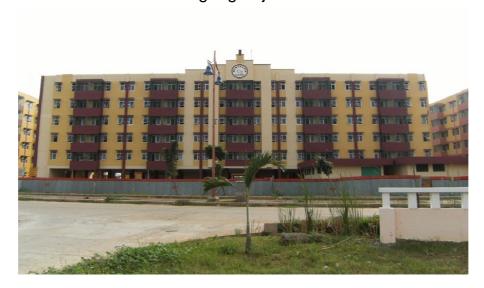
GEM Building Taxonomy Report

Precast Concrete System of Low Cost Residential Building Sugeng Wijanto



Taxonomy string:

DX+PF /CR+PC /LDUAL+DUC /DY+OF /CR+PC /LDUAL+DUC /YAPP:Year 2008 /HEX:6 storey+HBEX:None+HFEX:18.4 m+HD:Flat terrain /RES+RES2F /BPI /PLFRO /IRRE /EWMA /RSH5+RMN+RC+RC3+RWCP /FC+FC3+FWCP /FOSDL

Material type (DX): Material technology (DX):

Concrete, reinforced Precast concrete

Material type (DY): Material technology (DY):

Concrete, reinforced Precast concrete

Type of lateral load-resisting system (DX): System ductility (DX):

Dual frame-wall system Ductile

Type of lateral load-resisting system (DY): System ductility (DY):

Dual frame-wall system Ductile

Latest possible date of construction or retrofit: Number of storeys above ground:

Approximate date of construction or retrofit: Year

2008

Number of storeys below ground Height of grade above ground level:

Exact number of storeys: 6 storey Exact number of storeys: None

Slope of the ground:

Building occupancy class - general:

Flat terrain Residential

Building occupancy class - detail: Building Position within a block:

50+ Units Interior of block

Shape of the Building Plan: Material of exterior walls:

Rectangular, with an opening Masonry

Type of irregularity: Roof shape:
Regular structure Monopitch

Summary:

A six storey twin block of low-cost residential building is located at Marunda - Jakarta, Indonesia. The building was designed as precast concrete open frames with cast-in-place core-wall at emergency staircases. This precast system emphasizes the use of 65 mm precast concrete half slab with 60 mm topping for the floor slabs, precast concrete column, beam and staircase. The equivalent monolithic systems at precast concrete joints were used and easily carried out by local workers.