

Time's up for Tehran's unsafe buildings



Collapse of Plasco Building in Tehran
● NEW YORK TIMES

Social Desk

EXCLUSIVE

Safety measures in a building are of utmost importance. The collapse of buildings can lead to catastrophic consequences including loss of life, injuries, and destruction of property. Over the years, there have been several incidents of building collapses in different parts of the world, Iran included, that have resulted in devastating, eye-opening consequences. One of the most tragic building collapses occurred in Bangladesh in 2013, when the Rana Plaza building collapsed, killing over 1,100 people and injuring thousands more. The building housed several garment factories, and many workers were trapped inside when it collapsed. The incident sparked global outrage and led to calls for better safety measures in factories and buildings in developing countries. Another tragic instance dates back to 2017, when the Grenfell Tower fire in

London claimed the lives of 72 people. The fire started in a faulty refrigerator and quickly spread through the building due to the lack of proper fire safety measures. The incident highlighted the importance of regular safety inspections and the need for proper maintenance of buildings. In Iran, the Plasco building collapsed in January 2017. Plasco was a 17-story building in Tehran, which collapsed after a fire broke out on the ninth floor. At least 26 people were killed, including firefighters and shopkeepers who were trapped inside. But the instance that sounded the strongest alarm in Iran was the collapse of the Metropolis high-rise building in Abadan, Khuzestan Province, in southwestern Iran. The 10-story building was still under construction at the time, and its collapse on May 23, 2022, claimed more than 40 lives. From then on, Iranian authorities have been cracking down on unsafe buildings, forcing their owners to take safety measures

seriously, especially in Tehran, which hosts many such constructions. Pointing out the latest progress on the matter, the head of Tehran Fire Department Qodratollah Mohammadi told Fars News Agency that the number of capital's unsafe buildings have been reduced to 99, adding, "We will conclude the matter by May 22, and then refer uncooperative owners to the judicial system." Buildings can collapse due to several reasons including poor construction, faulty design, lack of maintenance, and natural disasters. However, many collapses could have been prevented if proper safety measures had been taken. Therefore, it's a shame to see some owners neglect them and cause irreparable damage to innocent citizens. Especially crowded buildings, such as residential complexes, commercial buildings and public spaces must strongly adhere to strict safety regulations. Safety measures in such buildings include fire safety systems, emergency

exits, regular inspections, and maintenance checks. Building owners and managers must ensure that these measures are in place and are regularly updated to ensure the safety of occupants.

Fire safety

One of the most important safety measures in crowded buildings is fire safety. Proper fire prevention and protection systems must be installed and maintained regularly. Smoke detectors, sprinklers, and fire extinguishers should be installed in all areas of the building. Emergency exits and evacuation plans must be clearly marked and easily accessible to all occupants. Regular fire drills should be conducted to ensure that everyone knows what to do in case of a fire.

Structural integrity

Another crucial safety measure is structural integrity. Buildings must be constructed with high-quality materials and designed to withstand natural disasters and other potential hazards. Regular

inspections and maintenance are necessary to ensure that the building remains structurally sound and safe for occupancy. Any damage or wear and tear should be repaired immediately to prevent further deterioration.

Ventilation, lighting, and sanitation systems

Safety measures also include proper ventilation, lighting, and sanitation systems. These systems are essential to prevent the spread of disease and provide a healthy environment for occupants. Proper ventilation helps remove pollutants and maintain good air quality. Adequate lighting is necessary to prevent accidents and ensure that occupants can see where they are going. Sanitation systems such as waste disposal and cleaning services should be maintained regularly to prevent the spread of germs.

Accessibility standards

Buildings must comply with accessibility stan-

dards to ensure that all occupants, including those with disabilities, can safely access and navigate the building. This includes providing wheelchair ramps, elevators, and accessible restrooms. All signage should be clear and easy to read, with Braille, or tactile markings, for those with visual impairment.

In conclusion, safety measures in crowded buildings are essential to prevent accidents and minimize the risk of casualties. Fire safety, structural integrity, ventilation, lighting, sanitation systems, and accessibility standards are all important aspects of building safety. Governments and building owners must prioritize safety and invest in the necessary measures to protect the lives of occupants. Regular inspections and maintenance are essential to ensure that buildings remain safe for occupancy. By observing these safety measures, we can create a safer and healthier environment for everyone.

NEWS IN BRIEF

Scientists use electricity to make wounds heal faster

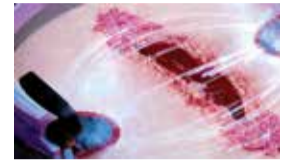


Illustration showing how electric fields can work on wounds.
● HASSAN A. TAHINI/SCIENCE BRUSH

Scientists have developed a specially engineered biochip that uses electricity to heal wounds up to three times faster than normal. It's well known that electric fields can guide the movements of skin cells, nudging them towards the site of an injury for instance. In fact, the human body generates an electric field that does this naturally. So researchers from the University of Freiburg in Germany set out to amplify the effect, Science Alert reported.

While it might not heal severe injuries with the speed of a Marvel superhero, it could radically reduce the time it takes for small tears and lacerations to recover.

For people with chronic wounds that take a long time to heal, such as in elderly folk, those with diabetes, or people with poor blood circulation, recovering quickly from frequent small, open cuts could be a literal lifesaver.

"Chronic wounds are a huge societal problem that we don't hear a lot about," says Maria Asplund, a bioelectronics scientist at the University of Freiburg and Chalmers University of Technology in Sweden.

"Our discovery of a method that may heal wounds up to three times faster can be a game changer for diabetic and elderly people, among others, who often suffer greatly from wounds that won't heal."

While it is established electricity can assist healing, the impact of an electric field's strength and direction on the process has never been well established.

So the researchers developed a bioelectronic platform and used it to grow artificial skin made up of cells called keratinocytes, which are the most common skin cell type and crucial for the healing process. They also compared the application of electric fields on one side of the wound with alternating fields on both sides of the wound. Both healthy keratinocytes and keratinocytes designed to resemble those in people with diabetes migrated up to three times faster than skin cells without any electrical interference, with an electrical push from just one side of the wound proving most effective at repairing the artificial skin in the quickest time. Fortunately, none of the cells were damaged by the electrical fields tested.

PIC OF THE DAY

Razif Khani is a cherished tradition of Qeshm Island and the historic Laft village in southern Iran, a land blessed with the warmth of the sun and the tranquility of water. This enchanting travelogue, woven in verse, celebrates the voyages of sailors and reveres the noble Prophet Muhammad (PBUH) and Imams with utmost devotion.



● ASGHAR BESHARATI/IRNA