Data structures

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Reconmatic

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RECONMATIC | Use case

Reduce

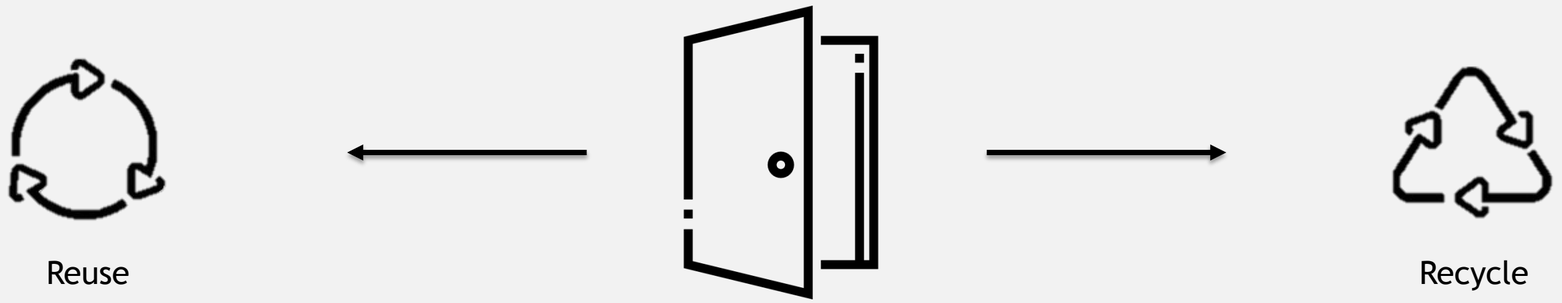
Reuse

Recycle

Construction and Demolition Waste

Product and material lifecycle

RECONMATIC | What is a door?



