

Circular Economy Ontology Network (CEON) - Construction Module

Metadata

IRI

<http://w3id.org/CEON/demo/construction/>

Title

Circular Economy Ontology Network (CEON) - Construction Module

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Version Iri

<http://w3id.org/CEON/demo/construction/0.2/>

Version Info

0.2

Preferred Namespace Prefix

construction

Preferred Namespace Uri

<http://w3id.org/CEON/demo/construction/>

Description

The construction use case ontology in Onto-DESIDE, as a module of CEON.

Classes

Quantity ^C	
IRI	http://qudt.org/schema/qudt/Quantity
Super Class Of	Conductivity^C FloorPanelHeight^C FloorPanelLength^C FloorPanelWidth^C LifeCycleAssessmentImpact^C MaximalDismantlingCostPerSqm^C MinimalDismantlingCostPerSqm^C PedestalHeight^C PedestalLength^C PedestalWidth^C RecycledContent^C RecyclingSeparability^C ResistanceToEarth^C ReuseDeconstructability^C SystemMaximalWeight^C SystemMinimalWeight^C SystemWeight^C Thickness^C

Quantity Value^C

IRI <http://qudt.org/schema/qudt/QuantityValue>

Super Class Of

[ConductivityValue^C](#)
[DismantlingCostValue^C](#)
[FloorPanelHeightValue^C](#)
[FloorPanelLengthValue^C](#)
[FloorPanelWidthValue^C](#)
[GlobalWarmingPotential^C](#)
[LocalRecyclingPlantDistance^C](#)
[MarketValueForProduct^C](#)
[MaximalDismantlingCostPerSqmValue^C](#)
[MaximalDismantlingCostValue^C](#)
[MinimalDismantlingCostPerSqmValue^C](#)
[MinimalDismantlingCostValue^C](#)
[PedestalHeightValue^C](#)
[PedestalLengthValue^C](#)
[PedestalWidthValue^C](#)
[RecycledContentValue^C](#)
[RecyclingDeconstructabilityValue^C](#)
[RecyclingPotentialValue^C](#)
[RecyclingSeparabilityValue^C](#)
[RefurbishmentCostValue^C](#)
[ResistanceToEarthValue^C](#)
[SystemMaximalWeightValue^C](#)
[SystemMinimalWeightValue^C](#)
[SystemWeightValue^C](#)
[TestingCostValue^C](#)
[ThicknessValue^C](#)
[TransportCostValue^C](#)
[UseSpanTime^C](#)

Unit^C

IRI <http://qudt.org/schema/qudt/Unit>

Super Class Of [CO2Eq^C](#)

A1Raw M Aterial Extraction Impact^C

IRI <http://w3id.org/CE0N/demo/construction/A1RawMAterialExtractionImpact>

Sub Class Of [ProductStageImpact^C](#)

A2Transportation Of Raw Materials Impact^C

IRI <http://w3id.org/CE0N/demo/construction/A2TransportationOfRawMaterialsImpact>

Sub Class Of [ProductStageImpact^C](#)

A3Manufacturing Impact^C

IRI <http://w3id.org/CE0N/demo/construction/A3ManufacturingImpact>

Sub Class Of [ProductStageImpact^C](#)

A4Transportation Of Manufactured Products Impact^C

IRI <http://w3id.org/CE0N/demo/construction/A4TransportationOfManufacturedProductsImpact>

Sub Class Of [ProductStageImpact^C](#)

A5The Construction Phase Impact^C

IRI <http://w3id.org/CE0N/demo/construction/A5TheConstructionPhaseImpact>

Sub Class Of [ProductStageImpact^C](#)

B1Installed Product Impact^C

IRI <http://w3id.org/CE0N/demo/construction/B1InstalledProductImpact>

Sub Class Of [UseStageImpact^C](#)

B2Maintenance Impact^C

IRI <http://w3id.org/CE0N/demo/construction/B2MaintenanceImpact>

Sub Class Of [UseStageImpact^C](#)

B3Repair Impact^C

IRI <http://w3id.org/CE0N/demo/construction/B3RepairImpact>

Sub Class Of [UseStageImpact^C](#)

B4Replacement Impact^C

IRI <http://w3id.org/CE0N/demo/construction/B4ReplacementImpact>

Sub Class Of [UseStageImpact^C](#)

B5Refurbishment Impact^C

IRI <http://w3id.org/CE0N/demo/construction/B5RefurbishmentImpact>

Sub Class Of [UseStageImpact^C](#)

B6Operational Energy Consumption^C

IRI <http://w3id.org/CE0N/demo/construction/B6OperationalEnergyConsumption>

Sub Class Of [UseStageImpact^C](#)

B7Operational Water Use^C

IRI <http://w3id.org/CE0N/demo/construction/B7OperationalWaterUse>

Sub Class Of [UseStageImpact^C](#)

Beyond End Of Life^C

IRI <http://w3id.org/CE0N/demo/construction/BeyondEndOfLife>

Sub Class Of [LifeCycleAssessmentImpact^C](#)

C1Demolition^C

IRI <http://w3id.org/CE0N/demo/construction/C1Demolition>

Sub Class Of [EndOfLifeStage^C](#)

C2Cmh Silver Compliance^C

IRI <http://w3id.org/CE0N/demo/construction/C2CMHSilverCompliance>

Sub Class Of [product:Compliance](#)

Equivalentclass [product:complianceWith](#) value [C2CMHSilver^C](#)

C2Transportation Of Demolition Waste^C

IRI <http://w3id.org/CE0N/demo/construction/C2TransportationOfDemolitionWaste>

Sub Class Of [EndOfLifeStage^C](#)

C3Recycling Or Disposal^C

IRI	http://w3id.org/CE0N/demo/construction/C3RecyclingOrDisposal
Sub Class Of	EndOfLifeStage^C

C4Final Disposal^C

IRI	http://w3id.org/CE0N/demo/construction/C4FinalDisposal
Sub Class Of	EndOfLifeStage^C

Co2Eq^C

IRI	http://w3id.org/CE0N/demo/construction/CO2Eq
Sub Class Of	http://qudt.org/schema/qudt/Unit^C

Conductivity^C

IRI	http://w3id.org/CE0N/demo/construction/Conductivity
Sub Class Of	http://qudt.org/schema/qudt/Quantity^C http://w3id.org/CE0N/ontology/resourceODP/ResourceProperty
In Domain Of	hasConductivityValue^{Op}
In Range Of	hasConductivityProperty^{Op}
Restriction	hasConductivityValue^{Op} only Conductivity^C

Conductivity Value^C

IRI	http://w3id.org/CE0N/demo/construction/ConductivityValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue^C http://qudt.org/schema/qudt/hasUnit^{Op} some http://qudt.org/schema/qudt/Unit^C and http://qudt.org/schema/qudt/hasUnit^{Op} only http://qudt.org/schema/qudt/Unit^C
In Range Of	hasConductivityValue^{Op}
Restriction	http://qudt.org/schema/qudt/numericValue^{dp} only ConductivityValue^C

Construction Product Quality^c

IRI	http://w3id.org/CE0N/demo/construction/ConstructionProductQuality
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/ResourceQuality
In Range Of	hasProductQuality ^{op}
Named Individuals	construction_product_quality_high ⁿⁱ construction_product_quality_low ⁿⁱ construction_product_quality_medium ⁿⁱ

Contaminant^c

IRI	http://w3id.org/CE0N/demo/construction/Contaminant
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/Matter
In Range Of	hasContaminant ^{op}

Dimensional Deviation^c

IRI	http://w3id.org/CE0N/demo/construction/DimensionalDeviation
In Range Of	hasDimensionalDeviation ^{op}

Dismantling Cost Value^c

IRI	http://w3id.org/CE0N/demo/construction/DismantlingCostValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^c http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^c and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^c
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only DismantlingCostValue ^c

End Of Life Stage^c

IRI	http://w3id.org/CE0N/demo/construction/EndOfLifeStage
Sub Class Of	LifeCycleAssessmentImpact ^c
Super Class Of	C1Demolition ^c C2TransportationOfDemolitionWaste ^c C3RecyclingOrDisposal ^c C4FinalDisposal ^c

Environmental Impact^C

IRI	http://w3id.org/CEON/demo/construction/EnvironmentalImpact
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
Super Class Of	LifeCycleAssessmentImpact^C

Fire Resistance Rating^C

IRI	http://w3id.org/CEON/demo/construction/FireResistanceRating
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
In Range Of	hasFireResistanceRating^{OP}
Named Individuals	E30ⁿⁱ E60ⁿⁱ

Fire Resistance Relation^C

IRI	http://w3id.org/CEON/demo/construction/FireResistanceRelation
Sub Class Of	actorODP:ResourceParticipation

