

## National BIM Standard - United States® Version 3

## 2 Reference Standards

#### 2.4 OmniClass™

## 2.4.4.10 OmniClass™ Table 34 – Organizational Roles, Pre- Consensus Approved Draft 2012-10-30

## 2.4.4.10.1 Scope – Business Case Description

OmniClass™ is an existing industry standard that has been continuously developed, managed, and published since 2001 by CSI and Construction Specifications Canada. OmniClass™ has its own procedure for regular review and approval of all content by an independent body of subject matter experts composed of representatives from a wide variety of AECOO industry interest areas, the OmniClass Development Committee.

OmniClass<sup>TM</sup> is designed to provide a standardized means of classifying and organizing construction information, including BIM objects and related information. This classification and organization allows for grouping and more refined analysis, storage and retrieval, or presentation of that information, and can also aid in enhancing information exchanges and other forms of standardized data transfer. All individual OmniClass<sup>TM</sup> tables are capable of serving these purposes individually, but the tables are designed to work as a suite, enhancing each other's classifications by increasing the number of access points provided on any object so classified. As a result, increasing the number of OmniClass<sup>TM</sup> tables available within an NBIMS-US<sup>TM</sup> context will have a multiplicative effect on affected applications.

The intended uses of Table 34 – Organizational Roles described in this version of the Table are:

"Specifying and estimating construction and maintenance costs for building elements, identifying workers and estimating associated labor costs needed in the performance of specified procedures, project management and planning."

#### 2.4.4.10.1.1 Publishing organization

All OmniClass™ content is published by <u>CSI</u> and <u>Construction Specifications Canada</u>.

#### 2.4.4.10.1.2 Version

The version of OmniClass™ Table 34 – Organizational Roles approved is "2012-10-30," designated as OmniClass\_34\_2012-10-30.zip on <a href="www.omniclass.org">www.omniclass.org</a>. The version of this table is listed as "Pre Consensus Approved Draft," which is the final version of any OmniClass™ table as approved by the OmniClass Development Committee prior to full consensus approval, either through NBIMS or another consensus process.

## 2.4.4.10.1.3 Date of publication

This is for the current edition of OmniClass™ Table 34, approved by the OmniClass Development Committee and published by CSI on October 30, 2012.

## 2.4.4.10.1.4 Industry source and process

All work on and approval of OmniClass™ content is conducted by the OmniClass Development Committee (ODC), an independent group of industry subject matter experts administered and funded by CSI and Construction Specifications Canada.

Membership in the ODC is free of charge and open to all interested individuals. The membership currently consists of 110 individuals representing a wide variety of interest areas in the AECOO industry, including designers, product manufacturers and information providers, contractors, owners, software developers, government agencies, universities, and others. A full list of organizations represented on the ODC is included below in "Annex A."

Development and review work takes place in a selection of Working Groups (WG) appointed and charged at the start of each biennial review cycle. Though all ODC members do not participate in every WG or take part in every development or review discussion, all ODC members are apprised of all WG activity quarterly and can request to participate in or monitor any WG at any time.

The following individuals were members of the WG that reviewed Table 34 – Organizational Roles content during the 2010-2012 review cycles:

Keith Robinson - Design Dialog - WG Lead

Bill Brodt - U.S. National Aeronautics and Space Administration (NASA)

Dianne Davis - AEC Infosystems, Inc.

Lew Finkel – Professional Construction Services

Jim Lewis - Maryland Department of the Environment

Mike MacVittie - Allen + Philip Architects

Patrick Mays - Dassault Systèmes

Frank Plimier - Frank Plimier Architect

Scott Wood - HOK Architects

At the close of each review cycle, WG present the outcomes of their review work to the full ODC membership for balloting and approval, which takes place following documented ODC procedure for approval of content.

## 2.4.4.10.1.5 Revision plans and notification

CSI has an MOA in effect with the buildingSMART alliance® relating to OmniClass™ content; in that agreement, CSI has agreed to notify the Alliance when OmniClass™ tables approved as NBIMS-US™ reference standards have been revised.

OmniClass<sup>™</sup> has a regular review calendar for all tables. OmniClass<sup>™</sup> Table 34 is next scheduled for review and possible update in the 2014-2016 OmniClass<sup>™</sup> Review Cycle, scheduled to conclude in Q3 of 2016.

