates have been consistently below market rates.

Program objectives

CMHC's objective is to avoid subsidies and make the best use of its resources for financing new commitments and renewals for social housing projects.

Eligibility

First Nation Councils with social housing projects apply for Direct Lending financing for new projects or for renewal of existing project loans.

How does it work?

For new commitments, First Nation Band Councils have the choice of financing their project through Direct Lending with CMHC, with an Aboriginal Capital Corporation (ACC), where available, or through an Approved Lender. It is important to remember that the interest rate cost plays a role in determining the amount of subsidy a First Nation Band Council is eligible to receive and the number of units the Council can build. In this regard, a lower interest rate is better.

For renewals, First Nation Band Councils receive an information package reminding them of the upcoming renewal. The First Nation Band Council has the option of Direct Lending with CMHC, with an ACC, where available, or through an Approved Lender. If the loans for the existing projects are in arrears, the loan must be brought current before transferring to Direct Lending.

CMHC and Aboriginal Capital Corporations (ACC)

CMHC supports Aboriginal Capital Corporations. CMHC has an agreement for ACCs to act as CMHC's Lender Agent for Direct Lending. A pilot project started in 1995. In the first phase of the pilot project, ACCs assumed responsibility for loan initiation and renewals. In the second phase, the responsibility of ACCs expanded to include loans administration.

CMHC IN/PECTION/

Section 2

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CMHC IN/PECTION/

Section 2

It is important that NISI Inspectors and Inspection Services understand the purpose, the people and the process of delivering CMHC inspections.

This section of the Guide clarifies:

- CMHC roles and responsibilities.
- The purpose of CMHC inspections in managing risk.
- The role of the First Nations as the CMHC client.
- NISI Inspectors' role and responsibilities in the delivery and administration of housing programs.
- The role of Approved Lenders.

CMHC RE/PON/IBILITIE/

Most of the following applies to Section 95 and Direct Lending programs. For an explanation of Section 10 Direct Lending, see "The Role of Approved Lenders" at the end of this Section.

CMHC is accountable for the federal government money it administers through its housing programs. CMHC 's responsibilities include:

Ensuring that federal funds are used for their intended purpose and that the building provides security for the CMHC direct loans.

Providing reasonable assurance that the building will have a useful life at least as long as the loan amortization period.

At the project commitment stage, CMHC assesses each project to determine if the project is a good risk for the direct loan and for long-term commitment of funding.

WHAT IS RISK?

Financially, a project that exceeds its budget is a risk to both CMHC, and the First Nation. The risk is that:

- The First Nation may have to borrow more money to finish the work;
- The First Nation may have to find money from other projects to finish the work;
- The First Nation may have to charge higher rents to make the project feasible.

Poor construction is a risk to homeowners and occupants. It can create unnecessarily high operating and maintenance costs; strain a project's financial viability, reduce the useful life of the building and can be a risk to the health and safety of the building's occupants.

EXAMPLES OF RISK

Poor pre-construction informationresulting in cost and schedule overruns

Poor contract administration and construction management-resulting in excessive costs

Use of unfamiliar materials or construction methods-leading to higher costs

Limited availability of specified materials or equipment-leading to schedule and cost overruns

Untrained work crew—resulting in poor workmanship, premature deterioration and unhealthy or unsafe housing

RI/K A//E//MENT

Technical reviews are one part of risk assessment. Other reviews in risk assessment cover financial viability and project management capability.

The technical review can include plans examination and inspections.

Technical review
• plans examination • inspections

Financial viability

Project management capability

It is important to understand that CMHC is not a regulatory agency. CMHC has no mandate or authority to enforce building codes and standards.

Technical reviews are done for CMHC 's purposes, at CMHC's discretion. A technical review done for CMHC is not a guarantee to the First Nation or homeowner that construction or renovation complies with building codes or standards.

Neither this *Guide* nor the Native Inspection Services Initiative calls CMHC inspections of new construction "compliance inspections," as this usually implies authority to enforce.

Adopting and enforcing building codes is an issue the First Nation must address.

CMHC, as part of its goal to improve and increase capacity, also uses physical condition reviews to help First Nations manage their housing portfolios efficiently and effectively.

The purpose of physical condition reviews is:

- To monitor the condition of the project.
- To determine the remaining useful life of major components of the structure.
- To help assess maintenance practices.

HOW NI/I IN/PECTOR/ AND IN/PECTION SERVICES HELP MANAGE RISK

To help manage risk for CMHC, NISI Inspectors and Inspection Services must complete two main tasks—plans review and completion of inspections. A thorough plans review ensures that all required information is included in the plans and that the plans follow the applicable building code.

Inspections have two purposes:

- 1. To monitor the progress of construction so funds can be advanced.
- 2. To review construction for general conformance to accepted building practices, applicable codes, plans and specifications.

By carefully completing inspections, NISI Inspectors help minimize risks to CMHC.

FIRST NATION RESPONSIBILITIES

The First Nation, as the authority with jurisdiction, is the regulatory body that ensures projects are built and renovated according to approved plans and specifications.

With this authority, the First Nation is responsible for enforcing compliance with building codes and standards and ensuring that deficiencies noted by NISI Inspectors and Inspection Services are corrected during construction.

The First Nation is also the owner and manager of the project, and is often the general contractor and builder. The First Nation provides technical information—plans and specifications—to CMHC (or an Approved Lender) for assessment of the project's feasibility.

The First Nation, as project owner and manager, is also responsible for managing construction contracts and subtrade agreements and ensuring that the quality of workmanship and materials meet contract and agreement specifications.

Provide plans and specifications

Ensure project is built according to plans

Ensure all deficiencies are corrected.

Manage contracts for construction

Provide quality control

NISI INSPECTOR AND INSPECTION SERVICE RESPONSIBILITIES

CMHC signs contracts with NISI Inspectors and Inspection Services for technical reviews to help assess a project's risk, technical review has two main functions:

- A review of plans and specifications to identify major deficiencies and suggest improvements.
- Progress inspections to allow CMHC to advance funds for the project and ensure that problems found earlier have been fixed.

CMHC realizes that NISI Inspectors and Inspection Services may in fact be working in the interests of CMHC, the Tribal Council and the First Nation where the project is being completed.

This can be difficult as each party has different needs. For example, CMHC expects the NISI Inspector or Inspection service to provide a professional opinion on whether the construction reasonably conforms to approved plans, specifications, codes and standards. On the other hand, the First Nation may expect a detailed compliance inspection.

It is suggested that, to meet the needs of each party, the NISI Inspector or Inspection Service complete for each inspection one thorough report recording progress and identifying deficiencies. The sample NHA Inspection Report in Section 4 can be used to show both project progress and deficiencies.

A JUGGE/TED APPROACH TO IN/PECTION/

- 1. Review plans, specifications and inspection report before arriving on site. If this is a second or successive inspection, review the previous inspection report.
- 2. Travel to the site with the First Nation representative and complete a walk-through of the site or building.
- 3. During the walk-through, write the percentage completion of components on the upper portion of the inspection report.
- 4. In the observations section of the report, note any apparent deficiencies, including health and safety issues. If there are major deficiencies, consider them when determining percentage completions.
- 5. Complete and sign the inspection report.
- 6. Send one copy of the inspection report to CMHC and one copy to the First Nation. CMHC will use the report to make a decision about advancing funds. The First Nation will use the report to deal with the deficiencies.

THE ROLE OF APPROVED LENDERS UNDER SECTION 10, ON-RESERVE LOAN INSURANCE PROGRAM (HOMEOWNERSHIP AND RENTAL)

Approved Lenders provide the loans for new projects and loans to buy and renovate existing units. CMHC provides loan insurance to Approved Lenders.

The following is taken from CMHC material for Approved Lenders.

CMHC offers mortgage loan insurance to Approved Lenders under the following processing services.

Homeowner

Basic service

- For progress or multiple advances, the Approved Lender is responsible for providing progress advance reviews and seeking preauthorization from CMHC for each loan advance. The progress advance reviews may be made by the Approved Lender or its agent (for example, an appraiser).
- Progress advance reviews consist of determining the percentage of completion of the building under construction on the basis of the amount of work in place.
- Any material on site that has not yet been used in the construction is not to be considered in the completion calculation.
- For single advances, the Approved Lender is fully responsible for ensuring completion of the property prior to advancing the funds. It is the Approved Lender's responsibility to decide which method is most appropriate to ensure the property is complete, for example, inspection, occupancy permit from the municipality or a new home warranty certificate.

CMHC does not prescribe any one particular method for confirming completion of the property under basic service and leaves this responsibility to the Approved Lender as outlined above. It is possible that what is available and acceptable in one region may not be acceptable or available in another. The lender therefore determines which

method is most appropriate and retains the supporting documentation.

Full service

- For progress or multiple advances, the Approved Lender seeks pre-authorization from CMHC for each loan advance.
- Prior to authorization, CMHC may, at its discretion and for its own risk management purposes, conduct or cause to be conducted a property inspection.

The Approved Lender cannot rely on CMHC regarding the value or condition of the property whether or not inspections and appraisals are conducted by CMHC.

emili

• The Approved Lender is fully authorized to make interim and final advances in accordance with CMHC's advancing criteria.

A: For purchase from a builder or self-built homes

- For interim advances (up to and including 85 per cent complete) the lender will validate the advance using one of the following methods:
 - Municipal or First Nation inspection report
 - Proof of registration of enrolment of the unit in an acceptable warranty program, together with a certificate of percentage complete, signed by the builder and the purchaser.
 - Third-party report from qualified professional carrying appropriate liability insurance, including but not limited to, inspectors, appraisers, architects and engineers.
 - Written confirmation of percentage complete, signed by the self-builder or both the builder and purchaser/borrower. Note: when this validation is adopted, an arms-length validation report per any of

the first three methods must be obtained at the point where all of the following have been completed:

- foundation, dampproofing, drain and backfill
- ii) frame sheathing and roof
- iii) doors and windows
- iv) rough electrical and plumbing
- v) insulation and air vapor barrier
- vi) basement floor
- For final advance (15 per cent or more) the lender will validate the advance using one of the following confirmations of substantial completion:
 - Proof of registration of enrolment of the unit in an acceptable warranty program, together with a certificate of completion signed by purchaser and builder.
 - Receipt of municipal occupancy permit from borrower.
 - Third-party inspection report from qualified professional carrying appropriate liability insurance, including but not limited to, inspectors, appraisers, architects and engineers.

B: For improvements:

- Where improvement costs do not exceed the lesser of 10 per cent of the CMHC approved "as improved" market value OR \$10,000, then the advance can be validated with a signed borrower declaration that the percentage of work has been completed.
- Where improvement costs exceed the lesser of 10 per cent of the CMHC approved "as improved" market value OR \$10,000, then advances need to be validated by applying the validation requirements described above in A.

Rental

Construction conditions

APPLICABLE LAWS, REGULATIONS AND CODES

The Approved Lender must ensure that the Developer complies with all applicable federal, provincial and municipal laws, regulations and codes in the construction of the project. Prior to any advance, the Approved Lender must obtain from the Project Architect certification that the work to-date is in compliance with plans and specifications, as approved by the appropriate regulatory authority.

PROJECT MONITOR INSPECTION AND REPORTING

The Approved Lender is to ensure that sufficient safeguards are in place in order to guarantee timely completion of the construction of this project at the stated costs.

Prior to the start of construction, the Approved Lender is to ensure that the project budget cost is reviewed and approved by a third-party Quantity Surveyor with PQS designation and liability insurance adequate for the size of the project in the opinion of the Approved Lender. Both the hard and soft costs are to be approved. The Quantity Surveyor is to confirm that the project budget (at an amount no greater than the anticipated \$X) is sufficient to complete the project, given the development schedule and the project specifications.

The Approved Lender shall employ this Project Monitor to recommend the amount of each progress advance, with verification of cost of work-in-place and cost to complete on every advance. In addition, the monitor shall provide certification that all monies advanced by the Approved Lender have been used for the project and that all bills have been paid. The Approved Lender is to review and recommend the progress advances.

or

For projects under \$1 million

Prior to the start of construction the Approved Lender is to ensure that the project budget cost is no greater than the anticipated level of \$X, Both the hard and soft costs are to be approved. The Approved Lender or consultant reporting to the Approved Lender must confirm that the project budget is fully sufficient to complete the project, given the development schedule and the project specifications.

