

FEDERACION DE COLEGIOS DE ARQUITECTOS DE LA REPUBLICA MEXICANA



THE ARCHITECTS AND NATURAL DISASTERS





FEDERACION DE COLEGIOS DE ARQUITECTOS DE LA REPUBLICA MEXICANA

FCARM represents 50,000 national and international Mexican Architects who serve their profession in this country which contents 2,000,000 km² and 107 million population.

During next five years, Mexican government will construct 5,000,000 houses for the family's that needs it the most, trough the architects in this federation, FCARM is keeping on eye on the structure and the design of these houses and decide if the design is appropriate for the people. Also the location of the land that we use to establish the accommodation is in the cities planification and is not located in dangerous zone.



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FCARM will take the experience and the conscience which aroused by this important workshop, immediately form a working group which composed by the architects, and the goal is to train them and diffuse the preventive and correct way that we have to consider in our house design and also the concern we should have for our cities planification.



Mexican territory also faces systematic cyclical problems that are derived from the natural disasters.



- **The Mexican Republic every year is whipped by enormous floods, droughts, frosts, forest fires, earthquakes, earth slidings, hurricanes, and in some cases, volcanic explosions that they generate numerous of lost materials and of human lives.**



Mexico has undergone great disasters in its history, which have brought human and economic lost, some of they are:

This it is the ranking of the 10 more numerous wrecks in Mexico and its costs:

- **1. - Hurricane Wilma (2005) 1.752 md.**
- **2. - Floods in Tabasco (2007) 700 md**
- **3. - Hurricane Gilberto (1997) 567 md**
- **4. - Earthquake Mexico, DF (1985) 473 md**
- **5. - Hurricane Isidoro (2002) 308 md**
- **6. - Hurricane Emily (2005) 302 md**
- **7. - Hurricane Stan (2005) 228 md**
- **8. - Hurricane Kenna (2002) 176 md**
- **9. - Hurricane Juliette (2001) 90 md**
- **10. - Hurricane Paulina (1997) 62 md**





Hurricane Wilma

The most intense hurricane ever recorded in the Atlantic basin.

Wilma made several landfalls, with the most destructive effects felt in the Yucatán Peninsula of Mexico, Cuba, and the U.S. state of Florida.





Hurricane Wilma

Pictures and television reports indicated extensive structural damage throughout the Cancun area, as well as significant flooding and many downed trees, power lines and scattered debris. Several homes had also collapsed. Rainfall amounts in excess of 23 inches (590 mm) were reported in several areas.





Tabasco flood

The 2007 Tabasco flood occurred in late October and early November 2007 in the Mexican states of Tabasco and Chiapas, in which as much as 80% of the former was left under water. At least 20,000 people were forced to seek emergency shelter. Over 1,000,000 residents were affected.





Tabasco flood



The 2007 Tabasco flood not only destroyed many family houses and took away people's belongings, but also affected theatres, libraries, artistic schools and museums.

- One week after the severe flooding, the capital of the state is in bankruptcy in part because flooding has affected various settlements. According to the local Chamber of Commerce, almost 15,000 establishments in downtown Villahermosa suffered losses of 100% in their infrastructure and inventories.

TABASCO

**NEEDS
YOUR
HELP**





Hurricane Gilbert

- **35,000 people were left homeless and 83 ships sank when Gilbert struck the Yucatán Peninsula. In north-eastern Mexico, heavy rains in and around Monterrey caused tremendous flooding.**



Mexico City earthquake



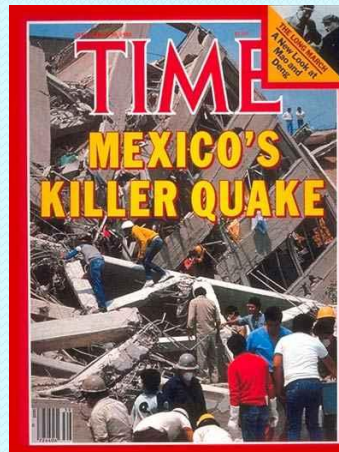
- The most devastating earthquakes in the history of the Americas. On September 19, 1985, Mexico City was struck by an earthquake of magnitude 8.1
- Although the epicentre of the earthquake was more than 3,000 Km. away. Mexico City suffered the most damage.



Mexico City earthquake



- As a result of the earthquake, according to official government statistics, over 9,000 people were killed, 30,000 injured, and 100,000 left homeless. 416 buildings were destroyed and over 3,000 seriously damaged.





