

Strata Plan 2720
(Hampton Court and Churchill Place)

Short and Long Term

Repair and Maintenance Plan

Issued by:

The Strata Council for Strata 2720

Version 1.0 – 20 December 2000

Strata 2720 Short and Long Term Repair and Maintenance Plan

Purpose

The purpose of this document is twofold. Firstly it describes various studies, reports and associated repairs related to water ingress at the two buildings that make up Strata Plan 2720, namely Hampton Court (545 Manchester) and Churchill Place (520 Dunedin). Secondly, it describes the practical short and long-term plan that has been put in place by the Strata Council to deal with the water ingress situation. It is a document of interest to both existing owners and prospective buyers.

Background

There were two different types of potential water ingress affecting our buildings in the past several years. The first was identified early in the building's lifetime and was associated with water entering the underground garage area. An improperly installed membrane around the perimeter of the buildings was the primary cause of this water ingress. This problem has been resolved (except for one minor item – see the attached maintenance history) by correctly re-attaching the membrane to the foundation followed by proper capping and caulking. The report will not discuss this matter further.

The second type of water infiltration is one that relates to the exterior cladding of the building (referred to as the building envelope). To fully appreciate this situation, one has to be familiar with the construction technique known as face seal and with the conditions necessary to create a water ingress problem.

Face seal construction is one in which a stucco cladding is applied to the exterior of a building over wire mesh, construction paper and wood sheeting. There is no separation between the stucco and the sheeting as there is when an alternative method called rain screen is used. The face seal method is an acceptable construction technique allowed by the building code and the majority of condominium buildings built in British Columbia in the last ten years have used this technique even though it is not well suited to our wet climate. When water gets in behind the stucco in a face seal building, it cannot easily drain away and if it does not have an opportunity to dry out, then mildew and eventually rotting will occur. In extreme cases, structural damage can result.

For water to enter a building envelope there must be three conditions present: a source of water, a force and an entry point. In Victoria the water comes in the form of rain. Force is primarily provided by wind but also by gravity and capillary action. The entry points can be numerous depending on building design and quality of construction. All buildings suffer from water infiltration to some extent. Lack of overhanging roofs and more joints will increase the number of occurrences. Buildings, like ours, with a lot of exterior detail require flashings at the joints and around balconies and windows all of which present opportunities for water entry. If the quality of the original installation of these flashings and the caulking and sealing of the seams was poor or if flexing and building settling have cracked the sealant, then water ingress can occur. If the underlying wood does not dry out, then any water that accumulates over time will eventually cause rotting.

Building Envelop Reports

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Prompted by the water entering the garage due to the faulty perimeter membrane and the water ingress problems affecting many Vancouver condominiums, the Strata Council contracted with an engineering firm in 1998 to carry out a building envelop review. The firm, Levelton Engineering, had done an earlier report on the faulty membrane. The building envelope review identified some water ingress associated with the decorative band flashings around the buildings and with some balconies and windows. Their report recommended a variety of repairs specifically directed at identified problems. After numerous discussions about the nature of these repairs they raised their original estimate of the repair cost to about \$243,000. Council accepted Levelton's recommendation and in early 1999 directed them to prepare specifications for the repairs and to solicit bids for the work in order to get an accurate cost of the repairs.

Coincident with these actions, the Strata Council entered into the first stages of a lawsuit against the developer, the contractor, various sub-trades and the City of Victoria. The lawyer hired by the Strata Council took the lawsuit to the discovery stage. During this period the engineering firm tried to retract their original recommendation and proposed further, more costly studies to determine the costs of a rain screen solution. Our lawyer also indicated that more studies would be required to gather additional evidence before proceeding increasing the legal costs beyond an initial \$10,000. At an Extraordinary General Meeting held on 26 April 1999, the owners decided not to proceed with the lawsuit preferring instead to direct their funds to the repair and maintenance process.

Prior to the Extraordinary General Meeting, the Strata Council had lost confidence in Levelton Engineering and decided to seek another opinion from a consultant (Doug Downs of DougLes Consulting Services) who had experience with water ingress problems and was very familiar with building restoration. He reviewed all the previous reports and carried out an extensive exploratory investigation of the exterior of both buildings. This included making a large number of openings in the stucco in order to test the moisture content of the underlying sheeting. This work was carried out in the spring after a long wet winter and openings were made on the walls that suffered the most exposure to harsh weather, namely those facing south and west. The Strata Council considers his report, presented in March 1999, to be thorough, comprehensive and the most useful assessment of our situation to date. Mr. Downs attended the April 26 Extraordinary Meeting to explain his findings to the owners.

In his investigation, the building paper showed signs of water infiltration but it was not overly wet. The underlying sheeting was moist with some moisture content over the acceptable limit. However, there were no signs of rot or decay in the exposed sheeting. His report identified that the majority of the problems were related to flashings on the balconies and decorative bands. Furthermore, these and many of the other problems could be easily identified and temporarily corrected with caulking or simple maintenance.