The Approved Lender/consultant will recommend all construction progress advances, verifying cost of work-in-place and cost to complete on every advance. In addition the Approved Lender /consultant shall provide certification that all monies advanced have been used for the project and that all bills have been paid. The Approved Lender is to review and recommend the progress advances.

Standards compliance—bomeowner and rental

• The Approved Lender is responsible for ensuring that the building construction is in conformance with all applicable standards and requirements of local authorities (provincial/territory/municipality/First Nation) responsible for supervision of building codes and standards in the location where the building(s) is/are located.

SECTION 3—ADMINISTRATIVE AFFAIRS

Section 3

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ADMINISTRATIVE AFFAIRS

NISI Inspectors and Inspection Services have responsibilities to CMHC, to First Nations and to fellow NISI Inspectors and Inspection Services.

This section of the Guide sets out:

- Qualifying criteria.
- Mentoring and capacity development.
- Monitoring.
- Fee scheduling and invoicing.
- Conflict of interest considerations.
- Code of conduct for NISI Inspectors and Inspection Services.
- Contracting arrangements.

QUALIFYING CRITERIA

CMHC actively seeks the use of qualified NISI Inspectors to provide Inspection Services for CMHC programs.

When CMHC signs a contract with a NISI Inspector or Inspection Service, all the technical staff assigned to complete the contract, including staff hired during the course of the contract, must:

- Meet at least one of the Minimum Technical Qualifications and if further confirmation of skills and knowledge is deemed necessary; then
- Have successfully completed the NISI Inspector examination.

CMHC feels it is very important that NISI Inspectors and Inspection Services meet the criteria to:

- Help ensure technical competency.
- Help ensure that there are skilled, qualified people doing inspections for CMHC.
- Help ensure a consistent level of competency and skill across the country.

Designation of NISI Inspectors by CMHC

NISI Inspectors and Inspection Services interested in signing a contract with CMHC should send the following to their nearest CMHC office.

- Documents showing that the candidate meets one of the requirements for minimum technical qualifications.
- Copies of letters of recommendation or references supporting minimum technical qualifications.

Minimum technical qualifications

NISI Inspectors and Inspection Services must meet at least one of the following requirements:

A bachelor's degree in architecture or engineering in building technology. (This must be verified by a diploma.)

Designation or certification as a First Nation, provincial or municipal building official. (Provide documents from a former employer or employers that confirm your competence as a residential building inspector and show two years of inspection experience.)

Diploma in building science, building technology, urban planning or other academic discipline from a recognized college. (The academic discipline must be relevant to residential inspections. Provide a letter of recommendation or reference from a former employer or employers and confirmation of at least two years of inspection experience.)

At least three years of residential inspection experience, specification writing and cost estimating

Fully qualified in a trade with at least two years of post-apprentice experience. (Provide letters of recommendation or references from previous employers or on-site supervisors who are qualified tradespersons.)

Construction generalist with at least four years experience in residential construction or renovation

Examination

CMHC will develop an examination process. If there is a provincial organization representing First Nations in technical matters, CMHC will develop the examination process with the organization. The examination will deal with topics relevant to geographic areas.

The examination may include the following:

- Either a written or oral examination, or both, to assess knowledge of various aspects of building construction and rehabilitation including codes, standards and required knowledge and skills.
- An on-site exam, to evaluate applicants' inspection skills, during which applicants will be asked to identify corrective measures and prepare a work description and cost estimates.
- An inspection of a set of house plans to identify deficiencies.

Knowledge and skills

CMHC expects NISI Inspectors and Inspection Services to be knowledgeable in several building science and technology areas. This knowledge falls into two broad areas: building codes and general building knowledge.

NISI Inspectors and Inspection Services are expected to know about the following building code subjects:

- Site work.
- Foundations.
- Floor framing.
- Wall framing.
- Roofing.
- Windows and doors.
- Exterior finishes.
- Electrical systems.
- Plumbing systems.
- Heating systems.

- Ventilation systems.
- Interior finishes.
- Water supply.
- Sewage disposal.
- Fire safety.
- Barrier-free access.
- Thermal and moisture protection.

General building knowledge includes topics that are relevant to improving housing design and construction. This knowledge comes from attending training sessions and reviewing periodicals and other publications. Topics include:

• Energy conservation.

- Materials and systems evaluations.
- Heat loss calculations.
- Cost-benefit energy analysis.
- Environmental assessments.
- Air quality and contaminants.
- Replacement reserve and life-cycle costing.

MENTORING AND CAPACITY DEVELOPMENT

One of CMHC's main roles is to help First Nations develop their capacities. In housing, CMHC does this by transferring its wealth of housing information to providers of Inspection Services to First Nations. Mentoring helps develop the knowledge, skills and expertise that are critical to the success of NISI Inspectors and Inspection Services.

Objectives of mentoring

CMHC's mentoring has three main objectives:

- 1. To actively support the growth and development of First Nation technical service providers—resulting in better-built homes.
- To build a common understanding of the respective roles and responsibilities of CMHC, First Nation administrations and First Nation technical service providers
- 3. To make everyone involved in housing aware of the potential benefits of mentoring.

How mentoring works

Mentoring is done by transferring information. Transfer of information may be through formal training, such as workshops, seminars and training programs, or through less formal, one-on-one discussions during site visits or by telephone. Information may also be transferred through publications.

Information transfer topics may include:

- Better building practices.
- Code interpretation.
- Building science.
- Indoor air quality.
- Non-technical topics, such as problem resolution.

Technical information

Section 10 of this *Guide* lists some of the technical information available from CMHC.

MONITORING

An inspection agreement with CMHC allows CMHC to monitor the services provided. Monitoring can be accomplished by the review of inspection reports or by on site visits. On site visits are generally undertaken on an annual basis.

Purposes of monitoring include:

- Determining if expectations under the NISI Agreement are being achieved and to clarify expectations if they are not clear.
- Resolving technical issues.
- Identifying training needs.

For on-site monitoring, a CMHC representative goes to a site with the representative of the NISI Inspection Service.

During the visit the CMHC representative reviews inspection reports with the Inspection Service representative. The CMHC representative may also talk with homeowners, First Nation administrators and contractors.

A written report is provided to the Inspection Service. The report gives findings from the monitoring and what actions are needed based on the findings.

CMHC's expectations

A main purpose of the monitoring visit is to ensure that CMHC's expectations outlined in the NISI Agreement are being met. The visit is designed to:

Confirm that inspections and reporting are properly completed, particularly for identification of deficiencies, and that required reports are completed Improper inspections and reporting may indicate the Inspector is not using the knowledge or skills set out in the minimum technical qualifications.

Confirm that the Inspector understands the requirements of the program under which the NISI Agreement was signed The Inspector's role and responsibilities vary depending on the CMHC program. Failure to understand the role and responsibilities of the Inspector may hinder delivery of the program.

Confirm that the Inspector's communications are honest and open and that the Inspector acts diplomatically with everyone. Poor communications or a negative attitude may contribute to a poor relationship between the various parties.

On-site monitoring protocol

An on-site monitoring visit is carefully planned to benefit both CMHC and the Inspector. To help make on-site monitoring meaningful, CMHC uses the following four-step process.

Step 1—Notification and scheduling

CMHC gives an Inspection Service at least one week's notice of a monitoring visit. To make the visit meaningful, the Service should prepare questions for the CMHC representative.

Step 2—On-site monitoring visit

The CMHC representative and Inspection Service representative meet at the project and review the following:

- CMHC's expectations for the NISI Agreement and the program.
- Inspection files and project binders, or both, that the Service has set up.

The CMHC representative will also discuss findings from the visit with the Inspector and answer questions.

Step 3—Recommendations and actions

The CMHC representative completes a written report discussing the findings and giving recommendations or actions that are required. CMHC gives the Native Inspection Service representative a copy of the report.

Step 4—Follow-up

If action is required because of the visit, the CMHC representative may do one or more of the following:

- Schedule another on-site monitoring visit to see if the recommendations or actions have been addressed.
- Review other written reports that the CMHC representative has asked for from the Inspection Service.
- Contact the Inspector to discuss the status of recommendations or actions.

FEE SCHEDULING AND INVOICING

NISI Inspectors and Inspection Services who sign an agreement with CMHC are paid for the services that they provide. There may be partial payments, but only for work that is acceptable.

Activities eligible for fees

Fees will be paid for:

- 1. Plans examination for each house model
- Up to six inspections for each new construction unit financed under Section 95, Non-Profit Rental Housing Program
- 3. Inspections for each unit eligible for assistance under the Residential Rehabilitation Assistance Program (RRAP).
- 4. Portfolio management physical condition reviews (cyclical inspections) for each inspection for each unit.

Travel expenses

In addition to fees for plans examinations and inspections, a NISI Inspector or Inspection Service may also be reimbursed for travel expenses, based on CMHC travel rates.

Example

A community is located 200 km (124 mi.) from the NISI Inspector's office. The Inspector travels 25 km (15.5 mi.) within the community to complete the inspections. The total travel distance is 425 km (264 mi.)—400 km (248.5 mi.) getting to and from the community, plus the 25 km (15.5 mi.) travel within the community.

It is also important to note the following:

- If there is no access by road, actual travel costs will be paid.
- Inspectors should try to combine inspections when visiting a community. For example, Section 95 and RRAP inspections could be done on the same visit.

Payment options

CMHC has a fixed fee for Section 95, RRAP and portfolio management physical condition reviews. CMHC offices will discuss payment methods and options with NISI Inspection Services.

There are now three payment options.

Option #1—The fees for each unit are paid when all inspections and reports are completed.

Option #2—Inspection fees are paid on the percentage completion of each unit. For example, if the unit is 50 per cent complete, the NISI Inspector or Inspection Service can invoice for 50 per cent of the fee. For the next invoice, if the unit is 75 per cent complete, the Inspector can invoice for 25 per cent of the total fee. Percentage completion continues until the unit is completed.

Option #3—A prorated portion of the fee can be paid as each inspection reported is submitted. For example, if six inspections are required, one sixth of the total fee can be paid upon CMHC receiving the reports.

Note: Technical reviews for Section 10 Homeowner and Rental activity are paid by the Approved Lender. The fee is negotiated with the Approved Lender by the NISI Inspector or Inspection Service. CMHC may do its own review of Section 10 projects. If so, CMHC pays the fee the same way as it does for Section 95 activities.

CONFLICT OF INTERENT

What is conflict of interest?

NISI Inspectors and Inspection Services face a number of unique challenges in doing their job. One challenge is the potential for conflict of interest.

There is a real, perceived or potential conflict of interest when a NISI Inspector has a private, personal, business, commercial or other interest in a project to be inspected—if that interest may influence or appear to influence the inspection.

It is important that Inspectors and Inspection Services disclose and avoid conflicts of interest. Disclosing and avoiding conflict of interest maintains the trust and confidence of CMHC, First Nations and community members. Disclosing and avoiding conflict of interest also upholds the professionalism and impartiality of NISI inspections and inspection agencies.

Why CMHC is concerned about conflict of interest

CMHC is responsible and accountable for federal funds used for its on-reserve programs. It is extremely important that these funds are used for their intended purpose—to provide quality, affordable housing or to renovate existing homes to bring them to a comfortable, safe level for occupants.

CMHC's Conflict of Interest Policy

CMHC's conflict of interest policy states:

"Any Inspector who may be in a position (or whose employer or family member is in a position) to derive any direct or indirect financial or other benefit from the inspection activities must disclose this situation and not act as CMHC's agent"

Situations to avoid

There are situations that may be a conflict of interest to a NISI Inspector or Inspection Service. The following are some examples:

On a First Nation project, do not sign a NISI Agreement in the following situations.

- You are a part-time or full-time employee of the First Nation.
- You are Chief or councillor of the First Nation.
- You are an employee or board member of the First Nation Housing Authority.
- You are the project construction manager.
- You are the borrower of the funds.
- A member of your family is a borrower on the project.
- You have a close friend who is the borrower.

Examples of situations to avoid:

Example #1

An Inspector should never succumb to pressure or threats from other individuals or agencies. A NISI Inspector or Inspection Service may be asked to over-advance on a project.

Pressure or a threat should be immediately reported to a supervisor or employer.

Example #2

A NISI Inspector or Inspection Service must ensure that the borrower is using program funds for their intended purpose. If the plans are for a wood-frame house, it is unacceptable for an individual to purchase a new mobile home.

The Inspector must be quite clear about the intended purpose of the project and should tell CMHC about changes.

