

Thursday Jan. 14th | Home » World » Haiti's Buildings Weren't Fit To Withstand Quakes

Haiti's Buildings Weren't Fit To Withstand Quakes

Jan. 13, 2010 | Christopher Joyce | National Public Radio

The magnitude 7.0 earthquake struck a country whose buildings were barely built to engineering standards and were hopelessly fragile in the grip of such a strong quake. Haiti has no national building code, and many structures may not have been sound to begin with.

That's the assessment of Pierre Fouché, an earthquake engineer from Haiti — in fact, the country's only earthquake engineer, to his knowledge.

[Comment](#) | [Read \(0\)](#)

[Mail this page](#)

[Print this page](#)

RELATED STORIES

- View this story at NPR

WORLD NEWS

- Suicide bomber kills 20 people in Afghanistan
- Iraq sentences 11 to death for government bombings
- Officials: Pakistan Taliban chief is alive
- China tells Web companies to obey controls » MORE WORLD NEWS

Fouché says when he was studying engineering in Haiti his professors told him that at least one building there would survive an earthquake — the presidential residence known as the National Palace.

The palace now lies in ruins.

Constructing Disaster

Fouché is now getting his doctorate in earthquake engineering at the University of Buffalo. He says his family has survived Tuesday's quake, but he's saddened by the fact that so many who didn't were killed because buildings in Haiti are so poorly constructed.

"Many people are doing whatever they want; they can build whatever they want," Fouché says. "One of the biggest problems too is that in the country we do not even have a national building code, which is very sad."

Fouché says people with money can build reinforced concrete buildings with steel rods to strengthen walls and floors. But he says even these may not meet engineering standards to support a load vertically, and they definitely cannot handle the side-to-side forces of an earthquake.

"The earthquake, it's much more of a type of lateral loading, [and] for lateral loading you need special construction, but in many cases they are not designed, not even for current daily loading."

But many people in Haiti live and work in unreinforced buildings — brick, block or concrete. He says some of these buildings use stacked bricks instead of solid vertical columns to support ceilings.

Widespread Collapse

Earthquakes put enormous stress on rigid buildings. Andre Filiatraut, who directs the earthquake engineering center at the University of Buffalo, explains what happens to a masonry or concrete wall that's perpendicular to the motion of the quake: "The wall just kind of explodes. Imagine that I hit a wall with my fist; I'm going to create a hole there, and imagine [that] the shaking in that direction will create even a bigger hole and the wall collapses and the slab falls down." The slab being the wall or ceiling.

Filiatraut says televised images of Port-au-Prince suggest this kind of collapse was widespread. "The video showed complete dust over the entire city. Apparently that dust lasted quite a long time, 10, 15 minutes or so,

Set It and Forget It
 Become a sustaining member today
 and **auto renew** each year!
Contribute Today

SPONSOR



ADVERTISE WITH US

LISTEN

- Live Stream
- HD Radio
- FM Radio
- iPhone App

SIGN UP

- Podcasts
- Newsletters
- RSS Feeds

FIND US ON

- NPR Mobile
- Facebook
- Flickr
- Gather
- Twitter
- YouTube

INFORM

- Get Involved

SPONSOR



ADVERTISE WITH US



ABOUT TOWN
Toshi Sushi:
 Japanese food for a Mexican palate

Hettie Lynne Hurtes | Food | Silver Lake

It's a tiny little place situated between a shoe repair and cheese shop on Hyperion in Silver Lake. You can barely read the sign on the awning: Sushi by Toshi. You really have to know it's there. But once you're aware of its existence, chances are you'll be there on a regular basis. [More...](#)

[More from KPCC Arts](#) | [Sign up for the A&C Newsletter](#)

SPONSOR



ADVERTISE WITH US

DAY IN A PAGE Radio/Story Archive

January 14 2010 GO

and slow down rescue and relief efforts. Copyright 2010 National Public Radio. To see more, visit <http://www.npr.org/>.

ADD A NEW COMMENT

Name

Email address

URL (optional)

Comment

Post Comment

89.3 KPCC | Southern California Public Radio

News Programs Blogs Events About Support Us

Pledge Now Contact Us Search

Terms & Conditions Privacy Website Feedback

© 2010 Southern California Public Radio
1570 E. Colorado Blvd., Pasadena, CA 91106-2003
626-585-7000

Foundations:



Partners:

