

The Other Reasons for The Disaster Interview with A Builder



The many buildings that collapsed and were damaged to differing degrees by the September 19, 2017 earthquake make us think, among other things, about the huge lack of foresight and responsibility that persists in the city's building practices. Living in such a high-risk seismic area, with a history of devastating earthquakes, like the one that happened 32 years before on the same date, should have been reason enough to increase efforts, controls, and security measures in the regulations and effective supervision of construction in Mexico. These measures imply following up on building codes both for new construction sites and for modifying and adapting already existing buildings.

This earthquake brought to light the realities of negligence, lack of public control, administrative chaos, and even open corruption in Mexico City's construction industry. Various analyses showed just how much profitability has been the priority in the real estate industry in place of the needs for structural safety and anti-earthquake prevention measures, even despite the existence of quite modern legislation on the topic, very often not worth the paper it's written on.

To a certain extent, Mexico City has based recent policy on the agreements and synergies among officials and

real estate developers. Unfortunately, this has sometimes gone as far as collusion. How much has this impacted some of the damage and consequences of the earthquake? If other paths had been taken, how much would that have averted some of the worst effects of such a strong earthquake. We talked with Igor del Moral Aguilar, the CEO and partner in Construcciones Panamericanas, an important construction company operating in Mexico City about this and other issues.

Voices of Mexico (vm): In general, do you think that the majority of the collapses in Mexico City on September 19 could have been avoided? Please explain very briefly why these buildings collapsed. Was it corruption; construction companies saving on materials to the detriment of quality and structural safety; changes made by building owners without the knowledge of the construction site directors (DROS) and without official permits, affecting the structures; or other factors?

Igor del Moral Aguilar (IMA): Every collapse in Mexico City merits a study of its own since the reasons are different in each case. However, the variables that could cause a building to collapse must be considered before building it. It's not only earthquakes that are important, but also the kind of foundations that must be used, the

number of stories to be built, the kind of soil in the area, the complementary technical norms, sticking to the building code, etc. Many of the collapses on September 19, 2017 were due to the fact that the buildings were not designed to withstand more weight, and some of the factors behind this are that they shouldn't have had as many stories as they had, the calculations were not done correctly, or the materials were faulty, among others.

A building can collapse because the foundations were built wrong or, once it was finished, the owners may have made structural changes, using the building for purposes for which it was not designed. People very often have no knowledge of these possibilities and they make changes without authorization.

VM: Should seismic safety be a priority for the Mexico City government? Was this priority actually given its place through public policies and sufficient resources?

IMA: Safety must always be the number one priority, and guaranteeing it is one of the obligations that the government must fulfill. No excuses. We live in a high-risk seismic area; that's why what is actually done in practice should be supervised even more closely, since the norms and steps to be followed are there. It's enough to follow them and carry out the procedures correctly; we have to make sure the laws and regulations aren't a dead letter. This is the area where the government should have the most control.

VM: Is the supervisory work done by the Mexico City Institute of Construction Safety (ISCCM) sufficient?

IMA: A good job could have prevented 100 percent of the collapses, but that responsibility is not only up to that institution. A good job is not only up to the one who authorizes it, but also to the person or institution that reviews and supervises it, and, of course, to those who carry it out. Having competent people both in the institutions and on the construction sites implies better results, better buildings.

VM: How useful is it to increase the number of monitoring institutions and how can efficient communication among them prevent tragedies?

IMA: In my experience, increasing the number of supervisory institutions would only make things more complicated for builders. There are already enough of them to regulate our activities. As people in the construction business, we have to take into account all the institutions and comply with all of them to build. More than creating

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new ones, I would think about making the existing ones more efficient and transparent.

VM: Does the current Mexico City building code, designed by the Ministries of Works and Services and of Urban Development and Housing, have any article demanding ongoing evaluation and professional development of DROS? What are the requirements for becoming one?

IMA: The current building code mentions the requirements for being registered as a DRO, which is constantly updated, supposedly broadening out the legal and technical knowledge prerequisites. Some of these requirements are proving through your professional license that you have sufficient training in some of the areas involved in the sector; accrediting your knowledge and use of the many regulations, laws, programs, norms, etc., that regulate building; having a certain number of years' experience in the profession; and being an active member of the respective professional association.

VM: If that's the case, how is it possible that according to some sources, only about half of the DROS have college degrees and are licensed as engineers and/or architects?

IMA: To register as a DRO, you must comply with the prerequisites I mentioned. Anything else is outside the law.

VM: What do you think of the procedures for accrediting DROS? Is their work supervised appropriately? Why?

IMA: I think the accreditation procedures as I described them are correct, since the evaluators are drawn from a commission made up of members of professional associations. That's where you can find the most qualified people for that task. Where there might be more problems is in their actual supervisory work, since, unfortunately, it is common practice that the DROS just sign the legal documents required by the regulations and are held responsible, but they don't really verify the quality and compliance with the law at the construction sites they're endorsing.

VM: Beyond the probable cases of corruption implicit in handing over the certifications, what can a duly certified DRO do to stop these kinds of practices?

IMA: A DRO has obligations with regard to the site he or she is endorsing when signing the documents. If he/she fulfilled his/her obligations, no DRO should have any problems; that would be the best way of preventing any illicit acts.

VM: What is the origin of the problems of quality, design, and construction in Mexico City?

IMA: The problem is that to build something, you have to know a great deal about many different areas and, therefore, many different professionals and experts are involved: accountants, chemists, engineers, architects, bricklayers, suppliers, sales personnel, etc. Bringing all this knowledge together for a successful job requires a great deal of supervision and can be complicated in an atmosphere of over-regulation and non-transparent management and administrative practices.

VM: Are DROS really necessary?

IMA: Yes, they are, because the DRO is the person legally responsible for the building; he or she guarantees it

with his/her signature; when they do that, there is someone who can be held responsible for anomalies and other events. Plus, a DRO can be revoked.

VM: How can you avoid the conflicts of interests that sometimes arise between a DRO and the construction company?

IMA: That's hard because the builder needs the DRO, and very often just thinks of his/her job as more red tape. This is above all the case because, when a builder has trained people like engineers and architects working at his sites, he very often doesn't place much value on the DRO's contribution more than for just getting that signature and fulfilling the licensing and authorization requirements. This job must be given greater authority, more prestige, and recognition, and even more pay. That might well ensure the existence of a mechanism that would have an impact on the quality of the buildings so that it's seen as more than just red tape.

VM: Thank you very much.

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