His report states that "the majority of the water infiltration and the leaks documented to date are related to several details that have not been attended to well". He concludes his findings by saying:

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“in my opinion this building is experiencing problems that should be expected. The problems are inherent to the design and construction. Test results indicate that this is the first stage of deterioration and it has been identified before major structural damage has taken place. This (early identification) is partly due to a diligent Strata Council and a building manager that have not ignored the problem or attempted temporary measures allowing it to persist for the time required to cause structural damage. As the problem is in its early stages it allows the option of maintaining it until a time when it becomes necessary or the funds are available to correct it with the rain screen system. My feeling is that if left as is without any actions being taken it would take another four or five years before significant structural damage occurred. With maintenance and some corrective measures taken now this could easily be extended to ten to fifteen years. The key is to keep on top of it, not to ignore even the smallest concerns of individual owners, and to complete annual or biennial reviews.”

Alternative Solutions

Given the foregoing, the most obvious alternatives are the following. First, change to rain screen technology which means remove the exterior cladding, redesign the building exterior and install new cladding using rain or drain screen technology. The cost to do both buildings is estimated at about 3.0 million dollars. This is a direct, simple solution with one disadvantage – every owner would need to come up with about \$30,000 each.

The alternative is more complex, requiring the Strata to understand the problem, correct the most obvious deficiencies, reduce the water infiltration at the worst areas, repair known damage and monitor the situation, repairing problem areas as they occur. This is not a permanent repair, however. With competent management and maintenance focussed on the problem, the building can be maintained without major structural damage for as long as ten to fifteen years. At some point in the future a permanent repair will need to be done and this solution necessitates the establishment of a fund to finance the eventual cost of a rain or drain screen solution. This is in addition to the cost of making the required initial repairs and carrying out annual inspections. In a subsequent report by the consultant, he detailed an estimated cost of \$116,240 for a five to six year maintenance program and \$489,993 for a ten to fifteen year program, the later involving the replacement of the decorative bands and some balconies. In discussions with the Strata Council, a compromise solution between the two was adopted with a cost estimated at about \$230,000. The Strata Council favoured this alternative as being the most practical solution.

Approach Adopted

The Strata Council held an Extraordinary General Meeting on 26 April 1999 to present the alternatives to the owners. Doug Downs presented his findings and discussed the alternative solutions as described above. There was very little support for the \$3 million rain screen solution. The Strata Council outlined the financing required for the short and long-term solution to maintain and extend the life of the building's exterior. A special assessment of \$100,000 had been made in 1998 - \$10,000 for legal expenses and

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\$90,000 for repair of the building membrane which was placed in the contingency reserve fund. The building envelope problem required additional assessments and a long-term financial plan. Four special resolutions were proposed to do the following:

- a) to proceed with the recommended repairs in 1999 at a total cost of \$228,934.80 (including the perimeter membrane);
- b) to use \$146,335 from the current contingency reserve fund;
- c) to double strata fees effective 1 May 1999 to establish a special building envelope fund for future repairs; and
- d) to make a special one time assessment of \$40,615.80 payable on 1 August 1999.

Each resolution passed with the required 75% majority.

Conclusion

Fortunately, our buildings are in a better condition compared to many others in Victoria. We do not need to do a drastic envelope replacement at this time. With proper repairs now, monitoring and ongoing maintenance, we can put off replacing our exterior cladding until the Strata has built up a fund to finance this expensive repair. Rather than paying interest on a \$3 million repair bill we will earn interest as our building envelope reserve fund builds to finance the future repair.

We believe that owners in Hampton Court and Churchill Place feel that their Council has acted in their best interests in recommending the plan described here. A majority of owners voted in support of this plan at the 1999 General Meeting. The Strata Properties Act of British Columbia obligates a Strata Council to take action if a problem such as the water ingress situation we have is evident. Doing nothing was not an option open to us. The Strata Council believes that the long-term plan we have put in place is the best solution given the circumstances of our water ingress problem and the financial realities facing most owners.

Prepared by Gerald Gabel, Secretary, Strata Council 2720

Version 1.0 dated 20 December 2000

Approved by the Council for Strata 2720 on 17 January 2001

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Referenced Documents

1. Report from Levelton Engineering Ltd.
Dated August 11, 1998
Re: Hampton and Churchill Courts
Waterproofing Membrane Review
2. Report from Levelton Engineering Ltd.
Dated November, 1998
Re: Building Envelope Review for
Hampton and Churchill Courts
3. Report from DougLes Consulting Services Incorporated
Dated March 27, 1999
Re: Analysis of Building Envelope
And Previous Reports
4. Letter from DougLes Consulting Services Incorporated
Dated April 14, 1999
Re: Update to previous report with more detail on the repair and
maintenance option
5. Letter from DougLes Consulting Services Incorporated
Dated February 22, 1999
Re: Summary of repair and maintenance work to be carried out
6. Minutes of the Extraordinary Meeting of Strata 2720
Held April 26, 1999
Re: Approval of the financing for the short and long term
repair and maintenance plan

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Building Maintenance History (Subsequent to the 1999 Repair Work)

1. Water ingress to under-ground garage area near HC 105/107

Water continued to enter the garage area near the front of Hampton Court after the membrane repair. The area in front of HC 105/107 was excavated and a tear in the membrane was found and repaired. This appears to have eliminated the problem but monitoring will continue. There has been some minor water leaks in the garage after heavy rainfalls but no water has entered any of the apartments.

(20 December 2000)