Floor Panel Height^C

IRI	http://w3id.org/CEON/demo/construction/FloorPanelHeight
Sub Class Of	<a href="http://qudt.org/schema/qudt/Quantity<sup>C</sup">http://qudt.org/schema/qudt/Quantity^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Floor Panel Height Value^C

IRI	http://w3id.org/CEON/demo/construction/FloorPanelHeightValue
Sub Class Of	<a href="http://qudt.org/schema/qudt/QuantityValue<sup>C</sup">http://qudt.org/schema/qudt/QuantityValue^C <a href="http://qudt.org/schema/qudt/hasUnit<sup>OP</sup">http://qudt.org/schema/qudt/hasUnit^{OP} some <a href="http://qudt.org/schema/qudt/Unit<sup>C</sup">http://qudt.org/schema/qudt/Unit^C and <a href="http://qudt.org/schema/qudt/hasUnit<sup>OP</sup">http://qudt.org/schema/qudt/hasUnit^{OP} only <a href="http://qudt.org/schema/qudt/Unit<sup>C</sup">http://qudt.org/schema/qudt/Unit^C
Restriction	<a href="http://qudt.org/schema/qudt/numericValue<sup>dp</sup">http://qudt.org/schema/qudt/numericValue^{dp} only FloorPanelHeightValue^C

Floor Panel Length^C

IRI	http://w3id.org/CEON/demo/construction/FloorPanelLength
Sub Class Of	<a href="http://qudt.org/schema/qudt/Quantity<sup>C</sup">http://qudt.org/schema/qudt/Quantity^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Floor Panel Length Value^C

IRI	http://w3id.org/CE0N/demo/construction/FloorPanelLengthValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only FloorPanelLengthValue ^C

Floor Panel Width^C

IRI	http://w3id.org/CE0N/demo/construction/FloorPanelWidth
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty

Floor Panel Width Value^C

IRI	http://w3id.org/CE0N/demo/construction/FloorPanelWidthValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only FloorPanelWidthValue ^C

Floor Tile^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTile
Sub Class Of	product:Product

Floor Tile Condition^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTileCondition
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/ResourceCondition
Named Individuals	bad_condition ⁿⁱ good_condition ⁿⁱ medium_condition ⁿⁱ

Floor Tile Condition Relation^C

IRI	http://w3id.org/CE0N/demo/construction/FloorTileConditionRelation
Sub Class Of	actorODP:ResourceParticipation

Galvanized Steel Material^C

IRI	http://w3id.org/CE0N/demo/construction/GalvanizedSteelMaterial
Sub Class Of	material:Material

Global Warming Potential^C

IRI	http://w3id.org/CE0N/demo/construction/GlobalWarmingPotential
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some CO2Eq ^C <i>and</i> http://qudt.org/schema/qudt/hasUnit ^{op} only CO2Eq ^C
In Range Of	hasGlobalWarmingPotential ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only GlobalWarmingPotential ^C

Installation Location^C

IRI	http://w3id.org/CE0N/demo/construction/InstallationLocation
Sub Class Of	http://w3id.org/CE0N/ontology/location/Location
In Range Of	installationLocation ^{op}

Life Cycle Assessment Impact^C

IRI	http://w3id.org/CE0N/demo/construction/LifeCycleAssessmentImpact
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C EnvironmentalImpact ^C
In Domain Of	hasGlobalWarmingPotential ^{op}
Restriction	hasGlobalWarmingPotential ^{op} only LifeCycleAssessmentImpact ^C
Super Class Of	BeyondEndOfLife ^C EndOfLifeStage ^C ProductStageImpact ^C UseStageImpact ^C

Local Recycling Plant Distance^C

IRI	http://w3id.org/CE0N/demo/construction/LocalRecyclingPlantDistance
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasDistanceToRecyclingPlant ^{OP} hasRecyclingPlant ^{OP}
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only LocalRecyclingPlantDistance ^C

Market Value For Product^C

IRI	http://w3id.org/CE0N/demo/construction/MarketValueForProduct
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasMarketValueForNewProduct ^{OP} hasMarketValueForReusedProduct ^{OP}
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only MarketValueForProduct ^C

Maximal Dismantling Cost Per Sqm^C

IRI	http://w3id.org/CE0N/demo/construction/MaximalDismantlingCostPerSqm
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C

