

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24 (1) of the Building Code Act, 1992.

AND IN THE MATTER OF Articles 9.26.5.1. and 9.26.5.2. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99 and 205/00 (the “Ontario Building Code”).

AND IN THE MATTER OF an application by Mr. Gary Treusch, Freure Riverwalk Ltd., Kitchener, Ontario, for the resolution of a dispute with Mr. Larry Simonato, Chief Building Official, City of Cambridge, Ontario, to determine whether the as-built roofs with a slope of $7 \frac{1}{2}/12$ that was not constructed with eave protection, except one layer of 15 lb building paper, provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code at the Riverwalk Condominiums, 333-385 George Street North, Cambridge, Ontario.

APPLICANT Mr. Gary Treusch, Freure Riverwalk Ltd.
Kitchener, Ontario

RESPONDENT Mr. Larry Simonato
Chief Building Official
City of Cambridge

PANEL Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. John Guthrie

PLACE Toronto, Ontario

DATE OF HEARING April 26th, 2001

DATE OF RULING April 26th, 2001

APPEARANCES Mr. Gary Treusch
Freure Riverwalk Ltd.
Kitchener, Ontario
The Applicant

RULING

1. The Applicant

Mr. Gary Treusch, Freure Riverwalk Ltd., Kitchener, Ontario, has received an order to comply under the Building Code Act, 1992 to remedy an alleged deficiency in the eave protection for the Riverwalk Condominiums at 333-385 George Street North, Cambridge, Ontario.

2. Description of Construction

The Applicant has constructed a multi-unit residential development for condominium ownership, having a Group C major occupancy. The development was constructed in several phases over the past five years, with the most recent phase being completed in 2000. The buildings are single storey in building height, designed in a row house or quattroplex format. There are 15 buildings with four dwelling units per block, for a total of 60 units within the development.

The construction in dispute involves the eave protection for these buildings. The roof pitch is 7½ to 12 and the eaves have been protected with one ply of 15 lb asphalt-saturated felt. The roofs have also been shingled with 230 lb shingles having a 20 year product warranty. At each phase of development the condominium buildings passed inspection with the municipality and occupancy permits have been issued for all of the built units. Through a private audit on select units, however, it was discovered that the level of eave protection installed by the roofing contractor was not according to plans and was inadequate to comply with the requirements of the Ontario Building Code.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the one ply of 15 lb asphalt-saturated felt, installed on the building roofs having a slope of 7 ½ in 12 provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code.

Subsection 9.26.5. outlines the OBC requirements for “Eave Protection for Shingles and Shakes”. In particular, Article 9.26.5.1. requires eave protection on all shingle roofs, with the exceptions to this requirement listed in Sentence 9.26.5.1.(2). Clause 9.26.5.1.(2)(d) specifically, is applicable in this instance. It exempts roofs from eave protection where the roof has a slope of 1 in 1.5 or greater. A roof with a pitch of 8/12 would provide this slope, however, with a slope of 7½ to 12 as is the case in the subject development, the benchmark for the exemption from eave protection is not met.

Article 9.26.5.2 outlines the materials required for eave protection. In this case, with a roof pitch of 7½/12, either one layer of 50 lb asphalt felt or two layers of 15 lb asphalt felt, cemented together with lap cement would be required. As noted, the Applicant has installed only one layer of 15 lb asphalt-saturated felt on these roofs.

4. Provisions of the Ontario Building Code

9.26.5.1 Required Eave Protection for Shingles and Shakes

- (1)** Except as provided in Sentence (2), eave protection shall be provided on shingle, shake or tile roofs, extending from the edge of the roof a minimum of 900 mm (2 ft 11 in) up

the roof slope to a line not less than 300 mm (11 ¾ in) inside the inner face of the exterior wall.

- (2) Eave protection is not required
 - (a) over unheated garages, carports and porches,
 - (b) where the roof overhang exceeds 900 mm (2 ft 11 in) measured along the roof slope from the edge of the roof to the inner face of the exterior wall,
 - (c) on roofs of asphalt shingles installed in accordance with Subsection 9.26.8.,
 - (d) on roofs with slopes of 1 in 1.5 or greater, or
 - (e) in regions with 3 500 or fewer degree-days.

