European Commission

DBL

DIGITAL BUILDING LOGBOOK

DBL Semantic Data Model, Linked Data implementation

In RDFS and SKOS code.

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Contents

1. Introduction

This report describes the implementation (i.e. the "coding") of the core Digital Building Logbook (DBL) ontology and dictionary in W3C Linked Data technology (formats and languages). It builds upon D2.1, which conceptually describes the DBL Semantic Data Model and includes the core DBL ontology.

The primary linked data format ('serialisation') used is 'Turtle' and the secondary and derived format is 'JSON-LD' (the linked data variant of JavaScript Object Notation). The latter is presented in the appendices.

This code is defined and checked using the commercial TopQuadrant semantic software[1]. The implementation is fully compliant with the CEN TC442 Semantic Modelling and Linking (SML) standard Part 1 specification (i.e. through the use of URIs, mapping to language constructs, etc.).

The report is structured as follows:

- **Implementation decisions**: Description of URIs and prefixes as well as the reuse of existing semantic resources, the way DBL concepts/attributes and relations are bound to the language constructs provided in RDF Schema (RDFS) and Simple Knowledge Organization System (SKOS) and some potential extensions using Web Ontology Language (OWL) and/or SHape Constraint Language (SHACL) capabilities (see D2.1 for explanations and details on these linked data languages).
- **DBL Ontology code**: The RDFS ontology code expressed in Turtle.
- **DBL Dictionary code**: The SKOS dictionary code expressed in Turtle.
- **Appendices**: The ontology and dictionary RDFS/SKOS codes now expressed in JSON-LD.

2. Implementation decisions

In this chapter, we describe the main implementation decisions.

URIs and prefixes

The general proverb of the W3C Linked Data / Semantic Web approach is:

"Everybody can say Anything about Anything".

Practically, this means that anybody can define any graph with any base (graph) URI that says something about elements within some namespace URI. For example, we could have three graphs (say one SKOS graph, one RDFS graph and an OWL graph) that assert different things about the same element (i.e. having the same name/ID in the same namespace URI).

In our case, we have two namespace URIs: one for the ontology and one for the dictionary (see also our warning in D2.1 about not mixing the world of 'things' and 'strings' (the terminology used to name things).

Namespace URIs:

<https://data.europa.eu/dbl/def> .

<https://data.europa.eu/dbl/term> .

[1] TopBraid Composer (TBC) 4.1 Maestro Edition.

Both URIs have a shortcut or so-called 'prefix' for a more efficient and readable code.

Prefixes:

@prefix dbl: <https://data.europa.eu/dbl/def#> .

@prefix dbl-term: <https://data.europa.eu/dbl/term#> .

Besides these two, we have a set of generic prefixes from the language side and reused SML-based resources:

@prefix sml: <https://w3id.org/sml/def#> .

@prefix sml-term: <https://w3id.org/sml/term#> .

@prefix quantitykind: <http://qudt.org/vocab/quantitykind/> .

@prefix qudt: <http://qudt.org/schema/qudt/> .

@prefix unit: <http://qudt.org/vocab/unit/> .

@prefix owl: <http://www.w3.org/2002/07/owl#> .

@prefix sh: <http://www.w3.org/ns/shacl#> .

@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .

@prefix skos: <http://www.w3.org/2004/02/skos/core#> .

@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .

@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

Currently, we have only one base (graph) URI for both of them:

- https://data.europa.eu/dbl/rdfs/def an owl:Ontology ;
- https://data.europa.eu/dbl/skos/term a skos:ConceptScheme ;

Especially for the ontology this could be extended in the future towards OWL[2] and/or SHACL[3] graphs, which are more expressive under an open or respective closed world assumption. We describe these potential extensions in chapter 3.

Imports of existing semantic resources

For the **ontology,** we import the (RDFS-based) modelling patterns defined by SML (SML Part 1 and the draft SML Part 2), the (SKOS-based) DBL Dictionary and some specific DBL resources, namely:

- Data CATalog (DCAT) ontology for meta-data
- Friend Of A Friend (FOAF) for agents like persons or organisations
- Location core vocabulary (LOCN) for locations
- GeoSPARQL for geometry

[2] See https://en.wikipedia.org/wiki/Web_Ontology_Language.
[3] See https://en.wikipedia.org/wiki/SHACL.

These are expressed as follows:

owl:imports <https://w3id.org/sml2/rdfs/def> ;

owl:imports <https://data.europa.eu/dbl/skos/term> ;

owl:imports <http://www.w3.org/ns/dcat> ;

owl:imports <http://xmlns.com/foaf/0.1/> ;

owl:imports <http://data.europa.eu/m8g> ;

For the **dictionary**, we only import the SKOS vocabulary itself. Note that SKOS is itself an OWL ontology and that our DBL Ontology is an instantiation of that ontology. All ontological elements refer via the standard 'rdfs:seeAlso' relation to their dictionary term counterparts.

Language-binding

All concepts, attributes and relations and their terms and definitions have to be represented formally in Linked Data code. As introduced earlier, this code has as a primary format Turtle. Based on this primary format, JSON-LD equivalent code is automatically derived (see the results in appendices A and B). The language used to define the items above is RDF/RDFS for the ontology and SKOS for the dictionary.

Table 1 : Language-binding for DBL

D2.1 Ontology/Dictionary element	Linked Data (RDF, RDFS, SKOS) code element
Concept	rdfs:Class
Term (for Concept)	skos:Concept
Relation between Concept & Term	rdfs:seeAlso
Attributes (identifiers and meta-properties)	rdf:Property with rdfs:range xsd:string/xsd:boolean/dbl:XValue (the last option in case of meta-attributes with enumeration type ranges)
Attributes (all other/quantities)	rdf:Property with rdfs:range sml:QuantityValue - qudt:numericValue with rdfs:range xsd:float/xsd:integer - dbl:status - assertion/valid times (4x) - any other metadata
Attributes (all other/qualities/non-enumerations)	rdf:Property with rdfs:range sml:QualityValue - qudt:value with rdfs:range xsd:string/xsd:boolean - dbl:status - assertion/valid times (4x)

	- any other metadata
Attributes (all other/qualities/enumerations) Relations	rdf:Property with rdfs:range sml:RelationReference - qudt:value with rdfs:range xsd:anyURI - dbl:status - assertion/valid times (4x) - any other metadata
Enumeration datatypes	dbl:XValue rdf:type sml:EnumerationType ('X' reflecting the attribute)
Enumeration items	Individuals of type dbl:XValue

NOTE 1: In the future (~Q1 2024), when RDF-star/SPARQL-star (https://w3c.github.io/rdf-star/cg-spec/editors_draft.html) and the Turtle-star serialisation are finalised, the languages mappings to own (complex) value objectifications can be simplified. The meta-data (units, quantity kinds, valid times, assertion times, etc.) can then be directly made a meta-property of a property since RDF-star provides a logical alternative to the current extra-logical reification mechanism.

Example code:

```
:employee38 :familyName "Smith" .

<< :employee38 :jobTitle "Assistant Designer" >> :accordingTo :employee22 .
```

A consequence would be that the existing rdfs:domain and rdfs:range can be used again also in complex cases without the need for chained property constraints (see next paragraph at 'modelling more constraints').

Potential extension using OWL/SHACL code

In the following subsections, we introduce the potentially more powerful modelling of data constraints using OWL/SHACL code.

Modelling of more complex rdfs:domain's

If an rdf:Property can be used by multiple concepts, one cannot use rdfs:domain because it only allows logical "AND-semantics". In turn, logical "OR-semantics" is provided by schema.org in the form of: ':domainIncludes'[4]. For simplicity in DBL we just omit the rdfs:domain. In a potential OWL extension, such a ':domainIncludes' can be modelled as a slightly more complex but now fully standard 'union of classes'.

To provide a small example about this:

[4] See: https://meta.schema.org/domainIncludes.

```
:somePropertyRelevantForBuildingsAndParcels
  a rdf:Property ;
  rdfs:domain [
     a owl:Class
     owl:unionOf (
     dbl:Building
     dbl:CadastralParcel )
    ] ;
  rdfs:range xsd:string .
```

Explicit distinction between attributes and relations

In OWL, rdf:Property is subclassed into owl:DatatypeProperty and owl:ObjectProperty for attributes and relations respectively. Although this is not essential, one can derive this explicit distinction from its type of range, thereby adding some additional flavour.

The earlier example fragment:

```
:somePropertyRelevantForBuildingsAndParcels
  a rdf:Property ;
```

would then become:

```
:somePropertyRelevantForBuildingsAndParcels
  a owl:DatatypeProperty ;
```

This would indicate the range is not a reference to another individual but a lexical value (here of type xsd:string).

Modelling more constraints

RDFS ontologies result in simple specifications with an emphasis on the 'possibilities' in the data. To be able to add more semantics, via the indication of the 'impossibilities' or constraints and restrictions, OWL/SHACL is needed. OWL/SHACL provide the capabilities to specify a wide range of cardinality and value restrictions on your properties in general ('universally') or in the context of a specific concept.

For instance, because of the objectification of (most) attributes and relations, their restricted rdfs:range's are lost in the coding. When using OWL or SHACL we could bring this knowledge back in the form of a restriction on the qudt:value or qudt:numericValue of the objectification.

A SHACL coding example for the fact that the underlying datatype for the attribute 'dbl:numberOfBuildingUnits' for a dbl:Building is an xsd:integer:

```
dbl:Building a rdfs:Class, sh:NodeShape ;
      sh:property [
```

```
        sh:path (dbl:numberOfBuildingUnits qudt:numericValue) ;
        sh:datatype xsd:integer ;
    ] .
```

This would make it possible to automatically check whether data is satisfying the modelled range for a property (in this case: is it an integer value).

3. DBL RDFS Ontology code in Turtle

```
# baseURI: https://data.europa.eu/dbl/rdfs/def
# imports: https://w3id.org/sml2/rdfs/def
# imports: https://data.europa.eu/dbl/skos/term
# imports: http://www.w3.org/ns/dcat
# imports: http://xmlns.com/foaf/0.1/
# imports: http://www.opengis.net/ont/geosparql
# imports: http://data.europa.eu/m8g

@prefix dbl: <https://data.europa.eu/dbl/def#> .
@prefix dbl-term: <https://data.europa.eu/dbl/term#> .
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix quantitykind: <http://qudt.org/vocab/quantitykind/> .
@prefix qudt: <http://qudt.org/schema/qudt/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix sh: <http://www.w3.org/ns/shacl#> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix sml: <https://w3id.org/sml/def#> .
@prefix unit: <http://qudt.org/vocab/unit/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcat: <http://www.w3.org/ns/dcat#> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
@prefix wgs84_pos: <http://www.w3.org/2003/01/geo/wgs84_pos#> .
@prefix geo: <http://www.opengis.net/ont/geosparql#> .
@prefix locn: <http://data.europa.eu/m8g/> .

<https://data.europa.eu/dbl/rdfs/def>
  a owl:Ontology ;
  owl:imports <https://w3id.org/sml2/rdfs/def> ;
  owl:imports <https://data.europa.eu/dbl/skos/term> ;
  owl:imports <http://www.w3.org/ns/dcat> ;
  owl:imports <http://xmlns.com/foaf/0.1/> ;
  owl:imports <http://www.opengis.net/ont/geosparql> ;
  owl:imports <http://data.europa.eu/m8g> ;
```

```
.

# Concepts

dbl:DBL-Root
  a rdfs:Class ;
  rdfs:subClassOf sml:SpatialRegion ;
  rdfs:subClassOf sml:TechnicalEntity ;
  rdfs:seeAlso dbl-term:DBL-Root ;
.
dbl:BuildingOrBuildingUnit
  a rdfs:Class ;
  rdfs:subClassOf dbl:DBL-Root ;
  rdfs:seeAlso dbl-term:BuildingOrBuildingUnit ;
.
dbl:Building
  a rdfs:Class ;
  rdfs:subClassOf dbl:BuildingOrBuildingUnit ;
  rdfs:seeAlso dbl-term:Building ;
.
dbl:BuildingUnit
  a rdfs:Class ;
  rdfs:subClassOf dbl:BuildingOrBuildingUnit ;
  rdfs:seeAlso dbl-term:BuildingUnit ;
.
dbl:CadastralParcel
  a rdfs:Class ;
  rdfs:subClassOf dbl:DBL-Root ;
  rdfs:seeAlso dbl-term:CadastralParcel ;
.
dbl:Address
  a rdfs:Class ;
  rdfs:seeAlso dbl-term:Address ;
.
dbl:NativeBIM
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
```

```
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:NativeBIM ;
.
dbl:OpenBIM
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:OpenBIM ;
.
dbl:NativeGIS
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:NativeGIS ;
.
dbl:OpenGIS
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:OpenGIS ;
.

# Properties (attributes)

dbl:inspireId
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:inspireId ;
.
dbl:officialValue
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:officialValue ;
.
dbl:officialValueReference
```

```
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:officialValueReference ;
.
dbl:officialArea
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:officialArea ;
.
dbl:officialAreaReference
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:officialAreaReference ;
.
dbl:numberOfElevators
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfElevators ;
.
dbl:numberOfSwimmingPools
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfSwimmingPools ;
.
dbl:numberOfBalconies
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfBalconies ;
.
dbl:grossVolume
  a rdf:Property ;
```

```
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:grossVolume ;
.
dbl:netVolume
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:netVolume ;
.
dbl:grossFloorArea
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:grossFloorArea ;
.
dbl:netFloorArea
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:netFloorArea ;
.
dbl:currentUse
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:currentUse ;
.
dbl:connectionToElectricity
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:connectionToElectricity ;
.
dbl:connectionToGas
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
```

```
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:connectionToGas ;
.
dbl:connectionToSewage
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:connectionToSewage ;
.
dbl:connectionToWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:connectionToWater ;
.
dbl:energyPerformance
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:energyPerformance ;
.
dbl:dateOfAssessment
  a rdf:Property ;
  rdfs:domain dbl:RelationReference ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:dateOfAssessment ;
.
dbl:assessmentMethod
  a rdf:Property ;
  rdfs:domain dbl:RelationReference ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:assessmentMethod ;
.
dbl:circularityPerformance
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
```

```
  rdfs:seeAlso dbl-term:circularityPerformance ;
.
dbl:smartReadinessIndicator
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:smartReadinessIndicator ;
.
dbl:yearlyUseOfWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:yeralyUseOfWater ;
.
dbl:yearlyReuseOfWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:yearlyReuseOfWater ;
.
dbl:yearlyUseOfGas
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:yearlyUseOfGas ;
.
dbl:yearlyUseOfElectricity
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:yearlyUseOfElectricity ;
.
dbl:numberOfRooms
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfRooms ;
```

```
.
dbl:heatingSource
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:heatingSource ;
.
dbl:heatingSystem
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:heatingSystem ;
.
dbl:ventilationSystem
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:ventilationSystem ;
.
dbl:geographicalName
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:geographicalName ;
.
dbl:buildingNature
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:buildingNature ;
.
dbl:dateOfConstruction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:dateOfConstruction ;
.
```

```
dbl:dateOfRenovation
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:dateOfRenovation ;
.
dbl:dateOfDemolition
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:dateOfDemolition ;
.
dbl:elevation
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:elevation ;
.
dbl:elevationReference
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:elevationReference ;
.
dbl:srsName
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:srsName ;
.
dbl:footprint
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:footprint ;
.
dbl:heightAboveGround
```

```
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:heightAboveGround ;
.
dbl:heightReference
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:heightReference ;
.
dbl:lowReference
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:lowReference ;
.
dbl:heightStatus
  a rdf:Property ;
  rdfs:domain sml:QuantityValue ;
  rdfs:range dbl:HeightStatusValue ;
  rdfs:seeAlso dbl-term:heightStatus ;
.
dbl:status
  a rdf:Property ;
  rdfs:domain sml:Objectification ;
  rdfs:range dbl:StatusValue ;
  rdfs:seeAlso dbl-term:status ;
.
dbl:assertionTimeStart
  a rdf:Property ;
  rdfs:domain sml:Objectification ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:assertionTimeStart ;
.
dbl:assertionTimeEnd
  a rdf:Property ;
```

```
  rdfs:domain sml:Objectification ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:assertionTimeEnd ;
.
dbl:stateTimeStart
  a rdf:Property ;
  rdfs:domain sml:Objectification ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:stateTimeStart ;
.
dbl:stateTimeEnd
  a rdf:Property ;
  rdfs:domain sml:Objectification ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:stateTimeEnd ;
.
dbl:heightBelowGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:heightBelowGround ;
.
dbl:roofType
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:roofType ;
.
dbl:conditionOfConstruction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:conditionOfConstruction ;
.
dbl:numberOfBuildingUnits
  a rdf:Property ;
  rdfs:domain dbl:Building ;
```

```
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfBuildingUnits ;
.
dbl:numberOfDwellings
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfDwellings ;
.
dbl:numberOfFloorsAboveGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfFloorsAboveGround ;
.
dbl:numberOfFloorsBelowGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfFloorsBelowGround ;
.
dbl:solarSurfacePotential
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:solarSurfacePotential ;
.
dbl:solarSurfaceActual
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:solarSurfaceActual ;
.
dbl:renewableEnergyProduction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
```

```
  rdfs:seeAlso dbl-term:renewableEnergyProduction ;
.
dbl:numberOfEVChargingPoints
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:numberOfEVChargingPoints ;
.
dbl:kindOfCommunicationConnection
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:kindOfCommunicationConnection ;
.
dbl:materialOfFacade
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:materialOfFacade ;
.
dbl:materialOfRoof
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:materialOfRoof ;
.
dbl:materialOfStructure
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:materialOfStructure ;
.
dbl:uValueFacades
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:uValueFacades ;
```

```
.
dbl:uValueRoofs
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:uValuesRoofs ;
.
dbl:uValueWindows
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:uValueWindows ;
.
dbl:uValueFloors
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:uValueFloors ;
.
dbl:nationalCadastralReference
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:natialCadastralReference ;
.
dbl:administrativeUnit
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:administrativeUnit ;
.
dbl:hasCleanSoilStatement
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range sml:QualityValue ;
  rdfs:seeAlso dbl-term:hasCleanSoilStatement ;
.
```

```
dbl:areaValue
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:areaValue ;
.
dbl:circumference
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range sml:QuantityValue ;
  rdfs:seeAlso dbl-term:circumference ;
.
dbl:adminUnit1stOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit1stOrder ;
.
dbl:adminUnit2ndOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit2ndOrder ;
.
dbl:adminUnit3rdOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit3rdOrder ;
.
dbl:postName
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:postname ;
.
dbl:thoroughfare
```

```
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:thoroughfare ;
.
dbl:locatorDesignator
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:locatorDesignator ;
.
dbl:locatorName
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:locatorName ;
.
dbl:postCode
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:postCode ;
.

# Properties (relations)

dbl:cadastralParcel
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:cadastralParcel ;
.
dbl:buildingUnit
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:buildingUnit ;
```

```
.
dbl:address
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:address ;
.
dbl:isDescribedByNativeBIM
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:isDescribedByNativeBIM ;
.
dbl:isDescribedByOpenBIM
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:isDescribedByOpenBIM ;
.
dbl:isDescribedByOpenGIS
  a rdf:Property ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:isDescribedByOpenGIS ;
.
dbl:isDescribedByNativeGIS
  a rdf:Property ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:isDescribedByNativeGIS ;
.
dbl:owner
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:owner ;
.
dbl:tenant
  a rdf:Property ;
```

```
  rdfs:domain dbl:DBL-Root ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:tenant ;
.
dbl:referencePoint
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:referencePoint ;
.
dbl:geometry
  a rdf:Property ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:geometry ;
.
dbl:horizontalGeometry
  a rdf:Property ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:horizontalGeometry ;
.
dbl:horizontalGeometryReference
  a rdf:Property ;
  rdfs:domain dbl:HorizontalGeometryReferenceValue ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl-term:horizontalGeometryReference ;
.

# Property Groups for aspects

dbl:Identification
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Identification ;
  rdfs:member dbl:inspireId ;
  rdfs:member dbl:geographicalName ;
  rdfs:member dbl:nationalCadastralReference  ;
.
dbl:General
```

```
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:General ;
  rdfs:member dbl:cadastralParcel ;
  rdfs:member dbl:buildingUnit ;
  rdfs:member dbl:buildingNature ;
  rdfs:member dbl:currentUse ;
  rdfs:member dbl:address ;
  rdfs:member wgs84_pos:location ;
  rdfs:member locn:location ;
  rdfs:member dbl:dateOfConstruction ;
  rdfs:member dbl:dateOfRenovation ;
  rdfs:member dbl:dateOfDemolition ;
  rdfs:member dbl:isDescribedByNativeBIM ;
  rdfs:member dbl:isDescribedByOpenBIM ;
  rdfs:member dbl:isDescribedByNativeGIS ;
  rdfs:member dbl:isDescribedByOpenGIS ;
.
dbl:Performance
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Performance ;
  rdfs:member dbl:connectionToElectricity ;
  rdfs:member dbl:connectionToGas ;
  rdfs:member dbl:connectionToSewage ;
  rdfs:member dbl:connectionToWater ;
  rdfs:member dbl:energyPerformance ;
  rdfs:member dbl:dateOfAssessment ;
  rdfs:member dbl:assessmentMethod ;
  rdfs:member dbl:circularityPerformance ;
  rdfs:member dbl:smartReadinessIndicator ;
  rdfs:member dbl:yearlyUseOfWater ;
  rdfs:member dbl:yearlyReuseOfWater ;
  rdfs:member dbl:yearlyUseOfGas ;
  rdfs:member dbl:yearlyUseOfElectricity ;
  rdfs:member dbl:internetDownloadBandwith ;
  rdfs:member dbl:internetUploadBandwith ;
  rdfs:member dbl:conditionOfConstruction ;
.
```

```
dbl:LegalAndFinance
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:LegalAndFinance ;
  rdfs:member dbl:owner ;
  rdfs:member dbl:tenant ;
  rdfs:member dbl:officialValue ;
  rdfs:member dbl:officialValueReference ;
  rdfs:member dbl:administrativeUnit ;
  rdfs:member dbl:hasCleanSoilStatement ;
.
dbl:Dimensions
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Dimensions ;
  rdfs:member dbl:officialArea ;
  rdfs:member dbl:officialAreaReference ;
  rdfs:member dbl:grossVolume ;
  rdfs:member dbl:netVolume ;
  rdfs:member dbl:elevation ;
  rdfs:member dbl:elevationReference ;
  rdfs:member dbl:footprint ;
  rdfs:member dbl:heightAboveGround ;
  rdfs:member dbl:heightBelowGround ;
  rdfs:member dbl:heightReference ;
  rdfs:member dbl:lowReference ;
  rdfs:member dbl:heightStatus ;
  rdfs:member dbl:roofType ;
  rdfs:member dbl:areaValue ;
  rdfs:member dbl:circumference ;
  rdfs:member dbl:referencePoint ;
  rdfs:member dbl:geometry ;
  rdfs:member geo:hasGeometry ;
  rdfs:member dbl:horizontalGeometry ;
  rdfs:member dbl:horizontalGeometryReference ;
.
dbl:StructureAndMaterial
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:StructureAndMaterial ;
```

```
  rdfs:member dbl:numberOfRooms ;
  rdfs:member dbl:numberOfBuildingUnits ;
  rdfs:member dbl:numberOfDwellings ;
  rdfs:member dbl:numberOfFloorsAboveGround ;
  rdfs:member dbl:numberOfFloorsBelowGround ;
  rdfs:member dbl:materialOfFacade ;
  rdfs:member dbl:materialOfRoof ;
  rdfs:member dbl:materialOfStructure ;
  rdfs:member dbl:uValueFacades ;
  rdfs:member dbl:uValueRoofs ;
  rdfs:member dbl:uValueWindows ;
  rdfs:member dbl:uValueFloors ;
  rdfs:member dbl:numberOfBalconies ;
  rdfs:member dbl:numberOfSwimmingPools ;
  rdfs:member dbl:numberOfElevators ;
.
dbl:BuildingServices
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:BuildingServices ;
  rdfs:member dbl:heatingSource ;
  rdfs:member dbl:heatingSystem ;
  rdfs:member dbl:ventilationSystem ;
  rdfs:member dbl:solarSurfacePotential ;
  rdfs:member dbl:solarSurfaceActual ;
  rdfs:member dbl:renewableEnergyProduction ;
  rdfs:member dbl:numberOfEVChargingPoints ;
  rdfs:member dbl:kindOfCommunicationConnection ;
.

# Enumeration types

dbl:OfficialValueReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:OfficialValueReferenceValue ;
.
dbl:OfficialAreaReferenceValue
  a sml:EnumerationType ;
```

```
  rdfs:seeAlso dbl-term:OfficialAreaReferenceValue ;
.
dbl:CurrentUseValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:CurrentUseValue ;
.
dbl:EnergyPerformanceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:EnergyPerformanceValue ;
.
dbl:CircularityPerformanceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:CircularityPerformanceValue ;
.
dbl:SmartReadinessIndicatorValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:SmartReadinessIndicatorValue ;
.
dbl:HeatingSourceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeatingSourceValue ;
.
dbl:HeatingSystemValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeatingSystemValue ;
.
dbl:VentilationSystemValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:VentilationSystemValue ;
.
dbl:ElevationReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:ElevationReferenceValue ;
.
dbl:HorizontalGeometryReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HorizontalGeometryReferenceValue ;
```

```
.
dbl:HeightStatusValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeightStatusValue ;
.
dbl:RoofTypeValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:RoofTypeValue ;
.
dbl:ConditionOfConstructionValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:ConditionOfConstructionValue ;
.
dbl:KindOfCommunicationConnectionValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:KindOfCommunicationConnectionValue ;
.
dbl:MaterialOfFacadeValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfFacadeValue ;
.
dbl:MaterialOfRoofValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfRoofValue ;
.
dbl:MaterialOfStructureValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfStructureValue ;
.
dbl:StatusValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:StatusValue ;
.

# Reference individuals as allowed values for enumeration types

dbl:As-required
```

```
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-required ;
.
dbl:As-designed
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-designed ;
.
dbl:As-built
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-built ;
.
dbl:As-used
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-used ;
.
dbl:TransactionPriceSimple
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceSimple ;
.
dbl:TransactionPriceMedium
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceMedium ;
.
dbl:TransactionPriceFull
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceFull ;
.
dbl:RentalIncome
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:RentalIncome ;
.
dbl:ConstructedArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:ConstructedArea ;
.
dbl:ExternalArea
  a dbl:OfficialAreaReferenceValue ;
```

```
  rdfs:seeAlso dbl-term:ExternalArea ;
.
dbl:InternalArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalArea ;
.
dbl:InternalPrimaryArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalPrimaryArea ;
.
dbl:InternalOtherArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalOtherArea ;
.
dbl:InternalResidualArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalResidualArea ;
.
dbl:InternalServiceArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalServiceArea ;
.
dbl:Residential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Residential ;
.
dbl:IndividualResidential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:IndividualResidential ;
.
dbl:CollectiveResidential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:CollectiveResidential ;
.
dbl:TwoDwellings
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:TwoDwellings ;
```

```
.
dbl:MoreThanTwoDwelling
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:MoreThanTwoDwellings ;
.
dbl:ResidenceForCommunities
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:ResidenceForCummunities ;
.
dbl:Agriculture
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Agriculture ;
.
dbl:Industrial
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Industrial ;
.
dbl:CommerceAndServices
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:CommerceAndServices ;
.
dbl:Office
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Office ;
.
dbl:Trade
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Trade ;
.
dbl:PublicServices
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:PublicServices ;
.
dbl:Ancillary
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Ancillary ;
.
```

```
dbl:A
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:A ;
.
dbl:B
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:B ;
.
dbl:C
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:C ;
.
dbl:D
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:D ;
.
dbl:E
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:E ;
.
dbl:F
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:F ;
.
dbl:G
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:G ;
.
dbl:CP1
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP1 ;
.
dbl:CP2
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP2 ;
.
dbl:CP3
```

```
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP3 ;
.
dbl:SRI1
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI1 ;
.
dbl:SRI2
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI2 ;
.
dbl:SRI3
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI3 ;
.
dbl:Biogas
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Biogas ;
.
dbl:Electricity
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Electricity ;
.
dbl:LiquidFuels
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:LiquidFuels ;
.
dbl:Naturalgas
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Naturalgas ;
.
dbl:SolidFuels
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:SolidFuels ;
.
dbl:Straw
  a dbl:HeatingSourceValue ;
```

```
  rdfs:seeAlso dbl-term:Straw ;
.
dbl:WarmWaterOrSteam
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:WarmwaterOrSteam ;
.
dbl:CentralHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:CentralHeating ;
.
dbl:DistrictHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:DistrictHeating ;
.
dbl:ElectricRadiators
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:ElectricRadiators ;
.
dbl:HeatPump
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:HeatPump ;
.
dbl:PortableGasHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:PortableGasHeating ;
.
dbl:SolarHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:SolarHeating ;
.
dbl:Stove
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:Stove ;
.
dbl:Missing
  a dbl:HeatingSystemValue, dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Missing ;
```

```
.
dbl:Natural
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Natural ;
.
dbl:Mechanical
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Mechanical ;
.
dbl:Hybrid
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Hybrid ;
.
dbl:Arch
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Arch ;
.
dbl:Bunker
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Bunker ;
.
dbl:Canopy
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Canopy ;
.
dbl:Castle
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Castle ;
.
dbl:CaveBuilding
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:CaveBuilding ;
.
dbl:Chapel
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Chapel ;
.
```

```
dbl:Church
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Church ;
.
dbl:Dam
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Dam ;
.
dbl:Greenhouse
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Greenhouse ;
.
dbl:Lighthouse
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Lighthouse ;
.
dbl:Mosque
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Mosque ;
.
dbl:Shed
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Shed ;
.
dbl:Silo
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Silo ;
.
dbl:Stadium
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Stadium ;
.
dbl:StorageTank
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:StorageTank ;
.
dbl:Synagogue
```

```
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Synagogue ;
.
dbl:Temple
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Temple ;
.
dbl:Tower
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Tower ;
.
dbl:Windmill
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Windmill ;
.
dbl:WindTurbine
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:WindTurbine ;
.
dbl:AboveGroundEnvelope
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:AboveGroundEnvelope ;
.
dbl:BottomOfConstruction
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:BottomOfConstruction ;
.
dbl:EntrancePoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:EntrancePoint ;
.
dbl:GeneralEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralEave ;
.
dbl:GeneralGround
  a dbl:ElevationReferenceValue ;
```

```
  rdfs:seeAlso dbl-term:GeneralGround ;
.
dbl:GeneralRoof
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralRoof ;
.
dbl:GeneralRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralRoofEdge ;
.
dbl:HighestEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestEave ;
.
dbl:HighestGroundPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestGroundPoint ;
.
dbl:HighestPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestPoint ;
.
dbl:HighestRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestRoofEdge ;
.
dbl:LowestEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestEave ;
.
dbl:LowestFloorAboveGround
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestFloorAboveGround ;
.
dbl:LowestGroundPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestGroundPoint ;
```

```
.
dbl:LowestRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestRoofEdge ;
.
dbl:TopOfConstruction
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:TopOfConstruction ;
.
dbl:ArchRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:ArchRoof ;
.
dbl:ConicalRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:ConicalRoof ;
.
dbl:DomedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:DomedRoof ;
.
dbl:DualPentRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:DualPentRoof ;
.
dbl:FlatRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:FlatRoof ;
.
dbl:GabledRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:GabledRoof ;
.
dbl:HalfHippedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HalfHippedRoof ;
.
```

```
dbl:HippedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HippedRoof ;
.
dbl:HyperbolicParabaloidalRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HyperbolicParabaloidalRoof ;
.
dbl:MansardRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:MansardRoof ;
.
dbl:MonopitchRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:MonopitchRoof ;
.
dbl:PavilionRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:PavilionRoof ;
.
dbl:PyramidalBroachRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:PyramidalRoof ;
.
dbl:SawToothRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:SawToothRoof ;
.
dbl:Declined
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Declined ;
.
dbl:Functional
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Functional ;
.
dbl:Demolished
```

```
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Demolished ;
.
dbl:Projected
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Projected ;
.
dbl:Ruin
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Ruin ;
.
dbl:UnderConstruction
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:UnderConstruction ;
.
dbl:TelephoneLine
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:TelephoneLine ;
.
dbl:Cable
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Cable ;
.
dbl:Optical
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Optical ;
.
dbl:WiFi
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Wifi ;
.
dbl:4G
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:4G ;
.
dbl:5G
  a dbl:KindOfCommunicationConnectionValue ;
```

```
  rdfs:seeAlso dbl-term:5G ;
.
dbl:Adobe
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Adobe ;
.
dbl:Asbestos
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Asbestos ;
.
dbl:CeramicTiles
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:CeramicTiles ;
.
dbl:Composite
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Composite ;
.
dbl:Concrete
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Concrete ;
.
dbl:Glass
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Glass ;
.
dbl:Limestone
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Limestone ;
.
dbl:Masonry
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Masonry ;
.
```

```
dbl:Metal
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Metal ;
.
dbl:NaturalStone
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:NaturalStone ;
.
dbl:Vegetated
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Vegetated ;
.
dbl:Wood
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Wood ;
.
dbl:ClayTile
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:ClayTile ;
.
dbl:Composition
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Composition ;
.
dbl:ConcreteTile
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:ConcreteTile ;
.
dbl:CorrugatedSheet
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:CorrugatedSheet ;
.
dbl:HotMoppedAsphalt
  a dbl:MaterialOfRoofValue ;
```

```
  rdfs:seeAlso dbl-term:HotMoppedAsphalt ;
.
dbl:ReinforcedConcrete
  a dbl:MaterialOfRoofValue ;
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ReinforcedConcrete ;
.
dbl:Slate
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Slate ;
.
dbl:Thatch
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Thatch ;
.
dbl:VegtatedGreenRoof
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:VegtatedGreenRoof ;
.
dbl:WoodShinglesOrShakes
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:WoodShinglesOrShakes ;
.
dbl:ReinforcedMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ReinforcedMasonry ;
.
dbl:RubleStoneMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:RubleStoneMasonry ;
.
dbl:Steel
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Steel ;
.
dbl:StoneMasonryBlock
  a dbl:MaterialOfStructureValue ;
```

```
  rdfs:seeAlso dbl-term:StoneMasonryBlock ;
.
dbl:AdobeBlockWalls
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:AdobeBlockWalls ;
.
dbl:ConcreteBlockMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ConcreteBlockMasonry ;
.
dbl:Earth
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Earth ;
.
dbl:FiredBrickMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:FiredBrickMasonry ;
.
dbl:InformalConstructions
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:InformalConstructions ;
.
dbl:MassiveStoneMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MassiveStomeMasonry ;
.
dbl:MobileHomes
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MobilesHomes ;
.
dbl:MudWalls
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MudWalls ;
.
dbl:PrecastConcrete
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:PrecastConcrete ;
```