Maximal Dismantling Cost Per Sqm Value^C

IRI	http://w3id.org/CE0N/demo/construction/MaximalDismantlingCostPerSqmValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only MaximalDismantlingCostPerSqmValue ^C

Maximal Dismantling Cost Value^C

IRI	http://w3id.org/CE0N/demo/construction/MaximalDismantlingCostValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only MaximalDismantlingCostValue ^C

Minimal Dismantling Cost Per Sqm^C

IRI	http://w3id.org/CE0N/demo/construction/MinimalDismantlingCostPerSqm
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C

Minimal Dismantling Cost Per Sqm Value^C

IRI	http://w3id.org/CE0N/demo/construction/MinimalDismantlingCostPerSqmValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only MinimalDismantlingCostPerSqmValue ^C

Minimal Dismantling Cost Value^C

IRI	http://w3id.org/CE0N/demo/construction/MinimalDismantlingCostValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{OP} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{OP} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{DP} only MinimalDismantlingCostValue ^C

Pedestal^C

IRI	http://w3id.org/CE0N/demo/construction/Pedestal
Sub Class Of	product:Item

Pedestal Height^C

IRI <http://w3id.org/CEON/demo/construction/PedestalHeight>

Sub Class Of [^C](http://qudt.org/schema/qudt/Quantity)
<http://w3id.org/CEON/ontology/resourceODP/ResourceProperty>

Pedestal Height Value^C

IRI <http://w3id.org/CEON/demo/construction/PedestalHeightValue>

Sub Class Of [^C](http://qudt.org/schema/qudt/QuantityValue)
[^{OP}](http://qudt.org/schema/qudt/hasUnit) some [^C](http://qudt.org/schema/qudt/Unit)
and [^{OP}](http://qudt.org/schema/qudt/hasUnit) only [^C](http://qudt.org/schema/qudt/Unit)

Restriction [^{DP}](http://qudt.org/schema/qudt/numericValue) only [PedestalHeightValue^C](#)

Pedestal Length^C

IRI <http://w3id.org/CEON/demo/construction/PedestalLength>

Sub Class Of [^C](http://qudt.org/schema/qudt/Quantity)
<http://w3id.org/CEON/ontology/resourceODP/ResourceProperty>

Pedestal Length Value^C

IRI <http://w3id.org/CEON/demo/construction/PedestalLengthValue>

Sub Class Of [^C](http://qudt.org/schema/qudt/QuantityValue)
[^{OP}](http://qudt.org/schema/qudt/hasUnit) only [^C](http://qudt.org/schema/qudt/Unit)
and [^{OP}](http://qudt.org/schema/qudt/hasUnit) some
[^C](http://qudt.org/schema/qudt/Unit)

Restriction [^{DP}](http://qudt.org/schema/qudt/numericValue) only [PedestalLengthValue^C](#)

Pedestal Width^C

IRI <http://w3id.org/CEON/demo/construction/PedestalWidth>

Sub Class Of [^C](http://qudt.org/schema/qudt/Quantity)
<http://w3id.org/CEON/ontology/resourceODP/ResourceProperty>

Pedestal Width Value^C

IRI <http://w3id.org/CE0N/demo/construction/PedestalWidthValue>

Sub Class Of <http://qudt.org/schema/qudt/QuantityValue>^C
<http://qudt.org/schema/qudt/hasUnit>^{op} only <http://qudt.org/schema/qudt/Unit>^C
and <http://qudt.org/schema/qudt/hasUnit>^{op} some
<http://qudt.org/schema/qudt/Unit>^C

Restriction <http://qudt.org/schema/qudt/numericValue>^{dp} only [PedestalWidthValue](#)^C

Product Stage Impact^C

IRI <http://w3id.org/CE0N/demo/construction/ProductStageImpact>

Sub Class Of [LifeCycleAssessmentImpact](#)^C

Super Class Of [A1RawMAterialExtractionImpact](#)^C
[A2TransportationOfRawMaterialsImpact](#)^C
[A3ManufacturingImpact](#)^C
[A4TransportationOfManufacturedProductsImpact](#)^C
[A5TheConstructionPhaseImpact](#)^C

Recycled Content^C

IRI <http://w3id.org/CE0N/demo/construction/RecycledContent>

Sub Class Of <http://qudt.org/schema/qudt/Quantity>^C

Recycled Content Value^C

IRI <http://w3id.org/CE0N/demo/construction/RecycledContentValue>

Sub Class Of <http://qudt.org/schema/qudt/QuantityValue>^C

In Range Of [hasRecycledContentValue](#)^{op}

Restriction <http://qudt.org/schema/qudt/hasUnit>^{op} only [RecycledContentValue](#)^C
<http://qudt.org/schema/qudt/numericValue>^{dp} only [RecycledContentValue](#)^C