Product

Material

RECONMATIC | Product/material

Reuse

Product

Manufacturer’s information

Design information

Construction information

Test information

Recycle

Material

Chemical information

Physical information

Mechanical information

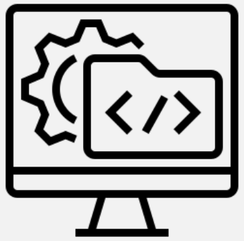
Lab test information

Survey information

Machine and human readable

Common terms
Searchable and reusable

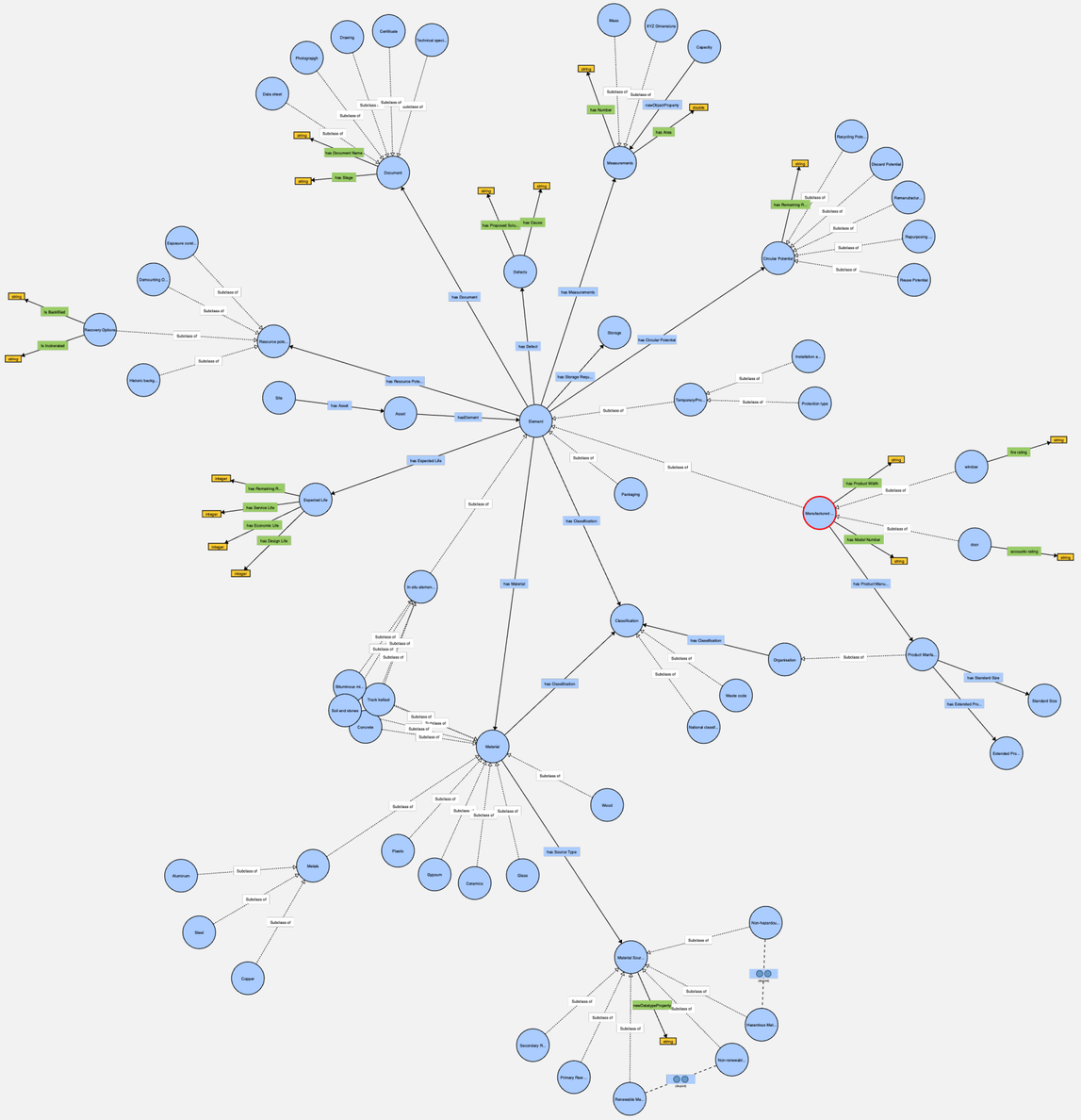
Structured



AEC software compatible

RECONMATIC | Ontology

Semantic Web

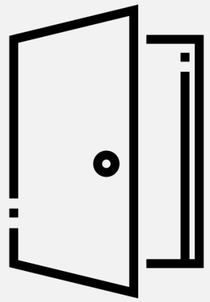


RECONMATIC | OpenBIM -IFC

Industry Foundation Classes

RECONMATIC | OpenBIM – IFC – Property Sets

Industry Foundation Classes



6.1.3.16.5 Property sets

Pset_Condition
AssessmentDate
AssessmentCondition
AssessmentDescription

Pset_ConstructionAdministration
ProcurementMethod
SpecificationSectionNumber
SubmittalIdentifer

Pset_ConstructionOccurence
InstallationDate
ModelNumber
TagNumber

Pset_DoorCommon
Reference
Status
FireRating

Pset_DoorTypeTurnstile `TURNSTILE`
IsBidirectional
TurnstileType
NarrowChannelWidth

Pset_DoorWindowGlazingType
GlassLayers
GlassThickness1
GlassThickness2

Pset_ElementKinematics
CyclicPath
CyclicRange
LinearPath

Pset_EnvironmentalCondition
ReferenceAirRelativeHumidity
ReferenceEnvironmentTemperature
MaximumAtmosphericPressure

Pset_EnvironmentalImpactIndicators
Reference
FunctionalUnitReference
IndicatorsUnit

Pset_EnvironmentalImpactValues
TotalPrimaryEnergyConsumption
WaterConsumption
HazardousWaste

Pset_InstallationOccurrence
InstallationDate
AcceptanceDate
PutIntoOperationDate

Pset_MaintenanceStrategy
AssetCriticality
AssetFrailty
AssetPriority

Pset_MaintenanceTriggerCondition
ConditionTargetPerformance
ConditionMaintenanceLevel
ConditionReplacementLevel

Pset_MaintenanceTriggerDuration
DurationTargetPerformance
DurationMaintenanceLevel
DurationReplacementLevel

