



center for
produktivitet
i byggeriet

CCS Identification



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bips
Lyskær 1
Herlev DK-2730
Denmark
Phone +45 70 23 22 37
Fax +45 70 23 42 37
bips@bips.dk
bips.dk

bips develops the common basis for standardised and digitalised cooperation in construction, operation and maintenance. The goal is to increase productivity through enhanced exchange of information.

Foreword

CCS Identification is a part of the cuneco classification system (CCS). CCS gives the construction industry a common language and methods for establishing unambiguous exchange of information through the entire construction process from idea to operation.

CCS Identification is the part of CCS which is used to identify object occurrences in the form of construction complexes, construction entities, built spaces, activity spaces, construction element, construction agents, construction products, construction aids and documentation. Any object can, depending on the requirements, be designated by an unambiguous ID corresponding to the following aspects: type, product, location and function.

The Type-ID and Product-ID can be used both as a single-level identification and as a multi-level identification. The multi-level ID identifies the considered object as a part of a whole in all aspects.

The individual projects may decide which ID's is to be used for the objects based on an analysis of the value it will add to the project.

The use of the identification is governed by a set of rules, which ensures that the ID's can be read by and exchanged between the users as well as the software solutions in a uniform manner.

This product sheet contains definitions, rules and examples for the use of CCS identification.

CCS Identification is coordinated with the other elements in CCS; classification, properties, levels of information and measurement rules.

For questions or feedback related to CCS Identification bips' secretariat can be contacted at bips@bips.dk or phone +45 7023 2237.

Read more about CCS at bips.dk

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General rules

Purpose

CCS Identification is used for identifying occurrences and types of objects.

Objects from following classes of objects are handled: construction complexes, construction entities, storeys, zones, built spaces, activity spaces, construction elements, construction aids, construction products, construction agents and documents.

Definitions

Identification/ID

Code which unambiguously separates one object from other objects or a group of objects from other groups of objects.

Distinction between classes of objects – “[]”

In order to distinguish between the individual classes of objects, a top node in the form of a letter in square brackets “[]” is used.

[C] Construction Complex

[E] Construction Entity

[S] Storey

[Z] Zone

[B] Built Space

[A] Activity Space

[L] Construction Element

[D] Construction Aid

[P] Construction Product

[G] Construction Agent

[U] Document

Top nodes are used when it is ambiguous which class of objects is identified. This may be the case if for example a document contains identification for several classes of objects. In practical

use the top nodes can be omitted, when there is no risk of mis-interpretation.

Top nodes are included in all the examples in this product sheet in order to present the examples in a consistent manner.

For information about [U] Documents, publication bips A104 applies.

Distinction between ID's – Prefix

In order to distinguish between the individual ID's a prefix is used.

The individual ID's are referred to by the following prefixes.

- % Type-ID
- § Multi-level type-ID
- # Product-ID
- Multi-level product-ID
- + Location-ID
- = Function-ID

Internationally [B]+ is recognised by prefix ++.

Letters and numbers

Letters and numbers are used in the identification code.

The letters refers to classes corresponding to CCS Classification. It is optional whether classification is used as a part of the identification. The numbers indicates sorting which is defined specifically for a project. A project specific sorting can be defined for projects as well as for companies.

CCS classification

The objects in CCS classification, along with codes and definitions, can be accessed at cunecoclassification.dk.

For [C] Construction entities the following classifications are used:

- C Construction complexes
- E Construction entities
- S Storeys
- Z Zones
- B Built spaces
- A Activity spaces

Separation of levels – “.”

In the Multi-level product-ID, the Multi-level type-ID, the Location-ID and the Function-ID a period “.” is used as a separator between the individual levels in the structure. The code X.Y.Z shall be interpreted as follows: Z is the object being regarded while Z is a part of Y which is a part of X.

Separation between codes for ID’s – “/”

If more than one ID applies for an object within a code string, or the ID’s is displayed in one line, the ID’s shall be separated by a forward slash “/”.

Project specific ID’s

If the ID’s defined by CCS are insufficient, it is possible to define supplementary ID’s which are specific to a given project. These ID’s are characterized by a number in the top node – e.g. [L1].

For the supplementary ID’s the rules and definitions for the ID being supplemented letter code apply. This means that the rules for the top node [L] Construction elements apply for the

supplementary top node [L1]. The meaning of the supplementary ID’s shall be described.

It is possible to assign project specific codes for user specified classification to the supplementary ID’s. It is important that definitions are established for the codes and that the codes cannot be confused with codes in CCS including that the letters O and I are not used, as confusion with the digits 0 (zero) and 1 (one) is likely.

Properties as a part of the identification

In addition to using CCS classification in the ID, the identification can be supplemented with information about the properties of the object. This is done by using codes for properties.

Properties are assigned in parenthesis “()” following the identification. The syntax is:

(XXXX:Y_XXXX:Y_.....)

The parameters in the string are determined by:

- XXXX Code referring to the property name
- Y Code referring to the property value
- :
- Character separating property name and property value
-
- Character separating the individual properties

The values for XXXX and Y are listed in the CCS Property database. See cunecoclassification.dk

Translation from code to text

Generally a code is translated into text using these principles:

- The separator “/” is used in the same way as in the code.
- The individual levels in multi-level ID’s are separated using a comma “,” and displayed in the same order as the code.