To belp clarify:

Family is considered the following:

- Spouse (husband or wife).
- Children.
- Siblings (brothers and sisters).
- Parents.
- Grandparents.
- Spouse's children.
- Spouse's siblings.
- · Spouse's parents.
- Spouse's grandparents.

A NISI Inspector or Inspection Service must declare a conflict of interest if family members may be in a position to benefit directly or indirectly from an inspection.

Employer is the following:

- First Nation.
- First Nation Housing Authority.
- Contractor.
- Sub contractor.
- Consulting firm.

NISI Inspectors and Inspection Services must declare a conflict of interest if an employer may be in a position to benefit directly or indirectly from an inspection.

Friends and conflict of interest

Usually, when conflict of interest is discussed, the focus is on the relationship between an individual and the individual's family or employer. With family and employer, it is clear when a potential conflict of interest exists. With friends, it is more difficult.

Friendships have varying degrees of strengths. Some are very close while others are casual. A NISI Inspector or Inspection Service must consider friendships on the basis of a perceived or real conflict of interest.

It is important to declare a conflict of interest if a friend may be in a position to benefit directly or indirectly from an inspection. This could be a friend who owns the house that is to be inspected or a friend who is a contractor working on a home that is to be inspected.

When reviewing friendships, it is extremely important to consider the following:

- NISI Inspectors and Inspection Services must carry out their duties with integrity, objectivity and impartiality.
- A real or perceived conflict of interest could affect your reputation.

It is in your best interest to protect your reputation. If you feel there is even the slightest potential for a conflict of interest, you should declare it.

Reporting a conflict of interest

When you sign a NISI Agreement, you also declare any conflicts of interest. If you have a conflict of interest, you must report it. CMHC will review your disclosure and decide whether to go ahead with the contract.

Final thoughts

It is important that you are impartial and objective—and that you are seen to be impartial and objective.

You want to carry out your duties and services with integrity. At stake is your professional reputation. To keep your professional reputation, maintain arms-length relationships and declare all real, potential or perceived conflicts.

CODE OF CONDUCT

There is no federal or provincial association for individuals or organizations providing housing inspections on First Nations. As a result, there has been no code of conduct for NISI Inspectors. Until a federal or provincial association is formed, CMHC suggests that NISI Inspectors and Inspection Services adopt to the following Code of Conduct.

Preamble

The Code of Conduct for NISI Inspectors and Inspection Services defines the professional behavior of Inspectors in Canada and serves as a guide for ethical conduct. This Code of Conduct represents the conduct that is generally accepted by various professions. The Code of Conduct will assist in protecting the health, safety and general welfare of First Nation residents and in ensuring that Inspectors have some accountability to Canada Mortgage and Housing Corporation and First Nation Administrations.

Code of Conduct

- 1. When undertaking an inspection, the Inspector will give the utmost importance to the health, safety and welfare of citizens.
- 2. Inspectors shall complete their work in a professional manner that will reflect positively on themselves and on other individuals or organizations engaged in the inspection process. When doing inspections, Inspector will follow accepted principles of honesty and integrity and will disclose any conflicts of interest.
- 3. An Inspector will always act in good faith toward each client, putting the needs of the client above his or her own. When working for a client, the Inspector will work with diligence and honesty to meet the client's goals and objectives.

- 4. An Inspector will express opinions only when they are based on practical experience and honest conviction.
- 5. An Inspector will not accept any type of compensation from more than one party for the same service without the consent of all interested parties.
- 6. An Inspector will build a professional reputation based on the high degree of service provided.
- 7. An Inspector will act in a professional manner that will uphold, maintain and enhance the integrity and reputation of all Inspectors.
- 8. Inspectors will continue their professional development throughout their careers by pursuing continued education opportunities, workshops, seminars and by joining other professional organizations.

CONTRACTING ARRANGEMENT/

CMHC contracts with NISI Inspectors and Inspection Services are called Inspection Services Agency Agreements. There is a sample Technical Services Agency Agreement on the next page.

Purpose of Technical Services Agency Agreement

The purposes of an Technical Services Agency Agreement:

- To give the terms and conditions agreed to by CMHC and the NISI Inspector or Inspection Service. The agreement lists the communities where the inspections are to take place and outlines basic project details, such as the number of units, unit types and unit locations.
- To set out the fees.
- To set out the fee payment schedule.
- To set out travel allowances.
- To name the specific individual(s) who will provide the inspection services.

JAMPLE TECHNICAL JERVICEJ AGENCY AGREEMENT

TECHNICAL SERVICES AGENCY AGREEMENT
THIS AGREEMENT made this day of , 20
BETWEEN
CANADA MORTGAGE AND HOUSING CORPORATION (hereinafter called "CMHC")
OF THE FIRST PART: - and -
(hereinafter called "the Agent")
OF THE SECOND PART.
WHEREAS the Agent has agreed to provide CMHC with technical services for the projects and properties as outlined in Schedule "A".
NOW THEREFORE THIS AGREEMENT WITNESSES THAT:
AGREEMENT
1. The Agent agrees to carry out the technical services described in Schedule "A" (which is attached to and forms part of this Agreement) and further amendments made thereto by agreement between the

TERM

parties from time to time.

2. This Agreement shall be from a term of one year effective the _____ day of ______, 20 ___, and ending on the _____ day of ______, 20 ___, and thereafter from year to year unless terminated in accordance with the provisions of paragraph 4. below.

PAYMENT

3. The amount and manner of payment to the Agent shall be made in accordance with and subject to the terms and conditions specified in Schedule "A" hereto annexed.

TERMINATION

4. This Agreement may be terminated by either party by giving two (2) weeks notice in writing to the other party, and may be terminated without notice by CMHC in the event of fraud or breach of contract by the Agent.

TERMINATION OF AGREEMENT

5. Upon termination of this Agreement, the Agent shall deliver to CMHC all records, accounts and other documentation of any kind maintained by the Agent in relation to the provisions of this Agreement save and except for records required by law to be retained by the Agent. The Agent will, upon the written request of CMHC, deliver to CMHC true copies of all records which are required by law to be retained by the Agent.

PARTIAL PAYMENT

6. Upon termination of this Agreement, the liability of the CMHC for payment shall be limited to and shall not exceed payment of an amount which, in the opinion of CMHC, is reasonable payment for partial performance of the work completed to the date of termination.

HONESTY

7. The Agent shall strive at all times to act honestly and in good faith and shall exercise the care, diligence and skill that a reasonably prudent person would exercise in similar circumstances.

CHANGES TO MINIMUM TECHNICAL QUALIFYING CRITERIA

8. The Agent and its employees, carrying out technical services identified in this Agreement, shall meet the minimum technical qualifications as identified by CMHC. The Agent shall not hire or assign any employee to the technical functions required under this Agreement unless such employee meets these qualifications. Amendments to the minimum technical qualifications may be introduced by CMHC from time to time.

MONITORING

9. The CMHC may conduct on site monitoring of the projects and properties from time to time to ensure adherence to the terms and conditions of this Agreement. The CMHC shall provide one (1) week's notification to the Agent of its intention to monitor. Written reports will be provided to the Agent setting out its findings from the monitoring and any action it requires the Agent to take based on the findings. Such action may include a reassessment of the Agent with respect to the minimum technical qualifications and the conditions outlined in paragraph 8. above or termination of this Agreement if warranted.

INDEMNIFICATION

10. The CMHC agrees to indemnify the Agent and its employees for all loss, damages, costs, expenses, claims, demands, actions, suits, or other proceedings of every nature and kind arising from or in consequence of the performance of this Agreement, provided such loss, damages, costs, expenses, claims, demands, actions, suits or proceedings arise without negligence or fraud on the part of the Agent or its employees, and whether such actions, suits or proceedings are brought in the name of the Agent or in the name of CMHC.

ASSIGNMENT

11. This Agreement shall not be assigned in whole or in part by the Agent without the prior written consent of CMHC.

CMHC PROPERTY

12. All reports and materials produced pursuant to this Agreement shall be the exclusive property of CMHC which shall have copyright therein.

CONFLICT OF INTEREST

13. The Agent shall ensure that any real, potential or apparent conflict of interest situations, as outlined in CMHC's Conflict of Interest guidelines and Native Inspection Services Initiative (NISI) Guide, will be avoided.

AGENT CONTRACTOR

14. The Agent is engaged as an independent service providing technical services to CMHC and is not engaged as an employee of CMHC.

CMHC REQUIREMENTS

15. The Agent shall undertake the technical services in accordance with CMHC's NISI Guide and any other requirements which CMHC may deem necessary.

NISI GUIDE

16. The CMHC shall provide to the Agent the NISI Guide mentioned in paragraph 15. and any amendments thereof and shall provide the inspection forms and any other forms mentioned in the NISI Guide required by the Agent to carry out the technical services specified by this agreement.

TECHNICAL INFORMATION

17. The Agent is responsible to obtain any technical information, standards and codes mentioned in the NISI Guide and any other technical material required to effectively carry out the technical services. CMHC will, however, make available to the Agent for study any technical reference material, standards and codes which CMHC may have in it's branch office. The Agent will not remove this material from the CMHC office without the express permission of CMHC's delegate.

DETAILED RECORDS

18. The Agent is required to keep proper and detailed records and statements of account, including receipts., vouchers and all other documents relating to the cost of carrying out the inspection; and shall at all reasonable times permit inspection and audit of such records and statements by CMHC.

DELEGATE
19. The CMHC delegate for the management of this contract is, who shall be responsible for the overall supervision and shall provide guidance to the Agent as deemed necessary
CONFIDENTIALITY
20. The Agent shall treat as confidential, during as well as after termination of this Agreement, all information relating to the affairs of the CMHC; and further agrees not to publish any information relating to this Agreement. The Agent shall, at the request of CMHC, provide an Oath of Secrecy for any employee and any other person engaged in carrying out the work, in a form prescribed by CMHC
HOUSE OF COMMONS
21. No member of the House of Commons shall be admitted to any share, part of this Agreement or any benefit to arise therefrom.
IN WITNESS THEREOF this Agreement has been executed by the parties hereto as of the date first above written.
CANADA MORTGAGE AND HOUSING CORPORATION
PER:
PER:
AGENT
PER:

/CHEDULE "A" (/AMPLE)

Attached to and forming part of an Agreement between Canada Mortgage and Housing Corporation

- (provide addresses, property identifications etc.)

 Subtotal: \$ ______

 C. Travel Expenses: \$
 - (see appendix C-1)

 Scheduled Return Flight
 \$ _____ x ____ trips = \$ _____

 Sub total:
 \$ ______

 Taxes:
 \$ ______

 Grand Total:
 \$ ______
- D. The Agent shall provide to CMHC, any reporting required under this agreement within_____days of completion of the inspections.
- E. CMHC will advance the fees agreed to herein within 30 days of receipt of invoices as follows: For new construction projects, payments will be in equal amounts and for () payments upon receipt of acceptable Inspection reports and invoices mentioned above. For Portfolio Management Inspections, payment will be full and final payment upon receipt of acceptable reports and invoices mentioned above.

APPENDIX 1. AGREED-TO EXPENSES (SAMPLE)

TRAVEL EXPENSES

Allo	owed in this Agreement from		(name of community)	and return.	
		(name of community)	(name of community)		
A.	Mileage in kilometres:				
	1 Round trip	to		_ =	_ km
	Total kilometres:				_ km
	Total mileage allowance:	trips x	_ total km x 38 c	ents = \$	
В. І	Meal/Accommodations:				
	Meal Allowance				
	Breakfast at	\$ per trip x	trips	= \$	
	Lunch at	\$ per trip x	trips	= \$	
	Dinner at	# pontain v	trino	= \$	
	Diffier at	\$ per trip x	uips	— φ	
	Hotel/Motel allowance	\$ per trip x	trips	= \$	
			_		
	Total Meal/Accommodation			¢	

INVOICE (/AMPLE)

	AND ADDRESS:		invoice		eports for all inspections eached or previously sen	
NAME OF INSP	ECTOR(S)					
Activity	Community Name	Inspection Date	Number of Inspections	Amount Invoiced	Travel	
PE-Plans Examination					\$	
NC-New Construction					\$	
PM-Portfolio Managerment					\$	
Subtotal					\$	
Total					\$	
DATE:			AGENT'S NA	ME:		
FOR CMHC INT	TERNAL USE O	NLY:				
TOTAL CONTRACT PRICE	AMOUN INVOICED DATE		IS 1	TANDING PER TRACT		
\$	\$	\$	\$			
Invoice must be number of insp	_	st Schedule "A"	of the contract t	o confirm acc	uracy of invoiced amour	t and
RECOMMENDE	D FOR PAYMEN	NT	APPROVED 1	FOR PAYMEN	ſ	

Section 4

PERFORMING CMHC IN/PECTION/ ON NEW HOU/ING PROJECT/

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PERFORMING CMHC IN/PECTION/ ON NEW HOU/ING PROJECT/

CMHC's subsidy and Direct Lending programs are designed to help First Nations build homes. They are an important source of housing funding for First Nations

CMHC requires technical review and inspection as part of Section 95 and Direct Lending activity. This helps ensure that new buildings conform reasonably to the plans and specifications.