.

4. DBL SKOS Dictionary code in Turtle

```
# baseURI: https://data.europa.eu/dbl/skos/term
# imports: https://w3id.org/sml2/skos/term

@prefix dbl-term: <https://data.europa.eu/dbl/term#> .
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix quantitykind: <http://qudt.org/vocab/quantitykind/> .
@prefix qudt: <http://qudt.org/schema/qudt/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix sh: <http://www.w3.org/ns/shacl#> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix sml: <https://w3id.org/sml/def#> .
@prefix sml-term: <https://w3id.org/sml/term#> .
@prefix unit: <http://qudt.org/vocab/unit/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .

<https://data.europa.eu/dbl/skos/term>
  a skos:ConceptScheme ;
  owl:imports <https://w3id.org/sml2/skos/term> ;
.

dbl-term:Building
  a skos:Concept ;
  skos:prefLabel "Buiding"@en ;
  skos:definition "Enclosed constructions above and/or underground which are intended or used for the shelter of humans, animals, things or the production of economic goods and that refer to any structure permanently constructed or erected on its site."@en ;
.
dbl-term:BuildingUnit
  a skos:Concept ;
  skos:prefLabel "BuildingUnit"@en ;
  skos:definition "BuildingUnits are subdivisions of Building with their own lockable access from the outside or from a common area (i.e. not from another BuildingUnit), which are atomic, functionally independent, and may be separately sold, rented out, inherited, etc. Examples: apartment, business, shop, hospital etc."@en ;
.
```

dbl-term:CadastralParcel

a skos:Concept ;

skos:prefLabel "CadastralParcel"@en ;

skos:definition "Areas defined by cadastral registers or equivalent. As much as possible, cadastral parcels should be forming a partition of national territory. Cadastral parcel should be considered as a single area of Earth surface (land and/or water), under homogeneous real property rights and unique ownership, real property rights and ownership being defined by national law."@en ;

.

dbl-term:Address

a skos:Concept ;

skos:preflabel "Address"@en ;

skos:definition "An identification of the fixed location of property (like a building) by means of a structured composition of geographic names and identifiers."@en ;

.

dbl-term:NativeBIM

a skos:Concept ;

skos:prefLabel "NativeBIM"@en ;

skos:definition "A Building Information Model in a proprietary format/semantics. Like a REVIT model."@en ;

.

dbl-term:OpenBIM

a skos:Concept ;

skos:prefLabel "OpenBIM"@en ;

skos:definition "A Building Information Model in an open format/semantics. Like a an IFC or gbXML model."@en ;

.

dbl-term:NativeGIS

a skos:Concept ;

skos:prefLabel "NativeGIS"@en ;

skos:definition "A GIS/GEO model in a proprietary format/semantics. Like an ESRI model."@en ;

.

dbl-term:OpenGIS

a skos:Concept ;

skos:prefLabel "NativeGIS"@en ;

skos:definition "A GIS/GEO Model in an open format/semantics. Like a GML/CITYGML or CityJSON model."@en ;

.

dbl-term:inspireId

a skos:Concept ;

skos:prefLabel "inspireId"@en ;

skos:definition "External object identifier of the spatial object. For DBL we will apply the CEN SML (URI-based) identification scheme."@en ;

.

dbl-term:owner

a skos:Concept ;

skos:prefLabel "owner"@en ;

skos:definition "A person who owns something; in this case a building, a building unit or a cadastral parcel."@en ;

.

dbl-term:tenant

a skos:Concept ;

skos:prefLabel "tenant"@en ;

skos:definition "A person who occupies land or property rented from an owner; in this case a building, a building unit or a cadastral parcel."@en ;

.

dbl-term:officialValue

a skos:Concept ;

skos:prefLabel "officialValue"@en ;

skos:definition "The value of the building, building unit or cadastral parcel as registered in official information system (often for property tax purposes)."@en ;

.

dbl-term:officialValueReference

a skos:Concept ;

skos:prefLabel "officialValueReference"@en ;

skos:definition "The reference market price that the official value aims to assess. One of: TransactionPriceSimple, TransactionPriceMedium, TransactionPriceFull or RentalIncome."@en ;

.

dbl-term:officialArea

a skos:Concept ;

skos:prefLabel "officialArea"@en ;

skos:definition "The area of the building, building unit or cadastral parcel as registered in an official information system."@en ;

.

dbl-term:officialAreaReference

a skos:Concept ;

skos:prefLabel "officialAreaReference"@en ;

skos:definition "The type of the official area."@en ;

.

dbl-term:address

a skos:Concept ;

skos:prefLabel "address"@en ;

skos:definition "The address of a building or building unit."@en ;

.

dbl-term:grossVolume

a skos:Concept ;

skos:prefLabel "grossVolume"@en ;

skos:definition "The total volume of all interior spaces in a building or building unit over the gross floor area. This total volume is enclosed by the outer boundary surfaces of the foundation, the exterior walls and the roof (including the dormers and skylights) (DIN 277-1 2005)."@en ;

.

dbl-term:netVolume

a skos:Concept ;

skos:prefLabel "netVolume"@en ;

skos:definition "The net volume of a building or building unit is the gross floor space minus the construction volumes (the latter being the spaces occupied by vertical construction elements such as walls)."@en ;

.

dbl-term:numberOfBalconies

a skos:Concept ;

skos:preflabel "numberOfBalconies"@en ;

skos:definition "The number of balconies for a building."@en ;

.

dbl-term:numberOfSwimmingPools

a skos:Concept ;

skos:preflabel "numberOfSwimmingPools"@en ;

skos:definition "The number of indoor or outdoor swimming pools for a parcel, building or building unit."@en ;

.

dbl-term:numberOfElevators

a skos:Concept ;

skos:preflabel "numberOfElevators"@en ;

skos:definition "The number of elevators in a building."@en ;

.

dbl-term:currentUse

a skos:Concept ;

skos:prefLabel "currentUse"@en ;

skos:definition "Activity hosted within the building or building unit. This attribute addresses mainly the buildings hosting human activities. One of: Residential, IndividualResidential, CollectiveResidential, TwoDwellings, MoreThanTwoDwelling, ResidenceForCommunities, Agriculture, Industrial, CommerceAndServices, Office, Trade, PublicServices or Ancilary."@en ;

.

dbl-term:connectionToElectricity

a skos:Concept ;

skos:prefLabel "connectionToElectricity"@en ;

skos:definition "An indication if the building or building part or building unit is connected or not to the public electricity network."@en ;

.

dbl-term:connectionToGas

a skos:Concept ;

skos:prefLabel "connectionToGas"@en ;

skos:definition "An indication if the building or building part or building unit is connected or not to the public gas network."@en ;

.

dbl-term:connectionToSewage

a skos:Concept ;

skos:prefLabel "connectionToSewage"@en ;

skos:definition "An indication if the building or building unit is connected or not to the public sewage network."@en ;

.

dbl-term:connectionToWater

a skos:Concept ;

skos:prefLabel "connectionToWater"@en ;

skos:definition "An indication if the building or building unit is connected or not to the public water network."@en ;

.

dbl-term:energyPerformance

a skos:Concept ;

skos:prefLabel "energyPerformance"@en ;

skos:definition "The energy performance of the building or building unit. One of: A, B, C, D, E, F or G."@en ;

.

dbl-term:dateOfAssessment

a skos:Concept ;

skos:prefLabel "dateOfAssessment"@en ;

skos:definition "The date when the energy, circularity or smart readiness (or other) performance of the building or building unit was assessed."@en ;

.

dbl-term:assessmentMethod

a skos:Concept ;

skos:prefLabel "assessmentMethod"@en ;

skos:definition "The reference to the method or document describing the assessment method of performance."@en ;

.

dbl-term:circularityPerformance

a skos:Concept ;

skos:prefLabel "circularityPerformance"@en ;

skos:definition "A total performance label for circularity related to material scarcity and environmental impacts, based on the total life cycle of a building or building unit. Taking into account all its products/materials that are part of it."@en ;

.

dbl-term:smartReadinessIndicator

a skos:Concept ;

skos:prefLabel "smartReadinessIndicator"@en ;

skos:definition "The Smart Readiness Indicator (SRI) of a building or building unit is an indicator that informs on the rating of smart readiness of a building or building unit in line with Article 8(10) of Directive 2010/31/EU. [16]."@en ;

.

dbl-term:yearlyUseOfWater

a skos:Concept ;

skos:prefLabel "yeralyUseOfWater"@en ;

skos:definition "The total use of fresh water for a building or building unit typically in M3 used for drinking, cooking, cleaning, toilet flushing, gardening etc."@en ;

.

dbl-term:yearlyReuseOfWater

a skos:Concept ;

skos:prefLabel "yearlyReuseOfWater"@en ;

skos:definition "The part of the yearlyUseOfwater that is directly or indirectly reused by a building or building unit in a year, again typically in M3."@en ;

.

dbl-term:yearlyUseOfGas

a skos:Concept ;

skos:prefLabel "yearlyUseOfGas"@en ;

skos:definition "The total use of natural gas for a building or building unit typically in M3 used for heating, washing, cooking etc."@en ;

.

dbl-term:yearlyUseOfElectricity

a skos:Concept ;

skos:prefLabel "yearlyUseOfElectricity"@en ;

skos:definition "The total use of natural gas for a building or building unit typically in kWh used for heating, washing, cooking, appliances etc."@en ;

.

dbl-term:numberOfRooms

a skos:Concept ;

skos:prefLabel "numberOfRooms"@en ;

skos:definition "The number of different rooms in a building or building unit available for end-user processes."@en ;

.

dbl-term:heatingSource

a skos:Concept ;

skos:prefLabel "heatingSource"@en ;

skos:definition "The source of energy used for the heating like electricity or natural gas. One of: Biogas, Electricity, LiquidFuels, Naturalgas, SolidFuels, Straw or WarmWaterOrSteam."@en ;

.

dbl-term:heatingSystem

a skos:Concept ;

skos:prefLabel "heatingSystem"@en ;

skos:definition "The system of heating like a stove, central heating or a heat pump. One of: Centralheating, DistrictHeating, ElectricRadiators, HeatPump, PortableGasHeating, SolarHeating, Stove or Missing."@en ;

.

dbl-term:ventilationSystem

a skos:Concept ;

skos:prefLabel "ventilationSystem"@en ;

skos:definition "The system of ventilation. One of: natural, mechanical, hybrid or Missing."@en ;

.

dbl-term:geographicalName

a skos:Concept ;

skos:prefLabel "geographicalName"@en ;

skos:definition "Name of the construction."@en ;

.

dbl-term:buildingNature

a skos:Concept ;

skos:prefLabel "buildingNature"@en ;

skos:definition "Characteristic of the building that makes it generally of interest for mappings applications. The characteristic may be related to the physical aspect and/or to the function of the building. One of : Arch, Bunker, Canopy, Castle, Cave building, Chapel, Church, Dam, Greenhouse, Lighthouse, Mosque, Shed, Silo, Stadium, Storage Tank, Synagogue, Temple, Tower, Windmill or Wind turbine."@en ;

.

dbl-term:dateOfConstruction

a skos:Concept ;

skos:prefLabel "dateOfConstruction"@en ;

skos:definition "Date of construction."@en ;

.

dbl-term:dateOfRenovation

a skos:Concept ;

skos:prefLabel "dateOfRenovation"@en ;

skos:definition "Date of last major renovation."@en ;

.

dbl-term:dateOfDemolition

a skos:Concept ;

skos:prefLabel "dateOfDemolition"@en ;

skos:definition "Date of demolition."@en ;

.

dbl-term:elevation

a skos:Concept ;

skos:prefLabel "elevation"@en ;

skos:definition "Vertically-constrained dimensional property consisting of an absolute measure referenced to a well-defined surface which is commonly taken as origin (geoïd, water level, etc.)."@en ;

.

dbl-term:elevationReference

a skos:Concept ;

skos:prefLabel "elevationReference"@en ;

skos:definition "Element where the elevation was measured. One of: AboveGroundEnvelope, BottomOfConstruction, EntrancePoint, GeneralEave, GeneralGround, GeneralRoof, GeneralRoofEdge, HighestEave, HighestGroundPoint, HighestPoint, HighestRoofEdge, LowestEave, LowestFloorAboveGround, LowestGroundPoint, LowestRoofEdge or TopOfConstruction."@en ;

.

dbl-term:srsName

a skos:Concept ;

skos:prefLabel "srsName"@en ;

skos:definition "The name of the spatial reference system."@en ;

.

dbl-term:footprint

a skos:Concept ;

skos:prefLabel "footprint"@en ;

skos:definition "The ground plate of a building. The geometry of this plate is defined by a horizontal reference geometry."@en ;

.

dbl-term:heightAboveGround

a skos:Concept ;

skos:prefLabel "heightAboveGround"@en ;

skos:definition "Height above ground. Vertical distance (measured or estimated) between a low reference and a high reference."@en ;

.

dbl-term:heightBelowGround

a skos:Concept ;

skos:prefLabel "heightBelowGround"@en ;

skos:definition "Height below ground of the building."@en ;

.

dbl-term:heightReference

a skos:Concept ;

skos:prefLabel "heightReference"@en ;

skos:definition "Element used as the high reference. One of: same of dbl:elevationReference."@en ;

.

dbl-term:lowReference

a skos:Concept ;

skos:prefLabel "lowReference"@en ;

skos:definition "Element as the low reference. One of: same of dbl:elevationReference."@en ;

.

dbl-term:heightStatus

a skos:Concept ;

skos:prefLabel "heightStatus"@en ;

skos:definition "Element used as the high reference. One of: Estimated or Measured."@en ;

.

dbl-term:status

a skos:Concept ;

skos:prefLabel "status"@en ;

skos:definition "Element used to indicate the originating asset life-cycle phase. One of: As-required, As-designed, As-built or As-used"@en ;

.

dbl-term:assertionTimeStart

a skos:Concept ;

skos:prefLabel "assertionTimeStart"@en ;

skos:definition "Element used to indicate the start time of the assertion about a property value"@en ;

.

dbl-term:assertionTimeEnd

a skos:Concept ;

skos:prefLabel "assertionTimeEnd"@en ;

skos:definition "Element used to indicate the end time of the assertion about a property value"@en ;

.

dbl-term:stateTimeStart

a skos:Concept ;

skos:prefLabel "stateTimeStart"@en ;

skos:definition "Element used to indicate the start time of the actual validness of a property value"@en ;

.

dbl-term:stateTimeEnd

a skos:Concept ;

skos:prefLabel "stateTimeEnd"@en ;

skos:definition "Element used to indicate the end time of the actual validness of a property value"@en ;

.

dbl-term:roofType

a skos:Concept ;

skos:prefLabel "roofType"@en ;

skos:definition "The shape of the roof. One of: ArchRoof, ConicalRoof, DomedRoof, DualPentRoof, FlatRoof, GabledRoof, HalfHippedRoof, HippedRoof, HyperbolicParabaloidalRoof, MansardRoof, MonopitchRoof, PavilionRoof, PyramidalBroachRoof or SawToothRoof."@en ;

.

dbl-term:conditionOfConstruction

a skos:Concept ;

skos:prefLabel "conditionOfConstruction"@en ;

skos:definition "Status of the construction. One of: Declined, Functional, Demolished, Projected, Ruin or UnderConstruction."@en ;

.

dbl-term:numberOfBuildingUnits

a skos:Concept ;

skos:prefLabel "numberOfBuildingUnits"@en ;

skos:definition "Number of building units in the building. A BuildingUnit is a subdivision of Building with its own lockable access from the outside or from a common area (i.e. not from another BuildingUnit), which is atomic, functionally independent, and may be separately sold, rented out, inherited, etc."@en ;

.

dbl-term:numberOfDwellings

a skos:Concept ;

skos:prefLabel "numberOfDwellings"@en ;

skos:definition "Number of dwellings as residential units which may consist of one or several rooms designed for the occupation of households."@en ;

.

dbl-term:numberOfFloorsAboveGround

a skos:Concept ;

skos:prefLabel "numberOfFloorsAboveGround"@en ;

skos:definition "Number of floors above ground."@en ;

.

dbl-term:numberOfFloorsBelowGround

a skos:Concept ;

skos:prefLabel "numberOfFloorsBelowGround"@en ;

skos:definition "Number of floors below ground."@en ;

.

dbl-term:solarSurfacePotential

a skos:Concept ;

skos:prefLabel "solarSurfacePotential"@en ;

skos:definition "The potential / maximum possible surface area for solar electricity production."@en ;

.

dbl-term:solarSurfaceActual

a skos:Concept ;

skos:prefLabel "solarSurfaceActual"@en ;

skos:definition "The actually used surface area for solar electricity production."@en ;

.

dbl-term:renewableEnergyProduction

a skos:Concept ;

skos:prefLabel "renewableEnergyProduction"@en ;

skos:definition "The total generated energy by the building."@en ;

.

dbl-term:numberOfEVChargingPoints

a skos:Concept ;

skos:prefLabel "numberOfEVChargingPoints"@en ;

skos:definition "The number of charging points for electric vehicles."@en ;

.

dbl-term:kindOfCommunicationConnection

a skos:Concept ;

skos:prefLabel "kindOfCommunicationConnection"@en ;

skos:definition "The kind of communication connection(s) to the environment. Examples include TelephoneLine, Cable, Optical, WiFi, 4G, 5G."@en ;

.

dbl-term:materialOfFacade

a skos:Concept ;

skos:prefLabel "materialOfFacade"@en ;

skos:definition "Material(s) of the building facade. One of: Adobe, Asbestos, CeramicTiles, Composite, Concrete, Glass, Limestone, Masonry, Metal, NaturalStone, Vegetated or Wood."@en ;

.

dbl-term:materialOfRoof

a skos:Concept ;

skos:prefLabel "materialOfRoof"@en ;

skos:definition "Material(s) of the building roof. One of: Asbestos, CeramicTile, ClayTile, Composition, ConcreteTile, CorrugatedSheet, Glass, HotMoppedAsphalt, Metal, ReinforcedConcrete, Slate, Thatch, VegtatedGreenRoof or WoodShinglesOrShakes."@en ;

.

dbl-term:materialOfStructure

a skos:Concept ;

skos:prefLabel "materialOfStructure"@en ;

skos:definition "Material(s) of the building structure. One of: ReinforcedConcrete, ReinforcedMasonry, RubleStoneMasonry, Steel, StoneMasonryBlock, Wood, AdobeBlockWalls, ConcreteBlockMasonry, Earth, FiredBrickMasonry, InformalConstructions, MassiveStoneMasonry, MobileHomes, MudWalls or PrecastConcrete."@en ;

.

dbl-term:uValueFacades

a skos:Concept ;

skos:prefLabel "uValueFacades"@en ;

skos:definition "The amount of energy (heat) lost through a square metre (m2) for facades for every degree (K) difference in temperature between the inside and the outside."@en ;

.

dbl-term:uValueRoofs

a skos:Concept ;

skos:prefLabel "uValuesRoofs"@en ;

skos:definition "The amount of energy (heat) lost through a square metre (m2) for roofs for every degree (K) difference in temperature between the inside and the outside."@en ;

.

dbl-term:uValueWindows

a skos:Concept ;

skos:prefLabel "uValueWindows"@en ;

skos:definition "The amount of energy (heat) lost through a square metre (m2) for windows for every degree (K) difference in temperature between the inside and the outside."@en ;

.

dbl-term:uValueFloors

a skos:Concept ;

skos:prefLabel "uValueFloors"@en ;

skos:definition "The amount of energy (heat) lost through a square metre (m2) for floors for every degree (K) difference in temperature between the inside and the outside."@en ;

.

dbl-term:nationalCadastralReference

a skos:Concept ;

skos:prefLabel "natialCadastralReference"@en ;

skos:definition "Thematic identifier at national level, generally the full national code of the cadastral parcel. Must ensure the link to the national cadastral register or equivalent."@en ;

.

dbl-term:administrativeUnit

a skos:Concept ;

skos:prefLabel "administrativeUnit"@en ;

skos:definition "The administrative unit of lowest administrative level containing this cadastral parcel."@en ;

.

dbl-term:hasCleanSoilStatement

a skos:Concept ;

skos:prefLabel "hasCleanSoilStatement"@en ;

skos:definition "The possession of proof that a parcel has clean soil."@en ;

.

dbl-term:areaValue

a skos:Concept ;

skos:prefLabel "areaValue"@en ;

skos:definition "The area value of the parcel typically in M2."@en ;

.

dbl-term:circumference

a skos:Concept ;

skos:prefLabel "circumference"@en ;

skos:definition "The total circumference of a parcel."@en ;

.

dbl-term:referencePoint

a skos:Concept ;

skos:prefLabel "referencePoint"@en ;

skos:definition "A point within the cadastral parcel."@en ;

.

dbl-term:geometry

a skos:Concept ;

skos:prefLabel "geometry"@en ;

skos:definition "The explicit location/shape representation of a building or cadastral parcel according to the GeoSPARQL implementation of GML Simple Features."@en ;

.

dbl-term:horizontalGeometry

a skos:Concept ;

skos:prefLabel "horizontalGeometry"@en ;

skos:definition "The explicit horizontal shape representation of a building according to the GeoSPARQL implementation of GML Simple Features."@en ;

.

dbl-term:adminUnit1stOrder

a skos:Concept ;

skos:prefLabel "adminUnit1stOrder"@en ;

skos:definition "Position derived from the related administrative unit of 1st order. For DBL we interpret this to be a country."@en ;

.

dbl-term:adminUnit2ndOrder

a skos:Concept ;

skos:prefLabel "adminUnit2ndOrder"@en ;

skos:definition "Position derived from the related administrative unit of 12nd order. For DBL we interpret this to be a state, province, etc. as region withing a country."@en ;

.

dbl-term:adminUnit3rdOrder

a skos:Concept ;

skos:prefLabel "adminUnit3rdOrder"@en ;

skos:definition "Position derived from the related administrative unit of 3rd order. For DBL we interpret this to be a municipality."@en ;

.

dbl-term:postName

a skos:Concept ;

skos:prefLabel "postname"@en ;

skos:definition "One or more names created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points. For DBL we interpret this to be a city."@en ;

.

dbl-term:thoroughfare

a skos:Concept ;

skos:prefLabel "thoroughfare"@en ;

skos:definition "The name or names of a passage or way through from one location to another like a road or a waterway. For DBL we interpret this to be a name of a street."@en ;

.

dbl-term:locatorDesignator

a skos:Concept ;

skos:prefLabel "locatorDesignator"@en ;

skos:definition "A number or a sequence of characters which allows a user or an application to interpret, parse and format the locator within the relevant scope. A locator may include more locator designators. For DBL we interpret this to be a street number."@en ;

.

dbl-term:locatorName

a skos:Concept ;

skos:prefLabel "locatorName"@en ;

skos:definition "Proper noun(s) applied to the real world entity identified by the locator. Like the Belvedere Building."@en ;

