# Circular Economy Ontology Network (CEON) - Construction Module

#### Metadata

IRI

http://w3id.org/CEON/ontology/construction/

**Title** 

Circular Economy Ontology Network (CEON) - Construction Module

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**Date Created** 

2023-03-16

License

https://github.com/LiUSemWeb/CEON/blob/master/LICENSE

**Version Iri** 

http://w3id.org/CEON/ontology/construction/0.1/

**Version Info** 

0.1

**Preferred Namespace Prefix** 

construction

**Preferred Namespace Uri** 

http://w3id.org/CEON/ontology/construction/

**Description** 

The Product module of CEON (Circular Economy Ontology Network).

#### Classes

#### Construction Product <sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/ConstructionProduct

Sub Class Of product:Product

Super Class Of FloorPanel<sup>c</sup>

Dimensional Deviation <sup>c</sup>

IRI http://w3id.org/CEON/ontology/construction/DimensionalDeviation

Fire Resistance<sup>c</sup>

IRI http://w3id.org/CEON/ontology/construction/FireResistance

In Range Of hasFireResistance op

**Named Individuals** 

F30<sup>ni</sup> F60<sup>ni</sup>

Fire Resistance Relation <sup>c</sup>

IRI http://w3id.org/CEON/ontology/construction/FireResistanceRelation

Sub Class Of actorODP:ResourceRelation

Floor Panel<sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/FloorPanel

Sub Class Of ConstructionProduct<sup>C</sup>

Floor Tile Condition <sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/FloorTileCondition

**Named Individuals** 

condition\_bad<sup>ni</sup> condition\_good<sup>ni</sup> condition\_medium<sup>ni</sup>

Floor Tile Condition Relation <sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/FloorTileConditionRelation

Sub Class Of actorODP:ResourceRelation

Product Quality<sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/ProductQuality

**Named Individuals** 

quality\_high<sup>ni</sup> quality\_low<sup>ni</sup> quality\_medium<sup>ni</sup>

Remaining Use Span <sup>c</sup>

IRI http://w3id.org/CEON/ontology/construction/RemainingUseSpan

Sub Class Of <a href="http://qudt.org/schema/qudt/Quantity">http://qudt.org/schema/qudt/Quantity</a>

Treatment Policy<sup>C</sup>

IRI http://w3id.org/CEON/ontology/construction/TreatmentPolicy

# **Object Properties**

has accessory op

IRI http://w3id.org/CEON/ontology/construction/hasAccessory

has condition op

IRI http://w3id.org/CEON/ontology/construction/hasCondition

has conductivity op

IRI http://w3id.org/CEON/ontology/construction/hasConductivity

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has dimensional deviation op

IRI http://w3id.org/CEON/ontology/construction/hasDimensionalDeviation

has distance to recycling plant op

IRI http://w3id.org/CEON/ontology/construction/hasDistanceToRecyclingPlant

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has fire resistance op

IRI http://w3id.org/CEON/ontology/construction/hasFireResistance

Range <u>FireResistance</u><sup>c</sup>

has height op

IRI http://w3id.org/CEON/ontology/construction/hasHeight

Sub Property Of hasTileDimension op

has market value for new product op

IRI http://w3id.org/CEON/ontology/construction/hasMarketValueForNewProduct

Sub Property Of quantity:hasMarketValue

has market value for reused product op

IRI http://w3id.org/CEON/ontology/construction/hasMarketValueForReusedProduct

Sub Property Of quantity:hasMarketValue

has pedestal grid dimension op

IRI http://w3id.org/CEON/ontology/construction/hasPedestalGridDimension

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Super Property Of** 

pedestalGridHeight<sup>op</sup>

pedestalGridThickness<sup>op</sup>

pedestalGridWidth<sup>op</sup>

• standardPedestalHeight<sup>op</sup>

has product category op

IRI http://w3id.org/CEON/ontology/construction/hasProductCategory

has recycling potential op

IRI http://w3id.org/CEON/ontology/construction/hasRecyclingPotential

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has recycling separability op

IRI http://w3id.org/CEON/ontology/construction/hasRecyclingSeparability

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has resistance to earth op

IRI http://w3id.org/CEON/ontology/construction/hasResistanceToEarth

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has reuse deconstructability op

IRI http://w3id.org/CEON/ontology/construction/hasReuseDeconstructability

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has reuse potential op

IRI http://w3id.org/CEON/ontology/construction/hasReusePotential

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has system weight op

IRI http://w3id.org/CEON/ontology/construction/hasSystemWeight

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has thickness op

IRI http://w3id.org/CEON/ontology/construction/hasThickness

Sub Property Of hasTileDimension op

has tile dimension op

IRI http://w3id.org/CEON/ontology/construction/hasTileDimension

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

**Super Property Of** 

hasHeight<sup>op</sup>

• <u>hasThickness<sup>op</sup></u>

• <u>hasWidth</u>op

has use span remaining op

IRI http://w3id.org/CEON/ontology/construction/hasUseSpanRemaining

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has use span total op

IRI http://w3id.org/CEON/ontology/construction/hasUseSpanTotal

Sub Property Of <a href="http://qudt.org/schema/qudt/quantityValue">http://qudt.org/schema/qudt/quantityValue</a>

has width op

IRI http://w3id.org/CEON/ontology/construction/hasWidth

Sub Property Of hasTileDimension op

ifc entity op

IRI http://w3id.org/CEON/ontology/construction/ifcEntity

pedestal grid height op

IRI http://w3id.org/CEON/ontology/construction/pedestalGridHeight

Sub Property Of hasPedestalGridDimension op

pedestal grid thickness op

IRI http://w3id.org/CEON/ontology/construction/pedestalGridThickness

Sub Property Of hasPedestalGridDimension op

pedestal grid width op

IRI http://w3id.org/CEON/ontology/construction/pedestalGridWidth

Sub Property Of hasPedestalGridDimension op

policy on treatment op

IRI http://w3id.org/CEON/ontology/construction/policyOnTreatment

quality of product op

IRI http://w3id.org/CEON/ontology/construction/qualityOfProduct

standard pedestal height<sup>op</sup>

IRI http://w3id.org/CEON/ontology/construction/standardPedestalHeight

Sub Property Of hasPedestalGridDimension op

### **Datatype Properties**

has contaminant <sup>dp</sup>

IRI http://w3id.org/CEON/ontology/construction/hasContaminant

Sub Property Of topDataProperty dp

has dismantling method dp

IRI http://w3id.org/CEON/ontology/construction/hasDismantlingMethod

Sub Property Of topDataProperty dp

has installation date dp

IRI http://w3id.org/CEON/ontology/construction/hasInstallationDate

Sub Property Of topDataProperty dp

has packaging recommendations after dismantling dp

IRI http://w3id.org/CEON/ontology/construction/hasPackagingRecommendationsAfter

Dismantling

Sub Property Of topDataProperty dp

has policy on treatment dp

IRI http://w3id.org/CEON/ontology/construction/hasPolicyOnTreatment

has product description dp

IRI http://w3id.org/CEON/ontology/construction/hasProductDescription

Sub Property Of topDataProperty dp

has product  $id \frac{dp}{dp}$ 

IRI http://w3id.org/CEON/ontology/construction/hasProductID

Sub Property Of topDataProperty dp

has product name dp

IRI http://w3id.org/CEON/ontology/construction/hasProductName

Sub Property Of topDataProperty dp

has production date  $^{\mbox{\scriptsize dp}}$ 

IRI http://w3id.org/CEON/ontology/construction/hasProductionDate

Sub Property Of topDataProperty dp

has production site dp

IRI http://w3id.org/CEON/ontology/construction/hasProductionSite

Sub Property Of topDataProperty dp

has refurbishment method dp

IRI http://w3id.org/CEON/ontology/construction/hasRefurbishmentMethod

Sub Property Of topDataProperty dp

is built in dp

IRI http://w3id.org/CEON/ontology/construction/isBuiltIn

Sub Property Of topDataProperty dp

is external dp

IRI http://w3id.org/CEON/ontology/construction/isExternal

Sub Property Of topDataProperty dp

is loadbearing  $^{\mbox{\scriptsize dp}}$ 

IRI http://w3id.org/CEON/ontology/construction/isLoadbearing

Sub Property Of topDataProperty dp

take back program original manufacturer dp

IRI http://w3id.org/CEON/ontology/construction/takeBackProgramOriginalManufacturer

Sub Property Of topDataProperty dp

take back program other manufacturers dp

IRI http://w3id.org/CEON/ontology/construction/takeBackProgramOtherManufacturers

Sub Property Of topDataProperty dp

technical requirements for take back for recycling <sup>dp</sup>

IRI http://w3id.org/CEON/ontology/construction/technicalRequirementsForTakeBackF

orRecycling

Sub Property Of topDataProperty dp

technical requirements for take back for reuse dp

IRI http://w3id.org/CEON/ontology/construction/technicalRequirementsForTakeBackF

orReuse

Sub Property Of topDataProperty dp

## **Annotation Properties**

contributor ap

IRI http://purl.org/dc/terms/contributor

created ap

IRI http://purl.org/dc/terms/created

creatorap

IRI http://purl.org/dc/terms/creator

description ap	
IRI	http://purl.org/dc/terms/description
license <sup>ap</sup>	
IRI	http://purl.org/dc/terms/license
title <sup>ap</sup>	
IRI	http://purl.org/dc/terms/title
preferred namespace prefix <sup>ap</sup>	
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix
preferred namespace uri <sup>ap</sup>	
IRI	http://purl.org/vocab/vann/preferredNamespaceUri
covers requirements ap	
IRI	http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#covers Requirements

# Namespaces

:

http://w3id.org/CEON/ontology/construction/

actor

http://w3id.org/CEON/ontology/actor/

actorODP

http://w3id.org/CEON/ontology/actorODP/

datasheet

http://w3id.org/CEON/ontology/datasheet/

dcterms

http://purl.org/dc/terms/

material

http://w3id.org/CEON/ontology/material/

odp

```
http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#

owl

http://www.w3.org/2002/07/owl#

product

http://w3id.org/CEON/ontology/product/

prov

http://www.w3.org/ns/prov#

quantity

http://w3id.org/CEON/ontology/quantity#

rdf

http://www.w3.org/1999/02/22-rdf-syntax-ns#

rdfs

http://www.w3.org/2000/01/rdf-schema#

vann

http://purl.org/vocab/vann/
```

# Legend

c Classes
op Object Properties
dp Datatype Properties
ap Annotation Properties