

Glass falls from Toronto's Shangri-La condo — again — as city tests to see if tower glass is faulty

Problem may be caused by nickel sulfide inclusions, microscopic imperfections that lead to spontaneous breakage.



TODD COYNE / TORONTO STAR

A pane of glass fell more than 50 storeys from the Shangri-La building onto University Ave. Thursday morning, temporarily closing the street during the morning commute.

By: [Todd Coyne](#) Staff Reporter, Published on Thu Jul 17 2014

It was déjà vu all over again for downtown Toronto residents as a pane of glass broke and fell more than 50 storeys Thursday, smashing onto a busy street at the height of the morning commute.

The [latest incident](#) at the luxury Shangri-La condo building could confirm what the City of Toronto has long suspected: that there is something wrong with the glass at the Shangri-La.

Over the past two months the city has been removing balcony glass from the two-year-old building and performing stress tests with the developer to determine if the glass is faulty.

The tests are looking specifically for something called nickel sulfide inclusions, microscopic imperfections in tempered glass that can cause spontaneous breakage.

The results of those tests won't be known for some time but the city is meeting with the developer next week to work out a schedule, according to the city's deputy chief building official, Mario Angelucci.

"In total, there have been five failures at this building," Angelucci told the Star, noting that two may have been caused by impacts, while the cause of others is unknown.

Thursday's failure was the third time in 10 months that police were called to close a street beside the new hotel-condo building, including when a 53-year-old man was struck and injured by falling glass last September.

No one was hurt Thursday when a panel broke and fell from a private patio on the 51st floor of the condo tower, throwing thick glass shards all over University Ave. and onto the sidewalk.

Apart from faulty material, there are competing theories as to why the falling-glass problem is so prevalent in Toronto, and not just at the Shangri-La.

Three other new downtown highrise buildings — Festival Tower, One Bedford and Murano Towers — are embroiled in a pending [class-action lawsuit](#) launched by about 1,200 condo owners who were barred from their balconies while the glass was replaced due to suspected material failure.

According to University of Toronto architecture expert David Lieberman, balcony glass in Toronto also fails because of extremes in weather, installer error, poor fastenings and air-pressure changes created by wind tunnels between buildings.

The city has ruled out installer error in its assessment of the Shangri-La problems, Angelucci said.

Westbank Corp., developer of the Shangri-La property, said in an email to the Star that the company is cooperating fully with Toronto's building inspector and has launched its own investigation into the latest fall.

The Ontario government [adopted new rules](#) on balcony glass in the summer of 2012 to address Toronto's concerns about a spike in falling glass from some of the city's newest condo units.

The most relevant change to balconies was the mandatory use of laminate glass, which stays in one piece when broken, as opposed to tempered glass, which crystallizes into multiple jagged shards, as seen on city streets and sidewalks.

According to Lieberman, those changes in the building code, which only cover projects begun after July 1, 2012, may not be enough.

Ideally balcony glass would be tempered and laminated just like a car windshield, the University of Toronto associate professor said. However, Toronto developers have shown little interest in the idea because of its high cost, he added.

“Most of them, unfortunately, operate such that code minimum is performance maximum.”

The 1,200-plaintiff balcony lawsuit is set to go to trial as early as next year, barring a settlement agreement between the condo owners and the developers, builders and subcontractors.

That’s plenty of time for owners at the Shangri-La to start a similar action piggybacking on the existing three-property case if the city finds the glass defective, according to Ted Charney, the lawyer spearheading the class action.

“If it turns out there’s defective glass, or in terms of the way the panels were installed in the building, there could be a real problem,” Charney told the Star. “It would be entirely appropriate for them to pursue compensation.”