

ACCIDENT THREAT NOTIFICATION: Fibre cement boards as fall protection on balcony railings are insufficient to prevent falls.

The Safety Investigation Authority is investigating an accident that occurred in Hietalahti, Helsinki on 17 September 2025, in which a person died after falling through a balcony railing board of an apartment building onto the ground.

When the safety investigation began in the autumn, it was noted that the fibre cement balcony boards at the home where the accident occurred should be tested in order to determine their durability in terms of protecting against falls and whether there were any defects in the attachments. Strength tests performed by the Safety Investigation Authority on Monday 18 May confirmed that fibre cement board is not suitable as fall protection or for preventing falls.

"We performed 10 different strength tests on the balcony board. The test results showed that, in practice, the impact caused by a small child aged 3–6 is sufficient to cause the board to fail," states Toni Kekki, Specialist at the Safety Investigation Authority.

[Link to test video \(YouTube\)](#)

Kekki continues: "A glass balcony panel is required to withstand an impact force of 220 Joules, which is equivalent to the impact of an adult falling against the glass. No equivalent standard has been specified for fibre cement board, even though the product is intended for exactly the same purpose as glass. Fibre boards are widely used because they are not only cost-effective but also a preferred solution in terms of facade appearance."

Under the Safety Investigation Act, the Safety Investigation Authority must notify the relevant authority if faults or deficiencies are detected during a safety investigation that the authority must urgently correct in order to prevent new accidents.

The Safety Investigation Authority issues an accident threat notification concerning the structure of the balcony board to the Ministry of the Environment and the City of Helsinki (Building Control Services). The fibre cement balcony board is not safe and does not prevent a person from falling off the balcony. The Safety Investigation Authority urges the supervisory authorities to take supervisory measures to promote balcony safety. In addition, the accident risk notification is addressed to the building control departments in municipalities and cities and to the housing company as a public notification.

The Ministry of the Environment supervises the safety of buildings through legislation. On the other hand, building control departments in cities ensure that the solutions used in buildings meet this requirement for safety.

“Based on the studies now carried out, it is clear that the board solutions currently in use are not strong enough. The Safety Investigation Authority does not know how many similar balcony boards are in use in Finland, but even the best estimate is in the tens of thousands. Near-miss situations involving the failure of balcony boards are not registered anywhere, which means that the authorities are not aware of them,” states Kekki.

“It should be noted that the attachments of glass balcony panels may also pose a safety risk. The investigation has shown that a glass balcony panel solution mounted on two plastic feet may slip off the feet. In other words, the plastic foot holding the glass panel in place fails at the bottom where the installation groove is located, allowing the glass panel to slip down. Everything appears fine visually, but the glass panel does not remain in place when pressed and it detaches. This means that not even the attachment methods for glass panels mounted in this way are sufficiently durable. The Safety Investigation Authority has no investigation material on this and the tests did not address this matter, but it became clear during the investigation and we wanted to raise awareness of it in the name of safety,” adds Kekki.

The Safety Investigation Authority has previously recommended, among other things, that balcony structures should be able to withstand a person falling against them. The Safety Investigation Authority has also called for setting up a kind of property database so that information on potential safety deficiencies relevant to structures could be disseminated and made publicly known. With regard to the recommendation for a property database, the Ministry of the Environment has stated that the recommendation will not be implemented.

“The Facade Association has already issued instructions to housing companies concerning the inspection of balcony structures, but the instructions have not been widely implemented,” says Kekki.

Link: <https://julkisivuyhdistys.fi/uutishuone/ajankohtaista/levyverhoiltujen-parvekekaiteiden-riskeihin-halutaan-puuttua-julkisivuyhdistys-julkaisi-valiaikaisen-ohjeistuksen/> (In Finnish)

The safety investigation is expected to be completed in autumn 2026.

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