.

dbl-term:postCode

a skos:Concept ;

skos:prefLabel "postCode"@en ;

skos:definition "A code created and maintained for postal purposes to identify a subdivision of addresses and postal delivery points."@en ;

.

dbl-term:cadastralParcel

a skos:Concept ;

skos:prefLabel "cadastralParcel"@en ;

skos:definition "The cadastral parcel(s) to which the building or building part or building unit is officially related."@en ;

.

dbl-term:buildingUnit

a skos:Concept ;

skos:prefLabel "buildingUnit"@en ;

skos:definition "The building unit(s) belonging to the building or building part."@en ;

.

dbl-term:isDescribedByNativeBIM

a skos:Concept ;

skos:prefLabel "isDescribedByNativeBIM"@en ;

skos:definition "A link to a Building Information Model in a proprietary format/semantics."@en ;

.

dbl-term:isDescribedByOpenBIM

a skos:Concept ;

skos:prefLabel "isDescribedByOpenBIM"@en ;

skos:definition "A link to a Building Information Model in an open format/semantics."@en ;

.

dbl-term:isDescribedByNativeGIS

a skos:Concept ;

skos:prefLabel "isDescribedByNativeGIS"@en ;

skos:definition "A link to a GIS/GEO model in a proprietary format/semantics."@en ;

.

dbl-term:isDescribedByOpenGIS

a skos:Concept ;

skos:prefLabel "isDescribedByOpenGIS"@en ;

skos:definition "A link to a GIS/GEO model in an open format/semantics."@en ;

.

dbl-term:Identification

skos:prefLabel "Identification"@en ;

skos:definition "The aspect of identification refers to all properties that somehow uniquely denote an abstract or concrete thing, existing in reality or only planned. Identification is the typically the first step in Identification, Authentication & authorisation."@en ;

.

dbl-term:General

skos:prefLabel "General"@en ;

skos:definition "This generic aspect refers to all properties that are hard to classify towards any other aspect defined here like relations to other key objects, locations and specific life-cycle events in time."@en ;

.

dbl-term:Performance

skos:prefLabel "Performance"@en ;

skos:definition "The aspect of performance refers to all properties that tell us about functional usage of some technical object. How it performs in its environment."@en ;

.

dbl-term:LegalAndFinance

skos:prefLabel "LegalAndFinance"@en ;

skos:definition "The aspect of legal & finance refers to all properties that are used in formal transactions like prove of ownership and taxation values."@en ;

.

dbl-term:Dimensions

skos:prefLabel "Dimensions"@en ;

skos:definition "The aspect of dimensions refers to all properties that give information about is location, orientation and inner (interior) or outer (boundary) geometry. Typically involving some coordinate reference system (CRS)."@en ;

.

dbl-term:StructureAndMaterial

skos:prefLabel "StructureAndMaterial"@en ;

skos:definition "The aspect of structure & material refers to all properties related to the breakdown and materialization of an object."@en ;

.

dbl-term:BuildingServices

skos:prefLabel "BuildingServices"@en ;

skos:definition "The aspect of building services refers to all properties related to the technical installations part of a building."@en ;

.

dbl-term:OfficialValueReferenceValue

a skos:Concept ;

skos:prefLabel "OfficialValueReferenceValue"@en ;

.

```
dbl-term:OfficialAreaReferenceValue
  a skos:Concept ;
  skos:prefLabel "OfficialAreaReferenceValue"@en ;
.
dbl-term:CurrentUseValue
  a skos:Concept ;
  skos:prefLabel "CurrentUseValue"@en ;
.
dbl-term:EnergyPerformanceValue
  a skos:Concept ;
  skos:prefLabel "EnergyPerformanceValue"@en ;
.
dbl-term:CircularityPerformanceValue
  a skos:Concept ;
  skos:prefLabel "CircularityPerformanceValue"@en ;
.
dbl-term:SmartReadinessIndicatorValue
  a skos:Concept ;
  skos:prefLabel "SmartReadinessIndicatorValue"@en ;
.
dbl-term:HeatingSourceValue
  a skos:Concept ;
  skos:prefLabel "HeatingSourceValue"@en ;
.
dbl-term:HeatingSystemValue
  a skos:Concept ;
  skos:prefLabel "HeatingSystemValue"@en ;
.
dbl-term:VentilationSystemValue
  a skos:Concept ;
  skos:prefLabel "VentilationSystemValue"@en ;
.
dbl-term:ElevationReferenceValue
  a skos:Concept ;
  skos:prefLabel "ElevationReferenceValue"@en ;
.
dbl-term:HeightStatusValue
```

```
  a skos:Concept ;
  skos:prefLabel "HeightStatusValue"@en ;
.
dbl-term:RoofTypeValue
  a skos:Concept ;
  skos:prefLabel "RoofTypeValue"@en ;
.
dbl-term:ConditionOfConstructionValue
  a skos:Concept ;
  skos:prefLabel "ConditionOfConstructionValue"@en ;
.
dbl-term:KindOfCommunicationConnectionValue
  a skos:Concept ;
  skos:prefLabel "KindOfCommunicationConnectionValue"@en ;
.
dbl-term:MaterialOfFacadeValue
  a skos:Concept ;
  skos:prefLabel "MaterialOfFacadeValue"@en ;
.
dbl-term:MaterialOfRoofValue
  a skos:Concept ;
  skos:prefLabel "MaterialOfRoofValue"@en ;
.
dbl-term:MaterialOfStructureValue
  a skos:Concept ;
  skos:prefLabel "MaterialOfStructureValue"@en ;
.
dbl-term:As-required
  a skos:Concept ;
  skos:prefLabel "As-required"@en ;
  skos:defintion "Indicating that a property value is a required value"@en ;
.
dbl-term:As-designed
  a skos:Concept ;
  skos:prefLabel "As-designed"@en ;
  skos:defintion "Indicating that a property value is a proposed value"@en ;
.
```

dbl-term:As-built

a skos:Concept ;

skos:prefLabel "As-built"@en ;

skos:defintion "Indicating that a property value is a realized value"@en ;

.

dbl-term:As-used

a skos:Concept ;

skos:prefLabel "As-used"@en ;

skos:defintion "Indicating that a property value is a current value"@en ;

.

dbl-term:TransactionPriceSimple

a skos:Concept ;

skos:prefLabel "TransactionPriceSimple"@en ;

skos:definition "The reference for official value is the market price for transaction (selling, inheritance...) of the building or building unit alone."@en ;

.

dbl-term:TransactionPriceMedium

a skos:Concept ;

skos:prefLabel "TransactionPriceMedium"@en ;

skos:definition "The reference for official value is the market price for transaction (selling, inheritance, ...) of the building and of the land on which the building is erected. In case of a building unit, the transaction price medium includes the building unit and the ratio of land associated to the building unit."@en ;

.

dbl-term:TransactionPriceFull

a skos:Concept ;

skos:prefLabel "TransactionPriceFull"@en ;

skos:definition "The reference for official value is the market price for transaction (selling, inheritance...) of the building and of the cadastral parcel on which the building is erected. In case of a building unit, the transaction price medium includes the building unit and the ratio of cadastral parcel associated to the building unit."@en ;

.

dbl-term:RentalIncome

a skos:Concept ;

skos:prefLabel "RentalIncome"@en ;

skos:definition "The reference for official value is the rental income for the building or building unit, according to market prices."@en ;

.

dbl-term:Residential

```
  a skos:Concept ;
  skos:prefLabel "Residential"@en ;
  skos:definition "The building (or building component) is used for residential purpose."@en ;
.
dbl-term:IndividualResidential
  a skos:Concept ;
  skos:prefLabel "IndividualResidential"@en ;
  skos:definition "The building (or building component) hosts only one dwelling."@en ;
.
dbl-term:CollectiveResidential
  a skos:Concept ;
  skos:prefLabel "CollectiveResidential"@en ;
  skos:definition "The building (or building component) hosts more than one dwelling."@en ;
.
dbl-term:TwoDwellings
  a skos:Concept ;
  skos:prefLabel "TwoDwellings"@en ;
  skos:definition "The building (or building component) hosts two dwellings."@en ;
.
dbl-term:MoreThanTwoDwelling
  a skos:Concept ;
  skos:prefLabel "MoreThanTwoDwellings"@en ;
  skos:definition "The building (or building component) hosts at least 3 dwellings."@en ;
.
dbl-term:ResidenceForCommunities
  a skos:Concept ;
  skos:prefLabel "ResidenceForCummunities"@en ;
  skos:definition "The building (or building component) hosts a residence for communities."@en ;
.
dbl-term:Agriculture
  a skos:Concept ;
  skos:prefLabel "Agriculture"@en ;
  skos:definition "The building (or building component) is used for agricultural activities."@en ;
.
dbl-term:Industrial
  a skos:Concept ;
  skos:prefLabel "Industrial"@en ;
```

skos:definition "The building (or building component) is used for secondary sector activities (industrial)."@en ;

.

dbl-term:CommerceAndServices

a skos:Concept ;

skos:prefLabel "CommerceAndServices"@en ;

skos:definition "The building (or building component) is used for any service activities. This value addresses the buildings and building components dedicated to tertiary sector activities (commercial and services)."@en ;

.

dbl-term:Office

a skos:Concept ;

skos:prefLabel "Office"@en ;

skos:definition "The building (or building component) hosts offices."@en ;

.

dbl-term:Trade

a skos:Concept ;

skos:prefLabel "Trade"@en ;

skos:definition "The building (or building component) hosts trade activities."@en ;

.

dbl-term:PublicServices

a skos:Concept ;

skos:prefLabel "PublicServices"@en ;

skos:definition "The building (or building component) hosts public services. Public services are tertiary services provided for the benefit of the citizens."@en ;

.

dbl-term:Ancillary

a skos:Concept ;

skos:prefLabel "Ancillary"@en ;

skos:definition "A building (or building component) of small size that is used only in connection with another larger building (or building component) and generally does not inherit the same function and characteristics as the building (or building component) it is linked to."@en ;

.

dbl-term:A

a skos:Concept ;

skos:prefLabel "A"@en ;

skos:definition "First class according to the energy performance of the building (i.e. the most efficient buildings for energy performance)."@en ;

.

```
dbl-term:B
  a skos:Concept ;
  skos:prefLabel "B"@en ;
  skos:definition "Second class according to the energy performance of the building."@en ;
.
dbl-term:C
  a skos:Concept ;
  skos:prefLabel "C"@en ;
  skos:definition "Third class according to the energy performance of the building."@en ;
.
dbl-term:D
  a skos:Concept ;
  skos:prefLabel "D"@en ;
  skos:definition "Fourth class according to the energy performance of the building."@en ;
.
dbl-term:E
  a skos:Concept ;
  skos:prefLabel "E"@en ;
  skos:definition "Fifth class according to the energy performance of the building."@en ;
.
dbl-term:F
  a skos:Concept ;
  skos:prefLabel "F"@en ;
  skos:definition "Sixth class according to the energy performance of the building."@en ;
.
dbl-term:G
  a skos:Concept ;
  skos:prefLabel "G"@en ;
  skos:definition "Seventh and last class according to the energy performance of the building (i.e.
the least efficient buildings for energy performance)."@en ;
.
dbl-term:CP1
  a skos:Concept ;
  skos:prefLabel "CP1"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:CP2
```

```
  a skos:Concept ;
  skos:prefLabel "CP2"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:CP3
  a skos:Concept ;
  skos:prefLabel "CP3"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:SRI1
  a skos:Concept ;
  skos:prefLabel "CSRI1"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:SRI2
  a skos:Concept ;
  skos:prefLabel "CSRI2"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:SRI3
  a skos:Concept ;
  skos:prefLabel "CSRI3"@en ;
  skos:definition "TBD"@en ;
.
dbl-term:Biogas
  a skos:Concept ;
  skos:prefLabel "Biogas"@en ;
  skos:definition "The heating source is biogas."@en ;
.
dbl-term:Electricity
  a skos:Concept ;
  skos:prefLabel "Electricity"@en ;
  skos:definition "The heating source is electricity distributed from power plant."@en ;
.
dbl-term:LiquidFuels
  a skos:Concept ;
  skos:prefLabel "LiquidFuels"@en ;
```

```
  skos:definition "The heating source is liquid fuel."@en ;
.
dbl-term:Naturalgas
  a skos:Concept ;
  skos:prefLabel "Naturalgas"@en ;
  skos:definition "The heating source is fossil gas distributed by pipeline."@en ;
.
dbl-term:SolidFuels
  a skos:Concept ;
  skos:prefLabel "SolidFuels"@en ;
  skos:definition "The heating source is solid fuel."@en ;
.
dbl-term:Straw
  a skos:Concept ;
  skos:prefLabel "Straw"@en ;
  skos:definition "The heating source is solid biofuels from straw and agricultural waste."@en ;
.
dbl-term:WarmWaterOrSteam
  a skos:Concept ;
  skos:prefLabel "WarmwaterOrSteam"@en ;
  skos:definition "The heating source used by the building or building unit is hot water or
stream."@en ;
.
dbl-term:CentralHeating
  a skos:Concept ;
  skos:prefLabel "CentralHeating"@en ;
  skos:definition "Central heating system performed at building or at building unit level."@en ;
.
dbl-term:DistrictHeating
  a skos:Concept ;
  skos:prefLabel "DistrictHeating"@en ;
  skos:definition "Central heating system, based on district heating."@en ;
.
dbl-term:ElectricRadiators
  a skos:Concept ;
  skos:prefLabel "ElectricRadiators"@en ;
  skos:definition "Heating is performed by electric radiators."@en ;
```

.

dbl-term:HeatPump

a skos:Concept ;

skos:prefLabel "HeatPump"@en ;

skos:definition "The heating is performed by a heat pump that transfers thermal energy from an air source or geothermal source."@en ;

.

dbl-term:PortableGasHeating

a skos:Concept ;

skos:prefLabel "PortableGasHeating"@en ;

skos:definition "Heating is performed by a portable device using liquefied petroleum gas."@en ;

.

dbl-term:SolarHeating

a skos:Concept ;

skos:prefLabel "SolarHeating"@en ;

skos:definition "The heating is performed by a solar collector heating the air or liquid based heating system."@en ;

.

dbl-term:Stove

a skos:Concept ;

skos:prefLabel "Stove"@en ;

skos:definition "Heating performed by a stove."@en ;

.

dbl-term:Missing

a skos:Concept ;

skos:prefLabel "Missing"@en ;

skos:definition "Not existing."@en ;

.

dbl-term:Natural

a skos:Concept ;

skos:prefLabel "Natural"@en ;

skos:definition "The ventilation system is based on natural processes"@en ;

.

dbl-term:Mechanical

a skos:Concept ;

skos:prefLabel "Mechanical"@en ;

skos:definition "The ventilation system is based on a mechanical system"@en ;

.

dbl-term:Hybrid

a skos:Concept ;

skos:prefLabel "Hybrid"@en ;

skos:definition "The ventilation system is a combination of natural processes and a mechanical system"@en ;

.

dbl-term:Arch

a skos:Concept ;

skos:prefLabel "Arch"@en ;

skos:definition "A man-made structure in the form of an arch."@en ;

.

dbl-term:Bunker

a skos:Concept ;

skos:prefLabel "Bunker"@en ;

skos:definition "A facility, partly underground, intended for or used by the military either for location of command/control centers or for troop encampment."@en ;

.

dbl-term:Canopy

a skos:Concept ;

skos:prefLabel "Canopy"@en ;

skos:definition "An overhead roof providing shelter to things below. Canopies may be free standing frameworks over which a covering is attached or may be linked or suspended to the outside of a building. "@en ;

.

dbl-term:Castle

a skos:Concept ;

skos:prefLabel "Castle"@en ;

skos:definition "A large ornate or fortified building usually constructed for the purpose of a private residence or security. "@en ;

.

dbl-term:CaveBuilding

a skos:Concept ;

skos:prefLabel "CaveBuilding"@en ;

skos:definition "A space hosting human or economic activity which is usually enclosed within rock with the addition of man-made exterior walls and which may contain structures comparable to the interior structures of freestanding buildings."@en ;

.

dbl-term:Chapel

```
  a skos:Concept ;
  skos:prefLabel "Chapel"@en ;
  skos:definition "A Christian place of worship, usually smaller than a church."@en ;
.
dbl-term:Church
  a skos:Concept ;
  skos:prefLabel "Church"@en ;
  skos:definition "A building or structure whose primary purpose is to facilitate the catholic or
orthodox cult."@en ;
.
dbl-term:Dam
  a skos:Concept ;
  skos:prefLabel "Dam"@en ;
  skos:definition "A permanent barrier across a watercourse used to impound water or to control its
flow."@en ;
.
dbl-term:Greenhouse
  a skos:Concept ;
  skos:prefLabel "Greenhouse"@en ;
  skos:definition "A building that is often constructed primarily of transparent material (for example:
glass), in which temperature and humidity can be controlled for the cultivation and/or protection of
plants."@en ;
.
dbl-term:Lighthouse
  a skos:Concept ;
  skos:prefLabel "Lighthouse"@en ;
  skos:definition "A tower designed to emit light from a system of lamps and lenses."@en ;
.
dbl-term:Mosque
  a skos:Concept ;
  skos:prefLabel "Mosque"@en ;
  skos:definition "A building or structure whose primary purpose is to facilitate the muslim cult."@en
;
.
dbl-term:Shed
  a skos:Concept ;
  skos:prefLabel "Shed"@en ;
```

skos:definition "A building of light construction, which usually has one or more open sides, that is typically used for storage."@en ;

.

dbl-term:Silo

a skos:Concept ;

skos:prefLabel "Silo"@en ;

skos:definition "A large storage structure, generally cylindrical, used for storing loose materials."@en ;

.

dbl-term:Stadium

a skos:Concept ;

skos:prefLabel "Stadium"@en ;

skos:definition "A place or venue for sports, concerts or other events and consists of a field or stage either partly or completely surrounded by a structure designed to allow spectators to stand or sit and view the event."@en ;

.

dbl-term:StorageTank

a skos:Concept ;

skos:prefLabel "StorageTank"@en ;

skos:definition "A container usually for holding liquids and compressed gases."@en ;

.

dbl-term:Synagogue

a skos:Concept ;

skos:prefLabel "Synagogue"@en ;

skos:definition "A building or structure whose primary purpose is to facilitate the israelit cult."@en ;

.

dbl-term:Temple

a skos:Concept ;

skos:prefLabel "Temple"@en ;

skos:definition "A building or structure whose primary purpose is to facilitate the meeting of a religious sect."@en ;

.

dbl-term:Tower

a skos:Concept ;

skos:prefLabel "Tower"@en ;

skos:definition "A relatively tall, narrow structure that may either stand alone or may form part of another structure. "@en ;

.

dbl-term:Windmill

a skos:Concept ;

skos:prefLabel "Windmill"@en ;

skos:definition "A building which converts the energy of the wind into rotational motion by means of adjustable sails or blades."@en ;

.

dbl-term:WindTurbine

a skos:Concept ;

skos:prefLabel "WindTurbine"@en ;

skos:definition "A tower and associated equipment that generates electrical power from wind."@en ;

.

dbl-term:AboveGroundEnvelope

a skos:Concept ;

skos:prefLabel "AboveGroundEnvelope"@en ;

skos:definition "The elevation or building horizontal geometry has been captured at the level of the maximum extend of the above ground envelope of the construction."@en ;

.

dbl-term:Combined

a skos:Concept ;

skos:PrefLabel "Combined"@en ;

skos:definition "The building horizontal geometry has been obtained from the combination of the geometries of its building parts with the geometries of the building parts using different horizontal geometry references."@en ;

.

dbl-term:BottomOfConstruction

a skos:Concept ;

skos:prefLabel "BottomOfConstruction"@en ;

skos:definition "The elevation has been captured at the bottom of the usable part of the construction."@en ;

.

dbl-term:Envelope

a skos:Concept ;

skos:prefLabel "Envelope"@en ;

skos:definition "The building horizontal geometry has been captured using the whole envelope of the building, i.e. the maximum extent of the building above and under ground."@en ;

.

dbl-term:FootPrint

a skos:Concept ;

skos:prefLabel "Footprint"@en ;

skos:definition "The building horizontal geometry has been captured using the footprint of the building, i.e. its extent at ground level."@en ;

.

dbl-term:PointInsideBuilding

a skos:Concept ;

skos:prefLabel "PointInsideBuilding"@en ;

skos:definition "The building horizontal geometry is represented by a point located within the building."@en ;

.

dbl-term:PointInsideCadastralParcel

a skos:Concept ;

skos:prefLabel "PointInsideCadastralParcel"@en ;

skos:definition "The building horizontal geometry is represented by a point located within the parcel the building belongs to."@en ;

.

dbl-term:EntrancePoint

a skos:Concept ;

skos:prefLabel "EntrancePoint"@en ;

skos:definition "The elevation or building horizontal geometry has been captured at the entrance of the construction, generally the bottom of entrance door."@en ;

.

dbl-term:GeneralEave

a skos:Concept ;

skos:prefLabel "GeneralEave"@en ;

skos:definition "The elevation has been captured on one of the meeting lines between the roof and the walls."@en ;

.

dbl-term:GeneralGround

a skos:Concept ;

skos:prefLabel "GeneralGround"@en ;

skos:definition "The elevation has been captured on one of the meeting lines between the construction and the ground."@en ;

.

dbl-term:GeneralRoof

a skos:Concept ;

skos:prefLabel "GeneralRoof"@en ;

skos:definition "The elevation has been captured anywhere on the roof."@en ;

.

dbl-term:GeneralRoofEdge

a skos:Concept ;

skos:prefLabel "GeneralRoofEdge"@en ;

skos:definition "The elevation has been captured on one of the roof edges."@en ;

.

dbl-term:RoofEdge

a skos:Concept ;

skos:prefLabel "RoofEdge"@en ;

skos:definition "The building horizontal geometry has been captured using the roof edges of the building."@en ;

.

dbl-term:HighestEave

a skos:Concept ;

skos:prefLabel "HighestEave"@en ;

skos:definition "The elevation has been captured on the highest meeting line between the roof and the walls."@en ;

.

dbl-term:HighestGroundPoint

a skos:Concept ;

skos:prefLabel "HighestGroundPoint"@en ;

skos:definition "The elevation has been captured on the highest point of the meeting lines between the construction and the ground."@en ;

.

dbl-term:HighestPoint

a skos:Concept ;

skos:prefLabel "HighestPoint"@en ;

skos:definition "The elevation has been captured at the highest point of the construction, including the installations, such as chimneys and antennas."@en ;

.

dbl-term:HighestRoofEdge

a skos:Concept ;

skos:prefLabel "HighestRoofEdge"@en ;

skos:definition "The elevation has been captured at the highest roof edge level of the construction."@en ;

.

dbl-term:LowestEave

a skos:Concept ;

skos:prefLabel "LowestEave"@en ;

skos:definition "The elevation has been captured on the lowest meeting line between the roof and the walls."@en ;

.

dbl-term:LowestFloorAboveGround

a skos:Concept ;

skos:prefLabel "LowestFloorAboveGround"@en ;

skos:definition "The elevation or building horizontal geometry has been captured at the level of the lowest floor above ground of the construction."@en ;

.

dbl-term:LowestGroundPoint

a skos:Concept ;

skos:prefLabel "LowestGroundPoint"@en ;

skos:definition "The elevation has been captured on the lowest point of the meeting lines between the construction and the ground."@en ;

.

dbl-term:LowestRoofEdge

a skos:Concept ;

skos:prefLabel "LowestRoofEdge"@en ;

skos:definition "The elevation has been captured at the lowest roof edge level of the construction."@en ;

.

dbl-term:TopOfConstruction

a skos:Concept ;

skos:prefLabel "TopOfConstruction"@en ;

skos:definition "The elevation has been captured at the top level of the construction."@en ;

.

dbl-term:Estimated

a skos:Concept ;

skos:preflabel "Estimated"@en ;

skos:definition "The height has been estimated and not measured."@en ;

.

dbl-term:Measured

a skos:Concept ;

skos:preflabel "Measured"@en ;

skos:definition "The height has been (directly or indirectly) measured."@en ;

.

dbl-term:ArchRoof

```
  a skos:Concept ;
  skos:prefLabel "ArchRoof"@en ;
  skos:definition "A roof taking the form of a semicircular span connected."@en ;
.
dbl-term:ConicalRoof
  a skos:Concept ;
  skos:prefLabel "ConicalRoof"@en ;
  skos:definition "An inverted cone roof construction usually atop of a cylindrical tower."@en ;
.
dbl-term:DomedRoof
  a skos:Concept ;
  skos:prefLabel "DomedRoof"@en ;
  skos:definition "Roof formed of a thin curved structural slab."@en ;
.
dbl-term:DualPentRoof
  a skos:Concept ;
  skos:prefLabel "DualPentRoof"@en ;
  skos:definition "A roof that has two or more single plane roofs, usually separated or connected by
vertical walls."@en ;
.
dbl-term:FlatRoof
  a skos:Concept ;
  skos:prefLabel "FlatRoof"@en ;
  skos:definition "Roof either horizontal or with a slope of 10 percent or less."@en ;
.
dbl-term:GabledRoof
  a skos:Concept ;
  skos:prefLabel "GabledRoof"@en ;
  skos:definition "Pitched roof that terminates at one or both ends as a gable."@en ;
.
dbl-term:HalfHippedRoof
  a skos:Concept ;
  skos:prefLabel "HalfHippedRoof"@en ;
  skos:definition "A roof where all planes slope down to the supporting walls but with the upper
point of the gable squared off."@en ;
.
dbl-term:HippedRoof
```

a skos:Concept ;

skos:prefLabel "HippedRoof"@en ;

skos:definition "Pitched roof with hip end or ends."@en ;

.

dbl-term:HyperbolicParabaloidalRoof

a skos:Concept ;

skos:prefLabel "HyperbolicParabaloidalRoof"@en ;

skos:definition "A roof constructed with two axes with one plane following a convex curve and another a concave curve."@en ;

.

dbl-term:MansardRoof

a skos:Concept ;

skos:prefLabel "MansardRoof"@en ;

skos:definition "Pitched roof with two inclined planes on each side of the ridge , the steeper of the two starting at the eaves"@en ;

.

dbl-term:MonopitchRoof

a skos:Concept ;

skos:prefLabel "MonopitchRoof"@en ;

skos:definition "Pitched roof that has only a single plane."@en ;

.

dbl-term:PavilionRoof

a skos:Concept ;

skos:prefLabel "PavilionRoof"@en ;

skos:definition "A roof construction with equal hips on all planes, usually taking the form of a pyramidal shape."@en ;

.

dbl-term:PyramidalBroachRoof

a skos:Concept ;

skos:prefLabel "PyramidalRoof"@en ;

skos:definition "A suspended roof construction with all four planes meeting at a central point."@en ;

.

dbl-term:SawToothRoof

a skos:Concept ;

skos:prefLabel "SawToothRoof"@en ;

skos:definition "Series of pitched roofs , each with one inclined plane steeper than the other and fully or partially glazed"@en ;

.

dbl-term:Declined

a skos:Concept ;

skos:prefLabel "Declined"@en ;

skos:definition "The construction cannot be used under normal conditions, though its main elements (walls, roof) are still present."@en ;

.

dbl-term:Functional

a skos:Concept ;

skos:prefLabel "Functional"@en ;

skos:definition "The construction is functional."@en ;

.

dbl-term:Demolished

a skos:Concept ;

skos:prefLabel "Demolished"@en ;

skos:definition "The construction has been demolished. There are no more visible remains."@en ;

.

dbl-term:Projected

a skos:Concept ;

skos:prefLabel "Projected"@en ;

skos:definition "The construction is being designed. Construction has not yet started."@en ;

.

dbl-term:Ruin

a skos:Concept ;

skos:prefLabel "Ruin"@en ;

skos:definition "The construction has been partly demolished and some main elements (roof, walls) have been destroyed. There are some visible remains of the construction."@en ;

.

dbl-term:UnderConstruction

a skos:Concept ;

skos:prefLabel "UnderConstruction"@en ;

skos:definition "The construction is under construction and not yet functional. This applies only to the initial construction of the construction and not to maintenance work."@en ;

.

dbl-term:TelephoneLine

a skos:Concept ;

skos:prefLabel "TelephoneLine"@en ;

```
  skos:definition "A telephone line is present for communication"@en ;
.
dbl-term:Cable
  a skos:Concept ;
  skos:prefLabel "Cable"@en ;
  skos:definition "A coax cable is present for communication"@en ;
.
dbl-term:Optical
  a skos:Concept ;
  skos:prefLabel "Optical"@en ;
  skos:definition "Glass fiber is present for communication"@en ;
.
dbl-term:WiFi
  a skos:Concept ;
  skos:prefLabel "Wifi"@en ;
  skos:definition "A wireless wifi network is present for communication"@en ;
.
dbl-term:4G
  a skos:Concept ;
  skos:prefLabel "4G"@en ;
  skos:definition "A wireless 4G network is present for communication"@en ;
.
dbl-term:5G
  a skos:Concept ;
  skos:prefLabel "5G"@en ;
  skos:definition "A wireless 5G network is present for communication"@en ;
.
dbl-term:Adobe
  a skos:Concept ;
  skos:prefLabel "Adobe"@en ;
  skos:definition "Use of a particular type of masonry for the facade, that involves the use of clay
bricks (adobe) formed in moulds and (traditionally) dried in the sun."@en ;
.
dbl-term:Asbestos
  a skos:Concept ;
  skos:prefLabel "Asbestos"@en ;
```

skos:definition "Facade or roof constructed out of fibre reinforced concrete that includes asbestos fibres."@en ;

.

dbl-term:CeramicTiles

a skos:Concept ;

skos:prefLabel "CeramicTiles"@en ;

skos:definition "Ceramic tiles of different colours and design are used for covering the facade of the building. For the roofs they are traditionally of the barrel type, what is referred to today as cap and pan roof tiles."@en ;

.

dbl-term:Composite

a skos:Concept ;

skos:prefLabel "Composite"@en ;

skos:definition "Composite material, such as plastics, PVC and fibreglass are used to cover the facade of the building."@en ;

.

dbl-term:Concrete

a skos:Concept ;

skos:prefLabel "Concrete"@en ;

skos:definition "The surface of the facade is constructed out of (reinforced, with bars or fibres- other than asbestos) concrete."@en ;

.

dbl-term:Glass

a skos:Concept ;

skos:prefLabel "Glass"@en ;

skos:definition "Known as structural glass, is used for glazing the facade of buildings through the use of curtain wall systems, frameless glazing systems, polycarbonate sheeting or architectural flat glass. For roof constructed out of glass: typically used in roofs covering internal atriums or in greenhouses."@en ;

.

dbl-term:Limestone

a skos:Concept ;

skos:prefLabel "Limestone"@en ;

skos:definition "The facade of the building is composed of limestone, a sedimentary rock composed largely of calcite and/or aragonite."@en ;

.

dbl-term:Masonry

a skos:Concept ;

skos:prefLabel "Masonry"@en ;

skos:definition "The facade consists of individual units made of fired clay brick or concrete block laid in and bound together by mortar."@en ;

.

dbl-term:Metal

a skos:Concept ;

skos:prefLabel "Metal"@en ;

skos:definition "The surface of the building is covered with metal in the form of galvanized steel with paint, aluminium with paint, stainless steel, zinc, lead or copper."@en ;

.

dbl-term:NaturalStone

a skos:Concept ;

skos:prefLabel "NaturalStone"@en ;

skos:definition "The facade is covered with natural stone, such as granite or marble, and may come in different colours and finishing."@en ;

.

dbl-term:Vegetated

a skos:Concept ;

skos:prefLabel "Vegtated"@en ;

skos:definition "The facade is covered with vegetation and a growing medium, planted over a waterproofing membrane"@en ;

.

dbl-term:Wood

a skos:Concept ;

skos:prefLabel "Wood"@en ;

skos:definition "The facade or the structure of the building is covered with wood, timber or lumber."@en ;

.

dbl-term:ClayTile

a skos:Concept ;

skos:prefLabel "ClayTile"@en ;

skos:definition "Is a specific type of ceramic tile, made of fired terracotta. It is generally semi-cylindrical, made by forming clay around a curved surface and laid in alternating columns of convex and concave tiles."@en ;

.

dbl-term:Composition

a skos:Concept ;

skos:prefLabel "Composition"@en ;

skos:definition "Composition shingles are the most widely used roofing material. They are also called asphalt shingles that could either be organic fibre mat or fibreglass core. Both types are

steeped in asphalt and then coated with mineral granules to add colour and texture. Most shingles have an adhesive back that when reinforced with tacks, staples or nails for attaching on roof frames would result in a tight fit."@en ;

.

dbl-term:ConcreteTile

a skos:Concept ;

skos:prefLabel "ConcreteTile"@en ;

skos:definition "Roofing material consisting of shingles, simulated wood shakes, lighter-weight tiles and concrete panels manufactured from a variety of fibre-reinforced cement products."@en ;

.

dbl-term:CorrugatedSheet

a skos:Concept ;

skos:prefLabel "CorrugatedSheet"@en ;

skos:definition "Roofs of corrugated sheet may be of fibreglass, PVC or metal; less frequent is the use of galvanized iron sheet."@en ;

.

dbl-term:HotMoppedAsphalt

a skos:Concept ;

skos:prefLabel "HotMoppedAsphalt"@en ;

skos:definition "Hot mopped asphalt roofing is usually applied to flat or semi-flat residential roofs that have good access and proper drainage."@en ;

.

dbl-term:ReinforcedConcrete

a skos:Concept ;

skos:prefLabel "ReinforcedConcrete"@en ;

skos:definition "The load resisting system is made of reinforced concrete, a combination of steel reinforcement bars embedded in concrete that act together in resisting forces. Reinforced concrete buildings may be constructed as moment resisting frames (beams and columns framing at nodes), or in combination with shear walls. Roofs constructed out of reinforced concrete, normally along flat or semi-flat surfaces used in terraces or inclined roofs."@en ;

.

dbl-term:Slate

a skos:Concept ;

skos:prefLabel "Slate"@en ;

skos:definition "Slate is a shingle-like sliver of rock or natural stone, offering a natural look laid out in a variety of patterns. It comes in different sizes and colours, although colours are limited to those found in nature."@en ;

.

dbl-term:Thatch

a skos:Concept ;

skos:prefLabel "Thatch"@en ;

skos:definition "Roofs are built by thatching, which is the craft of building a roof with dry vegetation such as straw, water reed, sedge, rushes and heather, layering the vegetation so as to shed water away from the inner roof."@en ;

.

dbl-term:VegtatedGreenRoof

a skos:Concept ;

skos:prefLabel "VegtatedGreenRoof"@en ;

skos:definition "Also known as eco-roofs, a vegetated or green roof is a roof of a building that is partially or completely covered with vegetation and a growing medium, planted over a waterproofing membrane. It may also include additional layers such as a root barrier and drainage and irrigation systems."@en ;

.

dbl-term:WoodShinglesOrShakes

a skos:Concept ;

skos:prefLabel "WoodShinglesOrShakes"@en ;

skos:definition "Wood shingles or shakes are differentiated by size and texture. Shingles are cut to a specific size and have smooth finish. Shakes are rough-textures and are irregular in shape."@en ;

.

dbl-term:ReinforcedMasonry

a skos:Concept ;

skos:prefLabel "ReinforcedMasonry"@en ;

skos:definition "Buildings of this type have exterior walls consisting of grouted (with concrete) masonry (clay brick or concrete block masonry) with internal reinforcing steel rods."@en ;

.

dbl-term:RubleStoneMasonry

a skos:Concept ;

skos:prefLabel "RubleStoneMasonry"@en ;

skos:definition "Ruble stone is field stone. Is a masonry technique that incorporates any material found or recovered, such as dressed blocks, broken fragments, brick or flint."@en ;

.

dbl-term:Steel

a skos:Concept ;

skos:prefLabel "Steel"@en ;

skos:definition "The load resisting system of the building is made of structural steel, which may be made composite with reinforced concrete at floor slabs. Steel structures may be constructed as moments resisting frames, as concentrically or eccentrically braced frames, or as spatial trusses. The members of the structure may be bolted or welded."@en ;

.

dbl-term:StoneMasonryBlock

a skos:Concept ;

skos:prefLabel "StoneMasonryBlock"@en ;

skos:definition "Consist of masonry buildings constructed with stone blocks cut from igneous, metamorphic or sedimentary rocks. This type of buildings are generally unreinforced and may be joined with lime/cement mortar."@en ;

.

dbl-term:AdobeBlockWalls

a skos:Concept ;

skos:prefLabel "AdobeBlockWalls"@en ;

skos:definition "Also known as moulded earth, is a building technique that involves the use of clay bricks (adobe) formed in moulds and (traditionally) dried in the sun."@en ;

.

dbl-term:ConcreteBlockMasonry

a skos:Concept ;

skos:prefLabel "ConcreteBlockMasonry"@en ;

skos:definition "Unreinforced concrete block masonry, with lime/cement mortar."@en ;

.

dbl-term:Earth

a skos:Concept ;

skos:prefLabel "Earth"@en ;

skos:definition "Rammed earth or pneumatically impacted stabilized earth. Rammed earth construction (also referred to as tapial in Spanish, or else, pied-a-terre, in France) is conducted by erecting wooden or metal forms for the walls and filling them with a moist cement stabilized earth mix which is compacted by pounding with hand tools (with conical or flat heads) or with a mechanical compactor. Metal rebar is often added to further increase ductility."@en ;

.

dbl-term:FiredBrickMasonry

a skos:Concept ;

skos:prefLabel "FiredBrickMasonry"@en ;

skos:definition "Unreinforced fired brick masonry. Buildings of this type have perimeter walls, and possibly some interior walls, constructed of unreinforced fired brick blocks. These perimeter walls are sometimes used as load bearing walls and have no internal reinforcing steel rods. Anchor plates are sometimes used to tie the walls to the floors and roof and are conspicuous from the outside of the structure. Unusual brick patterns may also indicate unreinforced fired brick masonry."@en ;

.

dbl-term:InformalConstructions

a skos:Concept ;

skos:prefLabel "InformalConstructions"@en ;

skos:definition "Parts of slums/squatters. Informal constructions are non-engineered and are built by self-builders ."@en ;

.

dbl-term:MassiveStoneMasonry

a skos:Concept ;

skos:prefLabel "MassiveStomeMasonry"@en ;

skos:definition "Massive stone masonry with lime/cement mortar. Is constructed with a coursed double leaf masonry, with the outer layers of stonework levelled as the construction progresses and follows a well established masonry bond. The stone units are cut in regular dimensions. To improve the connection between cross walls better quality units are used for the bond in these areas."@en ;

.

dbl-term:MobileHomes

a skos:Concept ;

skos:prefLabel "MobilesHomes"@en ;

skos:definition "A structure designed or adapted for human habitation which is capable of being moved from one place to another (whether by being towed, or by being transported on a motor vehicle or trailer) and any motor vehicle so designed or adapted."@en ;

.

dbl-term:MudWalls

a skos:Concept ;

skos:prefLabel "MudWalls"@en ;

skos:definition "Mud walls may be made of stacked earth or poured earth. Stacked earth consists in forming balls of plastic soil, which are freshly stacked on each other. Poured earth walls on the other hand are erected between formwork using a sandy material with coarse to fine granular particles. The ultimate finish can be natural - from the formwork- or sand blasted."@en ;

.

dbl-term:PrecastConcrete

a skos:Concept ;

skos:prefLabel "PrecastConcrete"@en ;

skos:definition "Precast wall panel construction. Buildings of this type are low-rise structures with precast reinforced concrete wall panels that are often poured on the ground and tilted into place. Roofs are often composed of either plywood sheathing or metal decking, and glass curtain walls may exist at the building perimeter."@en ;

.

dbl-term:ConstructedArea

a skos:Concept ;

skos:preflabel "ConstructedArea"@en ;

skos:definition "Constructed area is the difference between the external area and the internal area of the building or building unit."@en ;

.

dbl-term:ExternaldArea

a skos:Concept ;

skos:preflabel "ExternalArea"@en ;

skos:definition "External area is the area within the outer perimeter boundary of a building or building unit, including any outer cladding, measured at floor level."@en ;

.

dbl-term:InternalArea

a skos:Concept ;

skos:preflabel "InternalArea"@en ;

skos:definition "Internal area is the area within the interior perimeter of a building or building unit, measured above skirting-board level."@en ;

.

dbl-term:InternalPrimaryArea

a skos:Concept ;

skos:preflabel "InternalPrimaryArea"@en ;

skos:definition "Internal primary area is the sum of all floor areas with a heightroom superior or equal to heightParameter and that are associated with the principal uses of the building."@en ;

.

dbl-term:InternalOtherArea

a skos:Concept ;

skos:preflabel "InternalOtherArea"@en ;

skos:definition "Internal other area is the sum of all floor areas with a heightroom < heightParameter and that are associated with the main uses of the building."@en ;

.

dbl-term:InternalResidualArea

a skos:Concept ;

skos:preflabel "INternalResidualArea"@en ;

skos:definition "Internal residual area is the sum of all floor areas regardless of height that are not consistent with the principal use of the building."@en ;

.

dbl-term:InternalServiceArea

a skos:Concept ;

skos:preflabel "InternalServiceArea"@en ;

skos:definition "Internal service area is the sum of all floor areas used for building services, irrespective of their height or occupation."@en ;

.

Appendix A: RDFS Ontology code in JSON-LD


```
{
  "@graph" : [ {
    "@id" : "dbl:4G",
    "rdf:type" : {
      "@id" : "dbl:KindOfCommunicationConnectionValue"
    },
    "seeAlso" : "dbl-term:4G"
  }, {
    "@id" : "dbl:5G",
    "rdf:type" : {
      "@id" : "dbl:KindOfCommunicationConnectionValue"
    },
    "seeAlso" : "dbl-term:5G"
  }, {
    "@id" : "dbl:A",
    "rdf:type" : {
      "@id" : "dbl:EnergyPerformanceValue"
    },
    "seeAlso" : "dbl-term:A"
  }, {
    "@id" : "dbl:AboveGroundEnvelope",
    "rdf:type" : {
      "@id" : "dbl:ElevationReferenceValue"
    },
    "seeAlso" : "dbl-term:AboveGroundEnvelope"
  }, {
    "@id" : "dbl:Address",
    "@type" : "rdfs:Class",
    "seeAlso" : "dbl-term:Address"
  }, {
    "@id" : "dbl:Adobe",
    "rdf:type" : {
      "@id" : "dbl:MaterialOfFacadeValue"
    },
```

```
  "seeAlso" : "dbl-term:Adobe"
}, {
  "@id" : "dbl:AdobeBlockWalls",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:AdobeBlockWalls"
}, {
  "@id" : "dbl:Agriculture",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Agriculture"
}, {
  "@id" : "dbl:Ancillary",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Ancillary"
}, {
  "@id" : "dbl:Arch",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Arch"
}, {
  "@id" : "dbl:ArchRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:ArchRoof"
}, {
  "@id" : "dbl:As-built",
  "rdf:type" : {
    "@id" : "dbl:StatusValue"
  },
  "seeAlso" : "dbl-term:As-built"
}, {
  "@id" : "dbl:As-designed",
```

```
  "rdf:type" : {
    "@id" : "dbl:StatusValue"
  },
  "seeAlso" : "dbl-term:As-designed"
}, {
  "@id" : "dbl:As-required",
  "rdf:type" : {
    "@id" : "dbl:StatusValue"
  },
  "seeAlso" : "dbl-term:As-required"
}, {
  "@id" : "dbl:As-used",
  "rdf:type" : {
    "@id" : "dbl:StatusValue"
  },
  "seeAlso" : "dbl-term:As-used"
}, {
  "@id" : "dbl:Asbestos",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfRoofValue"
  }, {
    "@id" : "dbl:MaterialOfFacadeValue"
  } ],
  "seeAlso" : "dbl-term:Asbestos"
}, {
  "@id" : "dbl:B",
  "rdf:type" : {
    "@id" : "dbl:EnergyPerformanceValue"
  },
  "seeAlso" : "dbl-term:B"
}, {
  "@id" : "dbl:Biogas",
  "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
  },
  "seeAlso" : "dbl-term:Biogas"
}, {
```

```
    "@id" : "dbl:BottomOfConstruction",
    "rdf:type" : {
      "@id" : "dbl:ElevationReferenceValue"
    },
    "seeAlso" : "dbl-term:BottomOfConstruction"
  }, {
    "@id" : "dbl:Building",
    "@type" : "rdfs:Class",
    "seeAlso" : "dbl-term:Building",
    "subClassOf" : "dbl:BuildingOrBuildingUnit"
  }, {
    "@id" : "dbl:BuildingOrBuildingUnit",
    "@type" : "rdfs:Class",
    "seeAlso" : "dbl-term:BuildingOrBuildingUnit",
    "subClassOf" : "dbl:DBL-Root"
  }, {
    "@id" : "dbl:BuildingServices",
    "@type" : "rdfs:Container",
    "member" : [ "dbl:solarSurfaceActual", "dbl:solarSurfacePotential", "dbl:heatingSource",
"dbl:numberOfEVChargingPoints", "dbl:ventilationSystem", "dbl:kindOfCommunicationConnection",
"dbl:heatingSystem", "dbl:renewableEnergyProduction" ],
    "seeAlso" : "dbl-term:BuildingServices"
  }, {
    "@id" : "dbl:BuildingUnit",
    "@type" : "rdfs:Class",
    "seeAlso" : "dbl-term:BuildingUnit",
    "subClassOf" : "dbl:BuildingOrBuildingUnit"
  }, {
    "@id" : "dbl:Bunker",
    "@type" : "dbl:BuildingNatureValue",
    "seeAlso" : "dbl-term:Bunker"
  }, {
    "@id" : "dbl:C",
    "rdf:type" : {
      "@id" : "dbl:EnergyPerformanceValue"
    },
    "seeAlso" : "dbl-term:C"
```

```
}, {
  "@id" : "dbl:CP1",
  "rdf:type" : {
    "@id" : "dbl:CircularityPerformanceValue"
  },
  "seeAlso" : "dbl-term:CP1"
}, {
  "@id" : "dbl:CP2",
  "rdf:type" : {
    "@id" : "dbl:CircularityPerformanceValue"
  },
  "seeAlso" : "dbl-term:CP2"
}, {
  "@id" : "dbl:CP3",
  "rdf:type" : {
    "@id" : "dbl:CircularityPerformanceValue"
  },
  "seeAlso" : "dbl-term:CP3"
}, {
  "@id" : "dbl:Cable",
  "rdf:type" : {
    "@id" : "dbl:KindOfCommunicationConnectionValue"
  },
  "seeAlso" : "dbl-term:Cable"
}, {
  "@id" : "dbl:CadastralParcel",
  "@type" : "rdfs:Class",
  "seeAlso" : "dbl-term:CadastralParcel",
  "subClassOf" : "dbl:DBL-Root"
}, {
  "@id" : "dbl:Canopy",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Canopy"
}, {
  "@id" : "dbl:Castle",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Castle"
```

```
}, {
  "@id" : "dbl:CaveBuilding",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:CaveBuilding"
}, {
  "@id" : "dbl:CentralHeating",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:CentralHeating"
}, {
  "@id" : "dbl:CeramicTiles",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfRoofValue"
  }, {
    "@id" : "dbl:MaterialOfFacadeValue"
  } ],
  "seeAlso" : "dbl-term:CeramicTiles"
}, {
  "@id" : "dbl:Chapel",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Chapel"
}, {
  "@id" : "dbl:Church",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Church"
}, {
  "@id" : "dbl:CircularityPerformanceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:CircularityPerformanceValue"
}, {
  "@id" : "dbl:ClayTile",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:ClayTile"
}, {
```

```
  "@id" : "dbl:CollectiveResidential",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:CollectiveResidential"
}, {
  "@id" : "dbl:CommerceAndServices",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:CommerceAndServices"
}, {
  "@id" : "dbl:Composite",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
  },
  "seeAlso" : "dbl-term:Composite"
}, {
  "@id" : "dbl:Composition",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:Composition"
}, {
  "@id" : "dbl:Concrete",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
  },
  "seeAlso" : "dbl-term:Concrete"
}, {
  "@id" : "dbl:ConcreteBlockMasonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:ConcreteBlockMasonry"
}, {
  "@id" : "dbl:ConcreteTile",
```

```
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:ConcreteTile"
}, {
  "@id" : "dbl:ConditionOfConstructionValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:ConditionOfConstructionValue"
}, {
  "@id" : "dbl:ConicalRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:ConicalRoof"
}, {
  "@id" : "dbl:ConstructedArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:ConstructedArea"
}, {
  "@id" : "dbl:CurrentUseValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:CurrentUseValue"
}, {
  "@id" : "dbl:CorrugatedSheet",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:CorrugatedSheet"
}, {
  "@id" : "dbl:D",
  "rdf:type" : {
    "@id" : "dbl:EnergyPerformanceValue"
  },
  "seeAlso" : "dbl-term:D"
}, {
```

```
    "@id" : "dbl:DBL-Root",
    "@type" : "rdfs:Class",
    "seeAlso" : "dbl-term:DBL-Root",
    "subClassOf" : [ "sml:TechnicalEntity", "sml:SpatialRegion" ]
  }, {
    "@id" : "dbl:Dam",
    "@type" : "dbl:BuildingNatureValue",
    "seeAlso" : "dbl-term:Dam"
  }, {
    "@id" : "dbl:Declined",
    "rdf:type" : {
      "@id" : "dbl:ConditionOfConstructionValue"
    },
    "seeAlso" : "dbl-term:Declined"
  }, {
    "@id" : "dbl:Demolished",
    "rdf:type" : {
      "@id" : "dbl:ConditionOfConstructionValue"
    },
    "seeAlso" : "dbl-term:Demolished"
  }, {
    "@id" : "dbl:Dimensions",
    "@type" : "rdfs:Container",
    "member" : [ "dbl:elevationReference", "dbl:referencePoint", "dbl:lowReference",
"dbl:officialAreaReference", "dbl:areaValue", "dbl:heightReference", "dbl:roofType", "dbl:elevation",
"dbl:horizontalGeometry", "dbl:geometry", "dbl:officialArea", "dbl:heightStatus", "dbl:circumference",
"geo:hasGeometry", "dbl:netVolume", "dbl:grossVolume", "dbl:horizontalGeometryReference",
"dbl:heightBelowGround", "dbl:footprint", "dbl:heightAboveGround" ],
    "seeAlso" : "dbl-term:Dimensions"
  }, {
    "@id" : "dbl:DistrictHeating",
    "rdf:type" : {
      "@id" : "dbl:HeatingSystemValue"
    },
    "seeAlso" : "dbl-term:DistrictHeating"
  }, {
    "@id" : "dbl:DomedRoof",
    "rdf:type" : {
```

```
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:DomedRoof"
}, {
  "@id" : "dbl:DualPentRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:DualPentRoof"
}, {
  "@id" : "dbl:E",
  "rdf:type" : {
    "@id" : "dbl:EnergyPerformanceValue"
  },
  "seeAlso" : "dbl-term:E"
}, {
  "@id" : "dbl:Earth",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:Earth"
}, {
  "@id" : "dbl:ElectricRadiators",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:ElectricRadiators"
}, {
  "@id" : "dbl:Electricity",
  "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
  },
  "seeAlso" : "dbl-term:Electricity"
}, {
  "@id" : "dbl:ElevationReferenceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:ElevationReferenceValue"
```

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}, {
  "@id" : "dbl:EnergyPerformanceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:EnergyPerformanceValue"
}, {
  "@id" : "dbl:EntrancePoint",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:EntrancePoint"
}, {
  "@id" : "dbl:ExternalArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:ExternalArea"
}, {
  "@id" : "dbl:F",
  "rdf:type" : {
    "@id" : "dbl:EnergyPerformanceValue"
  },
  "seeAlso" : "dbl-term:F"
}, {
  "@id" : "dbl:FiredBrickMasonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:FiredBrickMasonry"
}, {
  "@id" : "dbl:FlatRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:FlatRoof"
}, {
  "@id" : "dbl:Functional",
  "rdf:type" : {
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      "@id" : "dbl:ConditionOfConstructionValue"
    },
    "seeAlso" : "dbl-term:Functional"
  }, {
    "@id" : "dbl:G",
    "rdf:type" : {
      "@id" : "dbl:EnergyPerformanceValue"
    },
    "seeAlso" : "dbl-term:G"
  }, {
    "@id" : "dbl:GabledRoof",
    "rdf:type" : {
      "@id" : "dbl:RoofTypeValue"
    },
    "seeAlso" : "dbl-term:GabledRoof"
  }, {
    "@id" : "dbl:General",
    "@type" : "rdfs:Container",
    "member" : [ "dbl:cadastralParcel", "dbl:dateOfConstruction", "locn:location", "wgs84_pos:location",
"dbl:dateOfDemolition", "dbl:currentUse", "dbl:isDescribedByNativeGIS", "dbl:buildingUnit",
"dbl:buildingNature", "dbl:isDescribedByOpenBIM", "dbl:dateOfRenovation", "dbl:address",
"dbl:isDescribedByOpenGIS", "dbl:isDescribedByNativeBIM" ],
    "seeAlso" : "dbl-term:General"
  }, {
    "@id" : "dbl:GeneralEave",
    "rdf:type" : {
      "@id" : "dbl:ElevationReferenceValue"
    },
    "seeAlso" : "dbl-term:GeneralEave"
  }, {
    "@id" : "dbl:GeneralGround",
    "rdf:type" : {
      "@id" : "dbl:ElevationReferenceValue"
    },
    "seeAlso" : "dbl-term:GeneralGround"
  }, {
    "@id" : "dbl:GeneralRoof",
```

```
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:GeneralRoof"
}, {
  "@id" : "dbl:GeneralRoofEdge",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:GeneralRoofEdge"
}, {
  "@id" : "dbl:Glass",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfRoofValue"
  }, {
    "@id" : "dbl:MaterialOfFacadeValue"
  } ],
  "seeAlso" : "dbl-term:Glass"
}, {
  "@id" : "dbl:Greenhouse",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Greenhouse"
}, {
  "@id" : "dbl:HalfHippedRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:HalfHippedRoof"
}, {
  "@id" : "dbl:HeatPump",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:HeatPump"
}, {
  "@id" : "dbl:HeatingSourceValue",
  "@type" : "sml:EnumerationType",
```

```
  "seeAlso" : "dbl-term:HeatingSourceValue"
}, {
  "@id" : "dbl:HeatingSystemValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:HeatingSystemValue"
}, {
  "@id" : "dbl:HeightStatusValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:HeightStatusValue"
}, {
  "@id" : "dbl:HighestEave",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:HighestEave"
}, {
  "@id" : "dbl:HighestGroundPoint",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:HighestGroundPoint"
}, {
  "@id" : "dbl:HighestPoint",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:HighestPoint"
}, {
  "@id" : "dbl:HighestRoofEdge",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:HighestRoofEdge"
}, {
  "@id" : "dbl:HippedRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
```

```
  },
  "seeAlso" : "dbl-term:HippedRoof"
}, {
  "@id" : "dbl:HorizontalGeometryReferenceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:HorizontalGeometryReferenceValue"
}, {
  "@id" : "dbl:HotMoppedAsphalt",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:HotMoppedAsphalt"
}, {
  "@id" : "dbl:Hybrid",
  "rdf:type" : {
    "@id" : "dbl:VentilationSystemValue"
  },
  "seeAlso" : "dbl-term:Hybrid"
}, {
  "@id" : "dbl:HyperbolicParabaloidalRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:HyperbolicParabaloidalRoof"
}, {
  "@id" : "dbl:Identification",
  "@type" : "rdfs:Container",
  "member" : [ "dbl:nationalCadastralReference", "dbl:geographicalName", "dbl:inspireId" ],
  "seeAlso" : "dbl-term:Identification"
}, {
  "@id" : "dbl:IndividualResidential",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:IndividualResidential"
}, {
  "@id" : "dbl:Industrial",
```

```
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Industrial"
}, {
  "@id" : "dbl:InformalConstructions",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:InformalConstructions"
}, {
  "@id" : "dbl:InternalArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:InternalArea"
}, {
  "@id" : "dbl:InternalOtherArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:InternalOtherArea"
}, {
  "@id" : "dbl:InternalPrimaryArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:InternalPrimaryArea"
}, {
  "@id" : "dbl:InternalResidualArea",
  "rdf:type" : {
    "@id" : "dbl:OfficialAreaReferenceValue"
  },
  "seeAlso" : "dbl-term:InternalResidualArea"
}, {
  "@id" : "dbl:InternalServiceArea",
  "rdf:type" : {
```

```
    "@id" : "dbl:OfficialAreaReferenceValue"
   },
   "seeAlso" : "dbl-term:InternalServiceArea"
  }, {
   "@id" : "dbl:KindOfCommunicationConnectionValue",
   "@type" : "sml:EnumerationType",
   "seeAlso" : "dbl-term:KindOfCommunicationConnectionValue"
  }, {
   "@id" : "dbl:LegalAndFinance",
   "@type" : "rdfs:Container",
   "member" : [ "dbl:hasCleanSoilStatement", "dbl:administrativeUnit", "dbl:officialValueReference",
"dbl:officialValue", "dbl:tenant", "dbl:owner" ],
   "seeAlso" : "dbl-term:LegalAndFinance"
  }, {
   "@id" : "dbl:Lighthouse",
   "@type" : "dbl:BuildingNatureValue",
   "seeAlso" : "dbl-term:Lighthouse"
  }, {
   "@id" : "dbl:Limestone",
   "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
   },
   "seeAlso" : "dbl-term:Limestone"
  }, {
   "@id" : "dbl:LiquidFuels",
   "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
   },
   "seeAlso" : "dbl-term:LiquidFuels"
  }, {
   "@id" : "dbl:LowestEave",
   "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
   },
   "seeAlso" : "dbl-term:LowestEave"
  }, {
   "@id" : "dbl:LowestFloorAboveGround",
```

```
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:LowestFloorAboveGround"
}, {
  "@id" : "dbl:LowestGroundPoint",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:LowestGroundPoint"
}, {
  "@id" : "dbl:LowestRoofEdge",
  "rdf:type" : {
    "@id" : "dbl:ElevationReferenceValue"
  },
  "seeAlso" : "dbl-term:LowestRoofEdge"
}, {
  "@id" : "dbl:MansardRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:MansardRoof"
}, {
  "@id" : "dbl:Masonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
  },
  "seeAlso" : "dbl-term:Masonry"
}, {
  "@id" : "dbl:MassiveStoneMasonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:MassiveStomeMasonry"
}, {
  "@id" : "dbl:MaterialOfFacadeValue",
  "@type" : "sml:EnumerationType",
```

```
  "seeAlso" : "dbl-term:MaterialOfFacadeValue"
}, {
  "@id" : "dbl:MaterialOfRoofValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:MaterialOfRoofValue"
}, {
  "@id" : "dbl:MaterialOfStructureValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:MaterialOfStructureValue"
}, {
  "@id" : "dbl:Mechanical",
  "rdf:type" : {
    "@id" : "dbl:VentilationSystemValue"
  },
  "seeAlso" : "dbl-term:Mechanical"
}, {
  "@id" : "dbl:Metal",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfRoofValue"
  }, {
    "@id" : "dbl:MaterialOfFacadeValue"
  } ],
  "seeAlso" : "dbl-term:Metal"
}, {
  "@id" : "dbl:Missing",
  "rdf:type" : [ {
    "@id" : "dbl:VentilationSystemValue"
  }, {
    "@id" : "dbl:HeatingSystemValue"
  } ],
  "seeAlso" : "dbl-term:Missing"
}, {
  "@id" : "dbl:MobileHomes",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:MobilesHomes"
```

```
}, {
  "@id" : "dbl:MonopitchRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:MonopitchRoof"
}, {
  "@id" : "dbl:MoreThanTwoDwelling",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:MoreThanTwoDwellings"
}, {
  "@id" : "dbl:Mosque",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Mosque"
}, {
  "@id" : "dbl:MudWalls",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:MudWalls"
}, {
  "@id" : "dbl:NativeBIM",
  "@type" : "rdfs:Class",
  "seeAlso" : "dbl-term:NativeBIM",
  "subClassOf" : [ "dcat:Dataset", "sml:InformationObject" ]
}, {
  "@id" : "dbl:NativeGIS",
  "@type" : "rdfs:Class",
  "seeAlso" : "dbl-term:NativeGIS",
  "subClassOf" : [ "dcat:Dataset", "sml:InformationObject" ]
}, {
  "@id" : "dbl:Natural",
  "rdf:type" : {
    "@id" : "dbl:VentilationSystemValue"
  },
```

```
  "seeAlso" : "dbl-term:Natural"
}, {
  "@id" : "dbl:NaturalStone",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
  },
  "seeAlso" : "dbl-term:NaturalStone"
}, {
  "@id" : "dbl:Naturalgas",
  "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
  },
  "seeAlso" : "dbl-term:Naturalgas"
}, {
  "@id" : "dbl:Office",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Office"
}, {
  "@id" : "dbl:OfficialAreaReferenceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:OfficialAreaReferenceValue"
}, {
  "@id" : "dbl:OfficialValueReferenceValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:OfficialValueReferenceValue"
}, {
  "@id" : "dbl:OpenBIM",
  "@type" : "rdfs:Class",
  "seeAlso" : "dbl-term:OpenBIM",
  "subClassOf" : [ "dcat:Dataset", "sml:InformationObject" ]
}, {
  "@id" : "dbl:OpenGIS",
  "@type" : "rdfs:Class",
  "seeAlso" : "dbl-term:OpenGIS",
  "subClassOf" : [ "dcat:Dataset", "sml:InformationObject" ]
```

```
}, {
  "@id" : "dbl:Optical",
  "rdf:type" : {
    "@id" : "dbl:KindOfCommunicationConnectionValue"
  },
  "seeAlso" : "dbl-term:Optical"
}, {
  "@id" : "dbl:PavilionRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:PavilionRoof"
}, {
  "@id" : "dbl:Performance",
  "@type" : "rdfs:Container",
  "member" : [ "dbl:energyPerformance", "dbl:yearlyUseOfElectricity", "dbl:internetUploadBandwith",
"dbl:assessmentMethod", "dbl:yearlyUseOfWater", "dbl:smartReadinessIndicator",
"dbl:connectionToElectricity", "dbl:connectionToSewage", "dbl:circularityPerformance",
"dbl:dateOfAssessment", "dbl:connectionToGas", "dbl:connectionToWater", "dbl:yearlyReuseOfWater",
"dbl:internetDownloadBandwith", "dbl:conditionOfConstruction", "dbl:yearlyUseOfGas" ],
  "seeAlso" : "dbl-term:Performance"
}, {
  "@id" : "dbl:PortableGasHeating",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:PortableGasHeating"
}, {
  "@id" : "dbl:PrecastConcrete",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:PrecastConcrete"
}, {
  "@id" : "dbl:Projected",
  "rdf:type" : {
    "@id" : "dbl:ConditionOfConstructionValue"
  },
```

```
  "seeAlso" : "dbl-term:Projected"
}, {
  "@id" : "dbl:PublicServices",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:PublicServices"
}, {
  "@id" : "dbl:PyramidalBroachRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:PyramidalRoof"
}, {
  "@id" : "dbl:ReinforcedConcrete",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfStructureValue"
  }, {
    "@id" : "dbl:MaterialOfRoofValue"
  } ],
  "seeAlso" : "dbl-term:ReinforcedConcrete"
}, {
  "@id" : "dbl:ReinforcedMasonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:ReinforcedMasonry"
}, {
  "@id" : "dbl:RentalIncome",
  "rdf:type" : {
    "@id" : "dbl:OfficialValueReferenceValue"
  },
  "seeAlso" : "dbl-term:RentalIncome"
}, {
  "@id" : "dbl:ResidenceForCommunities",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
```

```
  },
  "seeAlso" : "dbl-term:ResidenceForCummunities"
}, {
  "@id" : "dbl:Residential",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Residential"
}, {
  "@id" : "dbl:RoofTypeValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:RoofTypeValue"
}, {
  "@id" : "dbl:RubleStoneMasonry",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:RubleStoneMasonry"
}, {
  "@id" : "dbl:Ruin",
  "rdf:type" : {
    "@id" : "dbl:ConditionOfConstructionValue"
  },
  "seeAlso" : "dbl-term:Ruin"
}, {
  "@id" : "dbl:SRI1",
  "rdf:type" : {
    "@id" : "dbl:SmartReadinessIndicatorValue"
  },
  "seeAlso" : "dbl-term:CSRI1"
}, {
  "@id" : "dbl:SRI2",
  "rdf:type" : {
    "@id" : "dbl:SmartReadinessIndicatorValue"
  },
  "seeAlso" : "dbl-term:CSRI2"
}, {
```

```
  "@id" : "dbl:SRI3",
  "rdf:type" : {
    "@id" : "dbl:SmartReadinessIndicatorValue"
  },
  "seeAlso" : "dbl-term:CSRI3"
}, {
  "@id" : "dbl:SawToothRoof",
  "rdf:type" : {
    "@id" : "dbl:RoofTypeValue"
  },
  "seeAlso" : "dbl-term:SawToothRoof"
}, {
  "@id" : "dbl:Shed",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Shed"
}, {
  "@id" : "dbl:Silo",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Silo"
}, {
  "@id" : "dbl:Slate",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:Slate"
}, {
  "@id" : "dbl:SmartReadinessIndicatorValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:SmartReadinessIndicatorValue"
}, {
  "@id" : "dbl:SolarHeating",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:SolarHeating"
}, {
  "@id" : "dbl:SolidFuels",
```

```
  "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
  },
  "seeAlso" : "dbl-term:SolidFuels"
}, {
  "@id" : "dbl:Stadium",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Stadium"
}, {
  "@id" : "dbl:StatusValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:StatusValue"
}, {
  "@id" : "dbl:Steel",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:Steel"
}, {
  "@id" : "dbl:StoneMasonryBlock",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfStructureValue"
  },
  "seeAlso" : "dbl-term:StoneMasonryBlock"
}, {
  "@id" : "dbl:StorageTank",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:StorageTank"
}, {
  "@id" : "dbl:Stove",
  "rdf:type" : {
    "@id" : "dbl:HeatingSystemValue"
  },
  "seeAlso" : "dbl-term:Stove"
}, {
  "@id" : "dbl:Straw",
  "rdf:type" : {
```

```
      "@id" : "dbl:HeatingSourceValue"
    },
    "seeAlso" : "dbl-term:Straw"
  }, {
    "@id" : "dbl:StructureAndMaterial",
    "@type" : "rdfs:Container",
    "member" : [ "dbl:numberOfRooms", "dbl:numberOfBalconies", "dbl:numberOfDwellings",
"dbl:numberOfElevators", "dbl:numberOfFloorsAboveGround", "dbl:materialOfStructure",
"dbl:numberOfFloorsBelowGround", "dbl:numberOfSwimmingPools", "dbl:materialOfRoof",
"dbl:uValueFacades", "dbl:materialOfFacade", "dbl:numberOfBuildingUnits", "dbl:uValueRoofs",
"dbl:uValueFloors", "dbl:uValueWindows" ],
    "seeAlso" : "dbl-term:StructureAndMaterial"
  }, {
    "@id" : "dbl:Synagogue",
    "@type" : "dbl:BuildingNatureValue",
    "seeAlso" : "dbl-term:Synagogue"
  }, {
    "@id" : "dbl:TelephoneLine",
    "rdf:type" : {
      "@id" : "dbl:KindOfCommunicationConnectionValue"
    },
    "seeAlso" : "dbl-term:TelephoneLine"
  }, {
    "@id" : "dbl:Temple",
    "@type" : "dbl:BuildingNatureValue",
    "seeAlso" : "dbl-term:Temple"
  }, {
    "@id" : "dbl:Thatch",
    "rdf:type" : {
      "@id" : "dbl:MaterialOfRoofValue"
    },
    "seeAlso" : "dbl-term:Thatch"
  }, {
    "@id" : "dbl:TopOfConstruction",
    "rdf:type" : {
      "@id" : "dbl:ElevationReferenceValue"
    },
    "seeAlso" : "dbl-term:TopOfConstruction"
```

```
}, {
  "@id" : "dbl:Tower",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Tower"
}, {
  "@id" : "dbl:Trade",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:Trade"
}, {
  "@id" : "dbl:TransactionPriceFull",
  "rdf:type" : {
    "@id" : "dbl:OfficialValueReferenceValue"
  },
  "seeAlso" : "dbl-term:TransactionPriceFull"
}, {
  "@id" : "dbl:TransactionPriceMedium",
  "rdf:type" : {
    "@id" : "dbl:OfficialValueReferenceValue"
  },
  "seeAlso" : "dbl-term:TransactionPriceMedium"
}, {
  "@id" : "dbl:TransactionPriceSimple",
  "rdf:type" : {
    "@id" : "dbl:OfficialValueReferenceValue"
  },
  "seeAlso" : "dbl-term:TransactionPriceSimple"
}, {
  "@id" : "dbl:TwoDwellings",
  "rdf:type" : {
    "@id" : "dbl:CurrentUseValue"
  },
  "seeAlso" : "dbl-term:TwoDwellings"
}, {
  "@id" : "dbl:UnderConstruction",
  "rdf:type" : {
```

```
    "@id" : "dbl:ConditionOfConstructionValue"
  },
  "seeAlso" : "dbl-term:UnderConstruction"
}, {
  "@id" : "dbl:Vegetated",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfFacadeValue"
  },
  "seeAlso" : "dbl-term:Vegtated"
}, {
  "@id" : "dbl:VegtatedGreenRoof",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:VegtatedGreenRoof"
}, {
  "@id" : "dbl:VentilationSystemValue",
  "@type" : "sml:EnumerationType",
  "seeAlso" : "dbl-term:VentilationSystemValue"
}, {
  "@id" : "dbl:WarmWaterOrSteam",
  "rdf:type" : {
    "@id" : "dbl:HeatingSourceValue"
  },
  "seeAlso" : "dbl-term:WarmwaterOrSteam"
}, {
  "@id" : "dbl:WiFi",
  "rdf:type" : {
    "@id" : "dbl:KindOfCommunicationConnectionValue"
  },
  "seeAlso" : "dbl-term:Wifi"
}, {
  "@id" : "dbl:WindTurbine",
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:WindTurbine"
}, {
  "@id" : "dbl:Windmill",
```

```
  "@type" : "dbl:BuildingNatureValue",
  "seeAlso" : "dbl-term:Windmill"
}, {
  "@id" : "dbl:Wood",
  "rdf:type" : [ {
    "@id" : "dbl:MaterialOfStructureValue"
  }, {
    "@id" : "dbl:MaterialOfFacadeValue"
  } ],
  "seeAlso" : "dbl-term:Wood"
}, {
  "@id" : "dbl:WoodShinglesOrShakes",
  "rdf:type" : {
    "@id" : "dbl:MaterialOfRoofValue"
  },
  "seeAlso" : "dbl-term:WoodShinglesOrShakes"
}, {
  "@id" : "dbl:address",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:address"
}, {
  "@id" : "dbl:adminUnit1stOrder",
  "@type" : "rdf:Property",
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:adminUnit1stOrder"
}, {
  "@id" : "dbl:adminUnit2ndOrder",
  "@type" : "rdf:Property",
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:adminUnit2ndOrder"
}, {
  "@id" : "dbl:adminUnit3rdOrder",
  "@type" : "rdf:Property",
```

```
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:adminUnit3rdOrder"
}, {
  "@id" : "dbl:administrativeUnit",
  "@type" : "rdf:Property",
  "domain" : "dbl:CadastralParcel",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:administrativeUnit"
}, {
  "@id" : "dbl:areaValue",
  "@type" : "rdf:Property",
  "domain" : "dbl:CadastralParcel",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:areaValue"
}, {
  "@id" : "dbl:assertionTimeEnd",
  "@type" : "rdf:Property",
  "domain" : "sml:Objectification",
  "range" : "xsd:dateTime",
  "seeAlso" : "dbl-term:assertionTimeEnd"
}, {
  "@id" : "dbl:assertionTimeStart",
  "@type" : "rdf:Property",
  "domain" : "sml:Objectification",
  "range" : "xsd:dateTime",
  "seeAlso" : "dbl-term:assertionTimeStart"
}, {
  "@id" : "dbl:assessmentMethod",
  "@type" : "rdf:Property",
  "domain" : "dbl:RelationReference",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:assessmentMethod"
}, {
  "@id" : "dbl:buildingNature",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
```

```
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:buildingNature"
  }, {
    "@id" : "dbl:buildingUnit",
    "@type" : "rdf:Property",
    "domain" : "dbl:Building",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:buildingUnit"
  }, {
    "@id" : "dbl:cadastralParcel",
    "@type" : "rdf:Property",
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:cadastralParcel"
  }, {
    "@id" : "dbl:circularityPerformance",
    "@type" : "rdf:Property",
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:circularityPerformance"
  }, {
    "@id" : "dbl:circumference",
    "@type" : "rdf:Property",
    "domain" : "dbl:CadastralParcel",
    "range" : "sml:QuantityValue",
    "seeAlso" : "dbl-term:circumference"
  }, {
    "@id" : "dbl:conditionOfConstruction",
    "@type" : "rdf:Property",
    "domain" : "dbl:Building",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:conditionOfConstruction"
  }, {
    "@id" : "dbl:connectionToElectricity",
    "@type" : "rdf:Property",
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:QualityValue",
```

```
  "seeAlso" : "dbl-term:connectionToElectricity"
}, {
  "@id" : "dbl:connectionToGas",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:connectionToGas"
}, {
  "@id" : "dbl:connectionToSewage",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:connectionToSewage"
}, {
  "@id" : "dbl:connectionToWater",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:connectionToWater"
}, {
  "@id" : "dbl:currentUse",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:currentUse"
}, {
  "@id" : "dbl:dateOfAssessment",
  "@type" : "rdf:Property",
  "domain" : "dbl:RelationReference",
  "range" : "xsd:dateTime",
  "seeAlso" : "dbl-term:dateOfAssessment"
}, {
  "@id" : "dbl:dateOfConstruction",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:dateOfConstruction"
```

```
}, {
  "@id" : "dbl:dateOfDemolition",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:dateOfDemolition"
}, {
  "@id" : "dbl:dateOfRenovation",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:dateOfRenovation"
}, {
  "@id" : "dbl:elevation",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:elevation"
}, {
  "@id" : "dbl:elevationReference",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "dbl:ElevationReferenceValue",
  "seeAlso" : "dbl-term:elevationReference"
}, {
  "@id" : "dbl:energyPerformance",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:energyPerformance"
}, {
  "@id" : "dbl:footprint",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:footprint"
}, {
```

```
  "@id" : "dbl:geographicalName",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:geographicalName"
}, {
  "@id" : "dbl:geometry",
  "@type" : "rdf:Property",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:geometry"
}, {
  "@id" : "dbl:grossFloorArea",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:grossFloorArea"
}, {
  "@id" : "dbl:grossVolume",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:grossVolume"
}, {
  "@id" : "dbl:hasCleanSoilStatement",
  "@type" : "rdf:Property",
  "domain" : "dbl:CadastralParcel",
  "range" : "sml:QualityValue",
  "seeAlso" : "dbl-term:hasCleanSoilStatement"
}, {
  "@id" : "dbl:heatingSource",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:heatingSource"
}, {
  "@id" : "dbl:heatingSystem",
  "@type" : "rdf:Property",
```

```
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:heatingSystem"
}, {
  "@id" : "dbl:heightAboveGround",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:heightAboveGround"
}, {
  "@id" : "dbl:heightBelowGround",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:heightBelowGround"
}, {
  "@id" : "dbl:heightReference",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "dbl:ElevationReferenceValue",
  "seeAlso" : "dbl-term:heightReference"
}, {
  "@id" : "dbl:heightStatus",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "dbl:HeightStatusValue",
  "seeAlso" : "dbl-term:heightStatus"
}, {
  "@id" : "dbl:horizontalGeometry",
  "@type" : "rdf:Property",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:horizontalGeometry"
}, {
  "@id" : "dbl:horizontalGeometryReference",
  "@type" : "rdf:Property",
  "domain" : "dbl:HorizontalGeometryReferenceValue",
  "range" : "sml:RelationReference",
```

```
  "seeAlso" : "dbl-term:horizontalGeometryReference"
}, {
  "@id" : "dbl:inspireId",
  "@type" : "rdf:Property",
  "domain" : "dbl:DBL-Root",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:inspireId"
}, {
  "@id" : "dbl:isDescribedByNativeBIM",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:isDescribedByNativeBIM"
}, {
  "@id" : "dbl:isDescribedByNativeGIS",
  "@type" : "rdf:Property",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:isDescribedByNativeGIS"
}, {
  "@id" : "dbl:isDescribedByOpenBIM",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:isDescribedByOpenBIM"
}, {
  "@id" : "dbl:isDescribedByOpenGIS",
  "@type" : "rdf:Property",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:isDescribedByOpenGIS"
}, {
  "@id" : "dbl:kindOfCommunicationConnection",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:kindOfCommunicationConnection"
}, {
  "@id" : "dbl:locatorDesignator",
```

```
    "@type" : "rdf:Property",
    "domain" : "dbl:Address",
    "range" : "xsd:string",
    "seeAlso" : "dbl-term:locatorDesignator"
  }, {
    "@id" : "dbl:locatorName",
    "@type" : "rdf:Property",
    "domain" : "dbl:Address",
    "range" : "xsd:string",
    "seeAlso" : "dbl-term:locatorName"
  }, {
    "@id" : "dbl:lowReference",
    "@type" : "rdf:Property",
    "domain" : "sml:QuantityValue",
    "range" : "dbl:ElevationReferenceValue",
    "seeAlso" : "dbl-term:lowReference"
  }, {
    "@id" : "dbl:materialOfFacade",
    "@type" : "rdf:Property",
    "domain" : "dbl:Building",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:materialOfFacade"
  }, {
    "@id" : "dbl:materialOfRoof",
    "@type" : "rdf:Property",
    "domain" : "dbl:Building",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:materialOfRoof"
  }, {
    "@id" : "dbl:materialOfStructure",
    "@type" : "rdf:Property",
    "domain" : "dbl:Building",
    "range" : "sml:RelationReference",
    "seeAlso" : "dbl-term:materialOfStructure"
  }, {
    "@id" : "dbl:nationalCadastralReference",
    "@type" : "rdf:Property",
```

```
  "domain" : "dbl:CadastralParcel",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:natialCadastralReference"
}, {
  "@id" : "dbl:netFloorArea",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:netFloorArea"
}, {
  "@id" : "dbl:netVolume",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:netVolume"
}, {
  "@id" : "dbl:numberOfBalconies",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfBalconies"
}, {
  "@id" : "dbl:numberOfBuildingUnits",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfBuildingUnits"
}, {
  "@id" : "dbl:numberOfDwellings",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfDwellings"
}, {
  "@id" : "dbl:numberOfEVChargingPoints",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
```

```
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfEVChargingPoints"
}, {
  "@id" : "dbl:numberOfElevators",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfElevators"
}, {
  "@id" : "dbl:numberOfFloorsAboveGround",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfFloorsAboveGround"
}, {
  "@id" : "dbl:numberOfFloorsBelowGround",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfFloorsBelowGround"
}, {
  "@id" : "dbl:numberOfRooms",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfRooms"
}, {
  "@id" : "dbl:numberOfSwimmingPools",
  "@type" : "rdf:Property",
  "domain" : "dbl:DBL-Root",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:numberOfSwimmingPools"
}, {
  "@id" : "dbl:officialArea",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
```

```
  "seeAlso" : "dbl-term:officialArea"
}, {
  "@id" : "dbl:officialAreaReference",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "dbl:OfficialAreaReferenceValue",
  "seeAlso" : "dbl-term:officialAreaReference"
}, {
  "@id" : "dbl:officialValue",
  "@type" : "rdf:Property",
  "domain" : "dbl:DBL-Root",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:officialValue"
}, {
  "@id" : "dbl:officialValueReference",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "dbl:OfficialValueReferenceValue",
  "seeAlso" : "dbl-term:officialValueReference"
}, {
  "@id" : "dbl:owner",
  "@type" : "rdf:Property",
  "domain" : "dbl:DBL-Root",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:owner"
}, {
  "@id" : "dbl:postCode",
  "@type" : "rdf:Property",
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:postCode"
}, {
  "@id" : "dbl:postName",
  "@type" : "rdf:Property",
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:postname"
```

```
}, {
  "@id" : "dbl:referencePoint",
  "@type" : "rdf:Property",
  "domain" : "dbl:CadastralParcel",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:referencePoint"
}, {
  "@id" : "dbl:renewableEnergyProduction",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:renewableEnergyProduction"
}, {
  "@id" : "dbl:roofType",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:roofType"
}, {
  "@id" : "dbl:smartReadinessIndicator",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:smartReadinessIndicator"
}, {
  "@id" : "dbl:solarSurfaceActual",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:solarSurfaceActual"
}, {
  "@id" : "dbl:solarSurfacePotential",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:solarSurfacePotential"
}, {
```

```
  "@id" : "dbl:srsName",
  "@type" : "rdf:Property",
  "domain" : "sml:QuantityValue",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:srsName"
}, {
  "@id" : "dbl:stateTimeEnd",
  "@type" : "rdf:Property",
  "domain" : "sml:Objectification",
  "range" : "xsd:dateTime",
  "seeAlso" : "dbl-term:stateTimeEnd"
}, {
  "@id" : "dbl:stateTimeStart",
  "@type" : "rdf:Property",
  "domain" : "sml:Objectification",
  "range" : "xsd:dateTime",
  "seeAlso" : "dbl-term:stateTimeStart"
}, {
  "@id" : "dbl:status",
  "@type" : "rdf:Property",
  "domain" : "sml:Objectification",
  "range" : "dbl:StatusValue",
  "seeAlso" : "dbl-term:status"
}, {
  "@id" : "dbl:tenant",
  "@type" : "rdf:Property",
  "domain" : "dbl:DBL-Root",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:tenant"
}, {
  "@id" : "dbl:thoroughfare",
  "@type" : "rdf:Property",
  "domain" : "dbl:Address",
  "range" : "xsd:string",
  "seeAlso" : "dbl-term:thoroughfare"
}, {
  "@id" : "dbl:uValueFacades",
```

```
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:uValueFacades"
}, {
  "@id" : "dbl:uValueFloors",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:uValueFloors"
}, {
  "@id" : "dbl:uValueRoofs",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:uValuesRoofs"
}, {
  "@id" : "dbl:uValueWindows",
  "@type" : "rdf:Property",
  "domain" : "dbl:Building",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:uValueWindows"
}, {
  "@id" : "dbl:ventilationSystem",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:RelationReference",
  "seeAlso" : "dbl-term:ventilationSystem"
}, {
  "@id" : "dbl:yearlyReuseOfWater",
  "@type" : "rdf:Property",
  "domain" : "dbl:BuildingOrBuildingUnit",
  "range" : "sml:QuantityValue",
  "seeAlso" : "dbl-term:yearlyReuseOfWater"
}, {
  "@id" : "dbl:yearlyUseOfElectricity",
  "@type" : "rdf:Property",
```

```
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:QuantityValue",
    "seeAlso" : "dbl-term:yearlyUseOfElectricity"
  }, {
    "@id" : "dbl:yearlyUseOfGas",
    "@type" : "rdf:Property",
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:QuantityValue",
    "seeAlso" : "dbl-term:yearlyUseOfGas"
  }, {
    "@id" : "dbl:yearlyUseOfWater",
    "@type" : "rdf:Property",
    "domain" : "dbl:BuildingOrBuildingUnit",
    "range" : "sml:QuantityValue",
    "seeAlso" : "dbl-term:yeralyUseOfWater"
  }, {
    "@id" : "https://data.europa.eu/dbl/rdfs/def",
    "@type" : "owl:Ontology",
    "imports" : [ "http://data.europa.eu/m8g", "http://www.opengis.net/ont/geosparql",
"http://xmlns.com/foaf/0.1/", "http://www.w3.org/ns/dcat", "https://data.europa.eu/dbl/skos/term",
"https://w3id.org/sml2/rdfs/def" ]
  } ],
  "@context" : {
    "seeAlso" : {
      "@id" : "http://www.w3.org/2000/01/rdf-schema#seeAlso",
      "@type" : "@id"
    },
    "range" : {
      "@id" : "http://www.w3.org/2000/01/rdf-schema#range",
      "@type" : "@id"
    },
    "domain" : {
      "@id" : "http://www.w3.org/2000/01/rdf-schema#domain",
      "@type" : "@id"
    },
    "member" : {
      "@id" : "http://www.w3.org/2000/01/rdf-schema#member",
```

```
      "@type" : "@id"
    },
    "imports" : {
      "@id" : "http://www.w3.org/2002/07/owl#imports",
      "@type" : "@id"
    },
    "subClassOf" : {
      "@id" : "http://www.w3.org/2000/01/rdf-schema#subClassOf",
      "@type" : "@id"
    },
    "qudt" : "http://qudt.org/schema/qudt/",
    "owl" : "http://www.w3.org/2002/07/owl#",
    "xsd" : "http://www.w3.org/2001/XMLSchema#",
    "skos" : "http://www.w3.org/2004/02/skos/core#",
    "rdfs" : "http://www.w3.org/2000/01/rdf-schema#",
    "dbl" : "https://data.europa.eu/dbl/def#",
    "quantitykind" : "http://qudt.org/vocab/quantitykind/",
    "geo" : "http://www.opengis.net/ont/geosparql#",
    "unit" : "http://qudt.org/vocab/unit/",
    "sml" : "https://w3id.org/sml/def#",
    "rdf" : "http://www.w3.org/1999/02/22-rdf-syntax-ns#",
    "sh" : "http://www.w3.org/ns/shacl#",
    "dbl-term" : "https://data.europa.eu/dbl/term#",
    "wgs84_pos" : "http://www.w3.org/2003/01/geo/wgs84_pos#",
    "dcat" : "http://www.w3.org/ns/dcat#",
    "locn" : "http://data.europa.eu/m8g/",
    "foaf" : "http://xmlns.com/foaf/0.1/"
  }
}
```


Appendix B: SKOS Dictionary code in JSON-LD


```
{
  "@graph" : [ {
    "@id" : "https://data.europa.eu/dbl/skos/term",
    "@type" : [ "skos:ConceptScheme", "owl:Ontology" ],
    "imports" : "https://w3id.org/sml2/skos/term"
```

```
  }, {
    "@id" : "dbl-term:4G",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A wireless 4G network is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "4G"
    }
  }, {
    "@id" : "dbl-term:5G",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A wireless 5G network is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "5G"
    }
  }, {
    "@id" : "dbl-term:A",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "First class according to the energy performance of the building (i.e. the most
efficient buildings for energy performance)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "A"
    }
  }, {
    "@id" : "dbl-term:AboveGroundEnvelope",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation or building horizontal geometry has been captured at the level of the
maximum extend of the above ground envelope of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "AboveGroundEnvelope"
    }
  }, {
    "@id" : "dbl-term:Address",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An identification of the fixed location of property (like a building) by means of a
structured composition of geographic names and identifiers."
```

```
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "Address"
    }
  }, {
    "@id" : "dbl-term:Adobe",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Use of a particular type of masonry for the facade, that involves the use of clay
bricks (adobe) formed in moulds and (traditionally) dried in the sun."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Adobe"
    }
  }, {
    "@id" : "dbl-term:AdobeBlockWalls",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Also known as moulded earth, is a building technique that involves the use of clay
bricks (adobe) formed in moulds and (traditionally) dried in the sun."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "AdobeBlockWalls"
    }
  }, {
    "@id" : "dbl-term:Agriculture",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) is used for agricultural activities."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Agriculture"
    }
  }, {
    "@id" : "dbl-term:Ancillary",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building (or building component) of small size that is used only in connection with
another larger building (or building component) and generally does not inherit the same function
and characteristics as the building (or building component) it is linked to."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Ancillary"
    }
```

```
}, {
  "@id" : "dbl-term:Arch",
  "@type" : "skos:Concept",
  "definition" : {
    "@language" : "en",
    "@value" : "A man-made structure in the form of an arch."
  },
  "prefLabel" : {
    "@language" : "en",
    "@value" : "Arch"
  }
}, {
  "@id" : "dbl-term:ArchRoof",
  "@type" : "skos:Concept",
  "definition" : {
    "@language" : "en",
    "@value" : "A roof taking the form of a semicircular span connected."
  },
  "prefLabel" : {
    "@language" : "en",
    "@value" : "ArchRoof"
  }
}, {
  "@id" : "dbl-term:As-built",
  "@type" : "skos:Concept",
  "defintion" : {
    "@language" : "en",
    "@value" : "Indicating that a property value is a realized value"
  },
  "prefLabel" : {
    "@language" : "en",
    "@value" : "As-built"
  }
}, {
  "@id" : "dbl-term:As-designed",
  "@type" : "skos:Concept",
  "defintion" : {
    "@language" : "en",
    "@value" : "Indicating that a property value is a proposed value"
  },
  "prefLabel" : {
    "@language" : "en",
    "@value" : "As-designed"
  }
}, {
  "@id" : "dbl-term:As-required",
  "@type" : "skos:Concept",
  "defintion" : {
    "@language" : "en",
    "@value" : "Indicating that a property value is a required value"
  },
  "prefLabel" : {
    "@language" : "en",
```

```
      "@value" : "As-required"
    }
  }, {
    "@id" : "dbl-term:As-used",
    "@type" : "skos:Concept",
    "defintion" : {
      "@language" : "en",
      "@value" : "Indicating that a property value is a current value"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "As-used"
    }
  }, {
    "@id" : "dbl-term:Asbestos",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Facade or roof constructed out of fibre reinforced concrete that includes asbestos
fibres."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Asbestos"
    }
  }, {
    "@id" : "dbl-term:B",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Second class according to the energy performance of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "B"
    }
  }, {
    "@id" : "dbl-term:Biogas",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is biogas."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Biogas"
    }
  }, {
    "@id" : "dbl-term:BottomOfConstruction",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

```
      "@value" : "The elevation has been captured at the bottom of the usable part of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "BottomOfConstruction"
    }
  }, {
    "@id" : "dbl-term:Building",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Enclosed constructions above and/or underground which are intended or used for the shelter of humans, animals, things or the production of economic goods and that refer to any structure permanently constructed or erected on its site."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Buiding"
    }
  }, {
    "@id" : "dbl-term:BuildingServices",
    "definition" : {
      "@language" : "en",
      "@value" : "The aspect of building services refers to all properties related to the technical installations part of a building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "BuildingServices"
    }
  }, {
    "@id" : "dbl-term:BuildingUnit",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "BuildingUnits are subdivisions of Building with their own lockable access from the outside or from a common area (i.e. not from another BuildingUnit), which are atomic, functionally independent, and may be separately sold, rented out, inherited, etc. Examples: apartment, business, shop, hospital etc."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "BuildingUnit"
    }
  }, {
    "@id" : "dbl-term:Bunker",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A facility, partly underground, intended for or used by the military either for location of command/control centers or for troop encampment."
    },
```

```
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Bunker"
    }
  }, {
    "@id" : "dbl-term:C",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Third class according to the energy performance of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "C"
    }
  }, {
    "@id" : "dbl-term:CP1",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CP1"
    }
  }, {
    "@id" : "dbl-term:CP2",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CP2"
    }
  }, {
    "@id" : "dbl-term:CP3",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CP3"
    }
  }, {
    "@id" : "dbl-term:Cable",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

```
      "@value" : "A coax cable is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Cable"
    }
  }, {
    "@id" : "dbl-term:CadastralParcel",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Areas defined by cadastral registers or equivalent. As much as possible, cadastral parcels should be forming a partition of national territory. Cadastral parcel should be considered as a single area of Earth surface (land and/or water), under homogeneous real property rights and unique ownership, real property rights and ownership being defined by national law."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CadastralParcel"
    }
  }, {
    "@id" : "dbl-term:Canopy",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An overhead roof providing shelter to things below. Canopies may be free standing frameworks over which a covering is attached or may be linked or suspended to the outside of a building. "
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Canopy"
    }
  }, {
    "@id" : "dbl-term:Castle",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A large ornate or fortified building usually constructed for the purpose of a private residence or security. "
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Castle"
    }
  }, {
    "@id" : "dbl-term:CaveBuilding",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A space hosting human or economic activity which is usually enclosed within rock with the addition of man-made exterior walls and which may contain structures comparable to the interior structures of freestanding buildings."
```

```
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CaveBuilding"
    }
  }, {
    "@id" : "dbl-term:CentralHeating",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Central heating system performed at building or at building unit level."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CentralHeating"
    }
  }, {
    "@id" : "dbl-term:CeramicTiles",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Ceramic tiles of different colours and design are used for covering the facade of the building. For the roofs they are traditionally of the barrel type, what is referred to today as cap and pan roof tiles."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CeramicTiles"
    }
  }, {
    "@id" : "dbl-term:Chapel",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A Christian place of worship, usually smaller than a church."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Chapel"
    }
  }, {
    "@id" : "dbl-term:Church",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building or structure whose primary purpose is to facilitate the catholic or orthodox cult."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Church"
    }
  }, {
```

```
    "@id" : "dbl-term:CircularityPerformanceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CircularityPerformanceValue"
    }
  }, {
    "@id" : "dbl-term:ClayTile",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Is a specific type of ceramic tile, made of fired terracotta. It is generally semi-cylindrical, made by forming clay around a curved surface and laid in alternating columns of convex and concave tiles."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ClayTile"
    }
  }, {
    "@id" : "dbl-term:CollectiveResidential",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts more than one dwelling."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CollectiveResidential"
    }
  }, {
    "@id" : "dbl-term:Combined",
    "@type" : "skos:Concept",
    "PrefLabel" : {
      "@language" : "en",
      "@value" : "Combined"
    },
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry has been obtained from the combination of the geometries of its building parts with the geometries of the building parts using different horizontal geometry references."
    }
  }, {
    "@id" : "dbl-term:CommerceAndServices",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) is used for any service activities. This value addresses the buildings and building components dedicated to tertiary sector activities (commercial and services)."
    },
    "prefLabel" : {
```

```
      "@language" : "en",
      "@value" : "CommerceAndServices"
    }
  }, {
    "@id" : "dbl-term:Composite",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Composite material, such as plastics, PVC and fibreglass are used to cover the
facade of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Composite"
    }
  }, {
    "@id" : "dbl-term:Composition",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Composition shingles are the most widely used roofing material. They are also
called asphalt shingles that could either be organic fibre mat or fibreglass core. Both types are
steeped in asphalt and then coated with mineral granules to add colour and texture. Most shingles
have an adhesive back that when reinforced with tacks, staples or nails for attaching on roof
frames would result in a tight fit."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Composition"
    }
  }, {
    "@id" : "dbl-term:Concrete",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The surface of the facade is constructed out of (reinforced, with bars or fibres-other
than asbestos) concrete."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Concrete"
    }
  }, {
    "@id" : "dbl-term:ConcreteBlockMasonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Unreinforced concrete block masonry, with lime/cement mortar."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ConcreteBlockMasonry"
    }
```

```
  }, {
    "@id" : "dbl-term:ConcreteTile",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Roofing material consisting of shingles, simulated wood shakes, lighter-weight tiles
and concrete panels manufactured from a variety of fibre-reinforced cement products."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ConcreteTile"
    }
  }, {
    "@id" : "dbl-term:ConditionOfConstructionValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ConditionOfConstructionValue"
    }
  }, {
    "@id" : "dbl-term:ConicalRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An inverted cone roof construction usually atop of a cylindrical tower."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ConicalRoof"
    }
  }, {
    "@id" : "dbl-term:ConstructedArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Constructed area is the difference between the external area and the internal area
of the building or building unit."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "ConstructedArea"
    }
  }, {
    "@id" : "dbl-term:CurrentUseValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CurrentUseValue"
    }
  }, {
    "@id" : "dbl-term:CorrugatedSheet",
    "@type" : "skos:Concept",
    "definition" : {
```

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      "@language" : "en",
      "@value" : "Roofs of corrugated sheet may be of fibreglass, PVC or metal; less frequent is the use of galvanized iron sheet."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CorrugatedSheet"
    }
  }, {
    "@id" : "dbl-term:D",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Fourth class according to the energy performance of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "D"
    }
  }, {
    "@id" : "dbl-term:Dam",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A permanent barrier across a watercourse used to impound water or to control its flow."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Dam"
    }
  }, {
    "@id" : "dbl-term:Declined",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction cannot be used under normal conditions, though its main elements (walls, roof) are still present."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Declined"
    }
  }, {
    "@id" : "dbl-term:Demolished",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction has been demolished. There are no more visible remains."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Demolished"
```

```
    }
  }, {
    "@id" : "dbl-term:Dimensions",
    "definition" : {
      "@language" : "en",
      "@value" : "The aspect of dimensions refers to all properties that give information about is location, orientation and inner (interior) or outer (boundary) geometry. Typically involving some coordinate reference system (CRS)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Dimensions"
    }
  }, {
    "@id" : "dbl-term:DistrictHeating",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Central heating system, based on district heating."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "DistrictHeating"
    }
  }, {
    "@id" : "dbl-term:DomedRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Roof formed of a thin curved structural slab."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "DomedRoof"
    }
  }, {
    "@id" : "dbl-term:DualPentRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A roof that has two or more single plane roofs, usually separated or connected by vertical walls."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "DualPentRoof"
    }
  }, {
    "@id" : "dbl-term:E",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Fifth class according to the energy performance of the building."
```

```
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "E"
    }
  }, {
    "@id" : "dbl-term:Earth",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Rammed earth or pneumatically impacted stabilized earth. Rammed earth construction (also referred to as tapial in Spanish, or else, pied-a-terre, in France) is conducted by erecting wooden or metal forms for the walls and filling them with a moist cement stabilized earth mix which is compacted by pounding with hand tools (with conical or flat heads) or with a mechanical compactor. Metal rebar is often added to further increase ductility."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Earth"
    }
  }, {
    "@id" : "dbl-term:ElectricRadiators",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Heating is performed by electric radiators."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ElectricRadiators"
    }
  }, {
    "@id" : "dbl-term:Electricity",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is electricity distributed from power plant."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Electricity"
    }
  }, {
    "@id" : "dbl-term:ElevationReferenceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ElevationReferenceValue"
    }
  }, {
    "@id" : "dbl-term:EnergyPerformanceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
```

```
      "@language" : "en",
      "@value" : "EnergyPerformanceValue"
    }
  }, {
    "@id" : "dbl-term:EntrancePoint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation or building horizontal geometry has been captured at the entrance of the construction, generally the bottom of entrance door."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "EntrancePoint"
    }
  }, {
    "@id" : "dbl-term:Envelope",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry has been captured using the whole envelope of the building, i.e. the maximum extent of the building above and under ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Envelope"
    }
  }, {
    "@id" : "dbl-term:Estimated",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The height has been estimated and not measured."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "Estimated"
    }
  }, {
    "@id" : "dbl-term:ExternaldArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "External area is the area within the outer perimeter boundary of a building or building unit, including any outer cladding, measured at floor level."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "ExternalArea"
    }
  }, {
    "@id" : "dbl-term:F",
    "@type" : "skos:Concept",
```

```
    "definition" : {
      "@language" : "en",
      "@value" : "Sixth class according to the energy performance of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "F"
    }
  }, {
    "@id" : "dbl-term:FiredBrickMasonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Unreinforced fired brick masonry. Buildings of this type have perimeter walls, and possibly some interior walls, constructed of unreinforced fired brick blocks. These perimeter walls are sometimes used as load bearing walls and have no internal reinforcing steel rods. Anchor plates are sometimes used to tie the walls to the floors and roof and are conspicuous from the outside of the structure. Unusual brick patterns may also indicate unreinforced fired brick masonry."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "FiredBrickMasonry"
    }
  }, {
    "@id" : "dbl-term:FlatRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Roof either horizontal or with a slope of 10 percent or less."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "FlatRoof"
    }
  }, {
    "@id" : "dbl-term:FootPrint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry has been captured using the footprint of the building, i.e. its extent at ground level."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Footprint"
    }
  }, {
    "@id" : "dbl-term:Functional",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction is functional."
    },
```

```
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Functional"
    }
  }, {
    "@id" : "dbl-term:G",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Seventh and last class according to the energy performance of the building (i.e. the least efficient buildings for energy performance)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "G"
    }
  }, {
    "@id" : "dbl-term:GabledRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Pitched roof that terminates at one or both ends as a gable."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "GabledRoof"
    }
  }, {
    "@id" : "dbl-term:General",
    "definition" : {
      "@language" : "en",
      "@value" : "This generic aspect refers to all properties that are hard to classify towards any other aspect defined here like relations to other key objects, locations and specific life-cycle events in time."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "General"
    }
  }, {
    "@id" : "dbl-term:GeneralEave",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on one of the meeting lines between the roof and the walls."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "GeneralEave"
    }
  }, {
    "@id" : "dbl-term:GeneralGround",
```

```
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on one of the meeting lines between the
construction and the ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "GeneralGround"
    }
  }, {
    "@id" : "dbl-term:GeneralRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured anywhere on the roof."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "GeneralRoof"
    }
  }, {
    "@id" : "dbl-term:GeneralRoofEdge",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on one of the roof edges."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "GeneralRoofEdge"
    }
  }, {
    "@id" : "dbl-term:Glass",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Known as structural glass, is used for glazing the facade of buildings through the
use of curtain wall systems, frameless glazing systems, polycarbonate sheeting or architectural flat
glass. For roof constructed out of glass: typically used in roofs covering internal atriums or in
greenhouses."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Glass"
    }
  }, {
    "@id" : "dbl-term:Greenhouse",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

```
      "@value" : "A building that is often constructed primarily of transparent material (for example: glass), in which temperature and humidity can be controlled for the cultivation and/or protection of plants."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Greenhouse"
    }
  }, {
    "@id" : "dbl-term:HalfHippedRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A roof where all planes slope down to the supporting walls but with the upper point of the gable squared off."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HalfHippedRoof"
    }
  }, {
    "@id" : "dbl-term:HeatPump",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating is performed by a heat pump that transfers thermal energy from an air source or geothermal source."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HeatPump"
    }
  }, {
    "@id" : "dbl-term:HeatingSourceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HeatingSourceValue"
    }
  }, {
    "@id" : "dbl-term:HeatingSystemValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HeatingSystemValue"
    }
  }, {
    "@id" : "dbl-term:HeightStatusValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HeightStatusValue"
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  }, {
    "@id" : "dbl-term:HighestEave",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on the highest meeting line between the roof and
the walls."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HighestEave"
    }
  }, {
    "@id" : "dbl-term:HighestGroundPoint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on the highest point of the meeting lines between
the construction and the ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HighestGroundPoint"
    }
  }, {
    "@id" : "dbl-term:HighestPoint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured at the highest point of the construction, including
the installations, such as chimneys and antennas."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HighestPoint"
    }
  }, {
    "@id" : "dbl-term:HighestRoofEdge",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured at the highest roof edge level of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HighestRoofEdge"
    }
  }, {
    "@id" : "dbl-term:HippedRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Pitched roof with hip end or ends."
```

```
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HippedRoof"
    }
  }, {
    "@id" : "dbl-term:HotMoppedAsphalt",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Hot mopped asphalt roofing is usually applied to flat or semi-flat residential roofs
that have good access and proper drainage."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HotMoppedAsphalt"
    }
  }, {
    "@id" : "dbl-term:Hybrid",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The ventilation system is a combination of natural processes and a mechanical
system"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Hybrid"
    }
  }, {
    "@id" : "dbl-term:HyperbolicParabaloidalRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A roof constructed with two axes with one plane following a convex curve and
another a concave curve."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "HyperbolicParabaloidalRoof"
    }
  }, {
    "@id" : "dbl-term:Identification",
    "definition" : {
      "@language" : "en",
      "@value" : "The aspect of identification refers to all properties that somehow  uniquely denote
an abstract or concrete thing, existing in reality or only planned. Identification is the typically the
first step in Identification, Authentication & authorisation."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Identification"
    }
```

```
  }, {
    "@id" : "dbl-term:IndividualResidential",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts only one dwelling."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "IndividualResidential"
    }
  }, {
    "@id" : "dbl-term:Industrial",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) is used for secondary sector activities
(industrial)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Industrial"
    }
  }, {
    "@id" : "dbl-term:InformalConstructions",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Parts of slums/squatters. Informal constructions are non-engineered and are built by
self-builders ."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "InformalConstructions"
    }
  }, {
    "@id" : "dbl-term:InternalArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Internal area is the area within the interior perimeter of a building or building unit,
measured above skirting-board level."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "InternalArea"
    }
  }, {
    "@id" : "dbl-term:InternalOtherArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

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      "@value" : "Internal other area is the sum of all floor areas with a heightroom <
heightParameter and that are associated with the main uses of the building."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "InternalOtherArea"
    }
  }, {
    "@id" : "dbl-term:InternalPrimaryArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Internal primary area is the sum of all floor areas with a heightroom superior or
equal to heightParameter and that are associated with the principal uses of the building."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "InternalPrimaryArea"
    }
  }, {
    "@id" : "dbl-term:InternalResidualArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Internal residual area is the sum of all floor areas regardless of height that are not
consistent with the principal use of the building."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "INternalResidualArea"
    }
  }, {
    "@id" : "dbl-term:InternalServiceArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Internal service area is the sum of all floor areas used for building services,
irrespective of their height or occupation."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "InternalServiceArea"
    }
  }, {
    "@id" : "dbl-term:KindOfCommunicationConnectionValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "KindOfCommunicationConnectionValue"
    }
  }, {
    "@id" : "dbl-term:LegalAndFinance",
    "definition" : {
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```
      "@language" : "en",
      "@value" : "The aspect of legal & finance refers to all properties that are used in formal transactions like prove of ownership and taxation values."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LegalAndFinance"
    }
  }, {
    "@id" : "dbl-term:Lighthouse",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A tower designed to emit light from a system of lamps and lenses."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Lighthouse"
    }
  }, {
    "@id" : "dbl-term:Limestone",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The facade of the building is composed of limestone, a sedimentary rock composed largely of calcite and/or aragonite."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Limestone"
    }
  }, {
    "@id" : "dbl-term:LiquidFuels",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is liquid fuel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LiquidFuels"
    }
  }, {
    "@id" : "dbl-term:LowestEave",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on the lowest meeting line between the roof and the walls."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LowestEave"
```

```
    }
  }, {
    "@id" : "dbl-term:LowestFloorAboveGround",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation or building horizontal geometry has been captured at the level of the
lowest floor above ground of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LowestFloorAboveGround"
    }
  }, {
    "@id" : "dbl-term:LowestGroundPoint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured on the lowest point of the meeting lines between
the construction and the ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LowestGroundPoint"
    }
  }, {
    "@id" : "dbl-term:LowestRoofEdge",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured at the lowest roof edge level of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "LowestRoofEdge"
    }
  }, {
    "@id" : "dbl-term:MansardRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Pitched roof with two inclined planes on each side of the ridge , the steeper of the
two starting at the eaves"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MansardRoof"
    }
  }, {
    "@id" : "dbl-term:Masonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

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      "@value" : "The facade consists of individual units made of fired clay brick or concrete block laid in and bound together by mortar."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Masonry"
    }
  }, {
    "@id" : "dbl-term:MassiveStoneMasonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Massive stone masonry with lime/cement mortar. Is constructed with a coursed double leaf masonry, with the outer layers of stonework levelled as the construction progresses and follows a well established masonry bond. The stone units are cut in regular dimensions. To improve the connection between cross walls better quality units are used for the bond in these areas."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MassiveStomeMasonry"
    }
  }, {
    "@id" : "dbl-term:MaterialOfFacadeValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MaterialOfFacadeValue"
    }
  }, {
    "@id" : "dbl-term:MaterialOfRoofValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MaterialOfRoofValue"
    }
  }, {
    "@id" : "dbl-term:MaterialOfStructureValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MaterialOfStructureValue"
    }
  }, {
    "@id" : "dbl-term:Measured",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The height has been (directly or indirectly) measured."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "Measured"
```

```
    }
  }, {
    "@id" : "dbl-term:Mechanical",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The ventilation system is based on a mechanical system"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Mechanical"
    }
  }, {
    "@id" : "dbl-term:Metal",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The surface of the building is covered with metal in the form of galvanized steel
with paint, aluminium with paint, stainless steel, zinc, lead or copper."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Metal"
    }
  }, {
    "@id" : "dbl-term:Missing",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Not existing."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Missing"
    }
  }, {
    "@id" : "dbl-term:MobileHomes",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A structure designed or adapted for human habitation which is capable of being
moved from one place to another (whether by being towed, or by being transported on a motor
vehicle or trailer) and any motor vehicle so designed or adapted."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MobilesHomes"
    }
  }, {
    "@id" : "dbl-term:MonopitchRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

```
      "@value" : "Pitched roof that has only a single plane."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MonopitchRoof"
    }
  }, {
    "@id" : "dbl-term:MoreThanTwoDwelling",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts at least 3 dwellings."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MoreThanTwoDwellings"
    }
  }, {
    "@id" : "dbl-term:Mosque",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building or structure whose primary purpose is to facilitate the muslim cult."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Mosque"
    }
  }, {
    "@id" : "dbl-term:MudWalls",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Mud walls may be made of stacked earth or poured earth. Stacked earth consists in
forming balls of plastic soil, which are freshly stacked on each other. Poured earth walls on the
other hand are erected between formwork using a sandy material with coarse to fine granular
particles. The ultimate finish can be natural - from the formwork- or sand blasted."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "MudWalls"
    }
  }, {
    "@id" : "dbl-term:NativeBIM",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A Building Information Model in a proprietary format/semantics. Like a REVIT model."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "NativeBIM"
    }
```

```
  }, {
    "@id" : "dbl-term:NativeGIS",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A GIS/GEO model in a proprietary format/semantics. Like an ESRI model."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "NativeGIS"
    }
  }, {
    "@id" : "dbl-term:Natural",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The ventilation system is based on natural processes"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Natural"
    }
  }, {
    "@id" : "dbl-term:NaturalStone",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The facade is covered with natural stone, such as granite or marble, and may come
in different colours and finishing."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "NaturalStone"
    }
  }, {
    "@id" : "dbl-term:Naturalgas",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is fossil gas distributed by pipeline."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Naturalgas"
    }
  }, {
    "@id" : "dbl-term:Office",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts offices."
    },
    "prefLabel" : {
```

```
      "@language" : "en",
      "@value" : "Office"
    }
  }, {
    "@id" : "dbl-term:OfficialAreaReferenceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "OfficialAreaReferenceValue"
    }
  }, {
    "@id" : "dbl-term:OfficialValueReferenceValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "OfficialValueReferenceValue"
    }
  }, {
    "@id" : "dbl-term:OpenBIM",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A Building Information Model in an open format/semantics. Like a an IFC or gbXML
model."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "OpenBIM"
    }
  }, {
    "@id" : "dbl-term:OpenGIS",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A GIS/GEO Model in an open format/semantics. Like a GML/CITYGML or CityJSON
model."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "NativeGIS"
    }
  }, {
    "@id" : "dbl-term:Optical",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Glass fiber is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Optical"
    }
  }, {
```

```
    "@id" : "dbl-term:PavilionRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A roof construction with equal hips on all planes, usually taking the form of a
pyramidal shape."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PavilionRoof"
    }
  }, {
    "@id" : "dbl-term:Performance",
    "definition" : {
      "@language" : "en",
      "@value" : "The aspect of performance refers to all properties that tell us about functional
usage of some technical object. How it performs in its environment."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Performance"
    }
  }, {
    "@id" : "dbl-term:PointInsideBuilding",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry is represented by a point located within the
building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PointInsideBuilding"
    }
  }, {
    "@id" : "dbl-term:PointInsideCadastralParcel",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry is represented by a point located within the parcel
the building belongs to."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PointInsideCadastralParcel"
    }
  }, {
    "@id" : "dbl-term:PortableGasHeating",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Heating is performed by a portable device using liquefied petroleum gas."
    },
```

```
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PortableGasHeating"
    }
  }, {
    "@id" : "dbl-term:PrecastConcrete",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Precast wall panel construction. Buildings of this type are low-rise structures with precast reinforced concrete wall panels that are often poured on the ground and tilted into place. Roofs are often composed of either plywood sheathing or metal decking, and glass curtain walls may exist at the building perimeter."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PrecastConcrete"
    }
  }, {
    "@id" : "dbl-term:Projected",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction is being designed. Construction has not yet started."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Projected"
    }
  }, {
    "@id" : "dbl-term:PublicServices",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts public services. Public services are tertiary services provided for the benefit of the citizens."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PublicServices"
    }
  }, {
    "@id" : "dbl-term:PyramidalBroachRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A suspended roof construction with all four planes meeting at a central point."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "PyramidalRoof"
    }
  }, {
```

```
    "@id" : "dbl-term:ReinforcedConcrete",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The load resisting system is made of reinforced concrete, a combination of steel reinforcement bars embedded in concrete that act together in resisting forces. Reinforced concrete buildings may be constructed as moment resisting frames (beams and columns framing at nodes), or in combination with shear walls. Roofs constructed out of reinforced concrete, normally along flat or semi-flat surfaces used in terraces or inclined roofs."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ReinforcedConcrete"
    }
  }, {
    "@id" : "dbl-term:ReinforcedMasonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Buildings of this type have exterior walls consisting of grouted (with concrete) masonry (clay brick or concrete block masonry) with internal reinforcing steel rods."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ReinforcedMasonry"
    }
  }, {
    "@id" : "dbl-term:RentalIncome",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference for official value is the rental income for the building or building unit, according to market prices."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "RentalIncome"
    }
  }, {
    "@id" : "dbl-term:ResidenceForCommunities",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts a residence for communities."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ResidenceForCummunities"
    }
  }, {
    "@id" : "dbl-term:Residential",
    "@type" : "skos:Concept",
    "definition" : {
```

```
      "@language" : "en",
      "@value" : "The building (or building component) is used for residential purpose."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Residential"
    }
  }, {
    "@id" : "dbl-term:RoofEdge",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building horizontal geometry has been captured using the roof edges of the
building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "RoofEdge"
    }
  }, {
    "@id" : "dbl-term:RoofTypeValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "RoofTypeValue"
    }
  }, {
    "@id" : "dbl-term:RubleStoneMasonry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Ruble stone is field stone. Is a masonry technique that incorporates any material
found or recovered, such as dressed blocks, broken fragments, brick or flint."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "RubleStoneMasonry"
    }
  }, {
    "@id" : "dbl-term:Ruin",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction has been partly demolished and some main elements (roof, walls)
have been destroyed. There are some visible remains of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Ruin"
    }
  }, {
    "@id" : "dbl-term:SRI1",
    "@type" : "skos:Concept",
```

```
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CSRI1"
    }
  }, {
    "@id" : "dbl-term:SRI2",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CSRI2"
    }
  }, {
    "@id" : "dbl-term:SRI3",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "TBD"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "CSRI3"
    }
  }, {
    "@id" : "dbl-term:SawToothRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Series of pitched roofs , each with one inclined plane steeper than the other and
fully or partially glazed"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "SawToothRoof"
    }
  }, {
    "@id" : "dbl-term:Shed",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building of light construction, which usually has one or more open sides, that is
typically used for storage."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Shed"
```

```
    }
  }, {
    "@id" : "dbl-term:Silo",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A large storage structure, generally cylindrical, used for storing loose materials."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Silo"
    }
  }, {
    "@id" : "dbl-term:Slate",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Slate is a shingle-like sliver of rock or natural stone, offering a natural look laid out
in a variety of patterns. It comes in different sizes and colours, although colours are limited to
those found in nature."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Slate"
    }
  }, {
    "@id" : "dbl-term:SmartReadinessIndicatorValue",
    "@type" : "s",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "SmartReadinessIndicatorValue"
    }
  }, {
    "@id" : "dbl-term:SolarHeating",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating is performed by a solar collector heating the air or liquid based heating
system."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "SolarHeating"
    }
  }, {
    "@id" : "dbl-term:SolidFuels",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is solid fuel."
    },
    "prefLabel" : {
      "@language" : "en",
```

```
      "@value" : "SolidFuels"
    }
  }, {
    "@id" : "dbl-term:Stadium",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A place or venue for sports, concerts or other events and consists of a field or stage either partly or completely surrounded by a structure designed to allow spectators to stand or sit and view the event."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Stadium"
    }
  }, {
    "@id" : "dbl-term:Steel",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The load resisting system of the building is made of structural steel, which may be made composite with reinforced concrete at floor slabs. Steel structures may be constructed as moments resisting frames, as concentrically or eccentrically braced frames, or as spatial trusses. The members of the structure may be bolted or welded."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Steel"
    }
  }, {
    "@id" : "dbl-term:StoneMasonryBlock",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Consist of masonry buildings constructed with stone blocks cut from igneous, metamorphic or sedimentary rocks. This type of buildings are generally unreinforced and may be joined with lime/cement mortar."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "StoneMasonryBlock"
    }
  }, {
    "@id" : "dbl-term:StorageTank",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A container usually for holding liquids and compressed gases."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "StorageTank"
    }
```

```
  }, {
    "@id" : "dbl-term:Stove",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Heating performed by a stove."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Stove"
    }
  }, {
    "@id" : "dbl-term:Straw",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source is solid biofuels from straw and agricultural waste."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Straw"
    }
  }, {
    "@id" : "dbl-term:StructureAndMaterial",
    "definition" : {
      "@language" : "en",
      "@value" : "The aspect of structure & material refers to all properties related to the breakdown
and materialization of an object."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "StructureAndMaterial"
    }
  }, {
    "@id" : "dbl-term:Synagogue",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building or structure whose primary purpose is to facilitate the israelit cult."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Synagogue"
    }
  }, {
    "@id" : "dbl-term:TelephoneLine",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A telephone line is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
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```
      "@value" : "TelephoneLine"
    }
  }, {
    "@id" : "dbl-term:Temple",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building or structure whose primary purpose is to facilitate the meeting of a
religious sect."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Temple"
    }
  }, {
    "@id" : "dbl-term:Thatch",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Roofs are built by thatching, which is the craft of building a roof with dry vegetation
such as straw, water reed, sedge, rushes and heather, layering the vegetation so as to shed water
away from the inner roof."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Thatch"
    }
  }, {
    "@id" : "dbl-term:TopOfConstruction",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The elevation has been captured at the top level of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "TopOfConstruction"
    }
  }, {
    "@id" : "dbl-term:Tower",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A relatively tall, narrow structure that may either stand alone or may form part of
another structure. "
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Tower"
    }
  }, {
    "@id" : "dbl-term:Trade",
    "@type" : "skos:Concept",
```

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    "definition" : {
      "@language" : "en",
      "@value" : "The building (or building component) hosts trade activities."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Trade"
    }
  }, {
    "@id" : "dbl-term:TransactionPriceFull",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference for official value is the market price for transaction (selling, inheritance...) of the building and of the cadastral parcel on which the building is erected. In case of a building unit, the transaction price medium includes the building unit and the ratio of cadastral parcel associated to the building unit."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "TransactionPriceFull"
    }
  }, {
    "@id" : "dbl-term:TransactionPriceMedium",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference for official value is the market price for transaction (selling, inheritance, ...) of the building and of the land on which the building is erected. In case of a building unit, the transaction price medium includes the building unit and the ratio of land associated to the building unit."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "TransactionPriceMedium"
    }
  }, {
    "@id" : "dbl-term:TransactionPriceSimple",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference for official value is the market price for transaction (selling, inheritance...) of the building or building unit alone."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "TransactionPriceSimple"
    }
  }, {
    "@id" : "dbl-term:TwoDwellings",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
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      "@value" : "The building (or building component) hosts two dwellings."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "TwoDwellings"
    }
  }, {
    "@id" : "dbl-term:UnderConstruction",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The construction is under construction and not yet functional. This applies only to
the initial construction of the construction and not to maintenance work."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "UnderConstruction"
    }
  }, {
    "@id" : "dbl-term:Vegetated",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The facade is covered with vegetation and a growing medium, planted over a
waterproofing membrane"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Vegtated"
    }
  }, {
    "@id" : "dbl-term:VegtatedGreenRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Also known as eco-roofs, a vegetated or green roof is a roof of a building that is
partially or completely covered with vegetation and a growing medium, planted over a
waterproofing membrane. It may also include additional layers such as a root barrier and drainage
and irrigation systems."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "VegtatedGreenRoof"
    }
  }, {
    "@id" : "dbl-term:VentilationSystemValue",
    "@type" : "skos:Concept",
    "prefLabel" : {
      "@language" : "en",
      "@value" : "VentilationSystemValue"
    }
  }, {
    "@id" : "dbl-term:WarmWaterOrSteam",
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```
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The heating source used by the building or building unit is hot water or stream."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "WarmwaterOrSteam"
    }
  }, {
    "@id" : "dbl-term:WiFi",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A wireless wifi network is present for communication"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Wifi"
    }
  }, {
    "@id" : "dbl-term:WindTurbine",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A tower and associated equipment that generates electrical power from wind."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "WindTurbine"
    }
  }, {
    "@id" : "dbl-term:Windmill",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A building which converts the energy of the wind into rotational motion by means of
adjustable sails or blades."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Windmill"
    }
  }, {
    "@id" : "dbl-term:Wood",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The facade or the structure of the building is covered with wood, timber or lumber."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "Wood"
```

```
    }
  }, {
    "@id" : "dbl-term:WoodShinglesOrShakes",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Wood shingles or shakes are differentiated by size and texture. Shingles are cut to a specific size and have smooth finish. Shakes are rough-textures and are irregular in shape."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "WoodShinglesOrShakes"
    }
  }, {
    "@id" : "dbl-term:address",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The address of a building or building unit."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "address"
    }
  }, {
    "@id" : "dbl-term:adminUnit1stOrder",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Position derived from the related administrative unit of 1st order. For DBL we interpret this to be a country."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "adminUnit1stOrder"
    }
  }, {
    "@id" : "dbl-term:adminUnit2ndOrder",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Position derived from the related administrative unit of 12nd order.  For DBL we interpret this to be a state, province, etc. as region withing a country."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "adminUnit2ndOrder"
    }
  }, {
    "@id" : "dbl-term:adminUnit3rdOrder",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
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      "@value" : "Position derived from the related administrative unit of 3rd order. For DBL we
interpret this to be a municipality."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "adminUnit3rdOrder"
    }
  }, {
    "@id" : "dbl-term:administrativeUnit",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The administrative unit of lowest administrative level containing this cadastral
parcel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "administrativeUnit"
    }
  }, {
    "@id" : "dbl-term:areaValue",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The area value of the parcel typically in M2."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "areaValue"
    }
  }, {
    "@id" : "dbl-term:assertionTimeEnd",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used to indicate the end time of the assertion about a property value"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "assertionTimeEnd"
    }
  }, {
    "@id" : "dbl-term:assertionTimeStart",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used to indicate the start time of the assertion about a property value"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "assertionTimeStart"
    }
  }, {
```

```
    "@id" : "dbl-term:assessmentMethod",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference to the method or document describing the assessment method of
performance."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "assessmentMethod"
    }
  }, {
    "@id" : "dbl-term:buildingNature",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Characteristic of the building that makes it generally of interest for mappings
applications. The characteristic may be related to the physical aspect and/or to the function of the
building. One of : Arch, Bunker, Canopy, Castle, Cave building, Chapel, Church, Dam, Greenhouse,
Lighthouse, Mosque, Shed, Silo, Stadium, Storage Tank, Synagogue, Temple, Tower, Windmill or
Wind turbine."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "buildingNature"
    }
  }, {
    "@id" : "dbl-term:buildingUnit",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The building unit(s) belonging to the building or building part."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "buildingUnit"
    }
  }, {
    "@id" : "dbl-term:cadastralParcel",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The cadastral parcel(s) to which the building or building part or building unit is
officially related."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "cadastralParcel"
    }
  }, {
    "@id" : "dbl-term:circularityPerformance",
    "@type" : "skos:Concept",
    "definition" : {
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```
      "@language" : "en",
      "@value" : "A total performance label for circularity related to material scarcity and environmental impacts, based on the total life cycle of a building or building unit. Taking into account all its products/materials that are part of it."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "circularityPerformance"
    }
  }, {
    "@id" : "dbl-term:circumference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The total circumference of a parcel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "circumference"
    }
  }, {
    "@id" : "dbl-term:conditionOfConstruction",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Status of the construction. One of: Declined, Functional, Demolished, Projected, Ruin or UnderConstruction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "conditionOfConstruction"
    }
  }, {
    "@id" : "dbl-term:connectionToElectricity",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An indication if the building or building part or building unit is connected or not to the public electricity network."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "connectionToElectricity"
    }
  }, {
    "@id" : "dbl-term:connectionToGas",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An indication if the building or building part or building unit is connected or not to the public gas network."
    },
    "prefLabel" : {
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      "@language" : "en",
      "@value" : "connectionToGas"
    }
  }, {
    "@id" : "dbl-term:connectionToSewage",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An indication if the building or building unit is connected or not to the public sewage network."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "connectionToSewage"
    }
  }, {
    "@id" : "dbl-term:connectionToWater",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "An indication if the building or building unit is connected or not to the public water network."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "connectionToWater"
    }
  }, {
    "@id" : "dbl-term:currentUse",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Activity hosted within the building or building unit. This attribute addresses mainly the buildings hosting human activities. One of: Residential, IndividualResidential, CollectiveResidential, TwoDwellings, MoreThanTwoDwelling, ResidenceForCommunities, Agriculture, Industrial, CommerceAndServices, Office, Trade, PublicServices or Ancilary."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "currentUse"
    }
  }, {
    "@id" : "dbl-term:dateOfAssessment",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The date when the energy, circularity or smart readiness (or other) performance of the building or building unit was assessed."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "dateOfAssessment"
    }
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  }, {
    "@id" : "dbl-term:dateOfConstruction",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Date of construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "dateOfConstruction"
    }
  }, {
    "@id" : "dbl-term:dateOfDemolition",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Date of demolition."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "dateOfDemolition"
    }
  }, {
    "@id" : "dbl-term:dateOfRenovation",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Date of last major renovation."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "dateOfRenovation"
    }
  }, {
    "@id" : "dbl-term:elevation",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Vertically-constrained dimensional property consisting of an absolute measure
referenced to a well-defined surface which is commonly taken as origin (geoïd, water level, etc.)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "elevation"
    }
  }, {
    "@id" : "dbl-term:elevationReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element where the elevation was measured. One of: AboveGroundEnvelope,
BottomOfConstruction, EntrancePoint, GeneralEave, GeneralGround, GeneralRoof, GeneralRoofEdge,
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HighestEave, HighestGroundPoint, HighestPoint, HighestRoofEdge, LowestEave, LowestFloorAboveGround, LowestGroundPoint, LowestRoofEdge or TopOfConstruction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "elevationReference"
    }
  }, {
    "@id" : "dbl-term:energyPerformance",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The energy performance of the building or building unit. One of: A, B, C, D, E, F or G."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "energyPerformance"
    }
  }, {
    "@id" : "dbl-term:footprint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The ground plate of a building. The geometry of this plate is defined by a horizontal reference geometry."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "footprint"
    }
  }, {
    "@id" : "dbl-term:geographicalName",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Name of the construction."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "geographicalName"
    }
  }, {
    "@id" : "dbl-term:geometry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The explicit location/shape representation of a building or cadastral parcel according to the GeoSPARQL implementation of GML Simple Features."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "geometry"
    }

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  }, {
    "@id" : "dbl-term:grossVolume",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The total volume of all interior spaces in a building or building unit over the gross floor area. This total volume is enclosed by the outer boundary surfaces of the foundation, the exterior walls and the roof (including the dormers and skylights) (DIN 277-1 2005)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "grossVolume"
    }
  }, {
    "@id" : "dbl-term:hasCleanSoilStatement",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The possession of proof that a parcel has clean soil."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "hasCleanSoilStatement"
    }
  }, {
    "@id" : "dbl-term:heatingSource",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The source of energy used for the heating like electricity or natural gas. One of: Biogas, Electricity, LiquidFuels, Naturalgas, SolidFuels, Straw or WarmWaterOrSteam."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heatingSource"
    }
  }, {
    "@id" : "dbl-term:heatingSystem",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The system of heating like a stove, central heating or a heat pump. One of: Centralheating, DistrictHeating, ElectricRadiators, HeatPump, PortableGasHeating, SolarHeating, Stove or Missing."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heatingSystem"
    }
  }, {
    "@id" : "dbl-term:heightAboveGround",
    "@type" : "skos:Concept",
    "definition" : {
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      "@language" : "en",
      "@value" : "Height above ground. Vertical distance (measured or estimated) between a low reference and a high reference."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heightAboveGround"
    }
  }, {
    "@id" : "dbl-term:heightBelowGround",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Height below ground of the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heightBelowGround"
    }
  }, {
    "@id" : "dbl-term:heightReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used as the high reference. One of: same of dbl:elevationReference."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heightReference"
    }
  }, {
    "@id" : "dbl-term:heightStatus",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used as the high reference. One of: Estimated or Measured."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "heightStatus"
    }
  }, {
    "@id" : "dbl-term:horizontalGeometry",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The explicit horizontal shape representation of a building according to the GeoSPARQL implementation of GML Simple Features."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "horizontalGeometry"
    }
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  }, {
    "@id" : "dbl-term:inspireId",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "External object identifier of the spatial object. For DBL we will apply the CEN SML
(URI-based) identification scheme."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "inspireId"
    }
  }, {
    "@id" : "dbl-term:isDescribedByNativeBIM",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A link to a Building Information Model in a proprietary format/semantics."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "isDescribedByNativeBIM"
    }
  }, {
    "@id" : "dbl-term:isDescribedByNativeGIS",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A link to a GIS/GEO model in a proprietary format/semantics."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "isDescribedByNativeGIS"
    }
  }, {
    "@id" : "dbl-term:isDescribedByOpenBIM",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A link to a Building Information Model in an open format/semantics."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "isDescribedByOpenBIM"
    }
  }, {
    "@id" : "dbl-term:isDescribedByOpenGIS",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A link to a GIS/GEO model in an open format/semantics."
    },
    "prefLabel" : {
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      "@language" : "en",
      "@value" : "isDescribedByOpenGIS"
    }
  }, {
    "@id" : "dbl-term:kindOfCommunicationConnection",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The kind of communication connection(s) to the environment. Examples include TelephoneLine, Cable, Optical, WiFi, 4G, 5G."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "kindOfCommunicationConnection"
    }
  }, {
    "@id" : "dbl-term:locatorDesignator",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A number or a sequence of characters which allows a user or an application to interpret, parse and format the locator within the relevant scope. A locator may include more locator designators. For DBL we interpret this to be a street number."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "locatorDesignator"
    }
  }, {
    "@id" : "dbl-term:locatorName",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Proper noun(s) applied to the real world entity identified by the locator. Like the Belvedere Building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "locatorName"
    }
  }, {
    "@id" : "dbl-term:lowReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element as the low reference. One of: same of dbl:elevationReference."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "lowReference"
    }
  }, {
    "@id" : "dbl-term:materialOfFacade",
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    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Material(s) of the building facade. One of: Adobe, Asbestos, CeramicTiles, Composite,
Concrete, Glass, Limestone, Masonry, Metal, NaturalStone, Vegetated or Wood."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "materialOfFacade"
    }
  }, {
    "@id" : "dbl-term:materialOfRoof",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Material(s) of the building roof. One of: Asbestos, CeramicTile, ClayTile, Composition,
ConcreteTile, CorrugatedSheet, Glass, HotMoppedAsphalt, Metal, ReinforcedConcrete, Slate, Thatch,
VegtatedGreenRoof or WoodShinglesOrShakes."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "materialOfRoof"
    }
  }, {
    "@id" : "dbl-term:materialOfStructure",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Material(s) of the building structure. One of: ReinforcedConcrete, ReinforcedMasonry,
RubleStoneMasonry, Steel, StoneMasonryBlock, Wood, AdobeBlockWalls, ConcreteBlockMasonry,
Earth, FiredBrickMasonry, InformalConstructions, MassiveStoneMasonry, MobileHomes, MudWalls or
PrecastConcrete."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "materialOfStructure"
    }
  }, {
    "@id" : "dbl-term:nationalCadastralReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Thematic identifier at national level, generally the full national code of the cadastral
parcel. Must ensure the link to the national cadastral register or equivalent."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "natialCadastralReference"
    }
  }, {
    "@id" : "dbl-term:netVolume",
    "@type" : "skos:Concept",
    "definition" : {
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      "@language" : "en",
      "@value" : "The net volume of a building or building unit is the gross floor space minus the construction volumes (the latter being the spaces occupied by vertical construction elements such as walls)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "netVolume"
    }
  }, {
    "@id" : "dbl-term:numberOfBalconies",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The number of balconies for a building."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "numberOfBalconies"
    }
  }, {
    "@id" : "dbl-term:numberOfBuildingUnits",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Number of building units in the building. A BuildingUnit is a subdivision of Building with its own lockable access from the outside or from a common area (i.e. not from another BuildingUnit), which is atomic, functionally independent, and may be separately sold, rented out, inherited, etc."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfBuildingUnits"
    }
  }, {
    "@id" : "dbl-term:numberOfDwellings",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Number of dwellings as residential units which may consist of one or several rooms designed for the occupation of households."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfDwellings"
    }
  }, {
    "@id" : "dbl-term:numberOfEVChargingPoints",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The number of charging points for electric vehicles."
    },
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    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfEVChargingPoints"
    }
  }, {
    "@id" : "dbl-term:numberOfElevators",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The number of elevators in a building."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "numberOfElevators"
    }
  }, {
    "@id" : "dbl-term:numberOfFloorsAboveGround",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Number of floors above ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfFloorsAboveGround"
    }
  }, {
    "@id" : "dbl-term:numberOfFloorsBelowGround",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Number of floors below ground."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfFloorsBelowGround"
    }
  }, {
    "@id" : "dbl-term:numberOfRooms",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The number of different rooms in a building or building unit available for end-user
processes."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "numberOfRooms"
    }
  }, {
    "@id" : "dbl-term:numberOfSwimmingPools",
    "@type" : "skos:Concept",
    "definition" : {
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      "@language" : "en",
      "@value" : "The number of indoor or outdoor swimming pools for a parcel, building or building unit."
    },
    "preflabel" : {
      "@language" : "en",
      "@value" : "numberOfSwimmingPools"
    }
  }, {
    "@id" : "dbl-term:officialArea",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The area of the building, building unit or cadastral parcel as registered in an official information system."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "officialArea"
    }
  }, {
    "@id" : "dbl-term:officialAreaReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The type of the official area."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "officialAreaReference"
    }
  }, {
    "@id" : "dbl-term:officialValue",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The value of the building, building unit or cadastral parcel as registered in official information system (often for property tax purposes)."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "officialValue"
    }
  }, {
    "@id" : "dbl-term:officialValueReference",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The reference market price that the official value aims to assess. One of: TransactionPriceSimple, TransactionPriceMedium, TransactionPriceFull or RentalIncome."
    },
    "prefLabel" : {
      "@language" : "en",
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      "@value" : "officialValueReference"
    }
  }, {
    "@id" : "dbl-term:owner",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A person who owns something; in this case a building, a building unit or a cadastral
parcel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "owner"
    }
  }, {
    "@id" : "dbl-term:postCode",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A code created and maintained for postal purposes to identify a subdivision of
addresses and postal delivery points."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "postCode"
    }
  }, {
    "@id" : "dbl-term:postName",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "One or more names created and maintained for postal purposes to identify a
subdivision of addresses and postal delivery points. For DBL we interpret this to be a city."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "postname"
    }
  }, {
    "@id" : "dbl-term:referencePoint",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "A point within the cadastral parcel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "referencePoint"
    }
  }, {
    "@id" : "dbl-term:renewableEnergyProduction",
    "@type" : "skos:Concept",
    "definition" : {
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      "@language" : "en",
      "@value" : "The total generated energy by the building."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "renewableEnergyProduction"
    }
  }, {
    "@id" : "dbl-term:roofType",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The shape of the roof. One of: ArchRoof, ConicalRoof, DomedRoof, DualPentRoof,
FlatRoof, GabledRoof, HalfHippedRoof, HippedRoof, HyperbolicParabaloidalRoof, MansardRoof,
MonopitchRoof, PavilionRoof, PyramidalBroachRoof or SawToothRoof."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "roofType"
    }
  }, {
    "@id" : "dbl-term:smartReadinessIndicator",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The Smart Readiness Indicator (SRI) of a building or building unit is an indicator that
informs on the rating of smart readiness of a building or building unit in line with Article 8(10) of
Directive 2010/31/EU. [16]."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "smartReadinessIndicator"
    }
  }, {
    "@id" : "dbl-term:solarSurfaceActual",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The actually used surface area for solar electricity production."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "solarSurfaceActual"
    }
  }, {
    "@id" : "dbl-term:solarSurfacePotential",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The potential / maximum possible surface area for solar electricity production."
    },
    "prefLabel" : {
      "@language" : "en",
```

```
      "@value" : "solarSurfacePotential"
    }
  }, {
    "@id" : "dbl-term:srsName",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The name of the spatial reference system."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "srsName"
    }
  }, {
    "@id" : "dbl-term:stateTimeEnd",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used to indicate the end time of the actual validness of a property value"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "stateTimeEnd"
    }
  }, {
    "@id" : "dbl-term:stateTimeStart",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used to indicate the start time of the actual validness of a property value"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "stateTimeStart"
    }
  }, {
    "@id" : "dbl-term:status",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "Element used to indicate the originating asset life-cycle phase. One of: As-required,
As-designed, As-built or As-used"
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "status"
    }
  }, {
    "@id" : "dbl-term:tenant",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
```

```
      "@value" : "A person who occupies land or property rented from an owner; in this case a building, a building unit or a cadastral parcel."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "tenant"
    }
  }, {
    "@id" : "dbl-term:thoroughfare",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The name or names of a passage or way through from one location to another like a road or a waterway. For DBL we interpret this to be a name of a street."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "thoroughfare"
    }
  }, {
    "@id" : "dbl-term:uValueFacades",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The amount of energy (heat) lost through a square metre (m2) for facades for every degree (K) difference in temperature between the inside and the outside."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "uValueFacades"
    }
  }, {
    "@id" : "dbl-term:uValueFloors",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The amount of energy (heat) lost through a square metre (m2) for floors for every degree (K) difference in temperature between the inside and the outside."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "uValueFloors"
    }
  }, {
    "@id" : "dbl-term:uValueRoofs",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The amount of energy (heat) lost through a square metre (m2) for roofs for every degree (K) difference in temperature between the inside and the outside."
    },
    "prefLabel" : {
      "@language" : "en",
```

```
      "@value" : "uValuesRoofs"
    }
  }, {
    "@id" : "dbl-term:uValueWindows",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The amount of energy (heat) lost through a square metre (m2) for windows for
every degree (K) difference in temperature between the inside and the outside."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "uValueWindows"
    }
  }, {
    "@id" : "dbl-term:ventilationSystem",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The system of ventilation. One of: natural, mechanical, hybrid or Missing."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "ventilationSystem"
    }
  }, {
    "@id" : "dbl-term:yearlyReuseOfWater",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The part of the yearlyUseOfwater that is directly or indirectly reused by a building or
building unit in a year, again typically in M3."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "yearlyReuseOfWater"
    }
  }, {
    "@id" : "dbl-term:yearlyUseOfElectricity",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The total use of natural gas for a building or building unit typically in kWh used for
heating, washing, cooking, appliances etc."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "yearlyUseOfElectricity"
    }
  }, {
    "@id" : "dbl-term:yearlyUseOfGas",
    "@type" : "skos:Concept",
    "definition" : {
```

```
      "@language" : "en",
      "@value" : "The total use of natural gas for a building or building unit typically in M3 used for heating, washing, cooking etc."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "yearlyUseOfGas"
    }
  }, {
    "@id" : "dbl-term:yearlyUseOfWater",
    "@type" : "skos:Concept",
    "definition" : {
      "@language" : "en",
      "@value" : "The total use of fresh water for a building or building unit typically in M3 used for drinking, cooking, cleaning, toilet flushing, gardening etc."
    },
    "prefLabel" : {
      "@language" : "en",
      "@value" : "yeralyUseOfWater"
    }
  } ],
  "@context" : {
    "definition" : {
      "@id" : "http://www.w3.org/2004/02/skos/core#definition"
    },
    "prefLabel" : {
      "@id" : "http://www.w3.org/2004/02/skos/core#prefLabel"
    },
    "preflabel" : {
      "@id" : "http://www.w3.org/2004/02/skos/core#preflabel"
    },
    "defintion" : {
      "@id" : "http://www.w3.org/2004/02/skos/core#defintion"
    },
    "imports" : {
      "@id" : "http://www.w3.org/2002/07/owl#imports",
      "@type" : "@id"
    },
    "PrefLabel" : {
      "@id" : "http://www.w3.org/2004/02/skos/core#PrefLabel"
    },
    "quantitykind" : "http://qudt.org/vocab/quantitykind/",
    "qudt" : "http://qudt.org/schema/qudt/",
    "unit" : "http://qudt.org/vocab/unit/",
    "sml" : "https://w3id.org/sml/def#",
    "owl" : "http://www.w3.org/2002/07/owl#",
    "rdf" : "http://www.w3.org/1999/02/22-rdf-syntax-ns#",
    "sh" : "http://www.w3.org/ns/shacl#",
    "xsd" : "http://www.w3.org/2001/XMLSchema#",
    "dbl-term" : "https://data.europa.eu/dbl/term#",
    "skos" : "http://www.w3.org/2004/02/skos/core#",
    "rdfs" : "http://www.w3.org/2000/01/rdf-schema#",
    "sml-term" : "https://w3id.org/sml/term#"
```

```
  }
}
```

Appendix C: Experimental ontology in RDF-star

(Turtle serialisation, no JSON-LD yet[5])

RDF-star extends RDF with the capability to treat triples as subject (the first item of a triple), i.e. connect triples to meta-triples. This can be utilized to describe meta-data about properties (or 'predicates' in triple-speak). By exploiting this capability we can avoid the 'objectifications' and be able to directly reuse existing RDFS functionalities like domain and range property restrictions.

We call this approach 'experimental' because RDF-star is not yet a W3C Recommendation but just a draft community group report (https://w3c.github.io/rdf-star/cg-spec/editors_draft.html).

Language binding (differences with standard RDF only)

D2.1 Ontology/Dictionary element	Linked Data (RDF-star, RDFS) code element
Attributes	rdf:Property with rdfs:range xsd:string/xsd:boolean/xsd:integer/xsd:float/xsd:dateTime/dbl:XValue (where XValue is a relevant enumeration datatype) The rdfs:domain can now be rdf-star:Triple in case of meta-properties.
Relations	rdf:Property with rdfs:range Y (where Y is a relevant range class) The rdfs:domain can now be rdf-star:Triple in case of meta-properties.

Resulting turtle-star code for DBL ontology

```
# baseURI: https://data.europa.eu/dbl/rdfs/def
# imports: https://w3id.org/sml2/rdfs/def
# imports: https://data.europa.eu/dbl/skos/term
# imports: http://www.w3.org/ns/dcat
# imports: http://xmlns.com/foaf/0.1/
# imports: http://www.opengis.net/ont/geosparql
# imports: http://data.europa.eu/m8g

@prefix dbl: <https://data.europa.eu/dbl/def#> .
@prefix dbl-term: <https://data.europa.eu/dbl/term#> .
```

[5] From the RDF-star draft community group report: "While this document specifies a small number of concrete syntaxes, nothing prevents other concrete syntaxes of RDF-star from being proposed. In particular, syntaxes such as RDF/XML [RDF-SYNTAX-GRAMMAR], and JSON-LD [JSON-LD], could be extended to support RDF-star."

```
@prefix owl: <http://www.w3.org/2002/07/owl#> .
@prefix quantitykind: <http://qudt.org/vocab/quantitykind/> .
@prefix qudt: <http://qudt.org/schema/qudt/> .
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
@prefix rdf-star: <http://www.w3.org/ns/rdf-star#> .
@prefix sh: <http://www.w3.org/ns/shacl#> .
@prefix skos: <http://www.w3.org/2004/02/skos/core#> .
@prefix sml: <https://w3id.org/sml/def#> .
@prefix unit: <http://qudt.org/vocab/unit/> .
@prefix xsd: <http://www.w3.org/2001/XMLSchema#> .
@prefix dcat: <http://www.w3.org/ns/dcat#> .
@prefix foaf: <http://xmlns.com/foaf/0.1/> .
@prefix wgs84_pos: <http://www.w3.org/2003/01/geo/wgs84_pos#> .
@prefix geo: <http://www.opengis.net/ont/geosparql#> .
@prefix locn: <http://data.europa.eu/m8g/> .

<https://data.europa.eu/dbl/rdfs/def>
  a owl:Ontology ;
  owl:imports <https://w3id.org/sml2/rdfs/def> ;
  owl:imports <https://data.europa.eu/dbl/skos/term> ;
  owl:imports <http://www.w3.org/ns/dcat> ;
  owl:imports <http://xmlns.com/foaf/0.1/> ;
  owl:imports <http://www.opengis.net/ont/geosparql> ;
  owl:imports <http://data.europa.eu/m8g> ;
.

# Concepts

dbl:DBL-Root
  a rdfs:Class ;
  rdfs:subClassOf sml:SpatialRegion ;
  rdfs:subClassOf sml:TechnicalEntity ;
  rdfs:seeAlso dbl-term:DBL-Root ;
.
dbl:BuildingOrBuildingUnit
  a rdfs:Class ;
  rdfs:subClassOf dbl:DBL-Root ;
  rdfs:seeAlso dbl-term:BuildingOrBuildingUnit ;
.
dbl:Building
  a rdfs:Class ;
  rdfs:subClassOf dbl:BuildingOrBuildingUnit ;
  rdfs:seeAlso dbl-term:Building ;
.
dbl:BuildingUnit
  a rdfs:Class ;
  rdfs:subClassOf dbl:BuildingOrBuildingUnit ;
  rdfs:seeAlso dbl-term:BuildingUnit ;
.
dbl:CadastralParcel
  a rdfs:Class ;
  rdfs:subClassOf dbl:DBL-Root ;
```

```
  rdfs:seeAlso dbl-term:CadastralParcel ;
.
dbl:Address
  a rdfs:Class ;
  rdfs:seeAlso dbl-term:Address ;
.
dbl:NativeBIM
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:NativeBIM ;
.
dbl:OpenBIM
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:OpenBIM ;
.
dbl:NativeGIS
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:NativeGIS ;
.
dbl:OpenGIS
  a rdfs:Class ;
  rdfs:subClassOf sml:InformationObject ;
  rdfs:subClassOf dcat:Dataset ;
  rdfs:seeAlso dbl-term:OpenGIS ;
.

# Properties (attributes)

dbl:inspireId
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:inspireId ;
.
dbl:officialValue
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:officialValue ;
.
dbl:officialValueReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:officialValueReference ;
.
dbl:officialArea
  a rdf:Property ;
```

```
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:officialArea ;
.
dbl:officialAreaReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:officialAreaReference ;
.
dbl:numberOfElevators
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfElevators ;
.
dbl:numberOfSwimmingPools
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfSwimmingPools ;
.
dbl:numberOfBalconies
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfBalconies ;
.
dbl:grossVolume
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:grossVolume ;
.
dbl:netVolume
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:netVolume ;
.
dbl:grossFloorArea
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:grossFloorArea ;
.
dbl:netFloorArea
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:netFloorArea ;
.
dbl:currentUse
```

```
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:currentUse ;
.
dbl:connectionToElectricity
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:boolean ;
  rdfs:seeAlso dbl-term:connectionToElectricity ;
.
dbl:connectionToGas
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:boolean ;
  rdfs:seeAlso dbl-term:connectionToGas ;
.
dbl:connectionToSewage
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:boolean ;
  rdfs:seeAlso dbl-term:connectionToSewage ;
.
dbl:connectionToWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:boolean ;
  rdfs:seeAlso dbl-term:connectionToWater ;
.
dbl:energyPerformance
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:energyPerformance ;
.
dbl:dateOfAssessment
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:dateOfAssessment ;
.
dbl:assessmentMethod
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:assessmentMethod ;
.
dbl:circularityPerformance
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:circularityPerformance ;
.
```

```
dbl:smartReadinessIndicator
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:smartReadinessIndicator ;
.
dbl:yearlyUseOfWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:yeralyUseOfWater ;
.
dbl:yearlyReuseOfWater
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:yearlyReuseOfWater ;
.
dbl:yearlyUseOfGas
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:yearlyUseOfGas ;
.
dbl:yearlyUseOfElectricity
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:yearlyUseOfElectricity ;
.
dbl:numberOfRooms
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfRooms ;
.
dbl:heatingSource
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:heatingSource ;
.
dbl:heatingSystem
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:heatingSystem ;
.
dbl:ventilationSystem
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:ventilationSystem ;
```

```
.
dbl:geographicalName
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:geographicalName ;
.
dbl:buildingNature
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:buildingNature ;
.
dbl:dateOfConstruction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:dateOfConstruction ;
.
dbl:dateOfRenovation
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:dateOfRenovation ;
.
dbl:dateOfDemolition
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:dateOfDemolition ;
.
dbl:elevation
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:elevation ;
.
dbl:elevationReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:elevationReference ;
.
dbl:srsName
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:srsName ;
.
dbl:footprint
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
```

```
  rdfs:seeAlso dbl-term:footprint ;
.
dbl:heightAboveGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:heightAboveGround ;
.
dbl:heightReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:heightReference ;
.
dbl:lowReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:lowReference ;
.
dbl:heightStatus
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:HeightStatusValue ;
  rdfs:seeAlso dbl-term:heightStatus ;
.
dbl:status
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range dbl:StatusValue ;
  rdfs:seeAlso dbl-term:status ;
.
dbl:assertionTimeStart
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:assertionTimeStart ;
.
dbl:assertionTimeEnd
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:assertionTimeEnd ;
.
dbl:stateTimeStart
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:stateTimeStart ;
.
dbl:stateTimeEnd
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
```

```
  rdfs:range xsd:dateTime ;
  rdfs:seeAlso dbl-term:stateTimeEnd ;
.
dbl:heightBelowGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:heightBelowGround ;
.
dbl:roofType
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:roofType ;
.
dbl:conditionOfConstruction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:conditionOfConstruction ;
.
dbl:numberOfBuildingUnits
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfBuildingUnits ;
.
dbl:numberOfDwellings
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfDwellings ;
.
dbl:numberOfFloorsAboveGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfFloorsAboveGround ;
.
dbl:numberOfFloorsBelowGround
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfFloorsBelowGround ;
.
dbl:solarSurfacePotential
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:solarSurfacePotential ;
.
dbl:solarSurfaceActual
  a rdf:Property ;
```

```
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:solarSurfaceActual ;
.
dbl:renewableEnergyProduction
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:renewableEnergyProduction ;
.
dbl:numberOfEVChargingPoints
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:integer ;
  rdfs:seeAlso dbl-term:numberOfEVChargingPoints ;
.
dbl:kindOfCommunicationConnection
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:KindOfCommunicationSystemValue ;
  rdfs:seeAlso dbl-term:kindOfCommunicationConnection ;
.
dbl:materialOfFacade
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:materialOfFacade ;
.
dbl:materialOfRoof
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:materialOfRoof ;
.
dbl:materialOfStructure
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:materialOfStructure ;
.
dbl:uValueFacades
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:uValueFacades ;
.
dbl:uValueRoofs
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:uValuesRoofs ;
.
dbl:uValueWindows
```

```
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:uValueWindows ;
.
dbl:uValueFloors
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:uValueFloors ;
.
dbl:nationalCadastralReference
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:natialCadastralReference ;
.
dbl:administrativeUnit
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:administrativeUnit ;
.
dbl:hasCleanSoilStatement
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:boolean ;
  rdfs:seeAlso dbl-term:hasCleanSoilStatement ;
.
dbl:areaValue
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:areaValue ;
.
dbl:circumference
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range xsd:float ;
  rdfs:seeAlso dbl-term:circumference ;
.
dbl:adminUnit1stOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit1stOrder ;
.
dbl:adminUnit2ndOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit2ndOrder ;
.
```

```
dbl:adminUnit3rdOrder
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:adminUnit3rdOrder ;
.
dbl:postName
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:postname ;
.
dbl:thoroughfare
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:thoroughfare ;
.
dbl:locatorDesignator
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:locatorDesignator ;
.
dbl:locatorName
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:locatorName ;
.
dbl:postCode
  a rdf:Property ;
  rdfs:domain dbl:Address ;
  rdfs:range xsd:string ;
  rdfs:seeAlso dbl-term:postCode ;
.

# Properties (relations)

dbl:cadastralParcel
  a rdf:Property ;
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:CadastralParcel ;
  rdfs:seeAlso dbl-term:cadastralParcel ;
.
dbl:buildingUnit
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:BuildingUnit ;
  rdfs:seeAlso dbl-term:buildingUnit ;
.
dbl:address
  a rdf:Property ;
```

```
  rdfs:domain dbl:BuildingOrBuildingUnit ;
  rdfs:range dbl:Address ;
  rdfs:seeAlso dbl-term:address ;
.
dbl:isDescribedByNativeBIM
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:NativeBIM ;
  rdfs:range dcat:Dataset ;
  rdfs:seeAlso dbl-term:isDescribedByNativeBIM ;
.
dbl:isDescribedByOpenBIM
  a rdf:Property ;
  rdfs:domain dbl:Building ;
  rdfs:range dbl:OpenBIM ;
  rdfs:range dcat:Dataset ;
  rdfs:seeAlso dbl-term:isDescribedByOpenBIM ;
.
dbl:isDescribedByOpenGIS
  a rdf:Property ;
  rdfs:range dbl:OpenGIS ;
  rdfs:range dcat:Dataset ;
  rdfs:seeAlso dbl-term:isDescribedByOpenGIS ;
.
dbl:isDescribedByNativeGIS
  a rdf:Property ;
  rdfs:range dbl:NativeGIS ;
  rdfs:range dcat:Dataset ;
  rdfs:seeAlso dbl-term:isDescribedByNativeGIS ;
.
dbl:owner
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range foaf:Agent ;
  rdfs:seeAlso dbl-term:owner ;
.
dbl:tenant
  a rdf:Property ;
  rdfs:domain dbl:DBL-Root ;
  rdfs:range foaf:Agent ;
  rdfs:seeAlso dbl-term:tenant ;
.
dbl:referencePoint
  a rdf:Property ;
  rdfs:domain dbl:CadastralParcel ;
  rdfs:range geo:Geometry ;
  rdfs:seeAlso dbl-term:referencePoint ;
.
dbl:geometry
  a rdf:Property ;
  rdfs:range geo:Geometry ;
  rdfs:seeAlso dbl-term:geometry ;
.
```

```
dbl:horizontalGeometry
  a rdf:Property ;
  rdfs:range geo:Geometry ;
  rdfs:seeAlso dbl-term:horizontalGeometry ;
.
dbl:horizontalGeometryReference
  a rdf:Property ;
  rdfs:domain rdf-star:Triple ;
  rdfs:range sml:RelationReference ;
  rdfs:seeAlso dbl:HorizontalGeometryReferenceValue ;
.

# Property Groups for aspects

dbl:Identification
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Identification ;
  rdfs:member dbl:inspireId ;
  rdfs:member dbl:geographicalName ;
  rdfs:member dbl:nationalCadastralReference  ;
.
dbl:General
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:General ;
  rdfs:member dbl:cadastralParcel ;
  rdfs:member dbl:buildingUnit ;
  rdfs:member dbl:buildingNature ;
  rdfs:member dbl:currentUse ;
  rdfs:member dbl:address ;
  rdfs:member wgs84_pos:location ;
  rdfs:member locn:location ;
  rdfs:member dbl:dateOfConstruction ;
  rdfs:member dbl:dateOfRenovation ;
  rdfs:member dbl:dateOfDemolition ;
  rdfs:member dbl:isDescribedByNativeBIM ;
  rdfs:member dbl:isDescribedByOpenBIM ;
  rdfs:member dbl:isDescribedByNativeGIS ;
  rdfs:member dbl:isDescribedByOpenGIS ;
.
dbl:Performance
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Performance ;
  rdfs:member dbl:connectionToElectricity ;
  rdfs:member dbl:connectionToGas ;
  rdfs:member dbl:connectionToSewage ;
  rdfs:member dbl:connectionToWater ;
  rdfs:member dbl:energyPerformance ;
  rdfs:member dbl:dateOfAssessment ;
  rdfs:member dbl:assessmentMethod ;
  rdfs:member dbl:circularityPerformance ;
  rdfs:member dbl:smartReadinessIndicator ;
  rdfs:member dbl:yearlyUseOfWater ;
  rdfs:member dbl:yearlyReuseOfWater ;
```

```
  rdfs:member dbl:yearlyUseOfGas ;
  rdfs:member dbl:yearlyUseOfElectricity ;
  rdfs:member dbl:internetDownloadBandwith ;
  rdfs:member dbl:internetUploadBandwith ;
  rdfs:member dbl:conditionOfConstruction ;
.
dbl:LegalAndFinance
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:LegalAndFinance ;
  rdfs:member dbl:owner ;
  rdfs:member dbl:tenant ;
  rdfs:member dbl:officialValue ;
  rdfs:member dbl:officialValueReference ;
  rdfs:member dbl:administrativeUnit ;
  rdfs:member dbl:hasCleanSoilStatement ;
.
dbl:Dimensions
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:Dimensions ;
  rdfs:member dbl:officialArea ;
  rdfs:member dbl:officialAreaReference ;
  rdfs:member dbl:grossVolume ;
  rdfs:member dbl:netVolume ;
  rdfs:member dbl:elevation ;
  rdfs:member dbl:elevationReference ;
  rdfs:member dbl:footprint ;
  rdfs:member dbl:heightAboveGround ;
  rdfs:member dbl:heightBelowGround ;
  rdfs:member dbl:heightReference ;
  rdfs:member dbl:lowReference ;
  rdfs:member dbl:heightStatus ;
  rdfs:member dbl:roofType ;
  rdfs:member dbl:areaValue ;
  rdfs:member dbl:circumference ;
  rdfs:member dbl:referencePoint ;
  rdfs:member dbl:geometry ;
  rdfs:member geo:hasGeometry ;
  rdfs:member dbl:horizontalGeometry ;
  rdfs:member dbl:horizontalGeometryReference ;
.
dbl:StructureAndMaterial
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:StructureAndMaterial ;
  rdfs:member dbl:numberOfRooms ;
  rdfs:member dbl:numberOfBuildingUnits ;
  rdfs:member dbl:numberOfDwellings ;
  rdfs:member dbl:numberOfFloorsAboveGround ;
  rdfs:member dbl:numberOfFloorsBelowGround ;
  rdfs:member dbl:materialOfFacade ;
  rdfs:member dbl:materialOfRoof ;
  rdfs:member dbl:materialOfStructure ;
  rdfs:member dbl:uValueFacades ;
  rdfs:member dbl:uValueRoofs ;
```

```
  rdfs:member dbl:uValueWindows ;
  rdfs:member dbl:uValueFloors ;
  rdfs:member dbl:numberOfBalconies ;
  rdfs:member dbl:numberOfSwimmingPools ;
  rdfs:member dbl:numberOfElevators ;
.
dbl:BuildingServices
  a rdfs:Container ;
  rdfs:seeAlso dbl-term:BuildingServices ;
  rdfs:member dbl:heatingSource ;
  rdfs:member dbl:heatingSystem ;
  rdfs:member dbl:ventilationSystem ;
  rdfs:member dbl:solarSurfacePotential ;
  rdfs:member dbl:solarSurfaceActual ;
  rdfs:member dbl:renewableEnergyProduction ;
  rdfs:member dbl:numberOfEVChargingPoints ;
  rdfs:member dbl:kindOfCommunicationConnection ;
.

# Enumeration types

dbl:OfficialValueReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:OfficialValueReferenceValue ;
.
dbl:OfficialAreaReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:OfficialAreaReferenceValue ;
.
dbl:CurrentUseValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:CurrentUseValue ;
.
dbl:EnergyPerformanceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:EnergyPerformanceValue ;
.
dbl:CircularityPerformanceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:CircularityPerformanceValue ;
.
dbl:SmartReadinessIndicatorValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:SmartReadinessIndicatorValue ;
.
dbl:HeatingSourceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeatingSourceValue ;
.
dbl:HeatingSystemValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeatingSystemValue ;
.
```

```
dbl:VentilationSystemValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:VentilationSystemValue ;
.
dbl:ElevationReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:ElevationReferenceValue ;
.
dbl:HorizontalGeometryReferenceValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HorizontalGeometryReferenceValue ;
.
dbl:HeightStatusValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:HeightStatusValue ;
.
dbl:RoofTypeValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:RoofTypeValue ;
.
dbl:ConditionOfConstructionValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:ConditionOfConstructionValue ;
.
dbl:KindOfCommunicationConnectionValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:KindOfCommunicationConnectionValue ;
.
dbl:MaterialOfFacadeValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfFacadeValue ;
.
dbl:MaterialOfRoofValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfRoofValue ;
.
dbl:MaterialOfStructureValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:MaterialOfStructureValue ;
.
dbl:StatusValue
  a sml:EnumerationType ;
  rdfs:seeAlso dbl-term:StatusValue ;
.

# Reference individuals as allowed values for enumeration types

dbl:As-required
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-required ;
.
dbl:As-designed
  a dbl:StatusValue ;
```

```
  rdfs:seeAlso dbl-term:As-designed ;
.
dbl:As-built
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-built ;
.
dbl:As-used
  a dbl:StatusValue ;
  rdfs:seeAlso dbl-term:As-used ;
.
dbl:TransactionPriceSimple
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceSimple ;
.
dbl:TransactionPriceMedium
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceMedium ;
.
dbl:TransactionPriceFull
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:TransactionPriceFull ;
.
dbl:RentalIncome
  a dbl:OfficialValueReferenceValue ;
  rdfs:seeAlso dbl-term:RentalIncome ;
.
dbl:ConstructedArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:ConstructedArea ;
.
dbl:ExternalArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:ExternalArea ;
.
dbl:InternalArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalArea ;
.
dbl:InternalPrimaryArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalPrimaryArea ;
.
dbl:InternalOtherArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalOtherArea ;
.
dbl:InternalResidualArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalResidualArea ;
.
dbl:InternalServiceArea
  a dbl:OfficialAreaReferenceValue ;
  rdfs:seeAlso dbl-term:InternalServiceArea ;
```

```
.
dbl:Residential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Residential ;
.
dbl:IndividualResidential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:IndividualResidential ;
.
dbl:CollectiveResidential
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:CollectiveResidential ;
.
dbl:TwoDwellings
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:TwoDwellings ;
.
dbl:MoreThanTwoDwelling
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:MoreThanTwoDwellings ;
.
dbl:ResidenceForCommunities
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:ResidenceForCummunities ;
.
dbl:Agriculture
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Agriculture ;
.
dbl:Industrial
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Industrial ;
.
dbl:CommerceAndServices
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:CommerceAndServices ;
.
dbl:Office
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Office ;
.
dbl:Trade
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Trade ;
.
dbl:PublicServices
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:PublicServices ;
.
dbl:Ancillary
  a dbl:CurrentUseValue ;
  rdfs:seeAlso dbl-term:Ancillary ;
.
```

```
dbl:A
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:A ;
.
dbl:B
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:B ;
.
dbl:C
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:C ;
.
dbl:D
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:D ;
.
dbl:E
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:E ;
.
dbl:F
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:F ;
.
dbl:G
  a dbl:EnergyPerformanceValue ;
  rdfs:seeAlso dbl-term:G ;
.
dbl:CP1
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP1 ;
.
dbl:CP2
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP2 ;
.
dbl:CP3
  a dbl:CircularityPerformanceValue ;
  rdfs:seeAlso dbl-term:CP3 ;
.
dbl:SRI1
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI1 ;
.
dbl:SRI2
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI2 ;
.
dbl:SRI3
  a dbl:SmartReadinessIndicatorValue ;
  rdfs:seeAlso dbl-term:CSRI3 ;
.
dbl:Biogas
```

```
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Biogas ;
.
dbl:Electricity
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Electricity ;
.
dbl:LiquidFuels
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:LiquidFuels ;
.
dbl:Naturalgas
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Naturalgas ;
.
dbl:SolidFuels
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:SolidFuels ;
.
dbl:Straw
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:Straw ;
.
dbl:WarmWaterOrSteam
  a dbl:HeatingSourceValue ;
  rdfs:seeAlso dbl-term:WarmwaterOrSteam ;
.
dbl:CentralHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:CentralHeating ;
.
dbl:DistrictHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:DistrictHeating ;
.
dbl:ElectricRadiators
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:ElectricRadiators ;
.
dbl:HeatPump
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:HeatPump ;
.
dbl:PortableGasHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:PortableGasHeating ;
.
dbl:SolarHeating
  a dbl:HeatingSystemValue ;
  rdfs:seeAlso dbl-term:SolarHeating ;
.
dbl:Stove
  a dbl:HeatingSystemValue ;
```

```
  rdfs:seeAlso dbl-term:Stove ;
.
dbl:Missing
  a dbl:HeatingSystemValue, dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Missing ;
.
dbl:Natural
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Natural ;
.
dbl:Mechanical
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Mechanical ;
.
dbl:Hybrid
  a dbl:VentilationSystemValue ;
  rdfs:seeAlso dbl-term:Hybrid ;
.
dbl:Arch
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Arch ;
.
dbl:Bunker
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Bunker ;
.
dbl:Canopy
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Canopy ;
.
dbl:Castle
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Castle ;
.
dbl:CaveBuilding
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:CaveBuilding ;
.
dbl:Chapel
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Chapel ;
.
dbl:Church
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Church ;
.
dbl:Dam
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Dam ;
.
dbl:Greenhouse
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Greenhouse ;
```

```
.
dbl:Lighthouse
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Lighthouse ;
.
dbl:Mosque
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Mosque ;
.
dbl:Shed
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Shed ;
.
dbl:Silo
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Silo ;
.
dbl:Stadium
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Stadium ;
.
dbl:StorageTank
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:StorageTank ;
.
dbl:Synagogue
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Synagogue ;
.
dbl:Temple
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Temple ;
.
dbl:Tower
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Tower ;
.
dbl:Windmill
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:Windmill ;
.
dbl:WindTurbine
  a dbl:BuildingNatureValue ;
  rdfs:seeAlso dbl-term:WindTurbine ;
.
dbl:AboveGroundEnvelope
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:AboveGroundEnvelope ;
.
dbl:BottomOfConstruction
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:BottomOfConstruction ;
.
```

```
dbl:EntrancePoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:EntrancePoint ;
.
dbl:GeneralEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralEave ;
.
dbl:GeneralGround
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralGround ;
.
dbl:GeneralRoof
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralRoof ;
.
dbl:GeneralRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:GeneralRoofEdge ;
.
dbl:HighestEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestEave ;
.
dbl:HighestGroundPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestGroundPoint ;
.
dbl:HighestPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestPoint ;
.
dbl:HighestRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:HighestRoofEdge ;
.
dbl:LowestEave
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestEave ;
.
dbl:LowestFloorAboveGround
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestFloorAboveGround ;
.
dbl:LowestGroundPoint
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestGroundPoint ;
.
dbl:LowestRoofEdge
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:LowestRoofEdge ;
.
dbl:TopOfConstruction
```

```
  a dbl:ElevationReferenceValue ;
  rdfs:seeAlso dbl-term:TopOfConstruction ;
.
dbl:ArchRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:ArchRoof ;
.
dbl:ConicalRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:ConicalRoof ;
.
dbl:DomedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:DomedRoof ;
.
dbl:DualPentRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:DualPentRoof ;
.
dbl:FlatRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:FlatRoof ;
.
dbl:GabledRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:GabledRoof ;
.
dbl:HalfHippedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HalfHippedRoof ;
.
dbl:HippedRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HippedRoof ;
.
dbl:HyperbolicParabaloidalRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:HyperbolicParabaloidalRoof ;
.
dbl:MansardRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:MansardRoof ;
.
dbl:MonopitchRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:MonopitchRoof ;
.
dbl:PavilionRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:PavilionRoof ;
.
dbl:PyramidalBroachRoof
  a dbl:RoofTypeValue ;
```

```
  rdfs:seeAlso dbl-term:PyramidalRoof ;
.
dbl:SawToothRoof
  a dbl:RoofTypeValue ;
  rdfs:seeAlso dbl-term:SawToothRoof ;
.
dbl:Declined
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Declined ;
.
dbl:Functional
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Functional ;
.
dbl:Demolished
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Demolished ;
.
dbl:Projected
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Projected ;
.
dbl:Ruin
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:Ruin ;
.
dbl:UnderConstruction
  a dbl:ConditionOfConstructionValue ;
  rdfs:seeAlso dbl-term:UnderConstruction ;
.
dbl:TelephoneLine
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:TelephoneLine ;
.
dbl:Cable
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Cable ;
.
dbl:Optical
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Optical ;
.
dbl:WiFi
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:Wifi ;
.
dbl:4G
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:4G ;
.
dbl:5G
  a dbl:KindOfCommunicationConnectionValue ;
  rdfs:seeAlso dbl-term:5G ;
```

```
.
dbl:Adobe
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Adobe ;
.
dbl:Asbestos
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Asbestos ;
.
dbl:CeramicTiles
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:CeramicTiles ;
.
dbl:Composite
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Composite ;
.
dbl:Concrete
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Concrete ;
.
dbl:Glass
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Glass ;
.
dbl:Limestone
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Limestone ;
.
dbl:Masonry
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Masonry ;
.
dbl:Metal
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Metal ;
.
dbl:NaturalStone
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:NaturalStone ;
.
dbl:Vegetated
  a dbl:MaterialOfFacadeValue ;
  rdfs:seeAlso dbl-term:Vegtated ;
.
dbl:Wood
  a dbl:MaterialOfFacadeValue ;
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Wood ;
```

```
.
dbl:ClayTile
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:ClayTile ;
.
dbl:Composition
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Composition ;
.
dbl:ConcreteTile
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:ConcreteTile ;
.
dbl:CorrugatedSheet
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:CorrugatedSheet ;
.
dbl:HotMoppedAsphalt
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:HotMoppedAsphalt ;
.
dbl:ReinforcedConcrete
  a dbl:MaterialOfRoofValue ;
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ReinforcedConcrete ;
.
dbl:Slate
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Slate ;
.
dbl:Thatch
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:Thatch ;
.
dbl:VegtatedGreenRoof
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:VegtatedGreenRoof ;
.
dbl:WoodShinglesOrShakes
  a dbl:MaterialOfRoofValue ;
  rdfs:seeAlso dbl-term:WoodShinglesOrShakes ;
.
dbl:ReinforcedMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ReinforcedMasonry ;
.
dbl:RubleStoneMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:RubleStoneMasonry ;
.
dbl:Steel
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Steel ;
```

```
.
dbl:StoneMasonryBlock
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:StoneMasonryBlock ;
.
dbl:AdobeBlockWalls
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:AdobeBlockWalls ;
.
dbl:ConcreteBlockMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:ConcreteBlockMasonry ;
.
dbl:Earth
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:Earth ;
.
dbl:FiredBrickMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:FiredBrickMasonry ;
.
dbl:InformalConstructions
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:InformalConstructions ;
.
dbl:MassiveStoneMasonry
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MassiveStomeMasonry ;
.
dbl:MobileHomes
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MobilesHomes ;
.
dbl:MudWalls
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:MudWalls ;
.
dbl:PrecastConcrete
  a dbl:MaterialOfStructureValue ;
  rdfs:seeAlso dbl-term:PrecastConcrete ;
.
```

Appendix D: Data example in case of RDF-star

Non RDF-star (existing RDF):

```
:Building_1
  a dbl:Building ;
  dbl:heightAboveGround :QuantityValue_1 .

:QuantityValue_1
  a sml:QuantityValue ;
  qudt:numericvalue “5.36”^^xsd:float ;
  qudt:unit unit:M .
```

RDF-star variant:

```
:Building_1
  dbl:heightAboveGround “5.36”^^xsd:float {| qudt:unit unit:M |} .
```

DBL

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