## 2.4.4.10.2 Normative references

None

## 2.4.4.10.3 Terms, definitions, symbols, units and abbreviated terms

For the purposes of this document, the following terms and definitions apply. These terms and definitions are drawn from the OmniClass<sup>™</sup> informational documentation and the ISO standard upon which OmniClass<sup>™</sup> is based, ISO 12006-2:2001.

#### 2.4.4.10.3.1

#### construction entity

independent material construction result of significant scale serving at least one user activity or function

#### 2.4.4.10.3.2

#### phase

a portion of work that arises from sequencing work in accordance with a predetermined portion of a stage

#### 2.4.4.10.3.3

## discipline

practice area or specialty of the actors (participants) that carry out the processes and procedures that occur during the life cycle of a construction entity

## 2.4.4.10.3.4

## organizational role

the functional position occupied by a participant, either individual or group, which carries out the processes and procedures which occur during the life cycle of a construction entity

#### 2.4.4.10.3.5

#### material

substance used in construction or to manufacture products and other items used in construction; these substances may be raw materials or refined compounds

## 2.4.4.10.3.6

## property

characteristics of construction objects

## 2.4.4.10.3.7

#### work result

construction result achieved in the implementation phase or by subsequent alteration, maintenance, or demolition processes and identified by one or more of the following: the particular skill or trade involved; the construction resources used; the part of the construction entity which results; the temporary work or other preparatory or completion of work which is the result

#### 2.4.4.10.3.8

## **Construction Specifications Canada CSC**

#### 2.4.4.10.3.9

OmniClass Development Committee ODC

## 2.4.4.10.3.10

**Working Groups** 

WG

## 2.4.4.10.4 OmniClass<sup>™</sup> Table 34 – Organizational Roles

## 2.4.4.10.4.1 License terms

OmniClass™ license terms can be obtained at <a href="http://omniclass.org/license">http://omniclass.org/license</a>.

## 2.4.4.10.4.2 Referenced by other NBIMS-US™ Content

All OmniClass™ tables reference and are intended to work with other OmniClass™ tables. Additionally, other NBIMS-US™ information exchanges may use one or more OmniClass™ tables as data elements, for example, Table 13 – Spaces by Function is used in COBie. The following information exchanges that are part of NBIMS-US™ use Table 34 – Organizational Roles: COBie

It is anticipated that as other information exchanges have need to classify additional data elements, the other OmniClass™ tables will be able to serve that role.

## Annex A List of Organizations

### A.1 List of organizations represented on the OmniClass Development Committee

4Clicks Solutions, LLC Abbie Gregg, Inc. AEC Infosystems Allen + Philip Architects

American Institute of Architects (AIA)

Appraisal Institute Archi-Technology, LLC ARCOM Master Systems Army Corps of Engineers

Associated General Contractors of

America (AGC) Attainia Autodesk

Beardsley Design Associates

Bentley Systems BOMA International

Building Systems Design, Inc. buildingSMART Alliance

CAD Details Cannon Design CH2M Hill Conspectus Inc.

Construction Specifications Canada

(CSC)

Construction Specifications Institute

(CSI)

Dassault Systèmes Davis Langdon Design Ecology Digicon, Inc. Digital Alchemy

ESRI FM Global

FMBENCHMARKING GB Consultants

Georgia Institute of Technology

GOMO Graphisoft GRC Architects

Hall Building Information Group Harrison Publishing House, Inc.

HOK

International Code Council (ICC)
International Construction Information

Society (ICIS)

International Institute for Sustainable

Laboratories
Jacobs Engineering
JBHM Architects

Johnson & Johnson Consultants, LLC JS Construction Consultants (JSCC)

Kalin Associates

Keyword Specifications, Inc.

Kiewit Corporation Kingspan, Inc.

KJWW Engineering Consultants LACECO Architects and Engineers

LY Blair and Associates

M. C. Dean Manitoba Hydro

Maryland Department of the

Environment

McCarthy Building Companies, Inc.

McGraw-Hill Construction

National Institute of Building Sciences

(NIBS) NIBCO, Inc. Onuma Inc.

Open Data Standards

Open Standards Consortium for Real

Estate (OSCRE)
Parsons Brinckerhoff

PlaneBIM

Professional Construction Services, Inc. Public Works and Government Services

Canada, Real Property Services

Quarry Group, Inc. Reed Construction Data

RS Means RSP Architects Sumex Design SynCadd TC9. Inc.

U.S. Army Corps of Engineers

(USACE)

U.S. Coast Guard

U.S. Department of Defense (DoD)

U.S. Department of State

U.S. Department of Veterans Affairs

(VA)

U.S. Federal Aviation Administration

(FAA)

U.S. General Services Administration

(GSA)

U.S. Geospatial Consortium

U.S. Health Facility Planning Agency U.S. National Aeronautics and Space

Administration (NASA)

U.S. National Inst. of Standards and Tech. Smart Grid Architecture

Committee
Vela Systems, Inc.

Woolpert

**Zurich Financial Services** 

# Annex B Table 34 Approved by Consensus

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-10 00 00	Entrepreneurial Roles	Responsible for building capital through risk and/or initiative.
34-10 11 00	Owner	Responsible for the purchase, acquisition, or collection of an item through funds or other means.
34-10 11 11	Developer	Responsible for the renovation and re-leasing of existing buildings or the purchase of land for the purpose of improvements and resale.
34-10 11 14	Corporate Entity	Responsibility of ownership is spread among members of the separate legal entity such as businesses, charities or clubs.
34-10 11 17	Public Entity	Responsibility of ownership is disbursed to an overseeing government and other public/government owned corporation.
34-10 21 00	Partner	Responsible for mutual ownership of a business, service or item with another individual(s) through an agreed upon alliance or contract.
34-11 00 00	Management Roles	Responsible for getting people together to accomplish a set of desired goals or objectives using resources and personnel effectively.
34-11 10 00	Strategic Management Roles	Responsible for the development of goals and initiatives to be met as well as long-term planning.
34-11 10 11	President	The leader (often elected or appointed) of an organization, company, club, trade union, or country.
34-11 10 11 11	Vice President	Responsible for the replacement the president on the event of his or her death, resignation or incapacity.
34-11 10 14	Chairperson	Responsible for presiding over meetings of the an assembled group and the conducting of its business in an orderly fashion.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-11 10 17	Board Member	Responsible for attending, offering input and helping to facilitate board meetings, and may also be asked to serve as the leader of specific task groups, committees, working groups, or task teams.
34-11 20 00	Operational Management Roles	Responsible for the execution developed goals and initiatives to be met through staffing and acquisitions.
34-11 20 11	Executive	Responsible for the day-to-day managing of a company or corporation as the senior manager or highest level of management.
34-11 20 14	Officer	Responsible for the oversight and management of a specific element of a company or corporation. May also be an executive in the case of chief executive positions such as Chief Executive Officer (CEO), Chief Financial Officer (CFO), or Chief Operations Officer (COO).
34-11 20 17	Director	Responsible for overseeing and managing a department or collection of managers based on a specific task or initiative.
34-11 20 21	Manager	Responsible for overseeing or managing staff on a specific task or initiative.
34-11 20 24	Supervisor	Responsible for the direct oversight of staff on a specific task or initiative. Typically would report to a manager or director for additional guidance.
34-11 20 27	Coordinator	Responsible for the direct coordination of elements assigned to a specific task or initiative. Typically would report to a supervisor or manager for additional guidance.
34-11 20 31	Scheduler	Responsible for the development of a work plan and planning benchmarks in order to complete a specific task or initiative within a designated period of time.
34-11 20 34	Project Lead	Responsible for collecting and organizing different staff or volunteers to address a specific task or initiative. May also be referred to as a Team Leader.
34-20 00 00	Development Roles	Responsible for the design, planning, organizing and reviewing of building projects and construction tasks.
34-20 11 00	Design Roles	Responsible for the development and creation of methods for new ideas, items, or systems.
34-20 11 11	Architect	Responsible for the planning, designing and oversight of the construction of buildings.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-20 11 21	Engineer	Responsible for the application of scientific and mathematical principles in developing solutions to technical problems.
34-20 11 31	Designer	Responsible for the creation of tangible or intangible objects or ideas.
34-20 11 41	Specifier	Responsible for the documentation of construction methods and materials used to execute a design.
34-20 21 00	Planning Roles	Responsible for the design and creation of methods for utilizing land or other limited resources to maximize efficiency.
34-20 21 11	Planner	Responsible for the layout and use plans for land or other tangible spaces.
34-20 21 14	Cost Estimator	Responsible for the planning of expenses both before and during a project.
34-20 21 17	Scheduler	Responsible for the planning of time and order in which steps can be completed.
34-20 31 00	Surveyor	Responsible for the observation and recording of site conditions.
34-20 41 00	Contract Administrator	Responsible for the oversight and execution of all contracts and agreements within a construction project.
34-20 51 00	Observational Roles	Responsible for the oversight and review or work or tasks about to be completed, in the process of completion or recently completed.
34-20 51 11	Reviewer	Responsible for the review of plans for tasks or projects to be completed.
34-20 51 14	Review Board	Group responsible for the review of plans for tasks or projects to be completed. Often the review is specific to a single task or purpose such as historic appropriateness or code compliance.
34-20 51 17	Inspector	Responsible for the review of tasks or work recently completed.
34-20 51 21	Observer	Responsible for the review of tasks or work during completion.
34-35 00 00	Execution Roles	Responsible for the procurement, construction, and execution of plans for a building project or construction task.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-35 10 00	Procurement Roles	Responsible for the execution of all processes of a products design, from initial creation through sale.
34-35 10 11	Manufacturer	Responsible for the production of a product or service as developed by a designer and/or fabricator.
34-35 10 14	Fabricator	Responsible for the initial creation of a product or service.
34-35 10 17	Distributor	Responsible for the distribution of a product or service.
34-35 10 21	Supplier	Responsible for the sale and delivery of products or services.  May also be referred to as Vendor.
34-35 10 21 11	Product Representative	Responsible for the promotion and knowledge of a product or product line and the ability to aid in both selling and supporting design roles in utilizing the product.
34-35 10 24	Buyer	Responsible for the purchasing of a product or service through money or other means of procurement.