Recycling Deconstructability Value^C

IRI	http://w3id.org/CEON/demo/construction/RecyclingDeconstructabilityValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasReuseDeconstructability ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only RecyclingDeconstructabilityValue ^C

Recycling Potential Value^C

IRI	http://w3id.org/CEON/demo/construction/RecyclingPotentialValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasRecyclingPotential ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only RecyclingPotentialValue ^C

Recycling Separability^C

IRI	http://w3id.org/CEON/demo/construction/RecyclingSeparability
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
In Domain Of	hasRecyclingSeparability ^{op}
Restriction	hasRecyclingSeparability ^{op} only RecyclingSeparability ^C

Recycling Separability Value^C

IRI	http://w3id.org/CEON/demo/construction/RecyclingSeparabilityValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasRecyclingSeparability ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only RecyclingSeparabilityValue ^C

Refurbishment Cost Value^C

IRI	http://w3id.org/CEON/demo/construction/RefurbishmentCostValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only RefurbishmentCostValue ^C

Resistance To Earth^C

IRI	http://w3id.org/CEON/demo/construction/ResistanceToEarth
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
In Domain Of	hasResistanceToEarth ^{op}
Restriction	hasResistanceToEarth ^{op} only ResistanceToEarth ^C

Resistance To Earth Value^C

IRI	http://w3id.org/CEON/demo/construction/ResistanceToEarthValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasResistanceToEarth ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only ResistanceToEarthValue ^C

Reuse Deconstructability^C

IRI	http://w3id.org/CEON/demo/construction/ReuseDeconstructability
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
In Domain Of	hasReuseDeconstructability ^{op}
Restriction	hasReuseDeconstructability ^{op} only ReuseDeconstructability ^C

Reuse Potential^C

IRI	http://w3id.org/CEON/demo/construction/ReusePotential
Sub Class Of	http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
In Domain Of	hasRecyclingPotential ^{op}
In Range Of	hasReusePotential ^{op}
Named Individuals	high_reuse_potential ⁿⁱ needs_refurbishment_before_reuse ⁿⁱ

Screw^C

IRI	http://w3id.org/CEON/demo/construction/Screw
Sub Class Of	product:Item

System Maximal Weight^C

IRI	http://w3id.org/CEON/demo/construction/SystemMaximalWeight
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
Restriction	hasSystemWeight ^{op} only SystemMaximalWeight ^C

System Maximal Weight Value^C

IRI	http://w3id.org/CEON/demo/construction/SystemMaximalWeightValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only SystemMaximalWeightValue ^C

System Minimal Weight^C

IRI	http://w3id.org/CEON/demo/construction/SystemMinimalWeight
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CEON/ontology/resourceODP/ResourceProperty
Restriction	hasSystemWeight ^{op} only SystemMinimalWeight ^C

System Minimal Weight Value^C

IRI	http://w3id.org/CE0N/demo/construction/SystemMinimalWeightValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only SystemMinimalWeightValue ^C

System Weight^C

IRI	http://w3id.org/CE0N/demo/construction/SystemWeight
Sub Class Of	http://qudt.org/schema/qudt/Quantity ^C http://w3id.org/CE0N/ontology/resourceODP/ResourceProperty
Restriction	hasSystemWeight ^{op} only SystemWeight ^C

System Weight Value^C

IRI	http://w3id.org/CE0N/demo/construction/SystemWeightValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasSystemWeight ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only SystemWeightValue ^C

Take Back Program From Original Manufacturer^C

IRI	http://w3id.org/CE0N/demo/construction/TakeBackProgramFromOriginalManufacturer
Sub Class Of	actorODP:Infrastructure

Testing Cost Value^C

IRI	http://w3id.org/CE0N/demo/construction/TestingCostValue
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only TestingCostValue ^C

Thickness^C

IRI <http://w3id.org/CEON/demo/construction/Thickness>

Sub Class Of <http://qudt.org/schema/qudt/Quantity>^C
<http://w3id.org/CEON/ontology/resourceODP/ResourceProperty>