Pset_MaintenanceTriggerPerformance
TargetPerformance
PerformanceMaintenanceLevel
ReplacementLevel

Pset_ManufacturerOccurrence
AcquisitionDate
BarCode
SerialNumber

Pset_ManufacturerTypeInformation
GlobalTradeItemNumber
ArticleNumber
ModelReference

Pset_ProcessCapacity
ProcessItem
ProcessCapacity
ProcessPerformance

Pset_RepairOccurrence
RepairContent
RepairDate
MeanTimeToRepair

Pset_Risk
RiskName
RiskType
NatureOfRisk

Pset_ServiceLife
ServiceLifeDuration
MeanTimeBetweenFailure

Pset_TicketProcessing `BOOM_BARRIER`
TicketProcessingTime
TicketStuckRatio

Pset_TicketProcessing `TURNSTILE`
TicketProcessingTime
TicketStuckRatio

Pset_Tolerance
ToleranceDescription
ToleranceBasis
OverallTolerance

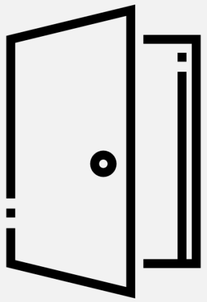
Pset_Uncertainty
UncertaintyBasis

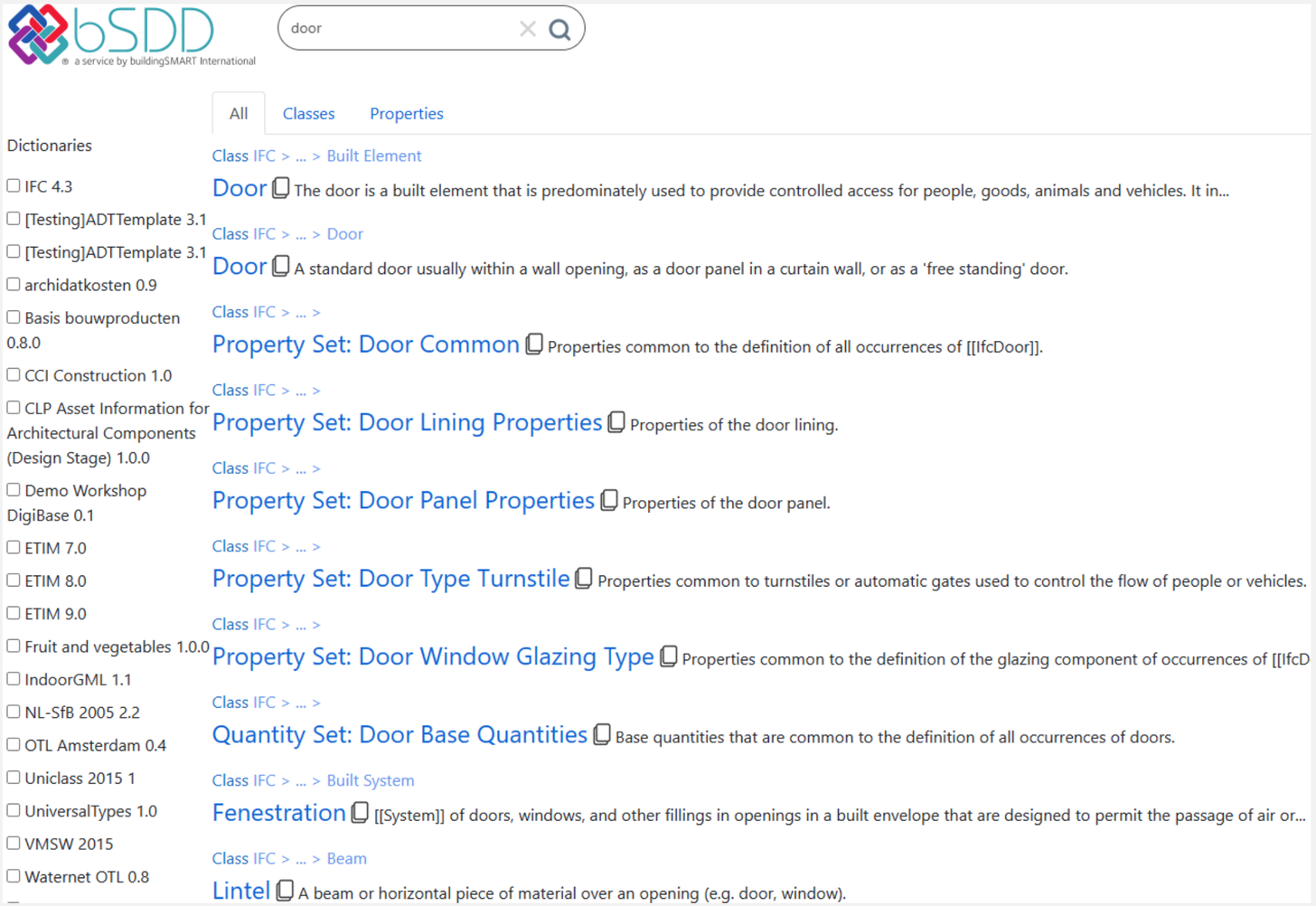
Pset_Warranty
WarrantyIdentifier

Qto_BodyGeometryValidation
GrossSurfaceArea

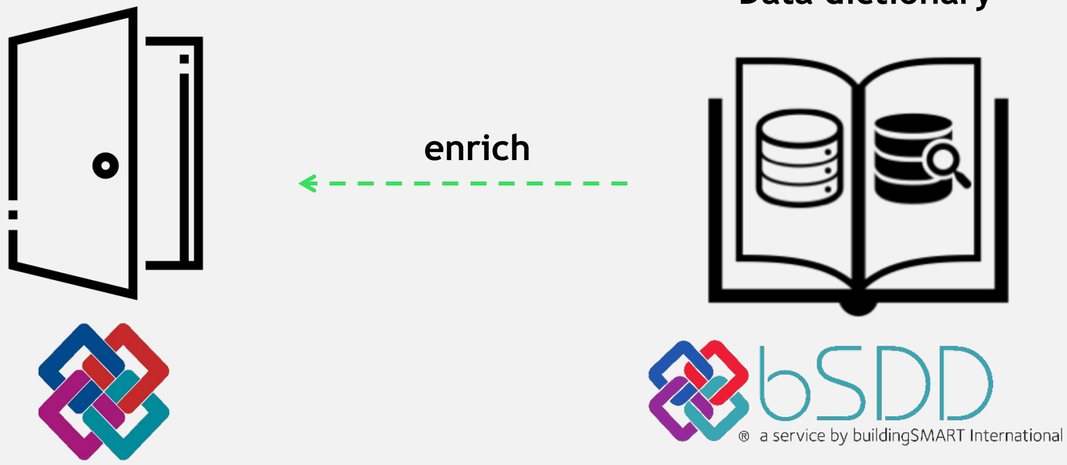
RECONMATIC | OpenBIM - bSDD

Industry Foundation Classes
Data Dictionary





RECONMATIC | Enrich information model – data dictionary



Code	WasteCode
URI	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode
Definition	Represents the waste code associated with the material, as per waste management classification systems, for instance, the European Waste
Dictionary	Decommissioning and Reuse
Dictionary version	0.0.2
Dictionary license	CC BY-NC-SA 4.0
Owner	Eindhoven University of Technology
DataType	String
IsDynamic	False
PropertyValueKind	Single
DocumentReference	https://ec.europa.eu/eurostat/documents/342366/351806/Guidance-on-EWCStat-categories-2010.pdf/0e7cd3fc-c05c-47a7-818f-1c2421e
Status	Active
VersionDateUtc	2024-04-24

Allowed values

Sort number	*Code*	*URI*	*Value*	*Description*
	WC_001	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_001	17 01concrete, bricks, tiles and ceramics	concrete, bricks, tiles and ceramics
	WC_002	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_002	17 01 01 concrete	concrete
	WC_003	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_003	17 01 02 bricks	bricks
	WC_004	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_004	17 01 03 tiles and ceramics	tiles and ceramics
	WC_005	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_005	17 01 06mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances	mixtures of, or separate fractions of ceramics containing hazardous subst
	WC_006	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_006	17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	mixtures of concrete, bricks, tiles and those mentioned in 17 01 06
	WC_007	https://identifier.buildingsmart.org/uri/TUe/DOR/0.0.2/prop/WasteCode/value/WC_007	17 02 wood, glass and plastic	wood, glass and plastic