If it is ambiguous what the code is referring to the text shall start with **Type, Product, Function** or **Location**.

Examples are given in the following chapters.

Type-ID

Prefix %

Definition

Identifies a project specific group of objects within the same class.

Guidelines

It is recommended that CCS classification is used in the identification.

Use

Type-ID can be used to group objects for a project specific purpose.

Examples of project specific purposes can be:

- Specification of objects with corresponding properties – e.g. in specification of construction elements.
- Configuration and specification of activity spaces.
- Records in a tender list.

Examples

[Construction entity] Lavatory building type 1
[E]%ACA1

[Built space] Office type 4
[B]%ADA4

[Activity space] Meeting room type 2
[A]%ADB3

[Construction element] Window type 1
[L]%QQA1

[Construction aid] Storage system type 5
[D]%D5

Multi-level type-ID

Prefix §

Definition

Identifies a project specific group of objects within the same class as a part of a group of project specific objects within the same class.

Guidelines

It is recommended that CCS classification is used in the identification.

Use

The multi-level type-ID can be used to group objects within a group of objects for a project specific purpose.

Examples of project specific purposes can be:

- A standardized type of construction elements, which is a part of another standardized type of construction elements e.g. in the form of standard building products.

Examples

[Activity space] Office type 3, Meeting room type 4
[A]§ADA3.BAB4

[Construction element] Flight of stairs type 3, Step type 2
[L]§XSB3.ULQ2

[Construction element] Wall structure type 2, Brick type 1
[L]§BD2.ULG1

Product-ID

Prefix

Definition

Identifies an object regarded as an individual object.

Guidelines

It is recommended that CCS classification is used when identifying construction elements and construction aids.

Use

The Product-ID is used to assign project specific numbers to objects when there is no knowledge of or requirement for structuring.

Examples of project specific purposes can be:

- Identification of individual construction elements within a class.
- Identification of individual spaces regardless of usage.

Examples

[Construction entity] Lavatory building no. 1
[E]#ACA1

[Built space] No. 10
[B]#10

[Activity space] No. 3
[A]#3

[Construction element] Window no. 1
[L]#QQA1

[Construction aid] Storage system no. 5
[D]%D5

Multi-level product-ID

Prefix -

Definition

Identifies an object as a part of an assembly whole.

Guidelines

It is recommended that CCS classification is used when identifying construction elements and construction aids.

The same numbering as for the Product-ID can be used for the individual objects thereby creating an unambiguous link between the Product-ID for an object and the numbering used for the object in the multi-level product-ID.

Use

The multi-level product-ID is used for identifying objects by their mutual relation.

Examples of project specific purposes can be:

- Identification of space in relation to e.g. construction entity or storey, when the location of the space is known.
- Identification of construction elements in relation to other construction elements in a construction entity.

Examples

[Construction entity] Construction entity no. 4, Storey no. 2,
Built space no. 1

[C]-E4.S2.B1

[Construction complex] Construction entity no. 12, Zone no. 3,
Storey no. 2, Activity space no. 22

[C]-E12.Z3.S2.A22

[Construction element] Wall system no. 2, Window no. 5,
Pane no. 1

[L]-B2.QQA5.NAA1

[Construction aid] Storage system no. 5,
Lighting equipment no. 3

[D]-D5.AA3

Location-ID

Prefix +

Definition

Identifies a place.

Guidelines

The place can be expressed by an object or by coordinates.

The number used always refers to a Product-ID.

Use

Examples of project specific purposes can be:

- Location of a construction element on a construction element.
- Location of a construction element in a space, a storey, a zone or a construction entity.
- Location of an activity space in a built space.
- Location of an activity space in an activity space.

Examples

[Activity space] No. 3 / Location, [Construction entity] Built space no. 6
[A]#3 / [C]+B6

[Construction element] Power socket no. 61 / Location, [Construction element] Wall plate no. 5
[L]#XDB61 / [L]+ULM5

[Construction element] Toilet type 5 / Location, [Construction complex] Construction entity no. 4, Storey no. 2, Built space no. 1
[L]%XLD5 / [C]+E4.S2.B1

[Construction aid] Lighting equipment no. 3 / Location, [Construction aid] Traffic system no. 2
[D]%AA3 / [D]+A2

Function-ID

Prefix =

Definition

Identifies an object as a part of a functional whole.

Guidelines

It is recommended that CCS Classification is used when identifying construction elements.

When identifying spaces ID's defined specifically for the project can be used.

Use

The Function-ID is used for identifying the functional relation between objects independently of the physical implementation.

Examples of project specific purposes can be:

- Construction elements in relation to predesign and/or system design of functional and technical systems – e.g. in the form of process diagrams and structural systems.
- Combination of spaces by their relation to groups of spaces in relation to a specific defined function.

Examples

[Construction entity1] Organization no. 1, Department no. 2, Office no. 3
[E1]=G1.F2.CFA3

NB: The ID above is a supplementary ID, which is indicated by the use of the top node [E1]. The codes G and F are defined as G: Organization and F: Department. All other codes are in accordance with CCS.

[Construction element] Ventilation system no. 1, Heating supply system no. 2, Check valve no. 3
[L]=J1.HD2.RMA3