

<u>Object</u>	<u>Category</u>	<u>Requirement</u>	<u>Verification</u>
1	CoClass Web/API Structure templates	As a CoClass user I want to be able to publish client and project-specific applications (templates / recipes) to make these available to others	Verify in CoClass API
2	CoClass Web/API Structure templates	As a user I want to be able to retrieve client-specific and project-specific applications (templates / recipes) in order to be able to use agreed structures	Verify in CoClass API
3	CoClass Web/API Searching/queries	As a CoClass user, I want to be able to search and filter object names (classes) in the CoClass classification, so that I can find what I am looking for	Verify in CoClass API
10	CoClass Web/API Structure templates	As a user i want to be able to keep track of different versions of my templates	Verify in CoClass API
12	CoClass Web/API Structure templates	As a "publisher" of shared templates, I want to be able to assign permissions (editing / viewing etc ...) to these for	Verify in CoClass Studio
15	CoClass Web/API Structure templates	Svensk Byggtjänst shall be able to provide public (agreed upon) template libraries	Verify in CoClass Studio
16	CoClass Web/API Rules/validation	As a user I want to validate my created templates to ensure that they follow CoClass classification and specification	Verify in CoClass Studio
17	CoClass Web/API Searching/queries	As a software developer I want to ask the CoClass API with a GET method if a certain CoClass code in a certain CoClass version is valid or not (perhaps with a boolean answer), so that I can build a validation tool.	That the response from a GET Method is true/false
18	CoClass Web/API Searching/queries	As a software developer I want to ask the CoClass API with a GET method which Definition that belongs to a certain CoClass code in a certain CoClass version, so that I can build a validation tool.	That the response from a GET method is a CoClass Description
19	CoClass Web/API Searching/queries	As a software developer I want to ask the CoClass API with a GET method which CoClass codes (plural) that has a certain Defintion, so that I can build a tool that provides advises to the user which codes to choose from.	That the response from a GET method is a CoClass code
20	Industry practice: CoClass development	As a facility manager/client I want to have the possibility to store multiple (infinite) Functional systems on each object, so that I can see all the functional systems that each object belongs to.	That it's possible to add several Functional systems on each object
21	Industry practice: Other	As as facility manager/client I want to have the possibility to store the specific CoClass version on each specific CoClass code, so that I can keep track on my data as the data updates	That it's possible to store a CoClass version number on each CoClass code
22	Industry practice: Searching/queries	As a user I want to search and filter object names (class) in the selected template with conditions on properties so that a standard on templates will be used	Verify that the correct template is used and contents

23	Industry practice: Structure templates	As a user management (updating) of built templates against CoClass "specification" special focus on properties	Verification through the steering group's maintenance document
24	Industry practice: CoClass development	As an Asset Owner, I want a classification system that covers the whole lifecycle of an asset, so that I can use the same classification system through all lifecycle states	With "pen and paper", perform a classification job for one specific asset instance for each life cycle
25	Industry practice: CoClass development	As an Asset Owner, I want a classification system that allows classification at different levels of information needs, so that I can use the classification system even though at some point I do not have all the necessary information to make a complete classification.	With "pen and paper", perform a classification job for one specific asset instance where all combinations of elements in the classification code are used in combination with valid values and no values
26	General CoClass development	As an Asset Owner, I want a classification system that allows assigning functional requirements as part of the classification, so that I later in the process can validate whether the functional requirements are met or not.	With "pen and paper", perform a classification of one asset regarding functional requirements, extend the classification regarding technical solution. Extend with one solution that are intended to fulfill the functional requirement and one that are not intended to fulfill the functional requirement. Verify that one of them does fulfill the requirements and the other doesn't
27	General CoClass development	As an Asset Owner, I want a classification system that allows classification of geoscience domains, so that I can search and use this kind of information by using the same classification methodology that I use on my assets.	With "pen and paper", perform a classification job for a number of typical geological, and geotechnical interpretations and investigation methods. To be detailed in a later stage
28,1	Industry practice: Other	As a CoClass user, I want to be able to concatenate CoClass codes to a reference identifier, so that I can deliver this as part of an information exchange (e.g. to NVDB).	With one software application that claims to have this functionality, send data to NVDB and verify that the CoClass based reference identifier is included in the delivery.
28,2	Industry practice: Other	As a CoClass user I want the software applications I use to help me to interpret CoClass based reference identifiers received as part of an information exchange (e.g. from NVDB) so that I don't have to learn the rules behind the concatenated reference identifier to carry out my work in an efficient way.	With one software application that claims to have this functionality, fetch data from NVDB and verify that the information in the CoClass based reference identifier is splitted and presented as CoClass codes.
30	CoClass Web/API CoClass development	As a CoClass user, I want Svensk Byggtjänst to offer a property set definition according to BSI's IFC specification, so that I can exchange information related to my classification of assets in a standardized manner	Visual inspection in software application that claims to have the functionality to fetch property set definitions from SBT and interpret IFC property set definitions correct.
32	Application Other	As a designer who models the built environment, I want to assign classification codes by selecting from a list of friendly / human readable values, so that I do not need to know the CoClass code values in order to do my design job.	Visual inspection in software application that claims to have this functionality
33	Application Structure templates	As an Asset Owner I want to define and share profiles of CoClass that suits my needs, so that I can ensure that my suppliers use CoClass the way I want it to be used	Visual inspection in software application that claims to have this functionality

