



Naming conventions, rules, examples, definitions

Of concepts and their attributes in Define

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Introduction

The purpose of this document is to explain the attributes and relations for each concept in Define.

Naming conventions with examples are included where such are appropriate.

The described naming conventions are based on Cobuilder data template process and experience, and can be extended or changed as necessary.

The document is structured in sub-chapters, each describing a different concept in this order:

- 1. Construction object;**
- 2. Group of properties;**
- 3. Measure;**
- 4. Unit;**
- 5. Property;**
- 6. Generic property;**
- 7. Value;**
- 8. Document;**
- 9. Classification;**
- 10. Classification code;**
- 11. Template.**

Construction Object

Construction objects have the following attributes and relationships:

Full name	Complete and unabbreviated title of the construction object
Technical definition	A detailed and precise definition of the construction object
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the construction object
User definitions	A user-friendly and simplified description of the construction object
Examples	Specific instance used to provide clarification, context, or evidence
References	Publications that are consulted to find specific information, particularly in technical or scientific domain
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

Besides the attributes and relationships, Construction objects need to be given clear, concise, easily understandable names and definitions. This is ensured by these [guidelines and rules for creating a CO](#)

Group of properties

The attributes and relations a Group of properties has are the following:

Full name	Complete and unabbreviated title of the group of properties
Technical definition	A detailed and precise definition of the group of property
User definitions	A user-friendly and simplified description of the group of properties
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the group of properties
Examples	Specific instance used to provide clarification, context, or evidence
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]

Countries of use	List of countries where the group of properties is intended to be used
Label	Short, descriptive text displayed in user interfaces to provide a user-friendly identifier
Properties	Inherent or acquired feature of an item [EN ISO 23386], [EN ISO 23387]
References	Publication that is consulted to find specific information, particularly in a technical or scientific domain [EN ISO 23386], [EN ISO 23387]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

At least one property should be added to a Group of properties to exist.

There are, generally, two cases of Groupings, mostly used in Cobuilder context:

Case name	Example
Case 1: Standard GP - [Standard short name]:[year of issue] Properties	EN 123:2020 Properties
Case 2: General GP - General properties - [template name]	General properties – screw

Case 1 covers sets holding properties only from a reliable source such as a standard or any technical specification;

Case 2 covers general groups of properties, valid for the CO, holding only properties that do not come from one source and are not referred to one;

Groups of properties may also be created for other grouping purposes, as needed.

A document should only be attached on a group of properties holding only properties from documents (case 1).

The technical definitions also have conventional view:

Case name	Definition
Case 1: Standard GP	Properties derived from the applicable source
Case 2: General	<i>As needed</i>

Measure

The attributes and relations a Measure has are the following:

Full name	Complete and unabbreviated title of the measure
Technical definition	A detailed and precise definition of the measure
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the measure
User definitions	A user-friendly and simplified description of the measure
Examples	Specific instance used to provide clarification, context, or evidence
Data type	Format for expressing the value of the property [EN ISO 23386]
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Unit	Real scalar quantity, defined and adopted by convention, with which any other quantity of the same kind can be compared to express the ratio of the second quantity to the first one as a number [EN ISO 23386], [EN ISO 23387]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

The full name should come from a reliable source, mostly based on [ISO 80000 series](#) - lowercase only (abbreviations and names can use uppercase).

EXAMPLE: length, voltage, time, pressure

A data type should be used from the ones existing in the system - nominal, float number, number, string, date, boolean. Data types cannot be created in Define.

Short names are to be avoided.

Most ISO 80000-based measures have already been created and should be provided by default to a context.

Unit

The attributes and relations a Unit has are the following:

Full name	Complete and unabbreviated title of the unit
Technical definition	A detailed and precise definition of the unit
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the unit
User definitions	A user-friendly and simplified description of the unit
Examples	Specific instance used to provide clarification, context, or evidence
Dimension	Numerical expression of a measure based on the 7 basic physical quantities
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

The full name is created as it comes from a standard or a reliable source - lowercase only (abbreviations and names can use uppercase).

EXAMPLE: volt

About the Short name, not every unit has its own specific symbol or short name. If there is one present, it needs to be the official one, approved by a standard/reliable source.

EXAMPLE: V

Property

The attributes and relations a property has are the following:

Full name	Complete and unabbreviated title of the property followed by the reference document
Technical definition	A detailed and precise definition of the unit
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the property

User definitions	A user-friendly and simplified description of the property
Examples	Used to illustrate the possible values of the property [EN ISO 23386]
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Generic property	Features of an object that are not necessarily constrained by official technical documents but represent common practice needs
Measure	Property of a phenomenon, body, or substance, where the property has a magnitude that can be expressed by means of a number and a reference [EN ISO 23386], [EN ISO 23387] referred to as “quantity”
Unit	Real scalar quantity, defined and adopted by convention, with which any other quantity of the same kind can be compared to express the ratio of the second quantity to the first one as a number [EN ISO 23386], [EN ISO 23387]
Reference	Publication that is consulted to find specific information, particularly in a technical or scientific domain [EN ISO 23386], [EN ISO 23387]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

The measure and the applicable units to choose from, are automatically inherited from the generic property that has been chosen.

When creating a Property, there are a few naming conventions. First, it is recommended that the code of the document and the short name of the document be the same.

The naming format is as follows:

Naming convention	Example
[term from a document] according to [document short name] - lowercase only (abbreviations and names can use uppercase)	rated voltage according to EN 123

The technical definition rules stay the same as in the Construction object. It is structured as it comes from the source but explained in a simpler way if needed, giving the test method and specific requirements from the source - lowercase only (abbreviations and names can use uppercase).

