

UFFI and market value

The Canadian Appraiser / Spring 1985

By B.J. (Ben) Lansink

Urea formaldehyde foam insulation (UFFI) has become the centre of controversy in the Canadian real estate industry during the last years. Many buildings have been insulated with this product and its effect on the inhabitants and market value of these properties is just now being seen

Urea formaldehyde foam insulation is a low-density foam prepared at the installation site from a mixture of urea formaldehyde resin and a propellant, usually compressed air. The mixture is pumped into the cavities of a wall, where it hardens. Deterioration of the foam with time results in the release of formaldehyde gas. In addition, a high moisture content may cause fungus to grow. Spores of the fungus may also find their way into the living area of a home. Formaldehyde gas and fungus spores can result in irritation to the eyes, nose and throat.

In 1980, a lab test indicated a relationship between cancer and UFFI. A temporary ban was put in place by Health and Welfare Canada in 1980. The ban was confirmed permanently in April 1981.

UFFI's presence in Canada goes back to 1969, but is a new phenomenon for the real estate industry. Approximately 80,000 to 100,000 Canadian homes were insulated with this controversial product. The installation of UFFI was subsidized through the Federal Government's C.H.I.P. program.

Insulation is a hidden item. Usually it is located in the frame cavities of the exterior walls between the exterior and interior finish, and in the attic area; it is not readily visible to an individual. In the majority of cases the type of insulation in the wall cavity and attic differs. Therefore, confirmation of the attic insulation does not necessarily mean wall-cavity insulation is the same. Exterior walls in the same house may have different types of insulation, and one wall could be insulated with two or more insulation types.

If a home has been insulated with UFFI and the insulation has been removed, the property may still have unacceptably high levels of UREA formaldehyde gas.

Since 1980 many articles have been published about UFFI – most of them negative in their findings. I consulted *The Canadian Newspaper Index* (CNI) at the University of Western Ontario in October of 1984. CNI indexes seven daily Canadian newspapers including the *Calgary Herald*, *Globe & Mail*, *Halifax Chronical Herald*, *Montreal Gazette*, *Toronto Star (Sunday Star)*, *Vancouver Sun*, and the *Winnipeg Free Press*. The Index does not cover every article published, but seems to provide an excellent cross-section of subjects. The subject index concerning UFFI fell under "Insulation." I noted the following number of articles in the various seven newspapers:

YEAR	# OF ARTICLES
1978 -	none
1979 -	none
1980 -	2
1981 -	136
1982 -	121
1983 -	95
1984 -	not available

Ninety-six to ninety-eight % of the articles concerned UFFI. There were, of course, numerous articles in magazines such as *McLeans* and special purpose papers such as the *Financial Post*. It is noteworthy that the amount of press concerning UFFI appears to be declining.

In one article written for *McLeans Weekly Magazine*, a physician who is professor of medicine at a Canadian university stated that a careful search for affected patients was conducted. He and other Toronto-area physicians did not find a single documented case of UFFI-related illness. He and his

family live in a UFFI home.

Other articles state that UFFI type gases could come from a recently-purchased laminated coffee table, or from plywood found in a home's sub-floor. Some examples of press headlines follow:

"Foam Leaves Legacy of Nose-Bleeds and Nausea"

"Ottawa Faces class Action Over Insulation"

"Liberals Sued Over Urea Foam"

"Urea Formaldehyde 'Foam-Linked' Deaths Claimed by 2 Families"

"Study Confirms Urea Foam Hazard"

"UFFI Scare Overblown - Hudac"

"Urea Good For You, Former Seller Insists"

"Pair Burns House to Get Rid of Foam"

"Cancer From Banned Foam Unlikely - Scientist"

On October 5, 1984, the Toronto Star headline read "Feds Approved Insulation Knowing Of Health Risk." A study obtained by the Star says that thousands of Canadians suffered health problems and structural damage to their homes because of the actions of two federal civil servants. The article further states that the two officials could be liable to criminal prosecution because of their acts and omissions.

An article by the Ontario Real Estate Association in *Education Update* (August 15, 1984) indicates that a Woodbridge area man pleaded guilty in county court to fraud. He was convicted for lying about UFFI to the buyer of his Etobicoke home.

Other evidence about the effect on market value if submitted by a 1982 Notice of Assessment mailed to all property owners in Elgin and Middlesex Counties by M.C. Quinn, Regional Assessment Commissioner, in 1983. I quote in part:

"If your residential property is insulated with Urea Formaldehyde Foam Insulation (UFFI) you may qualify for a reduction to you property assessment. A 35% reduction will be applied to the residential building portion of the property assessment. This percentage reduction has been determined based on an analysis of those properties in Ontario which sold over the past year, where purchasers were aware of the presence of UFFI."

An article in *Ontario Lawyers Weekly* (page 2, March 23, 1984), by Paul Truster, indicates that the analysis concluding the 35% was a "fake" as charged by Toronto lawyer, C. Ruby.

Does UFFI cause health problems? Will it cause structural problems by deteriorating a building's wood framing? As an appraiser, I am not qualified to say. As a real estate appraiser, I can attempt to measure the market value of a UFFI-insulated house to versus an exact duplicate without UFFI insulation. In other words, will a home offered on the open market fetch less when insulated with UFFI than an exact duplicate not insulated or insulated with a product other than UFFI?

The evidence since the ban of UFFI by the Federal Government in 1980 suggests "yes," a UFFI-insulated home will be subject to buyer resistance and will probably sell for less.