34	Application	Structure templates	As an Asset Owner I want Svensk Byggtjänst to host my profiles of CoClass, so that I don't have to apply resources from my own organization for this to avoid multiple variations	Icke funktionellt krav?
39	Application	Other	As a CoClass user, I want to have an approach to the classification process that allows me to perform the classification for some assets one day, and then continue with some other assets another day, so that the classification job does not require my schedule to be set up so that everything needs to be done in a batch .	Visual inspection in software application that claims to have this functionality
42,1	Application	Other	As an asset owner, I want to search for assets that are incompletely classified or not classified at all, so that I can make an assessment report of how complete the classification of my assets are.	Visual inspection in software application that claims to have this functionality
42,2	Application	Other	As a CoClass user, I want to search for assets that are incompletely classified or not classified at all, so that I can easily find assets that needs to be elaborated regarding the classification	Visual inspection in software application that claims to have this functionality
43	Application	Structure templates	As a CoClass user, I want the application I use to present only those parts of CoClass that are relevant for my work within a specific domain and specific life cycle state, so that I don't become overwhelmed by the complexity in the CoClass classification system and thereby becomes inefficient in my work.	Visual inspection in software application that claims to have this functionality
44	Industry practice: CoClass development		As an Asset Owner I want to be able to classify land use data (hazard zones, nature conservation areas, water supply areas etc.), so that I can search and use this kind of information by using the same classification methodology that I use on my assets.	With "pen and paper", perform a classification job for instances of land use data for each life cycle. Must be elaborated to a list of more spesific land use data.
45	Industry practice: CoClass development		As an Asset owner, I want to be able to classify assets that are beyond my ownership and responsibility, however capable to affect how I perform my asset management (e.g. high-voltage power lines, large water supply pipes), so that I can search and use this type of information using the same classification methodology as I use for my assets.	"With pen and paper", perform a classification job for instances of such assets. Must be elaborated to a list of more spesific assets."
46,1	Industry practice: CoClass development		As a CoClass user, I want to be able to classify assets used during the construction (scaffolding, barracks etc.) phase, so that I can search and use this kind of information by using the same classification methodology that I use on my assets.	"With ""pen and paper"", perform a classification job for instances of assets used during construction for each life cycle. Must be elaborated to a list of more spesific assets.
46,2	Industry practice: CoClass development		As a CoClass user, I want to be able to classify assets with a temporary position during the construction phase, so that I can search and use this kind of information by using the same classification methodology that I use on my assets.	"With ""pen and paper"", perform a classification job for instances of assets in temporary position. Must be elaborated to a list of more spesific assets.