Example: voltage assigned to the unit by the manufacturer, used as a reference value and measured with VDC tester at 30 degrees Celsius, moderate electric load

Generic property

The attributes and relations a Generic property has are the following:

Full name	Complete and unabbreviated title of the generic property
Technical definition	A detailed and precise definition of the generic property
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the generic property
User definitions	A user-friendly and simplified description of the generic property
Examples	Example of values for the generic property
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Property category	indicating the specific application or purpose of the values associated with that property
Measure	Property of a phenomenon, body, or substance, where the property has a magnitude that can be expressed by means of a number and a reference [EN ISO 23386], [EN ISO 23387] referred to as “quantity”
Unit	Real scalar quantity, defined and adopted by convention, with which any other quantity of the same kind can be compared to express the ratio of the second quantity to the first one as a number [EN ISO 23386], [EN ISO 23387]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

Relevant units to choose from are automatically inherited from the Measure chosen. The measure also sets the data type for this property and any other properties, related to it.

The full name should be lowercase only (abbreviations and names can use uppercase).

EXAMPLE: rated voltage

The technical definition rules stay the same as in the Construction object (see CO explanation above). As this is a generic property, the definition is naturally more high-level, without concrete measurements, aimed to express the nature of the property - lowercase only (abbreviations and names can use uppercase).

EXAMPLE: rated value of the voltage assigned by the manufacturer to a component, device or equipment and to which operation and performance characteristics are referred

Value

The attributes and relations a Value has are the following:

Full name	Complete and unabbreviated title of the value
Technical definition	A detailed and precise definition of the value
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the value
User definitions	A user-friendly and simplified description of the value
Examples	Example of values for the generic property
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Data type	Format for expressing the value of the property [EN ISO 23386]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

The full name is supposed to be as short as possible, better one word unless more words are supposed to form a statement to be used as such.

For values that aim at describing a list of predefined (enumerated) values to choose from (as the example provided) **the data type should be string**.

EXAMPLE: A1, B5, blue, Class1, C25, etc.

References

The attributes and relations a Reference has are the following:

Full name	Complete and unabbreviated title of the reference
Technical definition	A detailed and precise definition or the scope of the reference
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the reference
User definitions	A user-friendly and simplified description of the reference
Examples	Specific instance used to provide clarification, context, or evidence
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Type	The specific category or nature of a reference within a context
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

The full name follows this naming convention:

Naming convention	Example
[Document short name] - [Document title]- lowercase only after the short name (abbreviations and names can use uppercase)	EN 123 - standard to measure general things

A short name is also mandatory because it is used to search and adequately display search results. It looks like this:

Naming convention	Example
[Document short name]	EN 123

Definitions should be coming from the scope of the standard/technical specification and should be explaining the purpose of the document.

Classification

The attributes and relations a Classification has are the following:

Full name	Complete and unabbreviated title of the classification
Technical definition	A detailed and precise definition of the classification
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the classification
User definitions	A user-friendly and simplified description of the classification
Examples	Specific instance used to provide clarification, context, or evidence
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Language	The language of the classification
Countries of use	Indicates where the classification is intended to be used
Codes	An identifier expressed through letters, numbers, or symbols within the classification
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

A classification's full name must always be as it comes from the document that describes it.

EXAMPLE: Uniclass 2015 – Products

Unless the classification is to be used in only one country, stated and written in a document, a country is not to be picked from the attributes tab.

Classification code

The attributes and relations a Classification code has are the following:

Full name	Complete and unabbreviated title of the classification code
Technical definition	A detailed and precise definition of the classification code
Parent	The higher-level category that encompasses and relates to a code
Class number	A numerical identifier assigned to a specific class or category within a classification system

As it can be seen, it only has a full name. As the classification, the code must be as it comes from the organization that provides it.

EXAMPLE: Pr_30_30_30_30 (Uniclass), 1.2.3 (nrm)

Template

The attributes and relations a Template has are the following:

Full name	Complete and formal name of the template, providing a clear and unambiguous description of the template's purpose and content
Technical definition	Explanation of the templates
Short name/Symbol	A concise abbreviation, acronym, or symbol representing the template
User definitions	A user-friendly and simplified description of the template
Examples	Specific instance used to provide clarification, context, or evidence
Domain	Area of activity covering a science, a technique, a material, etc [EN ISO 23386]
Countries of use	Indicates where the Template is intended to be used
Construction object	Object of interest in the context of a construction process [EN ISO 23387]
GUID	Unique identifier generated using an algorithm [EN ISO 23386], [EN ISO 23387]

Groups of properties	Collection enabling the properties to be prearranged or organized [EN ISO 23386], [EN ISO 23387]
Properties	Inherent or acquired feature of an item [EN ISO 23386], [EN ISO 23387]
Classifications	Systematic organizations of data into distinct categories or groups based on shared characteristics
References	Publications that are consulted to find specific information, particularly in technical or scientific domain [EN ISO 23386], [EN ISO 23387]

Properties are added automatically through the Groups of properties.

As we currently have 1 template per CO in Cobuilder context, the template's full name repeats the name of the CO.

EXAMPLE: screw

The same is with the Technical definition:

EXAMPLE: a short, slender, sharp-pointed metal pin with a raised helical thread running around it and a slotted head, used to join things together by being rotated so that it pierces wood or other material and is held tightly in place

Important! At least 1 property set must be attached for the system to allow you to send a template for approval.

If the template has a standard Group of properties, this would mean that the template is according to a standard and then, a Document should be attached to the template.