

ASK THE INSPECTOR COLUMN FOR OCTOBER 14, 2015  
HEADLINE: IS THERE A WAY TO DATE A HOME?

This is actually a very common question that we get during an inspection, especially amongst new homebuyers. Up until WW1, most homes were either log, timber frame, stone or, in the late 1800's, either double or triple brick. Balloon frame was starting to gain in popularity before the war. Homes built after WW1, up to WW2, had numerous assembly methods and they often overlapped. Some homes built right after WW1 were timber frame, but this was quickly overtaken by balloon frame and braced frame. Platform frame came into existence in the early 30's. It was developed in California and quickly spread across the continent. These wood frame homes were 2x4 construction, "real" 2 inch by 4 inch lumber, that is.

The early insulation was loose mineral wool, which quickly became a paper bag filled with wool. Later on, it became bagged fibreglass insulation in both the walls and attic. Some times the attic was thicker and loose rock wool was also used here. This was rarely more than 6 inches thick and it quickly settled to well less than that. The homes built in Alberta and Saskatchewan were known to have more in the ceilings. It was also not uncommon to have no insulation at all. This was the norm if the home was assembled of double or triple brick or stone. These homes were losing their popularity by WW 1, although brick assembly did carry on until the late 20's. This decline was mainly due to cost. Their interiors had wood strips set into the brick or stone. These were called nailing strips and the lath and plaster was applied directly over this.

The foundations under these homes saw a considerable change over the period between the wars. They started out as rubble stone and, in the mid-late 1800's, evolved to cut stone. Next came hand poured solid concrete blocks and then manufactured hollow core blocks, known as the "55" blocks. This was close to their actual weight, which is where the term came from. The windows were usually single glazed and single hung with wood storms that were taken down in the summer months. The exterior doors were always solid wood, usually quite decorative and sometimes larger than the rest of the doors in the home.

WW11 brought new home construction to a standstill. Once the war was over the largest new home building boom North America has ever seen began. Close to one million single and storey and a half "War Homes" or "Victory Homes" were built in Canada from 1945 to well into the 50's. This was the first mass production home using a modified Platform Frame method of assembly. Many of these homes were actually a kit that arrived on the back of a flatbed and their floor assembly and some roof structures were actually bolted together. These homes were small, rarely over 1200 square feet. They were also the first to have a consistent insulation in the walls and attic areas. 3 ½ inches in the walls and six inches in the attic became the norm. The second level sloped ceilings were insulated with the 3-½ inch batts. By this time the insulation bags were gone and paper backed fibreglass batts with fold out tabs took over. These tabs were

stapled to the studding. This gave the effect of a primitive air barrier, the beginning of some effort to control heat loss.

The first residential roof trusses began to show up in the late 50's and took over new home construction by the mid 60's. Concrete blocks had taken over as the method of assembly for the majority of foundations right after the war. Unfortunately, these foundations were usually not insulated. It is now understood that up to 25% of heat loss is through the basement walls. By the late 60's, the use of poured concrete foundations was had begun. The first double glazed slider windows were starting to show up in the later part of the 50's. Exterior doors changed very little, however; they were still solid wood for the most part. Single glaze glass in a panel style door became extremely popular.

The last major change was in the 60's. The families of the soldiers were growing up and bigger homes were needed. There was a boom in two storey homes at this time and actually, according to statistics I have, close to three quarters of a million were built between the late 60's and the late 70's. Homes nearly doubled in size; 2200 sq ft of living space was common. These homes were still being built of '2x4' lumber, using today's dimensions, and two "platforms" or levels were built to create the two storey home.

The biggest changes were in insulation for homes built in the late 70's. The attic was often nine inches and 2x6 wall studding that allowed six-inch insulation started to enter the market. Most windows were double-glazed and insulated metal doors had entered the marketplace by the 70's. Thermopane insulated windows did not enter the market until the 80's. Block foundations began to loose their popularity as poured foundations started to take over. Insulating the basement walls for the first four feet became the standard of the day.

From the late 70's's until the 90's, other than improvements in insulation and air quality, very little changed in most new homes. Over the past 10-15 years, however, the introduction of manufactured floor trusses and beams, insulated concrete foundations, spray foam insulation, metal studding and whole home ventilation systems have dramatically changed the building of a new homes.

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