47	Industry practice: CoClass development	As an owner of a transport net, I want to use CoClass for "abstract assets" like parking lots for maintenance trucks, snow heaps etc., so that I can search and use this kind of information by using the same classification methodology that I use on my assets.	With "pen and paper", classify one abstract asset like snow heaps.	
48	Application	Structure templates	DUPLICATE	
49	General	Relating other systems	As an Asset Owner I want to define and share profiles of CoClass that suits my needs, so that I can ensure that my suppliers use CoClass the way I ment it to be used As a CoClass user, I want to be able to classify assets in all systems not only object based. Example are systems for calculatona and timelplanning. So that this systems also can use and carry the CoClass informations.	Be able to use CoClass in systems for calculation and timeplanning.
50	Application	Structure templates	As a CoClass user, I want the software applications I use to be able to utilize a CoClass profile to present assets, so that I can view assets in a way that is best suited to my role in a given life cycle phase	Visual inspection in software application that claims to have this functionality
51	Industry practice: Structure templates	DUPLICATE		
52,1	Application	Structure templates	As an Asset Owner, I want to be able to setup constraints on valid combinations of classification codes depending on life cycle phase, so that my assets are classified according my needs in all lifecycle phases. As an Asset Owner, I want to be able to setup constraints on valid combinations of classification codes depending on life cycle phase, so that my assets are classified according my needs in all lifecycle phases.	
52,2	Application	Structure templates	As an Asset Owner, I want to share my constraints on valid combinations of classification codes as a profile, so that my suppliers easily can classify my assets according my needs in all lifecycle phases	
53	Application	Other	As an Asset Owner, I want a classification system that allows self-contained classification of different sections of large extent assets (utilize classic GIS segmentation), so that I can use the classification system without having to split large extent assets in smaller fictitious parts	Visual inspection in software application that claims to have this functionality
54	Application	Structure templates	DUPLICATE As a CoClass user, I want my software applications to present classification hierarchies in alternative ways, so that the presentation is adapted to the role I have in a given phase	

55,1	Industry practice: Rules/validation	As a CoClass user I want the software applications I use to help me to verify the classification I've done so that I can be sure that classified assets fits correctly into the asset classification hierarchy.	Visual inspection in software application that claims to have this functionality
55,2	Industry practice: Rules/validation	As a CoClass user, I want the software applications I use to help me to browse the classification hierarchy, so that I can trace my classification of one single asset upwards towards a higher level (system level) of the classification.	Visual inspection in software application that claims to have this functionality
56,1	Industry practice: Other	Duplicate As an Asset Owner, I want to classify assets with regard to functional requirements and technical solution so that I can see how my assets are fulfilling the functional requirements through the assets' life cycle	
56,2	Industry practice: Other	Duplicate As a CoClass user, I want the software applications I use to help me to browse the classification hierarchy, so that I can trace my classification of one single asset upwards towards a higher level (system level) of the classification.	
57	Industry practice: Other	As an asset owner, I want to use a classification system where classification for one life cycle phase can be performed as a self-contained classification (independently of other life cycle phases), so that {WHAT DO WE AIM FOR HERE?}	
58	Application Other	As a Designer who models the built environment, I want objects to automatically assign classification codes so that I do not need deep knowledge of CoClass in order to do my design job.	Visual inspection in software application that claims to have this functionality
59	General Structure templates	As a CoClass administrator in the project , I want to define what classes are allowed and also set restrictions, so that the project only uses the allowed classes as decided in the specific project.	Start a project, use the CoClass Service and try to set restriction for classification in the project.
62	Industry practice: Relating other systems	As an Transports network owners, I want to be able to save part of the CoClass information to the Swedish Asset Managment System ANDA, so that the CoClass information is included in the delivery. Also possible to do a selected deliery in evry project phase.	With one software application that claims to have this functionality, send data to ANDA and verify that the CoClass data is included in the delivery.
63	General Structure templates	DUPLICATE Godkjenne kombinasjoner av klasser fra forskjellige tabeller, (billag for regelverk for referensID).	

