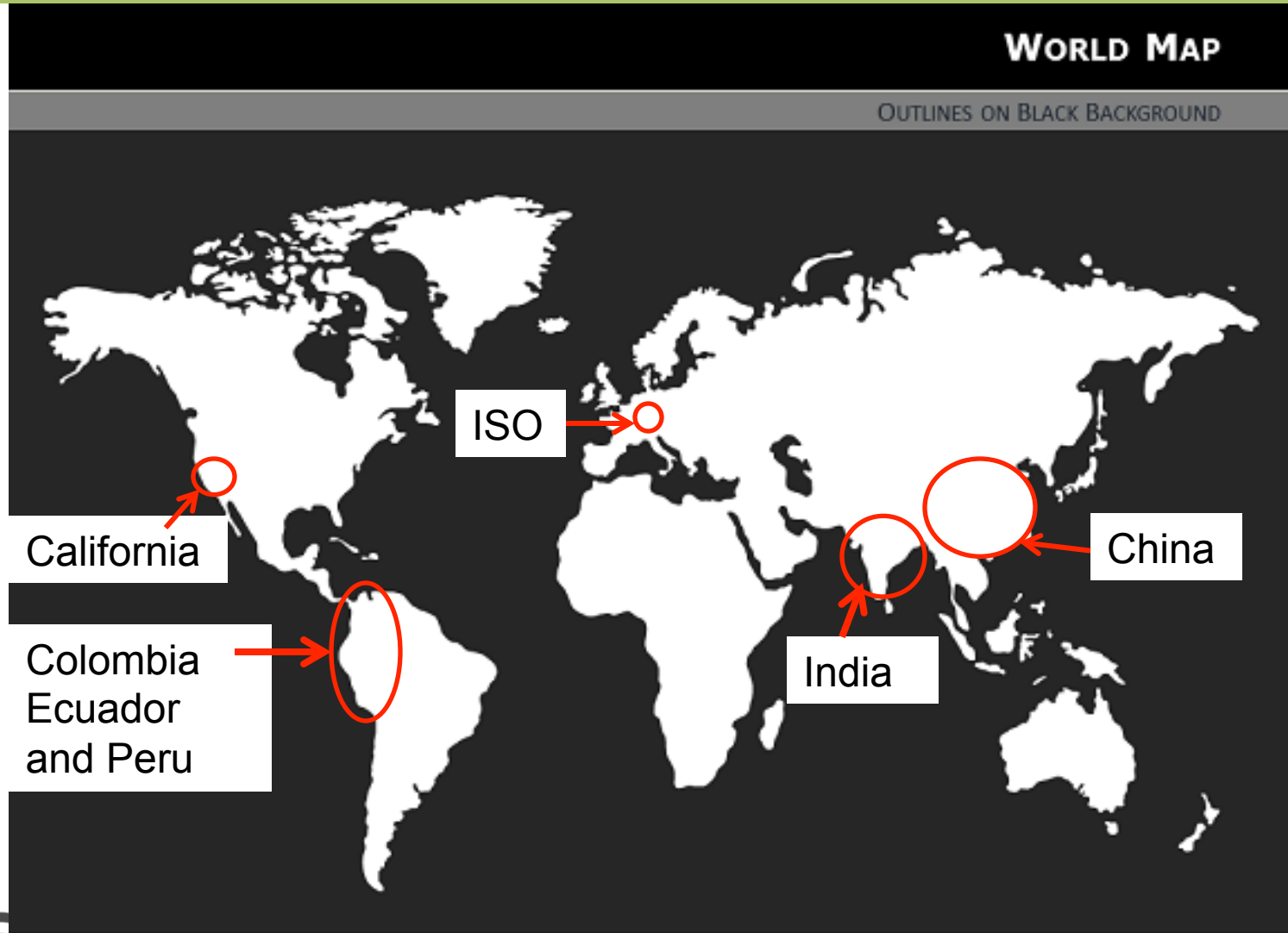


BAMBOO STANDARDS

LUIS FELIPE LOPEZ
WORLD BAMBOO CONGRESS
DAMYANG, SOUTH KOREA, SEP 18 TO 22

BAMBOO STANDARDS AROUND THE WORLD



CHRONOLOGY



STANDARDS TYPES

Material



Products



Process



ISO Standards 2001

- ISO 22156 “Bamboo - structural design”
- ISO 22157-1 “Bamboo – Determination of Physical and Mechanical properties” part 1.
- ISO 22157-2 “Bamboo – Determination of Physical and Mechanical properties” part 2: Laboratory manual.



