

## Why is the insulation inspected?

The insulation is inspected to confirm that in general, sufficient insulation is installed to prevent condensation within the building envelope and more particularly that the energy conservation standards are complied with. To prevent the diffusion of water vapour through insulated assemblies.

## When must an inspection be requested?

The insulation inspection is requested prior to covering with interior finishes. Framing, heating and plumbing rough-in deficiencies may be inspected during the insulation inspection. While 48 hours notice is required prior to the date of inspection, we strive to provide the best service possible and a next day service can usually be achieved to facilitate your construction schedule.

## What is involved during an inspection?

A provincially qualified building inspector reviews the insulation and vapour barrier for compliance with the building permit drawings and the Ontario Building Code. The following is a list of the major areas that are inspected.

- Location of insulation
- Minimum thermal resistance
- Installation of insulation
- Vapour barriers

The construction progress, including Building Code deficiencies, are documented on a Field Inspection Report issued by the building inspector immediately after the site inspection.

## What can I do before the inspection?

Your involvement in the inspection process is critical. A review of the construction prior to the inspector's arrival can help to ensure a smooth flow in the construction of your project. To help you achieve this, we have assembled a checklist of the most common Building Code deficiencies found while performing inspections. Please refer to the reverse side of this Information Sheet to complete the checklist.

## How do I request an inspection?

### Permit Inspection Request Line (PIRL)

PIRL is an interactive voice response system for builders, contractors, owners, owner's representatives, and permit holders, to schedule, cancel, reschedule, and obtain building inspection results 24 hours a day, 7 days a week.

Access the PIRL system 24 hours a day, 7 days a week on any touch-tone phone. Call 905-475-4850 and follow the simple instructions. For a detailed overview of what the system offers, please visit [www.markham.ca/building](http://www.markham.ca/building). When requesting an inspection you will need the following information with you:

1. Building permit no.
2. Project address
3. Date inspection required
4. Contact name and phone no.
5. Provide further comments (optional)

## Looking ahead ➡

The next inspection may be occupancy inspection. Ask your building inspector for the Occupancy Information Sheet or call us at (905) 477-7000 ext. 2307 and we will gladly send it to you.

*'This is one in a series of Information Sheets published specifically for homeowners and builders, for use as a guide to residential building inspections'*

# INSULATION INSPECTIONS

This checklist identifies the most common Ontario Building Code deficiencies found while performing insulation inspections. Use this checklist as a guide during construction, and reduce your costs associated with the repair of Building Code deficiencies. Not all Building Code requirements could be included in this checklist.

Prior to calling for an inspection, verify that the relevant items have been completed satisfactorily. While some items may not apply to your project, please consider each one carefully. Indicate '☑' as completed or '☒' as not applicable in the box adjacent to the construction item.

## Location of insulation

- Cold room walls are insulated to the floor in accordance with the Energy Design Summary Sheet (EDSS) and the permit drawings.
- The joist spaces between the first and the second floor joists are insulated in accordance with the EEDS and the permit drawings and the same amount of thermal insulation as the walls.
- Type 1 expanded polystyrene is not in contact with the ground or used above a roof membrane. Expanded polystyrene that can be used in contact with the ground must be stamped for this use.
- Support insulation on the sides of dropped ceilings over attached garages.
- All stud spaces above bathtub enclosures with dropped ceilings are sealed to prevent spillage of blown insulation.
- Insulation around skylights fully supported.
- Recessed light fixtures (pot lights) are approved for use in insulated ceilings.
- Openings between rafters at eaves (except at baffles) are sealed to prevent spillage of blown insulation.
- All chases into roof space are sealed.

## Minimum Thermal Resistance

- Correct thickness for the type of insulation installed and the EDSS
- Insulation not placed against chimneys of vents of heating appliances.
- Minimum of 400 mm high curb around attic access hatch.

- Return air chases through garages are strapped-out and insulated with a minimum of RSI 2.1 (R 12) insulation.
- Sprayed-in-place polyurethane complies with CAN/ULC-S705.1 and installed to CAN/ULC-S705.2
- Sprayed-in-place polyurethane installer is certified by the manufacturer to install their product.

## Installation of Insulation

- Batt type insulation is not compressed but trimmed to fit snugly.
- Baffles are installed to permit 50 % of roof space ventilation.
- 25 mm space above insulation for low slope roof to top of roof joist, with cross purlins.
- Batt type foundation insulation is protected by a moisture barrier, from floor slab to finished grade.

## Vapour Barriers

- The vapour barrier is installed on the warm side of insulation, covering the entire surface, behind bulkheads, furring, behind uninsulated ducts, floors over unheated spaces and on the cold side of plumbing pipes.
- .15 (6 mil) polyethylene vapour barrier covers all insulated surfaces and conforms to standard CAN/CGSB-51.33-M
- Where sprayed-in-place polyurethane insulation is installed to function as the vapour barrier, refer to Building Tip 34.