64	General	Structure templates	As a user of a software application, I want the software application to be able to be configured to use a specific asset owner's implementation of CoClass so that I do not need deep knowledge of a particular asset owner's CoClass implementation to be able to do my job.	Visual inspection in software application that claims to have this functionality
65	General	Structure templates	As an Asset Owner, I want to define profiles of CoClass that defines mandatory functional classes, so that I can see how my assets are fulfilling the functional requirements through the assets' life cycle	Visual inspection in software application that claims to have this functionality
66	Industry practice:	Other	As a part of the building sector , I want as many user as possible in the sector to use CoClass, so we get the benefits of one common classification system (CoClass)	By December 2020 the 50% most common systems within the Building Sector in Sweden have implemented CoClass.
68	Application	Other	As a CoClass user, I want the applications I use to be able to set up reports using CoClass codes so that I can produce asset assessment reports that follows the structure of my CoClass profile	Visual inspection in software application that claims to have this functionality
69	Application	Other	DUPLICATE As a CoClass user, I want the applications I use to be able to set up reports using CoClass codes so that I can produce asset assessment reports that follows the structure of my CoClass profile	
70	General	Structure templates	As a user, I want to organize/structure/split a building facility into different geographical / spatial divisions that is depending on what phase of the life cycle that fit the current stage. This division/split can be different between the stages. This means that, for example, the design phase may have the same division as a technical description, but in the asset management phase have a different division	That there is room in branchpraxis to do this and that this is then verified via some test scenarios within different phases
72	General	Structure templates	As a project owner i want the users only to be able to input data in a clear way. How structure and relations between classes / properties / Features attributes / recipes can be made must be clear and at what level they are done that duplicates are avoided	The requirements that are set up in branchpraxis are verified so that connections are tested so that it is ensured that they cannot be connected incorrectly.
73	General	Rules/validation	As a designer. I need to understand what design i can choose. As an owner I want to verify that. Functional requirements must be verified that they are fulfilled by the selected technical solution recipe / produktionsresultat	Can be difficult to accommodate / verify within this project
74	General	Structure templates	As a user, Support to the user must be provided so that the user is guided to use the defined ontology (Structure / relations)	Verification through user case in implemented software
75	General	Relating other systems	As a software developer. Functionality should be made so that you have taken height and that it is open and prepared to integrate other systems such as AMA description tools and requirements databases. So that this can easily be integrated in the future	Verified by that the attribute for beskrivningstext can be linked to the Produktionsresultat class

76	General	Other	As a designer, procurer and project owner. Where status can be set for different types of contracts on the objects should be clear	Verified by that the attribute is included
77	Industry practice:	Structure templates	As a user, owner and software developer. The recipe concept should be well defined in CoClass to avoid software-specific discrepancies	Verification through user case in implemented software
78	General	Structure templates	As a planner/designer. Support for working with the building facility division/structures should be available so that one can start working on it at an abstract level ie outside the 3D model	Verification by a test case being modeled solely by coclass structure
79	Application	Searching/queries	As a user. In a clear way it should be possible to interpret in the system which properties / Feature attributes / classes / recipes an object is dependent on	Verification by filtering on respective input parameters
80	CoClass Web/API	Searching/queries	As an application developer, I want to know what data is stored in a CoClass class, so that I can extract information from retrieved classes.	This could be verified by checking that the documentation provides an example response for each API method. The example response illustrates all attributes that are returned by that method.
81	CoClass Web/API	Searching/queries	As an application developer, I want to retrieve the data of a CoClass class and all its children, so that I can traverse the CoClass hierarchy and extract information relevant for my business case.	This could be verified by checking that the documentation provides an example response for each API method. The example response illustrates all attributes that are returned by that method.
82	CoClass Web/API	Searching/queries	As an application developer, I want to retrieve the available versions of a CoClass class, so that I can specify which version of a CoClass class I want to retrieve.	This could be verified by checking that the documentation provides an example response for each API method. The example response illustrates all attributes that are returned by that method.
83	Industry practice:	Relating other systems	As anyone I want to import an IFC - file and a Revit file where objects are labeled based on CoClass	To be shown
84	Industry practice:	Structure templates	As anyone I want to be able to structure the information recieved based on IEC 813 46-12	To be shown
85	Industry practice:	Relating other systems	As anyone I want to import all features from a supplier of goods, based on his ETIM code and based on i.e. the EN standard he is suppling. Then link that file to all appropriate objects in the structures	To be shown
86	Industry practice:	Structure templates	As anyone I want to populate the appropriate screens with the features recieved	To be shown
87	Industry practice:	Other	The supplier also delivered documentation i.e. files. As anyone I want to link those files incl the IFC and Revit files to all appropriate objects	To be shown

