

GEM Building Taxonomy Report

Reinforced concrete cast-in situ shear wall buildings (with "figure" plan and "bulbs")

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Taxonomy string:

DX /CR+CIP /LWAL /DY /CR+CIP /LWAL /YBET:1965,1989 /HEX:11+HBEX:1+HFEX:33+HD:0 /RES+RES2E /BPD /PLFR /IRRE /EWMA /RSH1+RMN+RC+RC1 /FC+FC1 /FOSSL

Material type (direction 1):

Concrete, reinforced

Material technology (direction 1):

Cast-in-place concrete

Material properties (direction 1):

Material technology (additional, direction 1):

Lateral load-resisting system (direction 1):

Wall

System ductility (direction 1):

Ductility unknown

Material type (direction 2):

Concrete, reinforced

Material technology (direction 2):

Cast-in-place concrete

Material properties (direction 2):

Material technology (additional, direction 2):

Lateral load-resisting system (direction 2):

Wall

System ductility (direction 2):

Ductility unknown

Foundations:

Shallow foundation, with lateral capacity

Plan shape:

Rectangular, solid

Type of Irregularity:

Regular structure

Building position within a block:

Detached building

Plan structural irregularity - primary:

Vertical structural irregularity - primary:

Plan structural irregularity - secondary:

Vertical structural irregularity - secondary:

Roof shape:

Flat

Roof covering:

No roof covering

Roof system material:

Concrete

Roof system type:

Cast-in-place beamless RC roof

Roof connections:

Roof-wall diaphragm connection unknown

Floor system material:

Concrete

Floor system type:

Cast-in-place beamless RC floor

Floor connections:

Floor-wall diaphragm connection, unknown

Exterior walls material:

Masonry

Date of construction:

Bounds for the date of construction or retro 1965-1989

Number of storeys above the ground:

Exact number of storeys 11

Number of storeys below the ground:

Exact number of storeys 1

Height of the grade above ground floor:

Exact grade height 33

Slope of the ground (for buildings on slopes):

Slope of the ground 0

Occupancy type - general:

Residential

Occupancy type - detail:

20-49 Units

Country:

Romania

Region:

Bucharest

Observations:

These buildings were designed according to the P13-1963 seismic code. Almost all walls are cast-in-place load-bearing walls, hence the "figure" (honeycomb) typology. Only the middle longitudinal wall is load-bearing while the exterior ones present so-called "bulbs" and some collapsed in the 1977 earthquake.