This section of the Guide specifies what CMHC requires from inspections and what reporting is expected.

There are sample forms in this Section-and in other Sections-for inspection reporting. The forms are reduced to fit in the Guide. Expand the forms if CMHC requires a lot of detail. If you modify a form or develop your own, have CMHC approve the changes before you use the form.

The forms are available from your CMHC office.

TECHNICAL REVIEW AND INSPECTIONS

Section 95 and Direct Lending

A signed Inspection Services Agency Agreement starts plans review and inspections under Section 95 and Direct Lending

The objectives of the technical review and inspection are:

- To ensure that plans and specifications are in reasonable conformity with established construction standards.
- To ensure that a building is in reasonable conformance with approved plans.
- To assess the level of completion.
- To review and report on the performance of building materials and systems.
- To verify construction cost estimates.
- To promote better housing through information transfer to First Nations.

Inspections are usually scheduled at these critical construction stages:

- Site inspection.
- Foundation inspection.
- Framing inspection (including insulation and air barrier inspection).
- Final inspection.

Deciding how many inspections are needed, and when they are needed, is based on experience with other projects undertaken by the First Nation or builder. If past projects have been completed successfully, CMHC may decide, after discussion with the First Nation, to have fewer inspections.

Below are the inspection steps to be followed by a NISI Inspector or Inspection Service for a new home.

PROCEDURES FOR NEW HOME INSPECTIONS

Confirm that the BCR (Band Council Resolution) naming or accepting NISI Inspector or Inspection Service has been sent to CMHC. Demonstrate First Nation support for your role in improving housing.

Confirm signing of Native Inspection Agency Agreement.

Receive plans from First Nation and identify and address deficiencies.
Return approved plans to First Nation.
Send plans review report to CMHC.
Where plans are incomplete, the Inspector must request additional information from the First Nation.

Confirm schedule for each required inspection. Complete inspection report. Submit to CMHC and the First Nation. Separate inspections may be required for:

- preliminary site inspection
- foundations
- framing and insulation
- final

Schedule and perform final inspection.
Complete inspection report and send it to CMHC and the First Nation. Additional inspections may be required if major infractions are found. Additional final inspection may be required where seasonal holdbacks exist.

REVIEW OF PLANY AND SPECIFICATIONS

Before construction, the NISI Inspector or Inspection Service should receive a set of plans to review. The Inspector's review helps ensure that the plans are complete. A complete set of plans:

- Minimizes problems during construction.
- Provides good information for quantity take off and cost estimating.
- Helps the builders during construction.
- Helps ensure that the building is being built to applicable codes.
- Provides a document to record changes made during construction. This can be an as-built drawing for future use.

Typical plans

Houses built on First Nations usually follow one of two different types of plans.

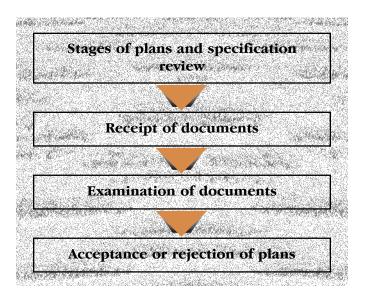
Custom plans are prepared by a consultant and are generally unique to the project. Typically, a First Nation hires a consultant to draw up plans for each unit. The consultant usually works within limits, such as maximum size of the houses and budget.

Stock plans are mass-produced and sold to many customers. Stock plans, which are convenient and relatively inexpensive, are generally available from building supply stores. There is a wide range of stock plans.

The cost of developing both custom and stock plans is usually considered an eligible cost in determining project financing details.

REVIEW OF PLANS AND SPECIFICATIONS

The following is an overview of each stage in reviewing plans and specifications.



Receipt of documents

 Ask the First Nation for the plans, specifications and other documents relating to the project.

Examination of documents

- Review the plans, specifications and related documents to ensure that they reasonably reflect the site conditions and are in reasonable conformance to construction standards agreed to with CMHC.
- If you need more information, contact the First Nation.

- If any of the following features are identified during the review, ask CMHC to confirm their eligibility:
 - garages and carports
 - decks
 - fireplace or wood burning stove that is not a primary heating source
 - dishwashers
 - microwaves
 - central vacuum
 - air conditioning
 - bay or bow windows
 - sliding patio doors
 - additional baths or powder rooms on the main floor
 - excessive room sizes
- If a professional, such as an engineer or architect, has provided designs, ensure that:
 - the drawings are stamped with the consultant's professional seal
 - the consultant is licensed to practice in the province or territory

If the drawings are not stamped or the consultant is not licensed, note it on the plans review.

Acceptance of plans

- Stamp, date and sign each sheet of all sets of plans when the review has been completed. If the CMHC account number is available, put it on each set of plans.
- Attach a copy of the letter to CMHC to each set of plans, specifications and related documents.
 Send a copy to the local CMHC office. If you have found deficiencies that can be corrected without substantial changes, be sure to say what they are in the letter.

Rejection of plans

- If one or more of the following is identified, the plans, specifications and related documents should be returned to the First Nation:
 - deficiencies that may affect structural integrity
 - deficiencies that raise health or safety concerns
 - significant changes to the design
 - problems that have no apparent solution.
- Complete the *Housing Plans Review Form*. (See the sample and instructions for completing the form at the end of this Section.).
- Send a memo to CMHC saying that that the plans have been rejected. Say what must be done to make the plans acceptable. Note that the specifications may need to be revised.
- Attach copies of the memo to CMHC and a plans review form (see sample) to each set of plans, specifications and related documents.

Changes to accepted plans

If the First Nation changes the accepted plans, the plans and specifications have to be reviewed again.

- Review the plans and specifications to ensure that the changes meet required construction standards.
- Tell CMHC, in writing, if the changes might affect the lending value.

FILLING OUT THE HOU/ING PLAN/ REVIEW FORM

The following page is a sample Housing Plans Review Form. The numbers on the sample correspond to the following numbers.

- 1. List the number of sheets that were reviewed.
- 2. List the number of corrections that were identified during the review.
- 3. List the First Nation where the project is being constructed.
- 4. Briefly describe the project's location.
- 5. Give each required change a number, staring with "one."
- 6. Give the sheet number where the change is identified.
- 7. Describe the required change. If it is a change required by a building code or standard, give the section or paragraph of the code or standard.
- 8. The NISI Inspector or Inspection Service representative signs here.
- 9. Give the date the Housing Plans Review Form was completed.

••••••••••••••••••••••••	**************************************	3000000000000000000000000000000000000	000000000000000000000000000000000000000
SAMPLE HOUSING REVIEW FORM	PLANS		
		<u>A</u>	(Agency)
		<u>B</u>	(Housing Inspector, Advisor)
HOUSING PLANS RI	EVIEW		
The specifications and pl corrections numbered prior approval of the bui	(1) to (2) as s	summarized belo	we been reviewed and approved for use with ow. No other changes may be made without in writing.
	•		or does not EXEMPT the borrower, builder or the standards as prescribed.
First Nation:		3	
Site Description:		4	
Change No.	Sheet No.		Description of Required Corrections, Authorized corrections
(5)	(6)		7

Change No.	Sheet No.	Description of Required Corrections, Authorized corrections
(5)	6	7
ame:	8	Date: 9



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Date of Review: First Nation: Site Description: Inspector: Site Plan Yes No Yes No Up to date survey provided? Have Building Services (water, sanitary disposal and electrical) been indicated? Does the site plan correspond with this Have existing or finished ground levels survey? (simple drainage plan) been indicated? Is there adequate offset from the property Soil information noted? lines? Have existing buildings, lane ways etc. been indicated? Foundation Plan No Yes No Have footings, walls, columns and beams Is there soil information to indicate what been properly shown and dimensioned? may be expected furing excavation? Are sections missing where there should be some? Floor Plans Yes No Yes No Have floor plans been provided for each Have heating ducts, vents and return air storey? vents been indicated? Has the proposed use of each room been Is there proper wing for each door? designated? Have the location of plumbing and electrical fixtures and outlets been shown? Elevation Drawings No Yes No Is there an elevation for each exterior wall Have roof penetrations been indicated on the home? (roof vents, chimneys, skylights and plumbing stacks)? Type of exterior cladding been indicated? Has a door and window schedule been Has pitch of all roof lines been shown? provided? Location size and meterial type for: 1) any exterior steps 2) any proposed decks

AMPLE PLANY REVIEW CHECKLIST

Sec	ction a	and Detail Drawings ••••••	o o oo	000000	
Yes	No		Yes	No	
		Proposed drainage for final grades indicated?			Main structural components of home are shown (size, location, foundations, floor systems, load carrying walls and roof
		Is composition of exterior walls and attic shown on drawings?			design)?
De	tailed i	Drawings ••••••••••••••••••••••••••••••••••••	0000	000000	00000000000000000000000000000000000000
Yes	No		Yes	No	
		Has it been identified how the foundation wall is to be connected to the footing?			Are there details on the inside of the crawl space or basement (insulation, floor completion, vapour barrier and interior
		Has it been identified how the drainage around the footing will be constructed?			finish)?
		Is there information about type and depth of backfull material?			Is it identified how the above grade level framing is to be attached to the foundation wall?
		Has it been identified how damp proffing is to be completed?			Are there exterior wall construction details (framing, sheathing, insulation, air barrier, interior and exterior finishes, and flashing)?
					Is it identified how the exterior walls and the roof are to be connected?
Plu	ımbing	, Electrical and Heating Draquings	ī	•••••	0
Yes	No		Yes	No	
		Is there a layout of the electrical systems?			Are there calculations for the following:
		Is there a layout of the plumbing system?			 Total Ventilation Capacity Design Heat Loss
		Is there a drawing showing the location of the drainage and venting components?			Are there details of heating and mechanical ventilation equipment specifications?
Fire	e Prot	ection Review ••••••	0 00 0 0	••••••	00000000000000000000000000000000000000
Yes	No		Yes	No	
		Have the location and accessibility of fire exits been identified on the house plans?			For multiple unit buildings, have the plans identified:
		Are there provisions for fire alarms, smoke alarms, and fire suppression systems on the house plans?			location of fire walls degree of fire separation between storeys location of closures in fire separations information regarding fire rating materials

COMPLETING THE NHA PROGRESS REPORT

The next page is a sample NHA Progress Report. The numbers on the sample correspond to the following numbers:

- 1. Record the property address of the inspected.
- 2. If you have it, give the CMHC account number for the project.
- 3. Give the date of the report.
- 4. Give the inspection report number.
- 5. Check "yes" or "no" if the services have been installed.
- 6. Check "yes" if the unit is completed. If it is not, check "no."
- 7. Record the percentage completed in the far right column for each item. The percentage completed cannot be more than the percentage in the column to the left. Percentage completed is an estimate by the Inspector.
- 8. Add the actual percentage in the far right column and record this result in this space.
- 9. Check the box in the General Assessment Section that describes the inspection results.
- 10. Record all observations, deficiencies or infractions in this section.
- 11. If you are employed by a NISI Inspection Service, give the name of the service. If you are self-employed, print your name.
- 12. Sign your name.

NOTE: Project funds are advanced based on the reports from the NISI Inspector or Inspection Service. It is therefore important to schedule inspections so there is no delay in advancing project funds.