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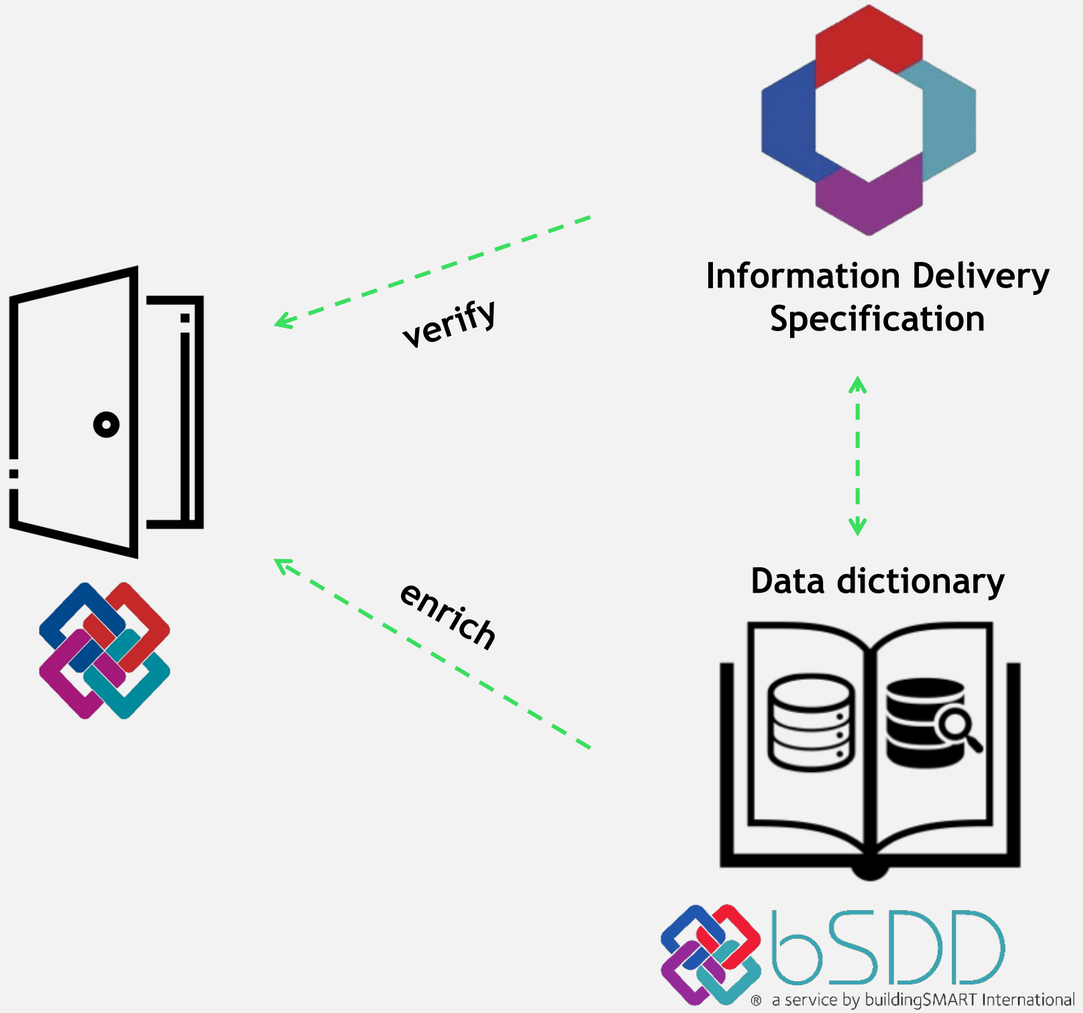
RECONMATIC | Enrich the information model and verify data



RECONMATIC | Learn more

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FOR YOUR ATTENTION

Vitalij Tetervov
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