

Classes

Bank

Bank \sqsubseteq Space

Box

Box \sqsubseteq Space

Building

Building \sqsubseteq InsideBuilding
Building $\sqsubseteq \neg$ BuildingElement
Building $\sqsubseteq \neg$ BuildingStorey
Building $\sqsubseteq \neg$ Space
Building $\sqsubseteq \neg$ BuildingElement
BuildingStorey $\sqsubseteq \neg$ BuildingElement
Space $\sqsubseteq \neg$ BuildingElement
Building $\sqsubseteq \neg$ BuildingStorey
BuildingElement $\sqsubseteq \neg$ BuildingStorey
Space $\sqsubseteq \neg$ BuildingStorey
Building $\sqsubseteq \neg$ Space
BuildingElement $\sqsubseteq \neg$ Space
BuildingStorey $\sqsubseteq \neg$ Space

BuildingElement

BuildingElement \sqsubseteq FeatureLink
BuildingElement \sqsubseteq InsideBuilding
BuildingElement $\sqsubseteq \neg$ Building
BuildingStorey $\sqsubseteq \neg$ Building
Space $\sqsubseteq \neg$ Building
BuildingElement $\sqsubseteq \neg$ Building
BuildingElement $\sqsubseteq \neg$ BuildingStorey
BuildingElement $\sqsubseteq \neg$ Space
Building $\sqsubseteq \neg$ BuildingStorey
BuildingElement $\sqsubseteq \neg$ BuildingStorey
Space $\sqsubseteq \neg$ BuildingStorey
Building $\sqsubseteq \neg$ Space
BuildingElement $\sqsubseteq \neg$ Space
BuildingStorey $\sqsubseteq \neg$ Space

BuildingStorey

BuildingStorey \sqsubseteq InsideBuilding

BuildingElement $\sqsubseteq \neg$ Building
 BuildingStorey $\sqsubseteq \neg$ Building
 Space $\sqsubseteq \neg$ Building
 Building $\sqsubseteq \neg$ BuildingElement
 BuildingStorey $\sqsubseteq \neg$ BuildingElement
 Space $\sqsubseteq \neg$ BuildingElement
 BuildingStorey $\sqsubseteq \neg$ Building
 BuildingStorey $\sqsubseteq \neg$ BuildingElement
 BuildingStorey $\sqsubseteq \neg$ Space
 Building $\sqsubseteq \neg$ Space
 BuildingElement $\sqsubseteq \neg$ Space
 BuildingStorey $\sqsubseteq \neg$ Space

Ceiling

Ceiling \sqsubseteq BuildingElement

City

City \sqsubseteq Location

Door

Door \sqsubseteq BuildingElement

Facade

Facade \sqsubseteq Outside

FeatureLink

FeatureOfInterest

Ground

Ground \sqsubseteq Outside

Groundfloor

Groundfloor \sqsubseteq Ceiling

InsideBuilding

InsideBuilding \sqsubseteq Location

Location

Location \sqsubseteq FeatureOfInterest

Location \sqsubseteq PhysicalPlace

Opening

Opening \sqsubseteq BuildingElement

Outside

Outside \sqsubseteq Location

PhysicalPlace

Project

Project \sqsubseteq Location

Roof

Roof \sqsubseteq Ceiling

Rooftop

Rooftop \sqsubseteq Outside

Room

Room \sqsubseteq Space

Site

Site \sqsubseteq Location

Space

Space \sqsubseteq Zone

BuildingElement $\sqsubseteq \neg$ Building

BuildingStorey $\sqsubseteq \neg$ Building

Space $\sqsubseteq \neg$ Building

Building $\sqsubseteq \neg$ BuildingElement

BuildingStorey $\sqsubseteq \neg$ BuildingElement

Space $\sqsubseteq \neg$ BuildingElement

Building $\sqsubseteq \neg$ BuildingStorey

BuildingElement $\sqsubseteq \neg$ BuildingStorey

Space $\sqsubseteq \neg$ BuildingStorey

Space $\sqsubseteq \neg$ Building

Space $\sqsubseteq \neg$ BuildingElement

$\text{Space} \sqsubseteq \neg \text{BuildingStorey}$

Trunk

$\text{Trunk} \sqsubseteq \text{Space}$

Wall

$\text{Wall} \sqsubseteq \text{BuildingElement}$

Window

$\text{Window} \sqsubseteq \text{BuildingElement}$

Wing

$\text{Wing} \sqsubseteq \text{Space}$

Zone

$\text{Zone} \sqsubseteq \text{InsideBuilding}$

Object properties

hasPart

hasSubLocation

$\sqsubseteq \text{hasPart}$
 $\text{hasSubLocation} \equiv \text{isSubLocationOf}^-$
 $\text{AsymmetricPropertyhasSubLocation}$
 $\text{IrreflexiveObjectPropertyhasSubLocation}$
 $\exists \text{hasSubLocation Thing} \sqsubseteq \text{Location}$
 $\top \sqsubseteq \forall \text{hasSubLocation Location}$

isConnectedTo

$\sqsubseteq \text{linksFeature}$
 $\text{isConnectedTo} \equiv \text{isConnectedTo}^-$
 $\exists \text{isConnectedTo Thing} \sqsubseteq \text{BuildingElement}$
 $\top \sqsubseteq \forall \text{isConnectedTo Location}$

isPartOf

isSubLocationOf

$\sqsubseteq \text{isPartOf}$
 $\text{hasSubLocation} \equiv \text{isSubLocationOf}^-$

AsymmetricPropertyisSubLocationOf
IrreflexiveObjectPropertyisSubLocationOf
 \exists isSubLocationOf Thing \sqsubseteq Location
 $\top \sqsubseteq \forall$ isSubLocationOf Location

linksFeature

Data properties

area

$\top \sqsubseteq \leq 1$ area
 \exists area Datatype rdf:Literal \sqsubseteq Location
 $\top \sqsubseteq \forall$ area Datatype xml:double

hasIFCID

height

$\top \sqsubseteq \leq 1$ height
 \exists height Datatype rdf:Literal \sqsubseteq Location

length

\exists length Datatype rdf:Literal \sqsubseteq Location

width

\exists width Datatype rdf:Literal \sqsubseteq Location

x

$\top \sqsubseteq \leq 1$ x
 \exists x Datatype rdf:Literal \sqsubseteq Location
 $\top \sqsubseteq \forall$ x Datatype xml:double

y

$\top \sqsubseteq \leq 1$ y
 \exists y Datatype rdf:Literal \sqsubseteq Location
 $\top \sqsubseteq \forall$ y Datatype xml:double

z

$\top \sqsubseteq \leq 1$ z
 \exists z Datatype rdf:Literal \sqsubseteq Location
 $\top \sqsubseteq \forall$ z Datatype xml:double

Individuals

Datatypes

PlainLiteral

double