88	Industry practice: Searching/queries	As a service provider/ anyone I want to find an item in the premises i.e. pump. Then the PID diagram related to that pump, then the wiring diagram and the premises where the switch related to the pump is located. Finally the ETIM code referring to that pump	To be shown
89	Industry practice: CoClass development	As anyone I want to update an object with new non-CoClass names, new features to be presented on the screen. Then add the relevant alphanumeric value to that feature	To be shown
90	Industry practice: Other	As anyone I want to add new files/ documents to the object above	To be shown
91	Industry practice: Rules/validation	As anyone I now want to export the object above including features and files to a subcontractor. Then importing all the information and comparing the updates made with what was sent out	To be shown
92	Industry practice: Rules/validation	As a superuser I want to be able to establish roles	To be shown
93	Industry practice: Rules/validation	As a superuser I want to be able to control information being presented at fieldlevel based on roles	To be shown
94	Industry practice: Rules/validation	As a superuser I want to be able to give accessrights to roles based on objects, files and features at field/ file level	To be shown
95	Industry practice: Searching/queries	As anyone I want to be able to update one document linked to many objects/ items in one action	To be shown
96	Industry practice: Searching/queries	As anyone I want to move one object including all its "children" including all features and files to a new location without having to update i.e. wiring and its alarm loop if no changes are made in those areas	To be shown
97	Industry practice: Searching/queries	As anyone I want to be able to export and import one object and all its "children" including all their features, files/ documents, versionnumber and history to any external or internal IT system	To be shown
98	Application Relating other systems	As a user of an application, i want to be able to access my templates from coclass.byggjtjanst.se by providing my credentials	Show that you can access a template in a 3rd party application
99	CoClass Web/API Structure templates	As a user of CoClass, I want to be able to publish templates publically for others to use	Show in CoClass Web
100	CoClass Web/API Structure templates	As a user of CoClass, I want to be able to use a template as the starting point of my own structure	Show in CoClass Web
101	Application Structure templates	As a user of an application, I want to be able to update a template from CoClass in my workspace	Show in application
102	Application Relating other systems	As a user. In the design tools the user should be able to select for the project/facility relevant objects with for the project/facility relevant CoClass structure/Features attributes/Recept	show in application

103 Industry practice: Searching/queries

As a user I want to filter object names (class) in the selected template with conditions to compare with other classsystems (Standard and nonstandard). This is for show results in different environmental systems. (BREEAM, LEED, Miljöbyggnad)

Verify that the correct template is used and contents

104	Industry practice	Other	As anyone, I need the industry practices to be governed and maintained by a body so that it reflects the needs over time	Verify that the industry practices has a responsible body and that there exists processes for maintenance.
105	Industry practice	Other	As anyone, I need means for software certification so that software compliance with industry practices can be assured and published since this will contribute to a higher degree of interoperability between software applications over the asset lifecycle.	Verify that there exists a software certification process with regards to the industry practices.

106 CoClass Web/API Searching/queries

As a developer I want to be able to use the API to provide suggestions for updates (e.g. definition for a class) to enable that functionality to an end user of my application

107 CoClass Web/API Searching/queries

as a software developer want the default and versionless class reference to always reference the latest version of a class and when a specific version is required be able to specify that version explicitly since the "normal" case would be that the latest version is wanted.