Earthquake Mexico, D.F. (1985)

Photographs





















Earthquake Mexico, (Temples)

Puebla, Puebla (1999)

Photographs



TEMPLO DE SAN AGUSTIN



TORRE DEL TEMPLO DE SAN AGUSTIN



DETALLE DE TORRE EN EL TEMPLODE SAN AGUSTIN



DETALLE DE LA TORRE DEL TEMPLO DE LA SOLEDAD



TEMPLO PARROQUIAL SAN ANDRES CALPAN



TEMPLO DE SANTA ROSA



PARROQUIA DE QUECHOLAC



TORRE DE LA PARROQUIA DE SAN ANTONIO EN AMOZOC



DETALLE DE TORRE DE LA PARROQUIA DE CUAHUTINCHAN



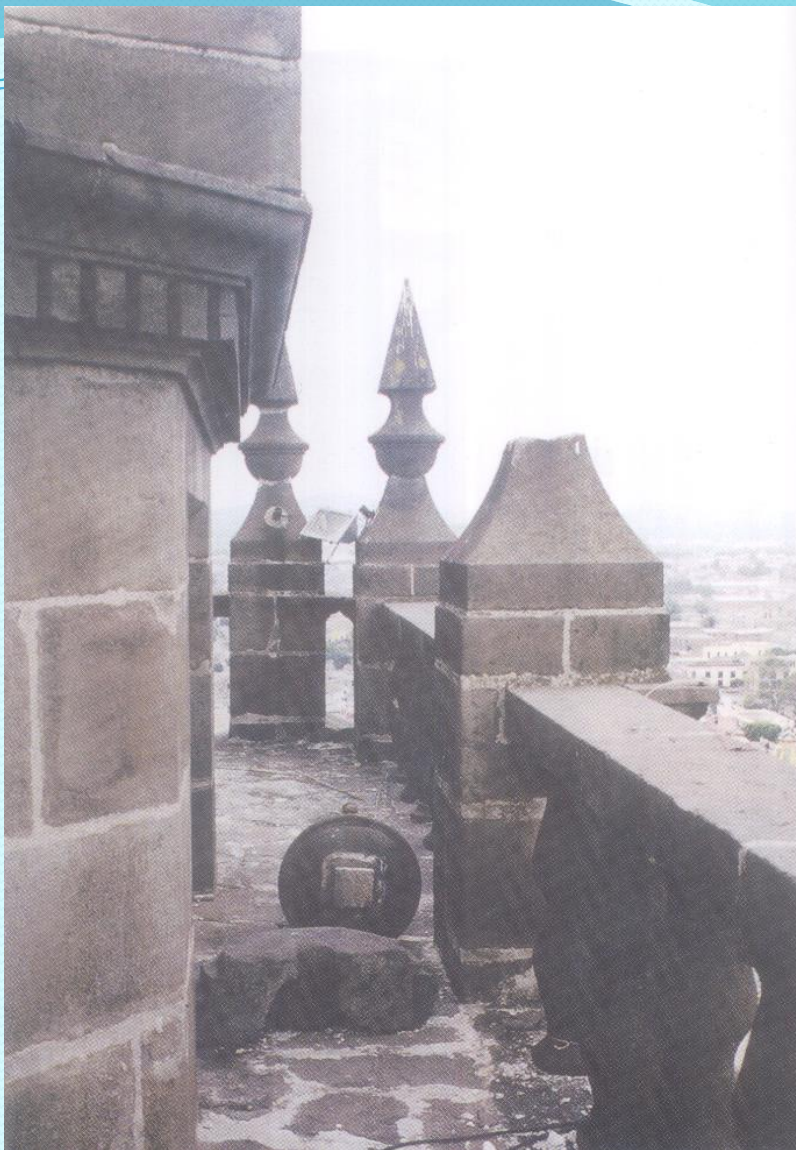
EXCONVENTO DE SAN FRANCISCO TOTIMEHUACAN



CATEDRAL DE LA CIUDAD DE PUEBLA.