Thickness Value^C

IRI <http://w3id.org/CEON/demo/construction/ThicknessValue>

Sub Class Of <http://qudt.org/schema/qudt/QuantityValue>^C
<http://qudt.org/schema/qudt/hasUnit>^{op} only <http://qudt.org/schema/qudt/Unit>^C
and <http://qudt.org/schema/qudt/hasUnit>^{op} some
<http://qudt.org/schema/qudt/Unit>^C

Restriction <http://qudt.org/schema/qudt/numericValue>^{dp} only [ThicknessValue](#)^C

Transport Cost Value^C

IRI <http://w3id.org/CEON/demo/construction/TransportCostValue>

Sub Class Of <http://qudt.org/schema/qudt/QuantityValue>^C
<http://qudt.org/schema/qudt/hasUnit>^{op} only <http://qudt.org/schema/qudt/Unit>^C
and <http://qudt.org/schema/qudt/hasUnit>^{op} some
<http://qudt.org/schema/qudt/Unit>^C

Restriction <http://qudt.org/schema/qudt/numericValue>^{dp} only [TransportCostValue](#)^C

Treatment Policy^C

IRI <http://w3id.org/CEON/demo/construction/TreatmentPolicy>

Sub Class Of <http://w3id.org/CEON/ontology/resourceODP/Information>

In Range Of [policyOnTreatment](#)^{op}

Named Individuals [refurbish](#)ⁿⁱ
[reprocess](#)ⁿⁱ
[reuse](#)ⁿⁱ

Use Span Time^C

IRI	http://w3id.org/CE0N/demo/construction/UseSpanTime
Sub Class Of	http://qudt.org/schema/qudt/QuantityValue ^C http://qudt.org/schema/qudt/hasUnit ^{op} some http://qudt.org/schema/qudt/Unit ^C and http://qudt.org/schema/qudt/hasUnit ^{op} only http://qudt.org/schema/qudt/Unit ^C
In Range Of	hasUseSpan ^{op} hasUseSpanRemaining ^{op} hasUseSpanTotal ^{op}
Restriction	http://qudt.org/schema/qudt/numericValue ^{dp} only UseSpanTime ^C

Use Stage Impact^C

IRI	http://w3id.org/CE0N/demo/construction/UseStageImpact
Sub Class Of	LifeCycleAssessmentImpact ^C
Super Class Of	B1InstalledProductImpact ^C B2MaintenanceImpact ^C B3RepairImpact ^C B4ReplacementImpact ^C B5RefurbishmentImpact ^C B6OperationalEnergyConsumption ^C B7OperationalWaterUse ^C

Object Properties

has unit^{op}

IRI	http://qudt.org/schema/qudt/hasUnit
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quantity value^{op}

IRI	http://qudt.org/schema/qudt/quantityValue
Super Property Of	<ul style="list-style-type: none">hasConductivityValue^{op}hasDistanceToRecyclingPlant^{op}hasGlobalWarmingPotential^{op}hasRecycledContentValue^{op}hasRecyclingPlant^{op}hasRecyclingPotential^{op}hasRecyclingSeparability^{op}hasResistanceToEarth^{op}hasReuseDeconstructability^{op}hasSystemWeight^{op}hasUseSpan^{op}

has accessory^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasAccessory>

has conductivity property^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasConductivityProperty>

Sub Property Of <http://w3id.org/CE0N/ontology/resourceODP/hasResourceProperty>

Domain [product:Product^C](#) *or* [product:Item^C](#)

Range [Conductivity^C](#)

has conductivity value^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasConductivityValue>

Sub Property Of [http://qudt.org/schema/qudt/quantityValue^{op}](http://qudt.org/schema/qudt/quantityValue)

Domain

- [Conductivity^C](#)
- [product:Product^C](#) *or* [product:Item^C](#)

Range [ConductivityValue^C](#)

has contaminant^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasContaminant>

Domain [product:Item^C](#) *or* [product:Product^C](#)

Range [Contaminant^C](#)

has dimensional deviation^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasDimensionalDeviation>

Sub Property Of [topObjectProperty^{op}](#)

Domain [product:Item^C](#) *or* [product:Product^C](#)

