



Natural Resources  
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**ecoENERGY**  
an ecoACTION initiative

# ENERGY STAR® for New Homes: Compliance Options

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Canada

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## 1. OVERVIEW

### 1.1 General

#### 1.1.1 Document Description

This document describes the compliance options available under the ENERGY STAR® for New Homes (ESNH) program in Canada. To label a new home as being ENERGY STAR qualified, Natural Resources Canada (NRCan) requires that:

- 1.1.1.1. New home builder participants work with an NRCan-licensed ESNH energy advisor (that has been trained and certified by an NRCan-licensed ESNH service organization) to determine construction specifications for each house by complying with one of the following compliance options: Performance Path or Prescriptive Path based on an NRCan-approved ENERGY STAR for New Homes Technical Specification;
- 1.1.1.2. New home builder participants ensure that the energy efficiency features (i.e.: type of windows, type of heating equipment, insulation levels in main walls, basement and attic, etc) of the ENERGY STAR package applied to each ENERGY STAR qualified new house are provided to the first owner of each home in writing;
- 1.1.1.3. The service organization overseeing the ENERGY STAR evaluation of each home must ensure that a record of each house and its ENERGY STAR package are provided to NRCan via electronic house files transferred to NRCan's national housing database as per the ENERGY STAR for New Homes File Submission Protocol;
- 1.1.1.4. All program participants (builders, energy advisors, and service organizations) involved with labeling a home as being ENERGY STAR qualified must ensure that the house meets the requirements outlined within this document and all other NRCan-published ENERGY STAR materials.

**Note:** Houses that meet the ENERGY STAR for New Homes requirements may also meet NRCan's national R-2000 Standard. If a builder wishes to R-2000 certify and ENERGY STAR label a home that they are building, then they must work with a service organization that is authorized by NRCan to deliver both the R-2000 Standard and ENERGY STAR for New Homes. Also, in this case, the ENERGY STAR Compliance Option that must be chosen is the Performance Path noted in Section 2.1.1.

#### 1.1.2 Quality Assurance

- 1.1.2.1. To reinforce the integrity of the ESNH program, NRCan undertakes quality assurance activities that include the audit of a random sampling of ESNH labeled houses (to confirm whether they comply with NRCan's minimum program requirements and whether the program administrative requirements have also been met). However, the ultimate responsibility for ensuring that houses labeled through ESNH meet NRCan's minimum program requirements rests with the builder.

Compliance of each house is verified by the energy advisor evaluating the house on-site. This process is managed and quality assured by a network of NRCan-licensed service organizations who are responsible for overseeing the evaluations and issuance of the ENERGY STAR labels for qualified homes only. Upon request, the builder, energy advisor, and service organization must each be able to provide NRCan with details of the construction specifications for any given ENERGY STAR qualified home that was labeled through their organization.

## 2. COMPLIANCE OPTIONS

### 2.1 Scope

The two compliance options available, as of January 1, 2011, under the ESNH program are detailed below. A third compliance option, the Hybrid Path, is currently under development.

#### 2.1.1 Performance Path (based on an EnerGuide Rating Service evaluation of each home):

Where,

- 2.1.1.1. Each house is evaluated by a Certified Energy Advisor in accordance with NRCan's EnerGuide Rating System's (ERS) Administrative and Technical procedures (including the modeling of each house in HOT2000, on-site evaluation and blower door testing of each house);
- 2.1.1.2. The construction specifications of each house are verified on-site to ensure that the house contains the required energy efficiency features;
- 2.1.1.3. The construction specifications for each house are designed to achieve the EnerGuide 80 performance target, and to meet all other ESNH minimum program requirements (including NRCan's Minimum Requirements for ENERGY STAR Qualified New Homes). Also, in Ontario only, the construction specifications for each home must meet the requirements of Performance Path files identified in NRCan's ENERGY STAR for New Homes: Technical Specifications – Ontario;
- 2.1.1.4. As per the ENERGY STAR for New Homes File Submission Protocol, an "ESNH Performance Route" file must be submitted to NRCan's national housing database for each house that complies via this method;
- 2.1.1.5. Each house that complies with the ESNH program requirements via this method will obtain an ERS label and an ESNH label;
- 2.1.1.6. A summary of the EnerGuide rated package, detailing the energy efficient components of the home, is required as an attachment to the final inspection checklist; and,
- 2.1.1.7. The analysis conducted under this Performance Path is limited to the specific house that is modeled and labeled. It is best suited to facilitate compliance of homes which are not readily covered by an NRCan-approved Prescriptive Path option.<sup>1</sup>

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<sup>1</sup> For example, these include homes that are smaller attached units or have large window areas that are not well covered by an NRCan-approved Prescriptive Path option. It is also intended to facilitate an entry point for builders that have already sought EnerGuide plan evaluations on their models or who are in transition to a Prescriptive Path to building ENERGY STAR qualified new homes.