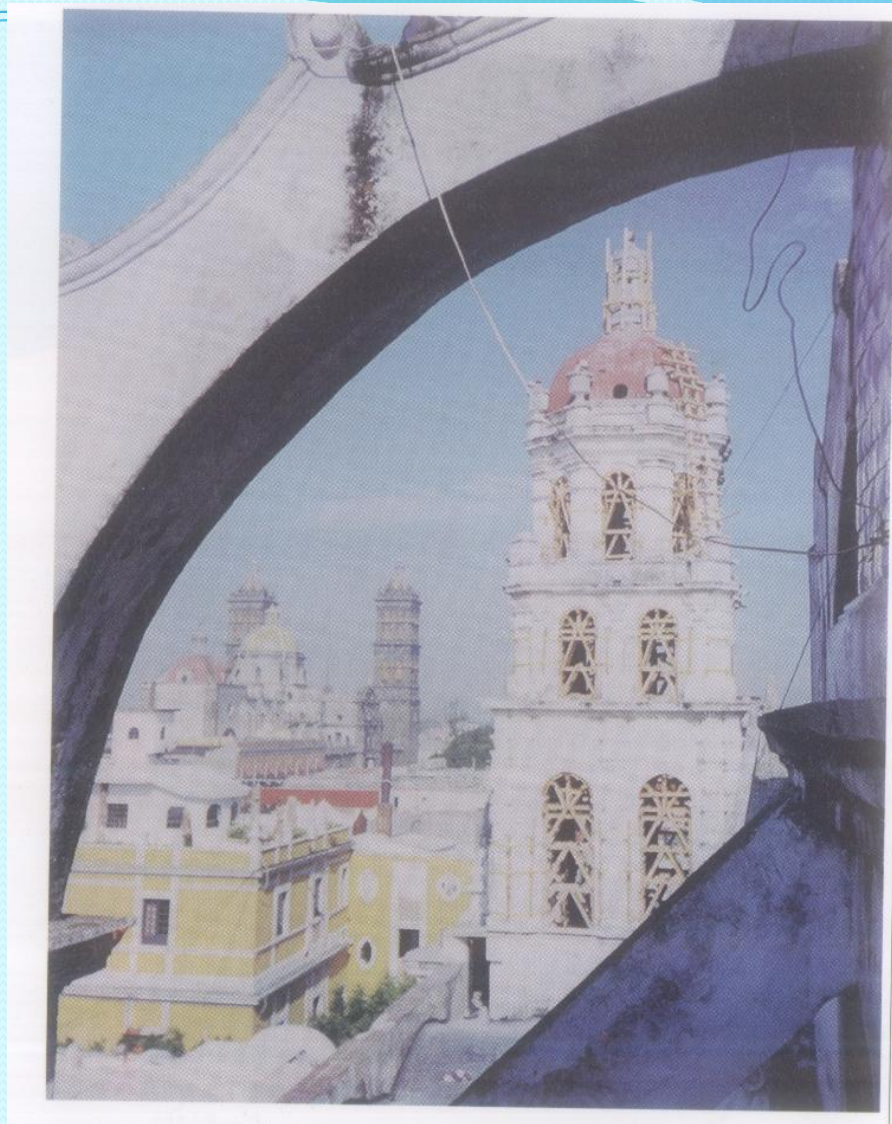
EDIFICIO CAROLINO BUAP



DETALLE DE LA TORRE SUR DE LA CATEDRAL



DETALLE DEL ORBE EN LA CATEDRAL



TEMPLO DE LA COMPAÑÍA DE JESUS



PARROQUIA DE SAN ANDRES CHOLULA



TEMPLO DE SAN JERONIMO

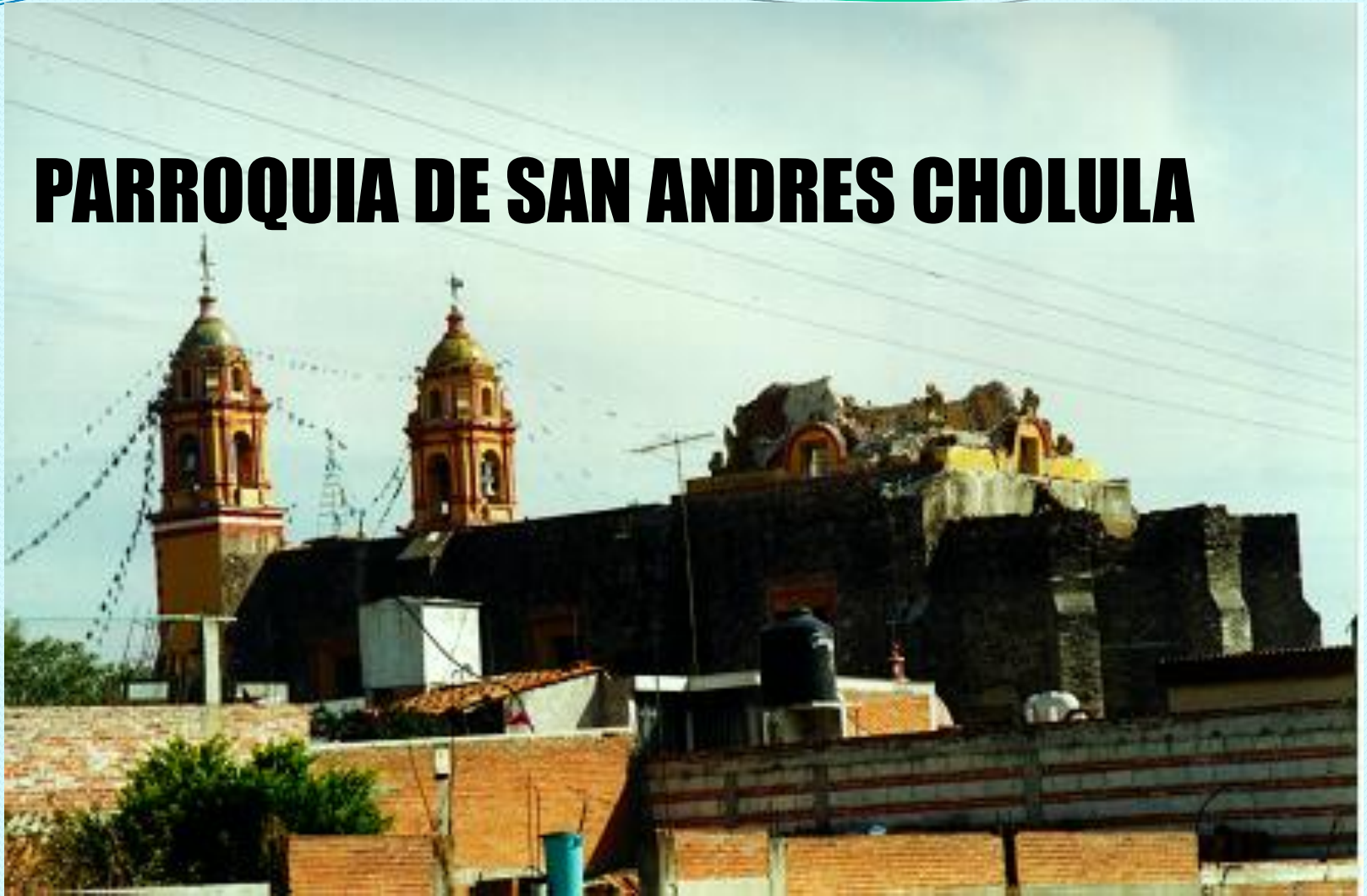


SANTUARIO DE LOS REMEDIOS EN CHOLULA



TEMPLO DE SANTA ROSA

PARROQUIA DE SAN ANDRES CHOLULA





Vista general del templo, cúpula colapsada y separación de las torres del cuerpo central.

PARROQUIA DE SAN ANDRES CHOLULA



Cúpula de planta elíptica colapsada.

PARROQUIA DE SAN ANDRES CHOLULA



Vista interior de la cúpula colapsada.

PARROQUIA DE SAN ANDRES CHOLULA



PARROQUIA DE SAN ANDRES CHOLULA

Restos de la cúpula con el remate de la linternilla en primer plano.



Hundimiento de piso provocado por el desplome de la cúpula.

PARROQUIA DE SAN ANDRES CHOLULA



Colapso de cubierta de viguería
por caída de contrafuerte..

PARROQUIA DE SAN ANDRES CHOLULA



Colapso de cubierta de viguería
por caída de contrafuerte..

PARROQUIA DE SAN ANDRES CHOLULA



Grietas longitudinales en bóveda de arista.

PARROQUIA DE SAN ANDRES CHOLULA



Grietas longitudinales en bóveda de arista.

PARROQUIA DE SAN ANDRES CHOLULA



Daño exterior en bóveda.

PARROQUIA DE SAN ANDRES CHOLULA



PARROQUIA DE SAN ANDRES CHOLULA

Proceso de liberación de
rellenos.



Retiro de tramo colapsado en bóveda para restitución.

PARROQUIA DE SAN ANDRES CHOLULA



Separación de torre del
cuerpo de la iglesia.

PARROQUIA DE SAN ANDRES CHOLULA



Proceso de consolidación de grietas por tendencia a separación de torre.



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