Range [DimensionalDeviation^C](#)

has distance to recycling plant^{op}

IRI	http://w3id.org/CEON/demo/construction/hasDistanceToRecyclingPlant
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	product:Product ^c or product:Item ^c
Range	LocalRecyclingPlantDistance ^c

has fire resistance rating^{op}

IRI	http://w3id.org/CEON/demo/construction/hasFireResistanceRating
Sub Property Of	http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty
Domain	product:Item ^c or product:Product ^c
Range	FireResistanceRating ^c

has global warming potential^{op}

IRI	http://w3id.org/CEON/demo/construction/hasGlobalWarmingPotential
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	<ul style="list-style-type: none">LifeCycleAssessmentImpact^cproduct:Item^c or product:Product^c
Range	GlobalWarmingPotential ^c

has installation location^{op}

IRI	http://w3id.org/CEON/demo/construction/hasInstallationLocation
Sub Property Of	http://w3id.org/CEON/ontology/location/hasLocation
Domain	product:Product ^c or product:Item ^c

has market value for new product^{op}

IRI	http://w3id.org/CEON/demo/construction/hasMarketValueForNewProduct
Sub Property Of	http://w3id.org/CEON/ontology/quantity/hasMarketValue
Domain	product:Item ^c or product:Product ^c
Range	MarketValueForProduct ^c

has market value for reused product^{op}

IRI	http://w3id.org/CEON/demo/construction/hasMarketValueForReusedProduct
Sub Property Of	http://w3id.org/CEON/ontology/quantity/hasMarketValue
Domain	product:Item ^C or product:Product ^C
Range	MarketValueForProduct ^C

has product quality^{op}

IRI	http://w3id.org/CEON/demo/construction/hasProductQuality
Sub Property Of	topObjectProperty ^{op}
Domain	product:Product ^C or product:Item ^C
Range	ConstructionProductQuality ^C

has recycled content value^{op}

IRI	http://w3id.org/CEON/demo/construction/hasRecycledContentValue
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Range	RecycledContentValue ^C

has recycling plant^{op}

IRI	http://w3id.org/CEON/demo/construction/hasRecyclingPlant
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Range	LocalRecyclingPlantDistance ^C

has recycling potential^{op}

IRI	http://w3id.org/CEON/demo/construction/hasRecyclingPotential
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	<ul style="list-style-type: none">ReusePotential^Cproduct:Product^C or product:Item^C
Range	RecyclingPotentialValue ^C

has recycling separability^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasRecyclingSeparability
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	<ul style="list-style-type: none">RecyclingSeparability^cproduct:Item^c or product:Product^c
Range	RecyclingSeparabilityValue ^c

has resistance to earth^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasResistanceToEarth
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	<ul style="list-style-type: none">ResistanceToEarth^cproduct:Product^c or product:Item^c
Range	ResistanceToEarthValue ^c

has reuse deconstructability^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasReuseDeconstructability
Sub Property Of	http://qudt.org/schema/qudt/quantityValue ^{op}
Domain	<ul style="list-style-type: none">ReuseDeconstructability^cproduct:Item^c or product:Product^c
Range	RecyclingDeconstructabilityValue ^c

has reuse potential^{op}

IRI	http://w3id.org/CE0N/demo/construction/hasReusePotential
Sub Property Of	http://w3id.org/CE0N/ontology/resourceODP/hasResourceProperty
Domain	product:Product ^c or product:Item ^c
Range	ReusePotential ^c

has system weight^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasSystemWeight>

Sub Property Of <http://qudt.org/schema/qudt/quantityValue>^{op}

Domain

- [SystemWeight](#)^c or [SystemMaximalWeight](#)^c or [SystemMinimalWeight](#)^c
- [product:Item](#)^c or [product:Product](#)^c

Range [SystemWeightValue](#)^c

has take back program^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasTakeBackProgram>

has use span^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasUseSpan>

Sub Property Of <http://qudt.org/schema/qudt/quantityValue>^{op}

Super Property Of

- [hasUseSpanRemaining](#)^{op}
- [hasUseSpanTotal](#)^{op}

Domain [product:Item](#)^c or [product:Product](#)^c

Range [UseSpanTime](#)^c

has use span remaining^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasUseSpanRemaining>

Sub Property Of [hasUseSpan](#)^{op}

Range [UseSpanTime](#)^c

has use span total^{op}

IRI <http://w3id.org/CE0N/demo/construction/hasUseSpanTotal>

Sub Property Of [hasUseSpan](#)^{op}

Range [UseSpanTime](#)^c

installation location^{op}

IRI <http://w3id.org/CE0N/demo/construction/installationLocation>

Range [InstallationLocation](#)^c

policy on treatment^{op}

IRI	http://w3id.org/CE0N/demo/construction/policyOnTreatment
Sub Property Of	topObjectProperty^{op}
Domain	product:Item^c or product:Product^c
Range	TreatmentPolicy^c