Sample NHA Progress Report



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Property Address	CMHC Acct	. No.	Date of Re		oection ort No. 4
	Services In:	stalled	5	Y	es 🔲 No
	Complete f	or Mor	tgages Purp	oses 🔲 Y	es No 6
Guide to percentage completion of single storey, 1 1/2 semi-de		levbel,	2 storey an	d bi-level, de	etached or
Note: For units constructed without basements:					
Deduct 8% from the "total Percentage Complete" at Deduct 4% from the "Total Percentage Complete" at the final.		_		ce examinati	ons except
				(1) %	Actual %
Excavation, foundation / slab, beams, columns, joists, sub	-floor			16	
Backfill, framing, sheathing, roof, roughed-in electrical, roinsulation, vapour barrier	oughed-in plu	mbing	,	22	
Roughed-in heating				2	
Exterior doors and windows				3	
Exterior finish				12	
Basement floor				3	
Heating equipment 7				5	
Interior doors				2	
Interior wall and ceiling finish				8	
Finish, floor coverings				3	
Complete electrical (including fixtures)				1	
Complete plumbing (including fixtures)				4	
Finish carpentry				11	
Painting				5	
Site Works				3	
		%	Complete	100	8

General Assessment 9	Construction conforms reasonably with established codes, plans, specifications and applicable building standards.	Construction accepted subject to correction of infractions or deficiencies as noted.
Notes		
10		
Inspection agency		Inspector's signature
(11)		(12)

RRAP TECHNICAL REVIEW AND INSPECTIONS

Section 5

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RRAP TECHNICAL REVIEW AND INSPECTIONS

CMHC's Residential Rehabilitation Assistance Programs (RRAP) are important tools to help improve existing First Nations housing stock. RRAP financial assistance can improve the health and safety of community housing and improve accessibility to better meet the needs of people with disabilities.

CMHC requires a technical review and inspections to help determine what repairs are needed and to ensure that they are completed according to the RRAP work description and, where applicable, conform to approved plans and specifications.

This section of the Guide specifies RRAP inspection and reporting requirements.

RRAP agents operate under a RRAP Agency Agreement, which is different from a NISI Agreement. A RRAP Agency Agreement may cover both administrative and technical aspects. The technical aspects, though, may be subcontracted to a technical service provider. RRAP Agency Agreements can either be with a RRAP delivery agent or with CMHC.

RRAP INSPECTIONS

There are two different On-Reserve Residential Rehabilitation Assistance program (RRAP) programs: *Homeowner RRAP* and *RRAP for Persons with Disabilities*.

Homeowner RRAP offers financial assistance to low-income First Nation homeowners for repairs. The program helps people who live in substandard dwellings to pay for repairs to make their homes safe and healthy.

RRAP for Persons with Disabilities helps lowincome First Nation homeowners modify their homes to improve accessibility for disabled occupants.

The Inspector's role

The NISI Inspector or Inspection Service role in RRAP program involves:

- 1. Being familiar with Homeowner RRAP Standards and Eligible Modifications for RRAP for the Disabled.
- 2. Inspecting the home for repairs or modifications that qualify for RRAP assistance.
- 3. Completing a work description—clarifying each work item—and coding each item properly. Proper coding means identifying the applicable RRAP standard and confirming that each repair item is either a *qualifying repair* or a *mandatory repair*.
- 4. Providing a cost estimate for each work item.
- 5. Reviewing estimates and confirming them with the First Nation RRAP administrator.
- 6. Inspecting to confirm completion of the work when there is a request for payment. After an inspection, complete *Form #2* and send it to the RRAP Administrator.
- 7. Helping the RRAP Administrator resolve disputes between the homeowner and the contractor.

Homeowner RRAP

To qualify for Homeowner RRAP funds, a home must be substandard or deficient in at least one of the following five areas:

Structural

- Electrical
- Plumbing
- Heating
- Fire safety

Homeowner RRAP may also deal with overcrowding, as defined by the *National Occupancy Standard*.

Work categories

Every item on the work description must be either a qualifying repair or a mandatory repair.

Qualifying repairs

Qualifying repairs are major repairs of substantial cost that correct deficiencies that threaten the health or safety of the occupants. There must be at least one qualifying repair for the Homeowner RRAP.

Examples of qualifying repairs are:

- Roof replacement (deteriorated structural members, sheathing, shingles).
- Furnace replacement.
- Galvanized pipe replacement.
- Electrical service upgrades.

There can be many other types of qualifying repairs.

All other repairs are mandatory repairs.

Mandatory repairs

Mandatory repairs are repairs needed for a minimum level of health and safety for occupants and to extend the useful life of the home. All mandatory health and safety repairs must be completed.

Examples of mandatory repairs include:

- Improvements to fix poor site drainage.
- Replacement of poor exterior stairs.
- Installation of handrails in stairways.
- Replacement of countertops that are in poor and unsanitary condition.

There can be many other mandatory repairs.

Minimum level of bealth and safety

To decide if a repair is mandatory, the NISI Inspector or Inspection Service must decide if the repair is needed to reach a minimum level of health and safety for residents. "Minimum level of health and safety" is a reasonable quality of structural soundness, fire safety and reasonable quality for heating, plumbing and electrical systems.

"Reasonable quality" is determined by the authority having jurisdiction or by CMHC.

Ineligible repairs

The following are ineligible for Homeowner RRAP assistance:

- Work started before getting RRAP approval.
- Work that goes beyond RRAP standards.
- Work on a commercial or non-residential part of a building.

RRAP for Persons with Disabilities minimum level of bealth and safety

A dwelling being considered for assistance under RRAP for Persons with Disabilities must meet the same minimum health and safety levels as a dwelling does for Homeowner RRAP. If it does not meet the minimum standards, it must be brought up to standard before considering modifications to improve it for occupants with disabilities. A Homeowner RRAP may be required to bring the dwelling to the minimum level of health and safety.

Eligible modifications

Modifications under RRAP for Persons with Disabilities must:

- Improve accessibility for disabled occupants.
- Be reasonably related to the occupant's disability.
- Be related to housing.
- Provide access to permanently installed basic facilities within the home.

Ineligible modifications

Modifications that are not eligible RRAP for Persons with Disabilities include:

- Work started before approval of the loan.
- Therapeutic equipment or modifications for supportive care, such as nursing care.
- Work on a commercial or non-residential part of a building.

TECHNICAL REVIEW AND INSPECTIONS

There must be a signed agreement between CMHC and a NISI Inspector or Inspection Service before RRAP inspections can start.

The objectives of review and inspection are:

- To ensure that proposed and completed work is eligible under RRAP, as either qualifying or mandatory.
- To provide or confirm cost estimates.
- To determine if work conforms to the work description.
- To determine level of completion for requests for payment.
- To review and report on the performance and acceptability of building materials and systems.
- To promote good housing design, construction and rehabilitation practices through information transfer to First Nations.

Inspections are typically scheduled at critical stages of the rehabilitation work. At the very least, RRAP inspections include:

- Preliminary inspection, to determine scope of work
- Follow up (progress) inspections

Inspection procedures

The chart summarizes the inspection steps for rehabilitation and conversion projects.

Confirm that the BCR naming NISI Inspector or Inspection Services has been sent to CMHC.

Confirm signing of RRAP Agency
Agreement.

Obtain and review project plans, if plans are required. If plans are not required, schedule site inspection.

Complete a work description for each property and send it to CMHC and the First Nation.

Schedule inspections each time a request for payment is submitted. Send reports to CMHC and First Nation.

FILLING OUT A RRAP WORK DE/CRIPTION

The next page is a sample RRAP Work Description. The numbers on the sample correspond to the following numbers:

Contractors should not use this form to submit quotes.

- 1. Put the applicant's name here.
- 2. Give the applicant's area code. If the applicant does not have a telephone, write NA)
- 3. Give applicant's full seven-figure telephone number. If the applicant does not have a telephone, write NA.
- 4. If the applicant is employed, fill out the applicant's telephone number at work. If the applicant is not employed, write NA.
- 5. Give the total number of pages in this report. Typically, there are either one or two pages.
- 6. CMHC Account No: This can be left blank and filled in later by the First Nation.
- 7. Give the applicant's address.
- 8. Provide the number of homes on this inspection. Typically, this is 1
- 9. Give the number of bedrooms in the unit.
- 10. Agency Account No: If you assign numbers to each inspection, put the number here.
- 11. Administering agency: Give the First Nation information here
- 12. Program type: Check the box that applies to the program being inspected. (For First Nations, it will be either "Homeowner" or "Disabled.")
- 13. Dwelling type: Circle the most suitable description of the home being inspected. Fill in the box on the right side of the section with the corresponding code.
- 14. Work item No.: Number each of the work items that were identified during the inspection.

- 15. RRAP Standards Reference No: From the RRAP Standards Codes, select the code that best describes the identified work item.
- 16. Work category: Identify each work item as either a qualifying or mandatory repair. Remember: an applicant must have at least one qualifying repair to be eligible for the program.
- 17. Work description: use this space to describe the type of repair that has been identified during the inspection. The following is an example for a roof replacement: remove all existing roof covering repair roof sheathing as required install metal drip edge install eave protection 0.91 m (36 in.) above interior wall install new flashing as required install roof vents sized at 1/300 of the roof space ventilation area. supply and install 25-year shingles according to manufacturer's specifications all material to be disposed of in proper landfill site.
- 18. Estimated cost: Calculate an approximate cost for each work item. Write the cost for each item in each of these corresponding spaces.
- 19. Subtotal (This page only): Add up all of the estimated costs for the work items on this page. Put the total cost in this space.
- 20. Subtotal: In this space enter the number of pages in the report. For instance:

No. of pages	Coding
in report	
1	
2	(Page 2 to 2)
3	(Page 2 to 3)
4	(Page 2 to 4)

21. In this space, give the dollar value for the total of estimated costs for the pages identified in Section 20. The following are specific examples.

No. of pages in report	How to find the total estimated cost
1	
2	add the estimated costs from page 2 add the total estimated costs from page 2 and 3
4	add the total estimated costs from page 2,3,and 4.

- 22. Total: Add the figures in Box 19 and Box 21 to determine the overall total estimated costs.
- 23. Report Type: Check if this report is the original or if it has been amended. An amended report is one in which the original report has been changed.
- 24. Inspection Site: Put the inspection date here. Make sure to write the full date—month, day and year. This will be helpful for future reference.
- 25. Inspectors Name: Print your name here.
- 26. Inspector's Signature: Sign here.

SAMPLE RRAP WORK DESCRIPTION



Page 1 of _____ 5

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Applicant'	s Name		Area Code	_	_	Telephone No Wor	k CMI	IC Acct.	No.	
(1)	1		2 3		3)	(4)	6			
Address of	ddress of Property Being Rehabilitated No. of Units No. of Beds Agency						gency A	Account No.		
Administering Agency (1)			I		Program Tyj RRAP (12)			☐ Rental ☐ Rooming House		
Dwelling '	Гуре 🔞									
001 - Single 003 - Du 002 - Detached 004 - Roy					008 - Triplex 009 - Other	0	0			
The follow	ving items	specify the w	ork to be funde	d under the	Residenal As	ssistance Programs				
Work Item No.	RRAP Stds. Ref. No.	Work Category (Q,M,E)	Work Description					Estimated Cost (nearest \$)		
14)	15)	16	(17)						(18)	
Sub-Total	this page (only)						19		
Sub-Total	(pageto_	_) 20						21)		
Total								22		
☐ Original ☐ Amende		Inspection Date	Inspector's	Name (Pleas	se Print) 25	Inspector's Signa	ıture	26		
should be		l between the	g / bidding purp applicant and			ble for use as a contra k begins.	act. A fir	m contra	ıct	
Name			Address				Date			
CMHC / Se	CHL 2553	2/95 CMH PU	Inc	_	e a right of a	Corporation is subject access to CMHC contr		•		

RRAP /TANDARD/ REFERENCE CODE

Homeowner RRAP standards for rebabilitation

1. General

- 1.1 Specifications, permits, fees and drawings
- 1.2 Architecturally or historically significant buildings
- 1.3 Protection against termites and other pest infestation

2. Site planning and improvement

- 2.1 Dilapidated structures
- 2.2 Walkways and driveways
- 2.3 Site grading and improvement

3. Rooms and spaces

- 3.1 Food preparation and eating space
- 3.2 Bathrooms and toilet rooms
- 3.3 Appliances
- 3.4 Storage of garbage containers
- 3.5 Closets

4. Fire protection

4.1 General

5. Building envelope and structure

- 5.1 General
- 5.2 Stairs and landings
- 5.3 Foundations
- 5.4 Foundations for mobile homes
- 5.5 Walls
- 5.6 Roofs and roof spaces
- 5.7 Floors

6. Energy conservation and ventilation

- 6.1 Thermal insulation
- 6.2 Air barriers and vapour barriers
- 6.3 Ventilation
- 6.4 Windows and doors

7. Finishes

- 7.1 Exterior finish
- 7.2 Interior finish
- 7.3 Floors

8. Heating

- 8.1 General
- 8.2 Installation
- 8.3 Smoke pipes and chimneys
- 8.4 Protection of combustible surfaces