34-35 15 00	Construction Roles	Responsible for the assembly and erecting of a building, project or site base on designs and plans.
34-35 15 11	Contractor	Responsible for the duties set up within a contracts signed with another organization or individual for the construction of a building, project or site.
34-35 15 14	Sub Contractor	Responsible for specific duties set up within a contract with another contractor or for an organization or individual on behalf of a contractor.
34-35 15 17	Project Engineer	Responsible for overseeing elements of a project that cross between engineering principles and project management and leading technical workers who contribute to the building of structures or products.
34-35 15 21	Tradesperson	Responsible for the execution of a specific trade or task within the construction or a building or product.
34-35 15 21 11	Craftsperson	Responsible for the execution of a specific craft, trade or art.
34-35 15 21 14	Journeyman	Responsible for a trade or craft and has been fully educated and has completed an apprenticeship.
34-35 15 21 17	Apprentice	Responsible for small tasks and support in return for on-the-job training or credit towards a career or licensure within a vocational trade.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-35 15 24	Laborer	Responsible for the execution of assigned general tasks.
34-35 15 24 11	Skilled Laborer	Responsible for the execution of assigned general tasks that require a level experience or training to complete.
34-35 15 24 14	Unskilled Laborer	Responsible for the execution of assigned general tasks that require no level experience or training to complete.
34-35 15 27	Installer	Responsible for the installation of an item or system.
34-35 15 31	Operator	Responsible for the set up, programming and oversight of a system while functioning.
34-41 00 00	Utilization Roles	Responsible for the oversight, management, operation, and maintenance of a facility once constructed and in use.
34-41 14 00	Facility Use Roles	Responsible for the oversight and planning of a facility's use and repair.
34-41 14 11	Facility Manager	Responsible for the oversight and planning of operations that take place within a facility.
34-41 14 14	Facility Maintenance	Responsible for the oversight and planning of maintenance that take place within a facility.
34-41 14 17	Facility Engineer	Responsible for the oversight and planning of systems that take place within a facility.
34-41 31 00	Facility Service Roles	Responsible for the activates and services that take place within a facility.
34-41 31 11	Custodian	Responsible for the general cleaning and waste removal within a facility. May also be referred to as Janitor or Housekeeper.
34-55 00 00	Support Roles	Responsible for execution of tasks to support, supplement, or improve upon the work of other occupations.
34-55 11 00	Administrative Service Roles	Responsible for the planning, direction, or coordination of one or more administrative services of an organization or business.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-55 11 11	Administrative Assistant	Responsible for various forms of administrative support to other individuals within an organization or business.
34-55 11 14	Receptionist	Responsible for the welcoming, greeting and oversight of a building or event's entry or waiting area for visitors, patients, or clients.
34-55 11 17	Records Manager	Responsible for the management of records within an organization or business.
34-55 11 21	Intern	Responsible for small tasks and support in return for on-the-job training or credit towards a career or licensure. For interns within trade or vocational jobs, see Apprentice under Construction Roles
34-55 11 24	Assistant	Responsible for support or assistance on a specific task and often under the direct guidance or supervision of a superior.
34-55 11 27	Trainer	Responsible for the education and training of employees or volunteers.
34-55 14 00	Professional Service Roles	Responsible for the execution, development, or planning of specific tasks that require a specified education or minimum amount of experience with on-the-job training.
34-55 14 11	Consultant	Responsible for providing professional or expert advice on a topic.
34-55 14 14	Librarian	Responsible for the collection, achieving, and coordination of a library or collection of resources and information for easy and repeatable access.
34-55 14 17	Draftsperson	Responsible for the production of drawings (physical or digital) of plans, designs, or details.
34-55 14 19	Marketing Roles	Responsible for the promotion of an idea or item for the purposes of resale or awareness.
34-55 14 19 11	Salesperson	Responsible for the sale of an item or service.
34-55 14 22	Financial Roles	Responsible for the oversight and execution of financial transactions.
34-55 14 22 11	Accountant	Responsible for the disclosure of financial information to managers, investors, tax authorities, or others responsible for the allocating or disbursement of resources.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-55 14 22 14	Banker	Responsible for the execution of investments or financial transactions. May also be referred to as Financier.
34-55 14 22 17	Record Keeper	Responsible for the official narrative of history.
34-55 14 22 21	Bookkeeper	Responsible for the recording of financial transactions.
34-55 14 24	Lawyer	Responsible for the review, execution, and oversight of legal proceedings on behalf of a client, entity, or government office.
34-55 14 27	Agent	Responsible for the actions of another in specific matters as defined by a contract or agreement.
34-55 14 31	Specialist	Responsible for providing information or knowledge of very specific topic.
34-61 00 00	Group Roles	Responsible for the development, oversight, or execution of tasks through teams or numerous individuals of select disciplines.
34-61 11 00	Teams	A formal or informal group of individuals responsible for executing a task or tasks.
34-61 11 11	Task Team	A formal group developed to address a single task. Often an appointed group as a subset of a board or committee.
34-61 11 21	Task Force	A formal or informal group of individuals responsible for the complete development and execution of a task or series of tasks related to a single outcome.
34-61 21 00	Boards	A formal group of individuals responsible for the oversight and maintenance of a specific interest.
34-61 21 11	Board of Directors	An elected or appointed group of individuals with a common interest or discipline responsible for the oversight and operational planning of a specific interest.
34-61 31 00	Committees	An appointed group of individuals with a common interest or discipline responsible for the development, operational planning, and possible execution of plans or tasks set forth by a board or executive.
34-61 31 21	Ad Hoc Committee	A special group of individuals with a common interest or discipline often responsible for a time sensitive or pending task or operational plan that does not allow for the proper appointment or election process of members.