**2.1.2 Prescriptive Path** (based on an NRCan-approved ENERGY STAR for New Homes Technical Specification): Where,

- 2.1.2.1. The construction specifications for each house are chosen from an NRCan-approved ENERGY STAR for New Homes Technical Specification that has been deemed by NRCan to comply with NRCan’s Minimum Requirements for ENERGY STAR Qualified New Homes;
- 2.1.2.2. An on-site evaluation (including a blower door test) to verify that the construction specifications of a house has been met is always required on a builder’s first home. However, if the first home meets the prescriptive requirements, then at the discretion of the energy advisor, a random sampling protocol can be implemented on a minimum of one in three houses after that. These on-site evaluations must include verification that all houses in the sample meet the construction specifications of the selected prescriptive path. Blower door test results of one home in the sample can be used to demonstrate compliance of all homes in the sample (up to three homes) to the air-tightness requirement(s);
- 2.1.2.3. As per the ESNH File Submission Protocol, an “ESNH Prescriptive Route” file must be submitted to NRCan’s national housing database for each house. The “reference house file” in these cases will be the house file provided by NRCan to the service organization which most closely represents the house as-built; and,
- 2.1.2.4. Each house that complies with the ESNH program requirements via this method will only obtain an ESNH label.

**Note 1:** The Prescriptive Path option is currently only available in Ontario and Saskatchewan. In Ontario, the NRCan-approved technical specification is NRCan’s ENERGY STAR for New Homes: Technical Specification – Ontario. In Saskatchewan, the NRCan-approved technical specification is Resource Efficient Housing Incorporated’s ENERGY STAR for New Homes Technical Specification (January 1, 2011 version). New Prescriptive Path options approved by NRCan will be made available at [www.newhomes.gc.ca](http://www.newhomes.gc.ca) as they are published.

**2.1.3 Hybrid Path**

At the time of publication, a third compliance path called the Hybrid Path, was being considered. Please check the online resource centre at [www.newhomes.gc.ca](http://www.newhomes.gc.ca) for the most current version of this and all other ENERGY STAR for New Homes program documents as they are posted there as they are updated and published.

### 3. FREQUENTLY ASKED QUESTIONS

#### 3.1. Questions and Answers

*Are there any exceptions to these rules?*

Yes, there are two exceptions:

1. Mindscape Innovations' MIBOP tool is an NRCan-approved tool that can be used to calculate a prescriptive set of technical specifications for a home in Ontario under the Prescriptive Path described within this document. All other requirements of the Prescriptive Path noted above must also be met. In 2009-2010, when NRCan's ENERGY STAR for New Homes: Technical Specifications – Ontario was developed, due to the nature of Mindscape's tool, it was not feasible to incorporate it into the new NRCan document. Consequently, MIBOP has been approved for use by NRCan until January 1, 2012 under the Prescriptive Path noted in section 2.1.2.
2. Although new CBOP submissions are no longer being accepted by NRCan, Custom Builder Option Packages (CBOPs) approved by NRCan prior to January 1, 2011 are eligible for use under the Prescriptive Path noted in section 2.1.2 and are valid until January 1, 2012. In addition, these homes must be built, labelled, and have corresponding house files submitted to NRCan no later than January 1, 2013. CBOPs can only be used by the builder noted in the submission and on the models reflected in the CBOP submission. The house files submitted under a CBOP should be based on the house files submitted in the CBOP submission instead of NRCan's reference house files. All other requirements of the Prescriptive Path noted above must also be met. A Hybrid Path compliance option is currently being considered. If published, it is anticipated that the Hybrid Path could replace the CBOP process that was pilot tested in 2008-2010.