9. Plumbing

- 9.1 Water supply
- 9.2 Pipes and fixtures
- 9.3 Sewage disposal

10. Electrical

10.1 General

11. Extensions

- 11.1 General
- 11.2 Standards and dimensions

12. Environmental concerns

- 12.1 Flood protection measures
- 12.2 Lead-based paint
- 12.3 Asbestos
- 12.4 Site contamination

RRAP STANDARDS REFERENCE CODE

RRAP for persons with disabilities— Eligible modifications

1. General

- 1.1 General requirements
- 1.2 Eligible modifications
- 1.3 Ineligible modifications
- 1.4 Specifications, permits, fees and drawings

2. Approaching and entering the house or apartment

- 2.1 At the site
- 2.2 Ramps and chairlifts
- 2.3 Carports and garages
- 2.4 Entrances

3. Doors and windows

- 3.1 Doors
- 3.2 Windows

4. Building services

- 4.1 General
- 4.2 Electrical
- 4.3 Heating, cooling and ventilation
- 4.4 Plumbing

5. The kitchen

5.1 Modifying the kitchen

6. The bathroom

6.1 Modifying the bathroom

7. Hallways, corridors and stairways

- 7.1 Entrance hallway
- 7.2 Corridors
- 7.3 Level changes
- 7.4 Floor finishes

8. Other rooms

- 8.1 The bedrooms
- 8.2 Living and dining areas
- 8.3 Laundry room

9. Fire safety and warning devices

- 9.1 Fire safety
- 9.2 Assistance buzzers or alarms

10. Extensions or conversions

10.1 General

11. Multiple-unit buildings

11.1 Signage

- 11.2 Vestibules
- 11.3 Common areas

PORTFOLIO MANAGEMENT TECHNICAL REVIEW/ AND IN/PECTION/

Section 6

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Portfolio Management Technical Reviews and Inspections

6-1

PORTFOLIO MANAGEMENT TECHNICAL REVIEW/ AND IN/PECTION/

Physical condition reviews

Under the Section 95 program, CMHC and First Nations sign operating agreements. These agreements last until the loans are fully repaid. The agreements list CMHC and First Nations responsibilities, such as subsidy payments, upkeep of the projects, annual reporting and so on.

CMHC signs contracts with NISI Inspectors and Inspection Services for regular physical condition reviews of the projects.

Purpose

CMHC's objectives for physical condition reviews are:

- To monitor the condition of housing projects.
- To help assess the adequacy of replacement reserve funding.
- To help assess maintenance practices.

CMHC, as part of its goal to enhance capacity development, uses physical condition reviews to assist First Nations in managing their housing portfolios efficiently and effectively.

NISI Agreement and physical condition reviews

CMHC portfolio management staff is the main client for Physical Condition Reviews. The staff reviews the reports and uses the review information to help monitor the ongoing financial and physical health of the projects. CMHC tells the First Nation the results of each review.

First Nations are responsible for conducting their own annual inspections so they can prepare maintenance budgets. Physical Condition Reviews, which are not done every year, are not a substitute.

Section 7

TECHNICAL CONJIDERATIONS AND INSPECTION CHECKLISTS

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Final Inspection Checklist	7-17

TECHNICAL CONJIDERATIONS AND INSPECTION CHECKLISTS

NISI Inspectors and Inspection Services play an important role in improving the quality of new housing built in First Nations-both through the inspections and the advice and knowledge they share with others involved in housing.

Inspections are required for all Section 95 and Direct Lending projects. Following Plans Review, the following are expected:

- Preliminary site inspection.
- Foundation inspection.
- Framing inspection, including insulation, vapour barrier and air barrier inspection.
- Final inspection.

This Section of the Guide comments on each inspection phase and offers advice. This Section includes some background about building science. It is assumed that as Inspectors provide advice in the field that the common level of understanding of how houses work will improve.

Finally, there is a checklist for each inspection. These are suggested checklists. They highlight key areas that NISI Inspectors and Inspection Services should check during construction.

PRELIMINARY SITE INSPECTION

The first required inspection takes place before construction starts. The preliminary site inspection confirms that the expectations for the site are valid. The preliminary site inspection can also establish the grounds for an effective working relationship between the Inspector and the First Nation representative(s).

Before the inspection

Contact the First Nation and arrange a date and time for the site inspection. You should also find the name of the First Nation representative who will accompany you.

Tip #1

If the First Nation's designated representative is a contractor, ask the First Nation for a letter saying that the contractor is the designated representative. Put the letter in your project file.

Tip #2

Try to co-ordinate the site inspection with the Environmental Health Officer to discuss the location and installation of the septic system or well.

Tip #3

Bring a camera with you to photograph of site. This will be useful for future reference.

The site inspection

The following is a general guideline for a site inspection.

- 1. Arrive at the First Nation office to meet with the First Nation representative.
- 2. If the plans do not include a site plan or an updated survey, confirm with the First Nation representative that the proposed location is indeed the proper location. Record this on the Site Inspection Checklist.

Tip #4

Be sure to confirm the site location, the name of the First Nation representative who provided the information and the date and time it was provided.

On the First Nation Project Location Form mark the location of the project. An example of a completed form is in Section 9. On the sketch, mark:

- the First Nation administration office
- major roads near the project
- north arrow
- where units are located throughout the community, and the location of each unit
- if the project involves a number of units in one location, show each unit. Do not show an "X" and designate it as project location.

Tip #5

If the project consists of a number of units in one location, use a second document to detail the positioning of each unit. Attach this sheet to the first sheet. 4. Travel to the site of the proposed new unit. On site, complete the on-site inspection checklist on the next page.

Note the following:

- Has the project started?
- Topography and natural site features (steep slopes).
- Existing services (water, electrical, sanitary).
- Roads (condition).
- Adjacent land use (industrial, commercial buildings).
- Other buildings close by.
- 5. Record the results of the inspection on the *NHA Technical Report*. See Section 9 for a sample report.

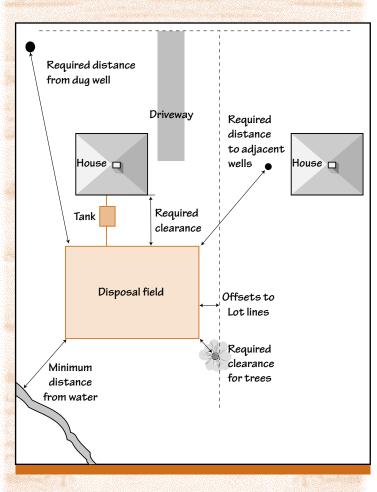
Tip #6

Recommend an excavation inspection if unusual soil or bearing conditions are anticipated. A soils consultant should do the inspection and recommend a foundation design.

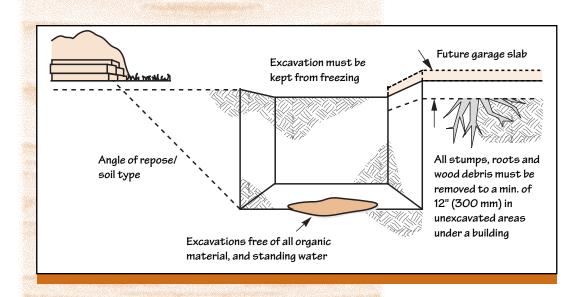
If the site is not suitable

If the site is unsuitable, the NISI Inspector or Inspection Service should:

- Complete an NHA Technical Report.
- Write a letter, with a copy of the *NHA Technical Report*, to the First Nation saying why construction should not go ahead; say in the letter that you are willing to provide technical assistance.
- Send a copy of the *NHA Technical Report* and the letter to the First Nation to CMHC.



- The proposed front, rear and side offsets from property lines.
- The elevation of the site and any potential drainage problems.
- Note where the existing ground elevation, street elevations or adjacent lots may cause problems in establishing finished lot grades and proper lot drainage.
- Note any existing structures that may be on the site.
- Determine if a soils report has been completed.
- Note the following:
 - Approximate soil type
 - Depth of water table, if encountered



FOUNDATION IN/PECTION

The foundation is the single most important element of a structure. A poorly designed or built foundation may result in:

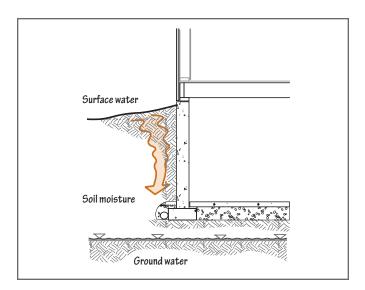
- Serious structural damage to the house.
- Water entering the house.
- Damage to interior finishes, windows and doors caused by shifting or settlement of the foundation.
- Occupant health problems as a result of exposure to molds.

A properly designed and built foundation serves several essential functions that Inspectors need to check.

Prevent water and moisture penetration

Foundation walls and basement slabs must be designed to prevent water from entering the house. Proper site grading, proper drainage from areas surrounding the footings and the use of free-draining materials around the foundation are fundamental. If there is a high water table, foundation design must be able to handle high hydrostatic pressures.

Moisture in the soil surrounding the foundation must be prevented from diffusing through the foundation into the interior space. Foundation walls must be dampproofed. A moisture barrier is

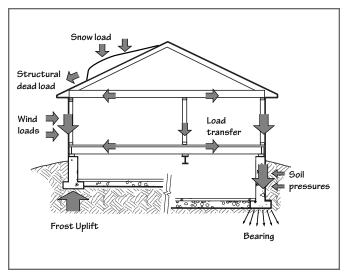


needed to prevent soil moisture moving through the slab or basement floor assembly.

Not placing a moisture barrier in crawl spaces can result in high humidity levels in the house. This often causes potentially dangerous levels of mold.

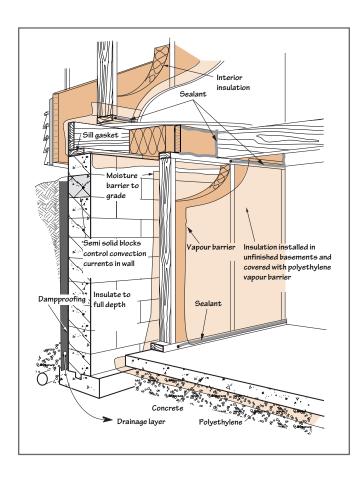
Load transfer

Foundation walls and footings transfer the building loads to the underlying soil. Foundations must be designed and built to accommodate the soil conditions on which they rest. Poor-bearing soils and foundations on high water tables require broader footings. Foundations must also be designed and built to withstand the effects of freezing and frost-related damage and to withstand the effects of expanding soil exerting lateral pressures.

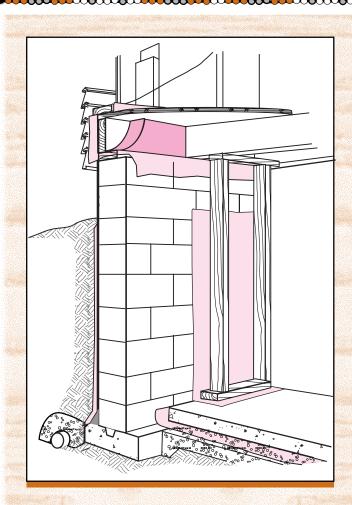


Control beat and air movement

Foundations must be designed and built to control heat and air flows. A continuous blanket of insulation around the foundation wall minimizes heat loss from the house interior. Insulation below basement slabs reduces heat loss, improves comfort levels and reduces the potential for condensation on the slab in the warmer months. Where the foundation wall and floor framing meet, design and construction should prevent air leakage.