9.26.5.2. **Materials**

- (1) Eave protection shall be laid beneath the starter strip and shall consist of
 - (a) No. 15 asphalt-saturated felt laid in two plies lapped 480 mm (18 7/8 in) and cemented together with lap cement,
 - (b) Type M or S roll roofing laid with not less than 100 mm (4 in) head and end laps cemented together with lap cement,
 - (c) glass fibre or polyester fibre coated base sheets, or
 - (d) self-sealing composite membranes consisting of modified bituminous coated material.

5. **Applicant's Position**

The Applicant submitted that an independent technical audit commissioned by the owners uncovered that, despite the pitch of the roof being 7 ½ /12, there was only one ply of 15 lb felt applied at the eaves. The building plan originally called for two plies, however, the installer inadvertently provided only one. He recognized the deficiency in the eave protection relative to the Code requirement, however, as the roof pitch is only slightly less than the 8/12 slope which would provide exemption from any type of eave protection, he believed that the effect would be negligible.

The Applicant stated that his company has been in business for 47 years with an estimated 8,000 homes built during that time. In his experience it has been found that ice damming occurs only on lower sloped roofs (i.e., less than 6/12 pitch). In addition, he advised that the buildings are provided with 230 lb shingles, exceeding Code requirements. Most buildings, he noted, have only 210 lb shingles. (The installed shingles also carry a 20 year guarantee which also surpasses the usual 15 year guarantee that most house shingles possess.) As a result, the Applicant argued that adequate protection from ice damming will be provided by the one layer of felt and the higher grade shingles.

The Applicant also submitted that some of the roofs in question had been in existence for 5 years with no leaks reported. The Applicant stated that it may be more detrimental to the integrity of the roofs if repairs were to be undertaken at this point. All roofs have been installed and have had an opportunity to seal. If repairs were to be conducted, which would include the removal of 900 mm of shingles to apply the additional layer of felt, the “monolithic” layer of shingles would be damaged. In his opinion, this would provide a seal that “ would be inferior to what is there now.”

6. **Respondent's Position**

The Respondent did not attend the hearing. The Commission therefore relied only on his written submission which concluded:

“The Builder, Freure Homes, was issued a Building Permit based upon the plans showing eaves protection of 50 lb Felt for the roofs. We have been advised by Freure Homes, the builder, that the roofer applied 1 layer of 15 lb felt paper only. Although this can be used to suggest that the builder attempted to meet the ‘intent’ of the code, the 1 ply does not meet the code either.

“We have also been advised by the builder that the roof slope is actually 7 ½ to 12. This is short of the actual code requirement by ½ inch, the code being 8 to 12 before eaves protection may be eliminated. A review of the plans also showed the slope of the roofs to be 7.5 to 12.”

The Respondent concluded by indicating that they will rely on the ruling of the Commission with respect to whether sufficiency of compliance for the eave protection has been provided in this development.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-built roof with slope 7 ½ to 12 that was not constructed with eave protection, except one layer of 15 lb building paper provides sufficiency of compliance with Article 9.26.5.2. of the Ontario Building Code at the Riverwalk Condominium, 333-385 George Street North, Cambridge, Ontario on condition that:

- a) The builder will provide a 10 year warrantee on installation and workmanship for the roofs.

8. Reasons

- i) The slope is very close (at 94%) to the pitch required for exemption from the eave protection requirement in the Ontario Building Code.
- ii) One layer of 15 lb building paper has been provided.
- iii) Most roofs are provided with 210 lb shingles. These roofs have 230 lb shingles with a 20 year warrantee.
- iv) The manufacture’s warrantee remains in effect.
- v) Some roofs have been in place for 5 years without a problem.

Dated at Toronto this 26th, day in the month of **April**, in the year **2001** for application number **2000-83**.

Dr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. John Guthrie