

GEM Building Taxonomy Report

The complex building of the Yingxiu secondary school in Yingxiu town
Sun Baitao



Taxonomy string:

DX+PF /CR+CIP /LFINF+DUC /DY+OF /CR+CIP /LFINF+DUC /YEX:2005 /HEX:5+HBEX:0+HFEX:3.60 /EDU+EDU2 /BP1 /PLFR /IRRE /EWMA /RSH1+RMN+RC /FC+FC2 /FOSSL

Material type (direction 1):

Concrete, reinforced

Material properties (direction 1):

Lateral load-resisting system (direction 1):

Infilled frame

Material type (direction 2):

Concrete, reinforced

Material properties (direction 2):

Lateral load-resisting system (direction 2):

Infilled frame

Foundations:

Shallow foundation, with lateral capacity

Type of Irregularity:

Regular structure

Plan structural irregularity - primary:

Plan structural irregularity - secondary:

Roof shape:

Flat

Roof system material:

Concrete

Roof connections:

Roof-wall diaphragm connection unknown

Floor system material:

Concrete

Floor connections:

Floor-wall diaphragm connection, unknown

Exterior walls material:

Masonry

Date of construction:

Exact date of construction or retrofit 2005

Number of storeys above the ground:

Exact number of storeys 5

Height of the grade above ground floor:

Exact height above grade 3.60

Occupancy type - general:

Education

Country:

China, Peoples Republic of

Summary:

Material technology (direction 1):

Cast-in-place concrete

Material technology (additional, direction 1):

System ductility (direction 1):

Ductile

Material technology (direction 2):

Cast-in-place concrete

Material technology (additional, direction 2):

System ductility (direction 2):

Ductile

Plan shape:

Rectangular, solid

Building position within a block:

One adjacent building

Vertical structural irregularity - primary:

Vertical structural irregularity - secondary:

Roof covering:

Concrete roof, no covering

Roof system type:

Concrete, unknown

Floor system type:

Cast-in-place beam-supported RC floor

Number of storeys below the ground:

Exact number of storeys 0

Slope of the ground (for buildings on slopes):

Unknown slope

Occupancy type - detail:

School

Region (province, state, etc.):

Hei Longjiang

Reinforced concrete frame structure is comprised by floors, beams, columns and foundations. Firstly, the plane frame is comprised by beams, columns and foundations. Secondly, spatial structure system is comprised by the plane frames connecting with continuous beams. The structure would be able to provide large space, and the plane arrangement is flexible.