Foundation Inspection Checklist



DRAINAGE LAYER Sump pump Graded to sump Gravel Extension

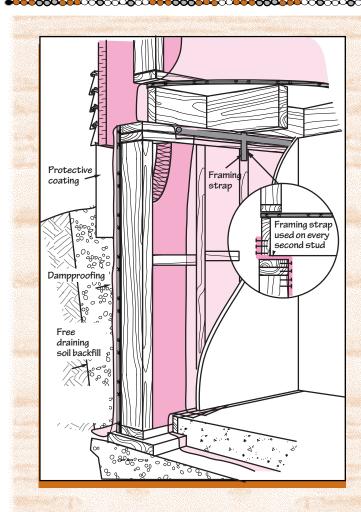
Exterior Inspection

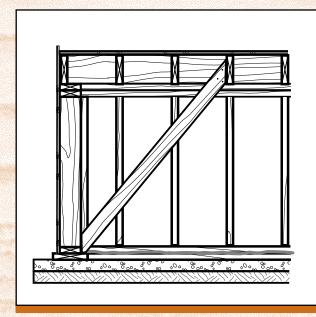
- Side, front and rear yard setbacks
- Thickness of foundation wall based on backfill height and lateral restraint
- Location of drainage tile and slope to dispersal
- Granular fill over drain tile
- Foundation parging and filling of form tie holes
- Foundation dampproofing and waterproofing as required
- The type of free-draining backfill materials to be used

Interior Inspection

- Location of footings for posts, piers
- Size of footings
- Drainage to sump in areas of high water
- Granular fill in preparation for basement slab
- Ground cover / moisture barrier in crawl space
- Bracing as required for PWF

► Foundation PWF Inspection Checklist



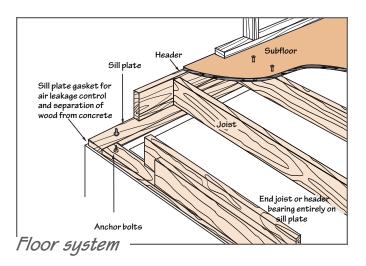


- Walls must be adequately blocked at mid height to resist soil pressures as required
- Ensure lateral support is in place at base and top plate
- Check for blocking between header and first joist along parallel walls
- Ensure built up framing around openings in walls is structurally sound
- Ensure well-draining backfill has been used and grade is properly sloped
- Check for sealed exterior plywood, dampproofing to the required height, and that moisture protection is properly installed
- Check barriers for construction damage and replace if required
- Oheck the plywood skirt board is in place
- Moisture barrier below slab should be installed if concrete is < 25 MPa
- Electrical service in exterior walls runs vertically through top plate to joist space
- Ensure proper sealing of polyethylene membranes
- Check for proper drainage past footing
- Stairwells along exterior walls must have reinforcement

FRAMING IN/PECTION

Typically, the framing inspection also deals with elements of the air barrier system that are installed during framing. More detailed inspection of the thermal aspects of the building envelope—the insulation, air barrier and vapour barrier—is usually performed later.

When reviewing the framing, you need to look at the floor system, wall framing and roof framing.



The floor system usually consists of beams, floor joists and sheathing. Typically, the floor system is anchored to the foundation to resist lifting forces from the wind and for lateral restraint from soil pressures.

A properly designed and built floor system should:

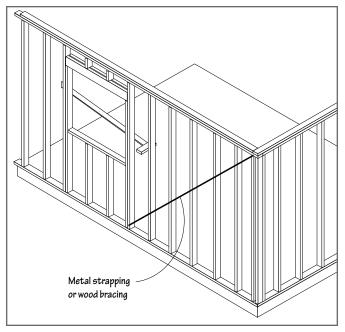
- Transfer both dead and live building loads to the foundation.
- Resist deflection and excessive vibration from undersized or over-spanned members, which will lead to deflection and vibration and may cause damage to interior finishes.
- Provide an acceptable surface for finished flooring materials.
- Restrict air leakage through the floor system.

Wall framing

Wall framing includes the fastening of vertical and horizontal members, usually made from wood or steel. They form the inside and outside walls of the house. The frame support upper floors, ceilings and the roof. It also serves as the support for attaching inside and outside wall-coverings

Properly designed and built wall framing:

- Transfers dead and live loads to the floor system and then to the foundation.
- Provides the house with enough stability to resist exterior wind-loading, racking and stability to resist movement associated with minor settlement of the foundation. Poor framing techniques can result in binding of windows and doors.
- Provides support and a nailing surface for interior and exterior finishes. Poor framing techniques, such as improper placement of wall studs or undersized lintels, can damage interior finishes over time.

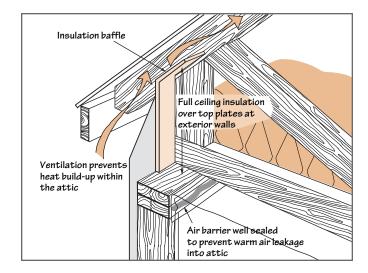


Roof system

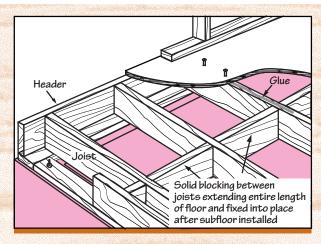
Roof framing is the base to which roof coverings (sheathing shingles, metal roofing) are attached. The frame must be rugged and strong enough to withstand exterior loading.

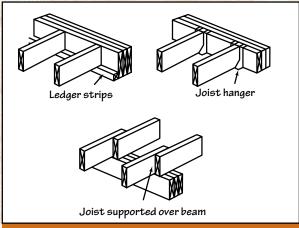
Properly designed and built roof framing:

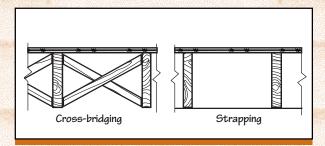
- Transfers dead and live loads to the supporting wall system. (Note that roofing components that deflect due to loads may be undersized.)
- Provides adequate resistance to wind and movement from moisture absorption.
 Sheathing installation must allow for some expansion.
- Provides adequate space for insulation to limit the loss of heat from the attic space. Be sure that the framing allows for continuity of the air barrier.

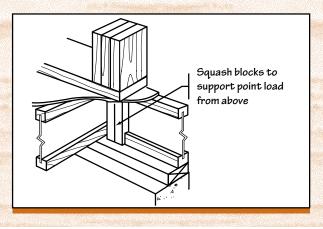


Floor Inspection Checklist





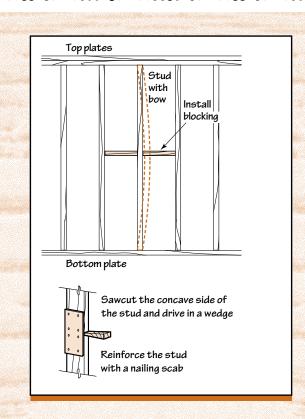


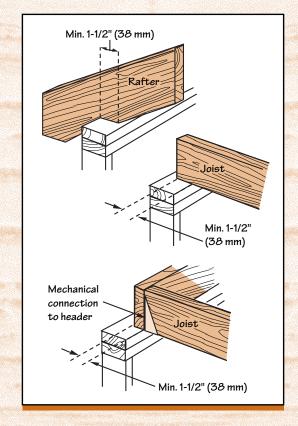


Check floors for sagging, squeaking and bounce and for required strapping and blocking.

- Check for proper bearing of beams and joists.
- Check that anchor bolts are fastened.
- Ensure moisture protection has been installed on framing members embedded in concrete foundation walls.
- Ensure that any imperfections in joists have been corrected, straightened and reinforced.
- Check for proper build-up framing around stair openings and over basement windows.
- Ensure that required fire-stopping is installed.
- Ensure that header wrap is installed.
- Ensure that support for interior partitions is in place.
- Ensure that I beams and web joists are reinforced where required.
- Check all notching and drilling for allowable limits and reinforce where required.
- Ensure that all penetrations through the header are properly sealed.

Walls and Roof Inspection Checklist





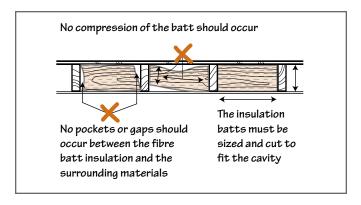
- Ensure that all defective members have been corrected (twists, bows, alignment)
- Ensure proper lintel size and bearing
- Check for proper blocking and firestops in bulkheads
- Check corner and intersecting wall details for allowable nailing for interior finish
- Ensure that rough openings are plumb and square and have proper bearing capacity
- Ensure proper bearing for beams and built-up trusses
- Check header wrap for proper placement during framing
- Check that all construction damage has been repaired
- Ensure that penetrations and openings are properly sealed and flashed
- Check notching and drilling for structural integrity
- Ensure that walls have been properly braced or sheathed to resist racking forces
- Check truss fastening and diagonal bracing
- Ensure proper bearing for built-up trusses, rafters and joists
- Check collar-tie spacing and location and that lateral support is sufficient
- Inspect proper nailing of bracing members

INJULATION, VAPOUR BARRIER AND AIR BARRIER JYJTEM INJPECTION

The combination of insulation, vapour barrier and an effective air barrier system provides a high degree of protection for the building envelope from the weather.

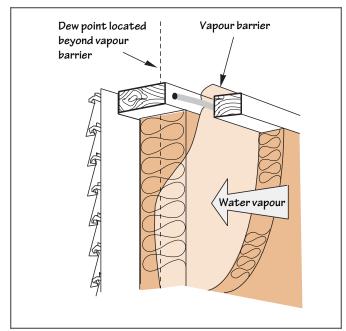
Insulation

Insulation should be in all floors, walls and ceilings that separate heated spaces from unheated spaces or exterior air or soil. Insulation should be continuous throughout the building envelope. When installing batt or loose fill insulation, the material should fill the entire cavity. Insulation should not be excessively compressed as the air pockets in the insulation provide thermal resistance.



Vapour barrier

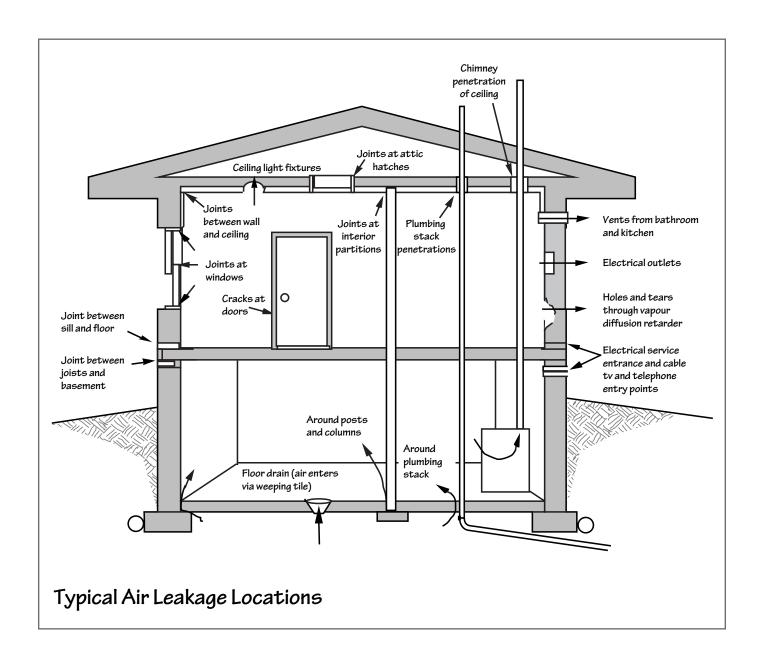
Vapour barriers, or moisture barriers, are membranes that restrict the diffusion of moisture. A vapour barrier should always be on the warm side of an insulated wall. When properly installed, it will prevent moisture in the heated air from entering the building envelope. A vapour barrier is needed to prevent moisture passing from soils into the house. A moisture-barrier ground cover is essential in crawl spaces.



Air barrier system

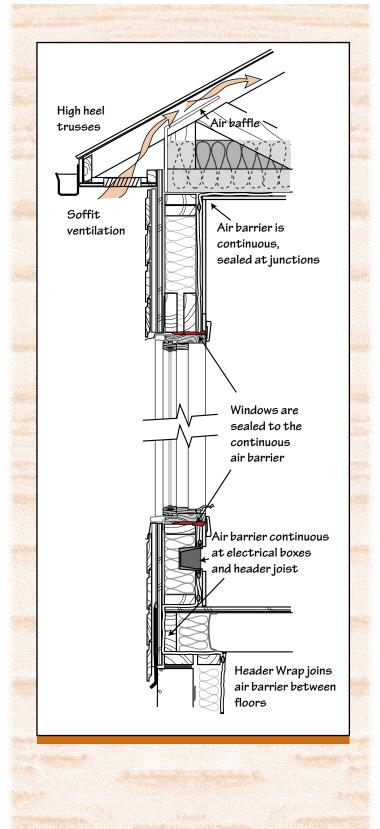
An air barrier system prevents moisture-laden warm air from moving into the envelope, where it might condense, and to restrict cold outside air from moving into the heated space. The air barrier system must be continuous through the building envelope and free of gaps, tears and discontinuities.

The air barrier system may be made up of several different materials—polyethylene, house wrap, rigid insulation, and so on—with effective seals provided where materials meet. When using materials with low permeability (high resistance to moisture coming through) the air barrier must be installed on the warm side of the building envelope.