Compression parallel



Bending

ISO Standards 2001



Tension parallel



Shear parallel

STRUCTURAL CODES

- Colombian NSR-10



Ministerio de Ambiente, Vivienda y Desarrollo Territorial
Vice ministerio de Vivienda y Desarrollo Territorial
Dirección del Sistema Habitacional
República de Colombia



COMISION ASESORA PERMANENTE PARA EL REGIMEN
DE CONSTRUCCIONES SISMO RESISTENTES
(Creada por la Ley 400 de 1997)

**REGLAMENTO COLOMBIANO DE
CONSTRUCCIÓN SISMO RESISTENTE**

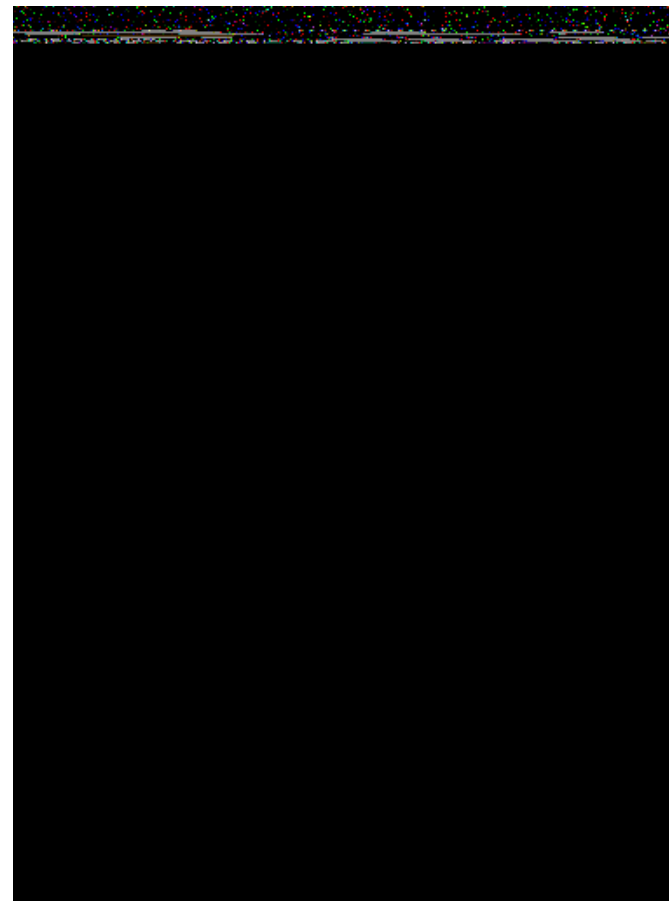
NSR-10



**TÍTULO E — CASAS DE UNO Y
DOS PISOS**

Secretaría de la Comisión:

ais Asociación Colombiana de Ingeniería Sísmica
Carrera 20 N° 84-14 Oficina 502 • Bogotá, D. C., COLOMBIA • Teléfono: 530-0826 • Fax: 530-0827



STRUCTURAL CODES

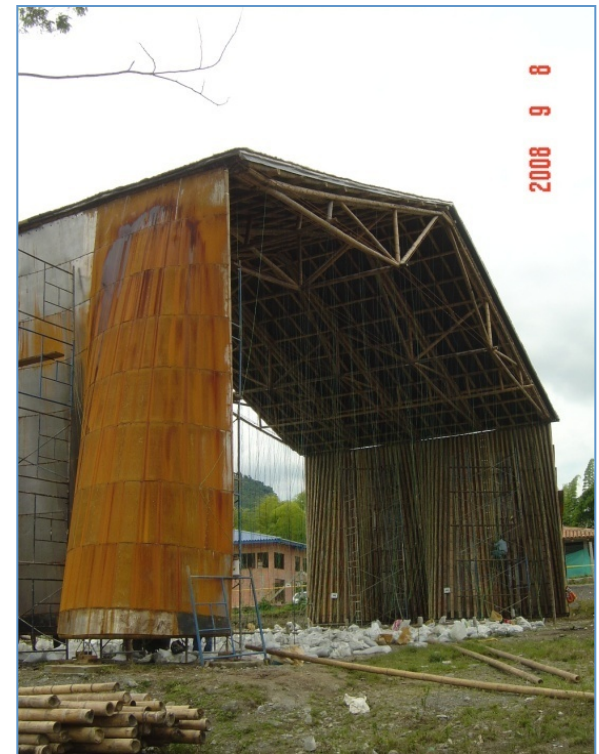
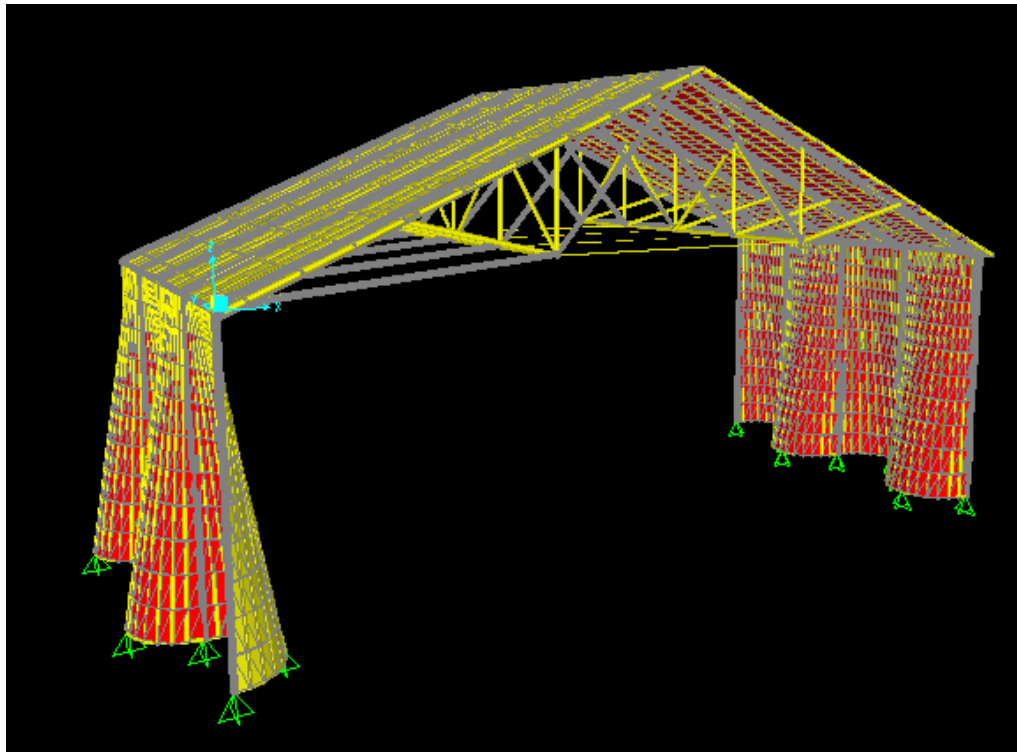
- HOUSES



3D STRUCTURES



FULL SCALE TEST



Arq. Simon Velez

RESULT





WITH AND WITHOUT STANDARDS





WHAT IS NEXT?

- ISO has created the Working group 12, “Bamboo construction”
- Update of Latin-American Codes
- Creation of Asian and African Codes
- Further research
- Dissemination
- Implementation

- Thanks