2012 DRAFT OmniClass™ Table 34 - Organizational Roles		
OmniClass™ Number	OmniClass™ Title	Definition
34-61 41 00	Business Organizations	An established business or institution with the intent of deriving profit or benefits directly from the sales or acquisitions of goods and services produced through a developed strategic plan.
34-61 41 11	Corporation	A business created under state laws as a separate legal entity that has privileges and liabilities that are distinct from those of its members.
34-61 41 21	Partnership	A business set forth through an arrangement where multiple parties agree to cooperate to advance mutual interests.
34-61 41 31	Sole Proprietorship	A business owned and operated by a single entity or single person.
34-61 41 41	Joint Venture	A business set forth through a contract in which multiple parties agree to develop, for a finite time, a new entity and new assets by contributing equity.
34-61 41 51	Single Purpose Entity	A business or legal entity created to fulfill narrow, specific, or temporary objectives. Typically set up by companies to limit financial risk.
34-61 51 00	Nonprofit Organizations	An established business or institution that uses surplus revenues to achieve its goals rather than distributing them as profit or dividends.
34-61 51 11	Association	A group of individuals who voluntarily enter into an agreement to accomplish a purpose.
34-61 51 21	Foundation	An established entity for the collection and disbursement of donated funds for the support of other organizations, or to provide a source of funding for its parent organization's charitable efforts.
34-61 51 31	Union	An organized group of a similar discipline that work together for the purpose of improving their own discipline's working condition and pay.
End of Table		