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Air / Vapour Barriers Inspection Checklist



- Ensure enough space between sheathing sheets.
- Ensure penetrations are not too large.
- Ensure insulation, air and vapour barriers are installed in the proper locations.
- Ensure proper sealing of joints of air barrier systems.
- Ensure all penetrations in air barrier systems are properly sealed.
- Ensure vapour barriers are installed in the proper locations.
- Ensure insulation is installed properly. In framing areas it should be placed within the full length and width of the area. It should also be installed with one side in full contact with an element that has low air permeance.

FINAL INSPECTION

The final inspection looks at the exterior and interior of the house to:

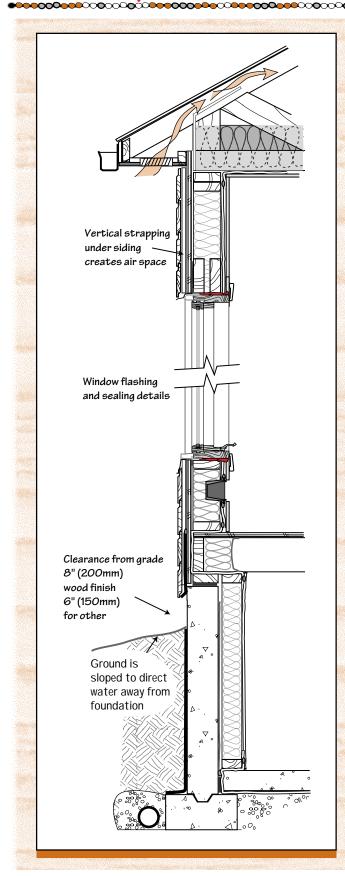
 Ensure that all the components of the house (finishes, electrical, mechanical and so on.) have been installed and completed properly and work properly.

The final inspection is usually completed before the clients move into their new home. The First Nation should allow enough time for the NISI Inspector to do the final inspection and for the contractor to fix what the Inspector finds wrong. If enough time is not allowed, and people move into the house there is the potential for health and safety problems.

The following are general guidelines for a final inspection:

- 1. Review previous inspection reports.
- 2. Schedule date and time of inspection with First Nation representative. Determine the date that people are expected to move into the house.
- 3. On-site, start the inspection on the exterior and then inspect the interior. Use the checklist on the next page as a reminder of issues to inspect.
- 4. Complete the inspection report on the *NHA Technical Report*.

Final Inspection Checklist



EXTERIOR ITEMS

Ensure that the finished grading provides positive drainage away from the home. If there are window wells, make sure that they have been properly installed.

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- Ensure the proper clearance of cladding materials
 (masonry veneer, siding, stucco) from finished grade.
- Check for the proper installation of driveways, exterior steps and landings.
- Check that exterior roof coverings are properly installed.
- Ensure that the installation of flashings and caulking around exterior doors and windows has been properly completed.
- Check that soffits, fascias and eavestroughs have been properly installed.
- Check that exhaust vent outlets (exhaust fans, HRV intake and exhaust, and so on) are fitted with hoods and screens.

INTERIOR ITEMS

- Check that windows, interior doors, finished cabinets, millwork, hardware, flooring, tiles, painting are completed and properly installed.
- Check that plumbing, heating and electrical systems and their fixtures and operating controls are properly connected and ready to use.
- Check the operation of mechancial ventilation system (fans, controls, etc.).
- Check that stairs, railings and guards are completed and properly installed.

Completing the NHA Technical Report:

- Record any deficiencies, infractions or lack of certificates;
- Write on form deficiencies or infractions that affect property value, structural integrity or raise health and safety concerns.
- Show per cent completion and say whether the unit is ready for occupancy.

REGIONAL VARIATIONS

Section 8

TABLE OF CONTENT/

Regional Variations

8-1

REGIONAL VARIATIONS

This *Guide* applies to NISI Inspectors and Inspection Services anywhere in Canada. There are variations to meet geographical, economic, political and cultural differences among First Nations

It is the mandate of CMHC's Regional Service Centres to work with NISI Inspectors and Inspection Services to develop and ensure an understanding of specific regional policies. These regional policies will be included in this Section of the *Guide* as they are developed.

Examples of regional variations include:

- In Ontario, all NISI Inspectors and Inspection Services must pass an examination developed by the Ontario First Nations Technical Service Committee (OFNTSC), no matter what their education and experience.
- NISI Inspectors and Inspection Services serving remote communities in some regions may follow different procedures based on the cost and difficulty of travel.
- In remote communities in some regions, there may be longer turnaround times for filing inspection reports to CMHC.

SAMPLE FORMS

Section 9

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NHA Inspection Report	9-1
RRAP Work Description	9-3
Housing Plan Review	9-4
First Nation Project Location Form	9-5

NHA INSPECTION REPORT (page 1 of 2)



Property Address	CMHC Acct.	No. Date of Ro		oection ort No.
	Services Inst	alled	Y	es 🔲 No
	Complete for	r Mortgages Pur	poses 🔲 Y	es 🔲 No
Guide to percentage completion of single storey, 1 sem	1/2 storey, split le i-detached.	evbel, 2 storey ar	nd bi-level, de	etached or
Note: For units constructed without basements:				
Deduct 8% from the "total Percentage Complete" Deduct 4% from the "Total Percentage Complete the final.		•	ice examinati	ons except
			(1) %	Actual %
Excavation, foundation / slab, beams, columns, joists,	sub-floor		16	
Backfill, framing, sheathing, roof, roughed-in electrical insulation, vapour barrier	l, roughed-in plun	nbing,	22	
Roughed-in heating			2	
Exterior doors and windows			3	
Exterior finish			12	
Basement floor			3	
Heating equipment	5			
Interior doors			2	
Interior wall and ceiling finish			8	
Finish, floor coverings			3	
Complete electrical (including fixtures)			1	
Complete plumbing (including fixtures)			4	
Finish carpentry			11	
Painting			5	
Site Works			3	
		% Complete	100	

NHA INSPECTION REPORT (page 2 of 2)



номе то canadians Canada

General Assessment	Construction conforms reasonably with established codes, plans, specifications and applicable building standards.		Construction accepted subject to correction of infractions or deficiencies as noted. Re-inspection is required. See notes.
Notes			
Inspection agency		Ins	pector's signature

RRAP WORK DE/CRIPTION



HOME TO CANADIANS

Canada

Page 1 of _____

Applicant'	s Name		Area Code Telephone No Home Telephone No Work CMHO			C Acct	. No.				
Address o	f Property Being Rehabilitated No. of Units No. of Beds Agency Ac					count	No.				
Administe	ring Agen	су	0 /1 = =				Rei	ntal oming I	House		
Dwelling '	Туре										
001 - Sing 002 - Deta		003 - Di 004 - Ro	-	005 - Apart 006 - Mobil			08 - Triplex 09 - Other		0	0	
The follow	ving items	specify the w	ork to be fund	ed under the	Residenal	Assista	ance Programs			-	
Work Item No.	RRAP Stds. Ref. No.	Work Category (Q,M,E)		Wo	rk Descriţ	otion				Estim Co (neare	st
Sub-Total	(this page	only)									
Sub-Total	(page_to										
Total											
Original Amende		Inspection Date	Inspector's	s Name (Pleas	se Print)		Inspector's Sig	natur	æ		
	negotiate	d between th	g / bidding pur e applicant and	•				tract.	A firi	n cont	tract
			A 11						- 4 -		
Name			Address						ate		
CMHC / S	CHL 2553	2/95 CMH PU	In		e a right o		poration is subj ss to CMHC cor				

HOUSING PLANS REVIEW



Canada A (Agency) **B** (Housing Inspector, Advisor) **HOUSING PLANS REVIEW** The specifications and plans, consisting of _____ sheets, have been reviewed and approved for use with corrections numbered _____ to ____ as summarized below. No other changes may be made without prior approval of the building inspector of the A (Agency) in writing. Approval of plans and specifications by the building inspector does not EXEMPT the borrower, builder or contractor from their obligation to meet REQUIREMENTS of the standards as prescribed. First Nation: Site Description: Change No. Description of Required Corrections, Sheet No. **Authorized corrections**

Date:

Name:

FIRST NATION PROJECT LOCATION FORM



HOME TO CANADIANS

Canada

First Nation		Project Name	Pro	oject Type Homeowner Disabled	☐ Rental☐ Rooming House
No. of Units	Inspector's Name			Date	Project No.

CMHC INFORMATION AND PUBLICATION Section 10

CMHC INFORMATION AND PUBLICATIONS

Web address

www.cmhc-schl.gc.ca

CMHC's Web site has information about buying and renting a home, mortgages and mortgage insurance, Healthy Housing $^{\text{\tiny TM}}$, FlexHousing $^{\text{\tiny TM}}$, building, renovating and maintaining a home and programs for Aboriginal Peoples, older Canadians and Canadians with disabilities.

It's easy to find your way around the CMHC Web site. Make our Web site your first stop when you are looking for any type of information about housing.

Publications

Design and construction

Title	Order #	Price
Best Practice Guide: Flashings	6919E	\$89
Best Practice Guide: Wood Frame Envelopes	6921E	\$89
Best Practice Guide: Wood-Frame Envelopes in the Coastal Climate of British Columbia	2178E	\$89
Building Solutions: A Problem Solving Guide for Builders and Renovators	2004E	\$34.95
Canadian Wood-Frame House Construction*	5031E	\$25.95
Canadian Wood-Frame House Construction on CD-ROM	2586	\$64.95
Complying with Residential Ventilation Requirements in the 1995 National Building Code	6451E	\$12.95
Details of House Construction Poster	5011E	\$6.95
Glossary of Housing Terms*	1165E	8.95
FlexHousing™: The Professional's Guide	2400E	\$24.95
FlexHousing™: Homes that Adapt to Life's Changes	2020E	\$9.95
Moisture and Air Problems and Solutions	5968E	Free
Moisture in Atlantic Canada	6779E	\$14.95
Tap the Sun: Passive Solar Techniques and Home Design	2000E	\$39.95

^{*}Canadian Wood-Frame House Construction and Glossary of Housing Terms are available as a package. The Order # is 4028; the price is \$29.95

Renovation

Title	Order #	Price
Renovators Technical Guide	6993E	\$34.95
Renovator's Business Guide	2018E	\$24.95

Communities

Title	Order #	Price
Soil Gases and Housing: A Guide for Municipalities	6728E	\$5.95
Construction and the Environment: How Home Builders and Renovators Can Help Build a Green Future	6719E	\$5.95
Guide to Affordable Housing Partnerships	2216E	\$19.95
Sharing Successes in Native Housing: Highlights of the CMHC Housing Awards Symposium on Aboriginal Housing	6821E	\$9.95
Practices for Sustainable Communities	2462	\$59.95

Housing for persons with disabilities

Title	Order #	Price
Housing for Persons with Disabilities	5467E	\$11.95
Housing Choices for Canadians with Disabilities	6619E	\$7.95

Housing for seniors

Title	Order #	Price
Housing for Elderly People: Design Guidelines	5075B	\$4
Planning Housing and Support Services for Seniors	2014E	\$44.95
Housing Options for People with Dementia	2214E	\$24.95
Housing for Older Canadians	2184E	\$49.95
Supportive Housing For Seniors	PE0381	Free

Healthy HousingTM

Title	Order #	Price
A Guide to Mechanical Equipment for Healthy Indoor Environments	PE0372	Free
Building Materials for the Environmentally Hypersensitive	6742E	\$29.95
Clean-up Procedures for Mold in Houses	6753E	\$3.95
Healthy Housing [™] Renovation Planner	2172E	\$34.95
The Clean Air Guide: How to Identify and Correct Indoor Air Problems in Your Home	6695E	\$5.95
Mold in Housing: An Information Kit for Aboriginal Communities	2600E	Free

Home maintenance

Title	Order #	Price
Cleaning Up Your House After a Flood	6789E	\$3.95
Homeowner's Inspection Checklist	2444E	\$19.95
Investigating, Diagnosing and Treating Your Damp Basement	6541E	\$9.95
Home Care: A Guide to Repair and Maintenance	5624E	\$6.95

Videos

Title	Order #	Price
Avoiding Wood-frame Construction Problems	VE059	\$19.95
Barrier-free Housing	VE008	\$9.95
The Living House: Foundations	VE020	\$9.95
Safe at Home	6837E	Free
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