



Ontario

BUILDING CODE COMMISSION

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

AND IN THE MATTER OF Article 3.2.9.1. 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. Grant Stummer, CEO, Universal Mold Inc., Mississauga, Ontario, for the resolution of a dispute with Mr. Agris Robeznieks, Chief Building Official, City of Mississauga, to determine whether the as-constructed infill addition that joins together two previously separate structures thereby creating a building having an area of 2, 229 m² (23,984 ft²), and that is not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Universal Mold Ltd., 1746 Mattawa Avenue, Mississauga, Ontario.

APPLICANT Grant Stummer, CEO
Universal Mold Inc.
Mississauga, Ontario

RESPONDENT Mr. Agris Robeznieks
Chief Building Official
City of Mississauga

PANEL Dr. Kenneth Peaker, Chair
Mr. Fred Barkhouse
Mr. Donald Pratt

PLACE Toronto, Ontario

DATE OF HEARING July 5, 2001

DATE OF RULING July 5, 2001

APPEARANCES Mr. Peter DeMan
DeMan Construction
Mississauga, Ontario
Agent for the Applicant

Mr. Paul Farrant
City of Mississauga
Designate for the Respondent

RULING

1. The Applicant

Mr. Grant Stummer, CEO, Universal Mold Inc., Mississauga, Ontario, has received a building permit under the Building Code Act, 1992 and has constructed an addition at Universal Mold Ltd., 1746 Mattawa Avenue, Mississauga, Ontario.

2. Description of Construction

The Applicant has constructed a 315 m² addition that joins two existing buildings creating a building with an area of 2, 229 m². The facility is owned and operated by Universal Mold Ltd., a plastic mold manufacturer. The building is of noncombustible construction and is not equipped with a fire alarm system, a sprinkler system or a standpipe and hose system. The facility is classified as a Group F, Division 2, industrial occupancy.

The construction in dispute involves the addition which fills the 9.14 m (30 ft) space between two existing buildings. The addition is approximately 9.14 m (30 ft) by 30.48 m (100 ft) and is to be used for a loading dock. The construction of the addition triggers the building area requirement in the OBC for a standpipe and hose system. However, none is proposed in this instance. The standpipe and hose is required to be located only within the area of the addition. The remainder of the building, as it is already in existence, is not subject to the standpipe and hose requirement.

3. Dispute

The issue at dispute between the Applicant and Respondent is whether the as-constructed infill addition, joining together two previously separate structures and creating a building with an area of 2, 229 m² (23,984 ft²), but not equipped with a standpipe and hose system, provides sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code.

Article 3.2.9.1. requires that a one storey building with an area in excess of 2, 000 m², and containing a Group F, Division 2 occupancy, be provided with a standpipe and hose system if the building is not sprinklered. The building in question is 2, 229 m² as a result of the construction of the addition which joined two smaller buildings. The facility is not sprinklered and, as mentioned above, is not equipped with a standpipe and hose system.

4. Provisions of the Ontario Building Code

Article 3.2.9. Standpipe Systems

3.2.9.1. Where Required

- (1) Except as provided in Sentences (4) to (7), a standpipe system shall be installed in every building that
 - (a) is more than 3 storeys in building height,
 - (b) is more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey, or

- (c) is not more than 14 m (45 ft 11 in) high measured between grade and the ceiling of the top storey but has a building area exceeding the area shown in Table 3.2.9.1. for the applicable building height if the building is not sprinklered.

Table 3.2.9.1.
Building Limits without Standpipe Systems
Forming Part of Sentence 3.2.9.1.(1)

Occupancy Classification	Building Area, m ² (ft ²)		
	1 Storey	2 Storeys	3 Storeys
A	2 500 (24,200)	2 000 (21,500)	1 500 (16,100)
C	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
D	4 000 (43,100)	3 000 (32,300)	2 000 (21,500)
F, Division 2	2 000 (21,500)	1 500 (16,100)	1 000 (10,800)
F, Division 3	3 000 (32,300)	2 000 (21,500)	1 000 (10,800)
Column 1	2	3	4

5. Applicant's Position

The Agent for the Applicant submitted that by joining the 30 ft space between the two existing buildings, a structure had been created that is 10% greater than the maximum area permitted to exempt a building with an F2 major occupancy from the standpipe and hose requirement. He argues that the Applicant has exceeded the provisions by a mere 229 m². He continued by advising that the buildings will still be somewhat independent, with the exception of a few doors and a drive through area. As a result, the walls cannot be considered firewalls and, therefore, the total structure is considered one building for the purposes of the Code.

The Agent also advised that, since the manufacturing area of the building was relatively small (approximately 1, 746 m²), there was a strong possibility that the use could be re-classified as a Group F, Division 3 occupancy. If the facility were an F3 occupancy, the standpipe and hose requirement would no longer be an issue; a building of up to 3, 000 m² would not require this system. They are currently pursuing this possibility with their consultants and City officials.

The Agent acknowledged that, given this present situation, the OBC requires a standpipe and hose system in the addition, but advised that providing this connection would be cost prohibitive. In addition, he didn't believe that much value would be added as the system would only be provided in the small addition at the centre of the building. In lieu of the standpipe and hose system, the Applicant proposed to provide extra protection by way of additional portable ABC type fire extinguishers and two mobile cart mounted 50 lb units.

The Agent further advised that the building is accessible from all sides for firefighting purposes, but when questioned, advised that there was not necessarily a designated route that was maintained year round. He stated that there were many doors around the building that could be used for search and rescue operations.

In summation, the Agent submitted that there is a fire safety plan in place and employees have been trained in case of an emergency. He felt that the proposed measures would be sufficient to compensate for the OBC requirement, given the size of the affected addition and the fact that the building exceeds the Code parameters by such a small amount.

6. Respondent's Position

The Designate for the Respondent submitted that a building permit was issued for this addition on the basis that a standpipe and hose system would be provided. He explained that the nature of this business with the use of plastics is relatively hazardous. As a result, the Fire Department would prefer an inexhaustible supply of water for firefighting purposes. While he recognized that only the small addition was affected by this requirement, he noted that this was now considered one building; a fire might not be as easily contained as when the buildings were separate.

He further submitted that the mobile carts, proposed by the Applicant, may be difficult to use and only provide a limited firefighting capability. The Fire Department may require the standpipe connection to adequately fight a fire within this building. A building the size of this structure, he argued, starts to exceed the limit of an advancing hose line. While they would not likely use the hose provided with the system, they may require the standpipe connection to reach certain areas of the facility.

7. Commission Ruling

It is the decision of the Building Code Commission that the as-constructed addition that joins together two previously separated structures, thereby creating a building having an area of 2, 229 m² and that is not equipped with a standpipe and hose system does not provide sufficiency of compliance with Article 3.2.9.1. of the Ontario Building Code at Universal Mold Ltd., 1746 Matheson Avenue, Mississauga, Ontario.

8. Reasons

- i) The compensating measures offered do not provide sufficiency of compliance with the OBC requirements.
- ii) Given the relative hazard posed by the use of plastics at this facility, having an F2 classification, the Fire Department would reasonably require an inexhaustible supply of water that the proposed mobile cart units and additional fire extinguishers would not provide.

Dated at Toronto this **5th** day in the month of **July** in the year **2001** for application number **2001-04**.

Mr. Kenneth Peaker, Chair

Mr. Fred Barkhouse

Mr. Donald Pratt