

TO: CITY MANAGER

1997 FEBRUARY 25

FROM: DIRECTOR PLANNING & BUILDING

SUBJECT: 5509 HASTINGS STREET, BURNABY, B.C.

PURPOSE: To provide Council with a comparison of the standards between the City of Burnaby and other areas in the Lower Mainland where recycled tire roofs have been installed.

RECOMMENDATION:

- 1) **THAT** a copy of this report be sent to Mr. Richard Moore, Box 1459, Squamish, B.C. - V0N 3G0.

REPORT

1.0 BACKGROUND:

On 1997 February 03, at the regular Council meeting, Council received Mr. Richard Moore of Moore Enviro Systems Inc., as a delegation regarding the application of a recycled tire roof at 5509 Hastings Street, Burnaby. B.C.

During the presentation, Mr. Moore indicated that several other recycled tire roof applications had been completed in other locations and that he had not experienced the problems that he is having with the City of Burnaby.

Council resolved to request staff for a report to determine the differences between the City of Burnaby's standards and the standards established in other areas where recycled tire roofs have been installed.

2.0 DISCUSSION:

In response to a business licence referral, Building Department staff attended 5509 Hastings Street on 1995 January 26 and noted that a pitched roof was being constructed without benefit of a building permit. Staff further noted that a non-standard roofing material was being applied and requested documentation demonstrating that this roofing material complies with the Building Code.

The B.C. Building Code, has several provisions that are relevant to this matter. Section 9.26.2.1(1) of the Code requires roofing materials for all buildings coming within the scope of Part 9 to conform to one of numerous specifically enumerated technical standards.

Section 2.5.1.2. of the Code requires any person who wishes to provide an equivalent material to *"submit sufficient evidence to demonstrate that the proposed equivalent will provide the level of performance required by this Code."* Section 2.5.1.3 states that materials not specifically described in the Code, or which vary from the specific requirements in the Code, may be used *"if it can be shown that these alternatives are suitable on the basis of past performance, tests or evaluations."*

Warnock Hersey Inc., an accredited Approving Agency, confirms that the product is eligible for certification subject to a specific application. Staff requested and obtained a copy of Warnock Hersey Test Report No. 634-303100 and the Manufacturer's installation instructions for Type "A" Tile included in that report. In reviewing the Warnock Hersey Test report, staff noted a variance in the application of the rubber tile roof system at the subject premises compared to the application which was tested and approved.

In further pursuing whether variances in application were addressed in the testing and approvals, staff were informed that any variance from the approved application must be inspected by a certified inspector.

Quality Auditing Institute, a certified Roof Inspection Agency, conducted an on-site inspection of the Moore Roof Systems Rubber Tile roof applied at 5509 Hastings Street and confirms that the application of the subject roof cannot be considered equivalent to that tested by Warnock Hersey.

Quality Auditing's report specifically notes *"the application of this tile has used a rubber tile capping system similar to Moore Roof Systems Type 'B' application in place of the metal tile sealer cap used when tested at Warnock Hersey. In addition, the screws used to fasten the tiles do not use 12.5 mm rubber washers to prevent water penetration"*.

Further discussion with Quality Auditing has revealed that remedying the existing roofing application is not an option as the deficiencies extend throughout the entire roof system. It is therefore recommended by Quality Auditing that the existing roofing application be removed and replaced with a Type "A" application, as approved by Warnock Hersey.

Staff surveyed other Jurisdictions in the Lower Mainland area, including the District of Squamish, where Moore Enviro Systems is located. The District has provided a copy of the legal opinion provided by Lidstone, Young, Anderson, Barristers & Solicitors, Vancouver, B.C. This opinion confirms the District's authority to require an owner or contractor to demonstrate that a non-standard roofing material is equivalent to the materials and standards specifically referenced in the Code. A copy of this opinion is on file in the Building Department. To date, the product is not permitted in the District of Squamish as Mr. Moore has not provided the required certification.

The District of West Vancouver is mentioned by Mr. Moore as an area where a recycled tire roof installation has been completed. The District reports knowing of one recycled tire roof installation involving the re-roofing of an older house. By policy, the District does not require a building permit for re-roofing projects.

The Municipality of Delta, City of New Westminster, District of North Vancouver, District of Pitt Meadows, City of Port Coquitlam, City of Port Moody, City of Richmond, City of Surrey and the City of White Rock report that to the best of their knowledge, Moore Enviro Systems Inc., has not completed any recycled tire roof installations within their respective Jurisdictions.

Staff did not survey other areas mentioned by Mr. Moore which are outside of B.C., such as Whitby Island in Washington, Edmonton and Regina, as the standards in those areas are not relevant to the standards in B.C.

3.0 CONCLUSION:

Staff are in receipt of Quality Auditing's inspection report of the Moore Roof Systems Rubber Tile roof applied at 5509 Hastings Street, Burnaby, B.C.

In response to this report, the property owner advises staff that it is his intention to pursue the installer to remedy this matter.

 KGB:ap

hastings.rep

cc: Deputy City Manager, Corporate Services
City Clerk
City Solicitor
Chief Building Inspector



D.G. Stenson, DIRECTOR
PLANNING AND BUILDING