I am aware of the following nine properties that have sold and are reported to be UFFI insulated:

No.	Location	Sold	App/Price	Resold	Resale Price	Loss
1.	Base Line Road.	1975	\$42,700	1982	\$25,000	41%
2.	Commissioners Road	1981	\$56,900	1982	\$42,000	26%
3.	Highbury Avenue	1976	\$23,000	1981	\$12,000	47%
4.	Base Line Road	1982	\$185,000	1983	\$94,000	49%
5.	Con. 4, Lobo	1979	\$50,000	1983	\$31,000	38%
6.	Con. 12, Lobo	1981	\$110,000	1984	\$60,000	46%
7.	Hope Street	1978	\$52,000	1981	\$22,000	58%
8.	Oakdale Avenue	1978	\$45,500	1982	\$36,500	20%
9.	Wilson Avenue	1976	\$39,500	1983	\$18,000	54%

Sale 1. sold power of sale for \$ 25,000. The foam was removed, certain improvement were made, and the home resold in May 1983 for \$ 65,100.

Sale 2. Sold power of sale. It is my understanding the purchasers removed the foam.

Sale 3. Sold power of sale. The purchaser has rented the home, having purchased it as an investment.

Sale 4. Involved an appraisal of \$ 185,000 in 1982. It sold power of sale in August 1983. It is my understanding that the purchaser removed the foam at a cost of \$12,000 to \$ 15,000.

Sale 5. Had been owned since 1971. It was appraised for a mortgagee in 1979. A first mortgage was placed for \$ 37,500 at 11.5%. It was insulated with UFFI early in 1979. With interest, payment arrears, and other costs, the debt amounted to \$ 41,000 when sold for \$ 31,000 in September of 1983.

Sale 6. Was the purchase of a contemporary-design home. It was purchased in 1982 by a local brewery to assist a corporate transferee for \$ 59, 478, the amount of the mortgage. The brewery resold the home in 1984 for \$ 60,000 after disclosing that it was insulated with UFFI.

Sale 7. Is located in the hamlet of Tavistock. It was sold by CMHC power of sale.

Sale 8. Involved the transfer of the owners to the Ottawa area. In my opinion, the market value of the 30-year-old detached single-family brick dwelling was closer to \$ 55,000 assuming no UFFI therefore, the loss is closer to 34%.

Sale 9. Sold by CMHC power of sale, after disclosing that it was insulated with UFFI.

I personally inspected each property on the exterior and Sales 1, 3, 4, 5, 6 and 9 on the interior. All except Sales 5, 6 and 7 are located in the City of London. All are detached single family dwellings. None of the examples considers the resale-date market value assuming no UFFI, thus complicating the true loss measurement.

My conclusion concerning the estimated market value of a UFFI residence versus a non-UFFI residence is that the UFFI home is worth substantially less.

Based on many negative press articles causing buyer resistance and the future homeowners' concern over possible health consequences, I suggest that a range of 35% to 50% less than the estimated market value is supportable.

Bear in mind that the 35% to 50% reduction would be based on the total property value of land and building(s). If we assume a market value estimate of \$ 100,000 assuming no UFFI, the indicated value of a UFFI-insulated house would be as follows:

$$\begin{aligned}
 & \$100,000 - 35\% = \$ 65,000 \\
 & \$100,000 - 50\% = \$ 50,000 \\
 & \text{Final estimated mid-range estimated: } \$ 57,500
 \end{aligned}$$

While the indicated range may be significant, it is not unrealistic in view of the many complexities involved in a UFFI home.

Will a home which has had UFFI removed and has been re-insulated with an acceptable insulation product sell for less than a similar home never having been insulated with UFFI?

With some evidence, I suggest there is in fact some buyer resistance, and in a market with an abundant housing supply, buyer resistance must result in a lower value. In other words, when shopping for a home a typical buyer will probably not attempt to purchase a home formerly UFFI-insulated versus a non-UFFI home unless the price is substantially less.

I am aware of the following sales:

Property	Sold	Price	Resold	Resale Price
1. Kenneth Avenue	1981	\$48,500	1984	\$47,500
2. Bow Street	1981	\$55,900	1983	\$52,750
3. Victoria Street	1982	\$66,500	1983	\$60,000

All three sales involve detached single family dwellings located in the City of London.

Sale 1 was purchased in 1981, with the purchaser unaware of the insulation type. The UFFI was removed at a cost of \$10,500 late in 1983, and the property sold early in 1984 for \$47,500. The loss is approximately \$11,500 excluding possible removal grant. This property was listed MLS in 1984 after disclosing its former UFFI. The supportable loss is 24% once UFFI was removed. When purchased in 1981, this home had original brick. When sold in 1984 it had replaced brick, one rebuilt fireplace, and a new second fireplace. In my opinion, it had a market value of \$55,000 in 1984. Therefore, it sold at 10% to 15% less than market value.

Sale 2 sold for 5.6% less than its 1981 price. Assuming it increased by 5% between April 1981 and September 1983 when sold, the selling price would be approximately 10% less than market value, because of the former UFFI insulation.

Sale 3 had UFFI removed between 1982 and 1983 and sold for 11% less than its unadjusted 1982 price.

It must be remembered that some government grant assistance may have occurred. The grants did not exceed \$5,500. Most UFFI removals cost in excess of \$10,000.

I am professionally involved in four lawsuits concerning UFFI. Being situated in Canada's eleventh's largest city, they probably represent a fraction of the litigation involving UFFI. I understand there is a group court action before the Federal Court of Canada, claiming \$20 million in damages from the Federal Government.

To conclude: the final chapter has yet to be written on the UFFI story. It will be necessary for appraisers to monitor UFFI and market value on an ongoing basis.

B.J. Lansink, AACI, SRA has been a fee appraiser with Knowles, Lansink & Associates Limited since the company was formed in 1974. Prior to that, he had been the Mortgage Manager for Royal Trust. As well as being active in real estate appraisal, Mr. Lansink is a certified instructor in the Principles of Mortgage Financing for Ontario colleges.