

BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.8.8.5. of Regulation 403, as amended by O. Reg. 22/98, 102/98, 122/98, 152/99, 278/99, 593/99, 597/99, 205/00 and 283/01 (the “Ontario Building Code”).

AND IN THE MATTER OF an application by Harold Prell, Homeowner, for the resolution of a dispute with Jim Witmer, Chief Building Official, City of Kitchener, to determine whether the proposed interior and exterior guards to be comprised of wrought iron balusters containing sections of ornamental floral design and scroll patterns within the area between 100 mm and 900 mm above the walking surface, provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code at 49 Bingeman Street, Kitchener, Ontario.

APPLICANT	Harold Prell Homeowner, Kitchener, Ontario
RESPONDENT	Jim Witmer Chief Building Official City of Kitchener
PANEL	Michael Steele, Chair - Designate Donald Pratt Gary Burtch
PLACE	Toronto, Ontario
DATE OF HEARING	December 13, 2001
DATE OF RULING	December 13, 2001
APPEARANCES	Harold Prell Homeowner, Kitchener, Ontario The Applicant
	Glen Good Deputy Chief Building Official City of Kitchener Designate for the Respondent

RULING

1. The Applicant

Harold Prell, Homeowner, Kitchener, Ontario, has received a building permit under the *Building Code Act*, S.O. 1992, c. 23, as amended, and has constructed an addition to his single detached dwelling at 49 Bingeman Street, Kitchener, Ontario.

2. Description of Construction

The Applicant has recently undertaken renovations to his Class C, residential dwelling. As well, an addition to the dwelling is currently being constructed. The building has an area of less than 600 m² with a building height of two storeys.

The construction in dispute involves the design of the guards proposed to be used at several locations throughout the interior and exterior of the dwelling. The guards are comprised of hand crafted wrought iron members with a stainless steel handrail. All pieces will be assembled on site and welded together. There are three guard designs proposed for various aspects of the building.

The first design, proposed for use on the interior stair and landing areas, is partially comprised of curving metal members designed in an ornamental floral pattern. The vertical pickets of the guard are interwoven with this floral pattern and other ornate decorative attachments that protrude into the area between the balusters.

The second guard design, proposed to serve the two exterior rectangular balconies, incorporates a scroll-like fixture at the mid point of each picket. This decorative feature projects approximately 40 mm (1.5 in) out from the vertical picket.

The third guard in dispute will serve the semi-circular exterior balconies. The subject balusters of this guard design, when viewed in cross section, are not vertical. They are designed with an outward projecting curvature, i.e., in a bow shape. The lower portion of the balusters curves away from the exposing face of the building. The slope of this portion is measured at approximately 45° to 55° from horizontal at approximately 100 to 150 mm above the walking surface. This balustrade also incorporates a number of ornate decorative protrusions that join the pickets in various locations.

For all three of the guard designs the Applicant has undertaken to ensure that the loading requirements of the Code are met and that there will be no openings greater than 100 mm.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the proposed guards which include ornate decorative elements in the area between 100 mm and 900 mm above the walking surface provide sufficiency of compliance with Article 9.8.8.5. of the Ontario Building Code.

This provision stipulates that required guards must be designed in such a way so as not to facilitate climbing between 100 and 900 mm above the floor or walking surface of the area the guard is protecting. The issue at dispute is whether the various designs of the proposed guards will facilitate climbing.

4. Provisions of the Ontario Building Code

9.8.8.5. Design to Prevent Climbing (See Appendix A.)

(1) *Guards* required by Article 9.8.8.1. and serving *buildings of residential occupancy* shall be designed so that no member, attachment or opening located between 100 mm (4 in) and 900 mm (2 ft 11 in) above the floor or walking surface protected by the *guard* will facilitate climbing.

5. Applicant's Position

The Applicant advised that he is currently renovating a 100 year old home and has also constructed an addition to the building. Without realizing that this would be an issue, the Applicant imported the components of the guard to be assembled on site. The renovations are nearing completion and, after discussions with the municipality, the proposed guard design became an issue. He advised that this has been a frustrating process for both himself and his architect who advised that similar ornate designs had been approved elsewhere throughout the province.

At the hearing the Applicant undertook to ensure that all aspects of the Code in respect to structural loading and size of openings would be complied with. The only dispute, he submitted, was with respect to the subjective issue of climbability. In respect to the interior and exterior vertical guards, the Applicant acknowledged that the design was very ornate but suggested that there was no ladder effect being created. He argued that the appearance of the guard does not invite climbing and that the features are merely decorative.

In respect to the outward curving balusters the Applicant made the argument that this bow-like effect made the guard more difficult to climb. He stated that, to gain a toe hold on the balusters, one would have to be leaning backward, away from the top of the handrail. This would not facilitate climbing. In addition he advised that the exterior balconies in question were quite small and that doors to these areas would generally be locked.

In summation, the Applicant submitted that it remained questionable whether a child would, or could, climb the guards. He suggested that, because many of the decorative elements have sharp edges, a potentially painful hand or foot hold would help to deter climbing. He advised that he had spent a considerable amount of time on the renovation of this building and in trying to incorporate a guard design that would conform to the general character of the neighbourhood.

6. Respondent's Position

The Designate for the Respondent submitted that the municipality is regularly presented with ornamental and decorative guards for consideration. He recognized the investment that the Applicant has made and acknowledged the unique design being proposed. The Designate agreed that the designs do not look like a ladder but argued that, as a result of the decorative features throughout the guard, a toe hold could be obtained.

The Designate recognized that the guards were not situated in a public space and advised that he was more concerned with the interior guard than the ones serving the small exterior balconies. He conceded

that the balcony areas were quite small with restricted access and that people would not tend to congregate there. However the interior guard, he argued, would be a focal point within the home. Guests may have children who could be enticed by the design to attempt to climb the guard. In summation the Designate advised that the Code does not provide much latitude in guard design. In this instance, despite the increased level of supervision one might expect in a private residence, he could not accept the guard designs as proposed since, in his opinion, they do not comply with the Code.

7. Commission Ruling

It is the decision of the Building Code Commission that:

- i) The ornamental wrought iron guard with balusters having an outward curve creating a slope on the lower portion of the picket provide sufficiency of compliance with Article 9.8.8.5. of the OBC, and
- ii) The guards designed with vertical balusters containing decorative wrought iron elements within the safety zone between 100 mm and 900 mm above the walking surface provide sufficiency of compliance with the OBC on condition that they are modified to prevent climbing as follows:
 - a) The guard is to be protected on the interior surface by the installation of an additional covering, approved by the municipality, which prevents climbing.
 - b) The additional material is to be affixed in a manner which prevents removal except through the use of tools to, for example, facilitate cleaning or repair.

8. Reasons

- i) The curvature of the balusters is directed outward from the balcony and from the upper rail of the guard, making climbing difficult.
- ii) The additional protective covering on the interior surface of the vertical guards will satisfy the provisions of the Building Code, whereas, the design of the vertical pickets with ornamental features and attachments within and throughout the safety zone could otherwise be considered to facilitate climbing.

Dated at Toronto this **13th** day in the month of **December** in the year **2001** for application number **2001-73**.

Michael Steele, Chair - Designate

Donald Pratt

Gary Burtch