

GEM Building Taxonomy Report

Prefabricated metal construction of the Modern Movement

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Taxonomy string:

DX /S /LFM /DY /S /LFM /YEX:1929 /HEX:4+HBEX:1+HFAPP:3m+HD:0 /RES+RES2E /BPD /PLFR /IRRE /EWME /RSH1 /FME+FME3 /

Material type (direction 1):

Steel

Material technology (direction 1):

Steel, unknown

Material properties (direction 1):

Unknown connection

Material technology (additional, direction 1):

Lateral load-resisting system (direction 1):

Moment frame

System ductility (direction 1):

Ductility unknown

Material type (direction 2):

Steel

Material technology (direction 2):

Steel, unknown

Material properties (direction 2):

Welded connections

Material technology (additional, direction 2):

Lateral load-resisting system (direction 2):

Moment frame

System ductility (direction 2):

Ductility unknown

Foundations:

Unknown foundation system

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:

Unknown roof covering

Roof system material:

Roof material, unknown

Roof system type:

Roof connections:

Roof-wall diaphragm connection unknown

Floor system material:

Metal

Floor system type:

Composite steel deck and concrete slab

Floor connections:

Floor-wall diaphragm connection, unknown

Exterior walls material:

Metal

Date of construction:

Exact date of construction or retrofit 1929

Number of storeys above the ground:

Exact number of storeys 4

Number of storeys below the ground:

Exact number of storeys 1

Height of the grade above ground floor:

Approximate grade height 3m

Slope of the ground (for buildings on slopes):

Slope of the ground 0

Occupancy type - general:

Residential

Occupancy type - detail:

20-49 Units

Country:

Germany

Region:

Europe

Observations:

This urban housing construction was practiced for about 20 years during the early 1900s in Germany. Included in this report are blocks of flats. These buildings consist of a row of several individual, 20-meter-long units, each of which usually contains two apartments on each floor. The load-bearing system is iron skeleton with brick infill. Usually, the skeleton is made out of columns and beams, but dense column grids were