AIR BARRIER INSPECTIONS

Why is the air barrier inspected?

The air barrier is inspected to confirm that the air barrier material(s) are installed to provide a system that will control the air infiltration and exfiltration through the building envelope, providing a continuous barrier to air leakage. The system must be sufficient to prevent excessive moisture condensation in the wall, ceiling and floor assemblies.

When must an inspection be requested?

The air barrier inspection is requested prior to covering with interior finishes when installed on the interior of the building or prior to installation of the cladding when the air barrier is installed entirely on the exterior. 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 air barriers for compliance with the building permit drawings and the Ontario Building Code. The following is a list of the major areas that are inspected.

- Properties of the air barrier system
- Continuity of the air barrier system

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

Builders, contractors, owners, owner's representatives, and permit holders, can schedule, cancel, reschedule, and obtain building inspection results from Monday to Friday, 8am - 3pm by calling Building Service Department at 705.337.4263 or via email: building@kapuskasing.ca

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

AIR BARRIER INSPECTIONS

This checklist identifies the most common Ontario Building Code deficiencies found while performing air barrier 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.

Air Barrier System Properties

- ☐ Sheet and panel type materials have an air leakage characteristic not greater than 0.02 L/(s.m2) measured at an air pressure differential of 75 Pa.
- ☐ Where polyethylene sheet is used to provide air-tightness in the air barrier system, it conforms to CAN/CGSB-51.34M.ls.

Continuity of the Air Barrier System

- ☐ Air-impermeable panel-type materials have all joints sealed to minimize air leakage.
- ☐ Flexible sheet material has all joints sealed with compatible material such as tape or flexible sealant, or lapped not less than 100 mm and clamped such as between framing members furring or blocking and rigid panels.
- ☐ Where an air barrier system consisting of flexible sheet material is installed at locations where it is not supported by an interior finish, such as behind a bath tub, shower enclosure or fireplace, the continuity of the air barrier is maintained by sealing it's joints.
- ☐ Where an interior wall meets an exterior wall, ceiling, floor or roof required to be provided with an air barrier protection, the air barrier system shall extend across the intersection and shall be sealed by taping, sealant or joints clamped.
- ☐ Where an interior wall projects through a ceiling or extends to become an exterior wall, spaces in the wall is blocked to provide continuity across those spaces with the air barrier system in the abutting walls or ceiling by sealing each air barrier to the blocking or wrapping each air barrier around the transition and sealing with tape, sealant or joints clamped.
- ☐ Where an interior floor projects through an exterior wall or extends to become an exterior floor, continuity of the *air barrier system* is maintained from the abutting walls across the floor assembly.
- ☐ Where an interior floor projects through an exterior wall to become an exterior floor, the air barrier of the wall under the floor is continuous with or sealed to the subfloor or the air barrier on the underside of the floor, the air barrier of the wall above the floor is continuous with or sealed to the subfloor or the air barrier on the top of the floor, and the spaces between floor joists are blocked and sealed.
- ☐ Where a header wrap is used as an air barrier, it is sealed or lapped to the wall air barrier above and below with tape, sealant or joints clamped.
- ☐ Penetrations of the air barrier system, such as those created by the installation of electrical wiring, electrical boxes, piping or ductwork, are to be sealed with compatible material such as tape or caulking to maintain the integrity of the air barrier system over the entire surface.
- ☐ Penetrations of the air barrier system, such as those created by the installation of doors, windows and other fenestration are sealed to maintain the integrity of the air barrier system over the entire surface.
- ☐ Where an interior air barrier is penetrated by doors, windows and other fenestration, the air barrier is sealed to the door frame or window frame with compatible tape, or spray foam insulation.
- ☐ Where an exterior air barrier is penetrated by doors, windows and other fenestration, the air barrier is sealed to the door frame or window frame with compatible flexible flashing material, caulking, or spray foam insulation.
- ☐ An access hatch installed through an assembly constructed with an air barrier system is weatherstripped around the perimeter to minimize air leakage.
- ☐ Where the foundation wall and floor slab are used as an air barrier, they are caulked at all joints, intersections and penetrations.
- ☐ Sump pit covers are sealed to maintain continuity of the air barrier system.