Datatype Properties

numeric value^{dp}

IRI	http://qudt.org/schema/qudt/numericValue
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construction year^{dp}

IRI	http://w3id.org/CE0N/demo/construction/constructionYear
Sub Property Of	topDataProperty^{dp}
Range	xsd:gYear

has accessories^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasAccessories
Domain	product:Item^c or product:Product^c
Range	xsd:string

has dismantling instruction^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasDismantlingInstruction
Sub Property Of	topDataProperty^{dp}
Domain	product:Product^c or product:Item^c
Range	xsd:anyURI

has dismantling method^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasDismantlingMethod
Sub Property Of	topDataProperty^{dp}
Domain	product:Item^c or product:Product^c
Range	xsd:string

has image^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasImage>

has installation date^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasInstallationDate>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Item](#)

Range [xsd:date](#)

has packaging recommendations after dismantling^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasPackagingRecommendationsAfterDismantling>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Item^c](#) or [product:Product^c](#)

Range [xsd:string](#)

has product description^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasProductDescription>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Item^c](#) or [product:Product^c](#)

Range [xsd:string](#)

has product id^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasProductID>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Product^c](#) or [product:Item^c](#)

Range [xsd:int](#)

has production date^{dp}

IRI <http://w3id.org/CE0N/demo/construction/hasProductionDate>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Item](#)

Range [xsd:date](#)

has production site^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasProductionSite
Sub Property Of	topDataProperty ^{dp}
Domain	product:Item ^c or product:Product ^c
Range	xsd:string

has refurbishment method^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasRefurbishmentMethod
Sub Property Of	topDataProperty ^{dp}
Domain	product:Product ^c or product:Item ^c
Range	xsd:string

has technical requirements for take back for recycling^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasTechnicalRequirementsForTakeBackForRecycling
Sub Property Of	topDataProperty ^{dp}
Domain	product:Item ^c or product:Product ^c
Range	xsd:string

has technical requirements for take back for reuse^{dp}

IRI	http://w3id.org/CE0N/demo/construction/hasTechnicalRequirementsForTakeBackForReuse
Sub Property Of	topDataProperty ^{dp}
Domain	product:Product ^c or product:Item ^c
Range	xsd:string

is contaminated^{dp}

IRI	http://w3id.org/CE0N/demo/construction/isContaminated
Sub Property Of	topDataProperty ^{dp}
Domain	product:Product ^c or product:Item ^c
Range	xsd:boolean

is take back program from original manufacturer available^{dp}

IRI <http://w3id.org/CE0N/demo/construction/isTakeBackProgramFromOriginalManufacturerAvailable>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Product](#)

Range [xsd:boolean](#)

is take back program from other manufacturer available^{dp}

IRI <http://w3id.org/CE0N/demo/construction/isTakeBackProgramFromOtherManufacturerAvailable>

Sub Property Of [topDataProperty^{dp}](#)

Domain [product:Product](#)

Range [xsd:boolean](#)

Annotation Properties

contributor^{ap}

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

created^{ap}

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

creator^{ap}

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

description^{ap}

IRI <http://purl.org/dc/terms/description>

license^{ap}

IRI <http://purl.org/dc/terms/license>

title^{ap}

IRI <http://purl.org/dc/terms/title>

preferred namespace prefix ^{ap}	
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix
preferred namespace uri ^{ap}	
IRI	http://purl.org/vocab/vann/preferredNamespaceUri
covers requirements ^{ap}	
IRI	http://www.ontologydesignpatterns.org/schemas/cannotation-schema.owl#coversRequirements
max qualified cardinality ^{ap}	
IRI	http://www.w3.org/2002/07/owl#maxQualifiedCardinality

Namespaces

:	http://w3id.org/CEON/demo/construction/
actor	http://w3id.org/CEON/ontology/actor/
actorODP	http://w3id.org/CEON/ontology/actorODP/
dcterms	http://purl.org/dc/terms/
material	http://w3id.org/CEON/ontology/material/
odp	http://www.ontologydesignpatterns.org/schemas/cannotationschema.owl#
owl	http://www.w3.org/2002/07/owl#
product	http://w3id.org/CEON/ontology/product/
prov	http://www.w3.org/ns/prov#
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/
xsd	http://www.w3.org/2001/XMLSchema#

Legend

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties