

National BIM Standard - United States® Version 3

2 Reference Standards

2.4 OmniClass™

2.4.4.7 OmniClass™ Table 31 – Phases, Pre Consensus Approved Draft 2012-10-30

2.4.4.7.1 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™ 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™ 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™ tables available within an NBIMS-US™ context will have a multiplicative effect on affected applications.

The intended uses of Table 31 – Phases described in this version of the Table are:

“Construction project scheduling and record keeping, facility management record keeping, preventative maintenance scheduling.”

2.4.4.7.1.1 Publishing organization

All OmniClass™ content is published by CSI and Construction Specifications Canada.

2.4.4.7.1.2 Version

The version of OmniClass™ Table 31 – Construction Entities by Form is “2012-10-30,” designated as OmniClass_31_2012-10-30.zip on www.omniclass.org. 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-US™ or another consensus process.

2.4.4.7.1.3 Date of publication

This NBIMS-US™ approved document is for the current edition of OmniClass™ Table 31, approved by the OmniClass Development Committee and published by CSI on October 30, 2012.

2.4.4.7.1.4 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 31 – Phases content during the 2008-2010 and 2010-2012 review cycles:

Dianne Davis – AEC Infosystems Inc. – WG Lead
Mehmet Ateshin – LACECO Architects and Engineers
Gary Beimers – GB Consultants
Kenneth Chappell – CUH2A, ARCOM Master Systems
Roger Grant – CSI, National Institute of Building Sciences (NIBS)
Duke Guzey – independent consultant
Chris Hubbard – Quarry Group, Inc.
Robert W. Johnson – Johnson & Johnson Consultants, LLC
Dave Jordani – Jordani Consulting Group
Josh Kanner – Vela Systems, Inc.
Deborah MacPherson – Cannon Design
Mike MacVittie – Allen + Philip Architects
Patrick Mays – Dassault Systèmes
Adam Omansky – Vela Systems, Inc.
Chris Pechacek – McCarthy Building Companies, Inc.
Deke Smith – buildingSMART alliance®
Robert Weygant – Sumex Design

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.

2.4.4.7.1.5 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™ has a regular review calendar for all tables. OmniClass™ Table 31 is next scheduled for review and possible update in the 2014-2016 OmniClass™ Review Cycle, scheduled to conclude in Q3 of 2016.

2.4.4.7.2 Normative references.

None

2.4.4.7.3 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™ informational documentation and the ISO standard upon which OmniClass™ is based, ISO 12006-2:2001.

2.4.4.7.3.1

construction entity

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

2.4.4.7.3.2

phase

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

2.4.4.7.3.3

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

2.4.4.7.3.4

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

2.4.4.7.3.5

material

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

2.4.4.7.3.6

property

characteristics of construction objects

2.4.4.7.3.7

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

2.4.4.7.3.8

Construction Specifications Canada CSC

2.4.4.7.3.9

OmniClass Development Committee ODC

2.4.4.7.3.10 Working Groups WG

2.4.4.7.4 [OmniClass™ Table 31 – Phases](#)

2.4.4.7.4.1 License terms

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

2.4.4.7.4.2 Referenced by other NBIMS-US™ Content

The version of Table 31 approved differs from other existing phase organization methods currently in use in the AECOO industry in several significant ways.

1. It is designed to operate throughout the full facility life cycle. Many of the existing methods stop at facility hand off or provide less attention to the operations phase than they do to design and execution phases.
2. It is designed to be project delivery method independent. Most of the other systems in use are designed with only a few project delivery methods in mind and tend to skew towards more traditional project delivery methods. The naming and organization of the phases in this version of OmniClass™ Table 31 are designed to support both traditional and leading edge methods of project delivery.
3. As a result, it is not designed around paper-based deliverables as many of the existing phase organization methods are.
4. It provides a transition matrix that correlates many of the most popular phase identification methods currently in use.
5. It is designed to work with the existing OmniClass™ classification system.

All OmniClass™ tables are intended to work with other OmniClass™ tables. Additionally, 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 31 – Phases: LCie and 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.

2.4.4.7.5 Bibliography

None

**Annex A
List of Organizations**

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

4Clicks Solutions, LLC	Johnson & Johnson Consultants, LLC
Abbie Gregg, Inc.	JS Construction Consultants (JSCC)
AEC Infosystems	Kalin Associates
Allen + Philip Architects	Keyword Specifications, Inc.
American Institute of Architects (AIA)	Kiewit Corporation
Appraisal Institute	Kingspan, Inc.
Archi-Technology, LLC	KJWW Engineering Consultants
ARCOM Master Systems	LACECO Architects and Engineers
Army Corps of Engineers	LY Blair and Associates
Associated General Contractors of America (AGC)	M. C. Dean
Attainia	Manitoba Hydro
Autodesk	Maryland Department of the Environment
Beardsley Design Associates	McCarthy Building Companies, Inc.
Bentley Systems	McGraw-Hill Construction
BOMA International	National Institute of Building Sciences (NIBS)
Building Systems Design, Inc.	NIBCO, Inc.
buildingSMART alliance	Onuma Inc.
CAD Details	Open Data Standards
Cannon Design	Open Standards Consortium for Real Estate (OSCRE)
CH2M Hill	Parsons Brinckerhoff
Conspectus Inc.	PlaneBIM
Construction Specifications Canada (CSC)	Professional Construction Services, Inc.
Construction Specifications Institute (CSI)	Public Works and Government Services Canada, Real Property Services
Dassault Systèmes	Quarry Group, Inc.
Davis Langdon	Reed Construction Data
Design Ecology	RS Means
Digicon, Inc.	RSP Architects
Digital Alchemy	Sumex Design
ESRI	SynCadd
FM Global	TC9, Inc.
FMBENCHMARKING	U.S. Army Corps of Engineers (USACE)
GB Consultants	U.S. Coast Guard
Georgia Institute of Technology	U.S. Department of Defense (DoD)
GOMO	U.S. Department of State
Graphisoft	U.S. Department of Veterans Affairs (VA)
GRC Architects	U.S. Federal Aviation Administration (FAA)
Hall Building Information Group	U.S. General Services Administration (GSA)
Harrison Publishing House, Inc.	U.S. Geospatial Consortium
HOK	
International Code Council (ICC)	
International Construction Information Society (ICIS)	
International Institute for Sustainable Laboratories	
Jacobs Engineering	
JBHM Architects	

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 31 Approved by Consensus

2012 DRAFT OmniClass™ Table 31 - Phases		
OmniClass™ Number	OmniClass™ Title	Definition
31-10 00 00	Inception Phase	Phase for establishing the project vision and means to satisfy the client's business or public service requirement, including site selection, planning considerations, establishment of timeline, method of delivery, budget and which identifies necessary resources (design, legal, financing, insurance, etc.).
31-20 00 00	Conceptualization Phase	Phase to identify the major design ideas in the context of programmatic objectives, facility performance, and activity parameters, to define spaces, and to initiate basic project element considerations.
31-30 00 00	Criteria Definition Phase	Phase to create and refine schematic diagrams of the basic project elements - substructure, shell, interiors, equipment, services, equipment and furnishings, special construction and demolition, and building sitework - that fully establish project spatial and element criteria as the Basis of Design.
31-40 00 00	Design Phase	Phase in which project team establishes means of satisfying project Basis of Design requirements with technical solutions, evaluates alternatives through value analysis or similar processes, and completes initial documentation - Drawings and specified Work Results - for the designed project.
31-50 00 00	Coordination Phase	Phase that bridges the design effort with implementation by integrating constructability and feasibility evaluations of the design in order to further develop spaces, elements, products, and materials necessary for the procurement and execution of the Work irrespective of the method of delivery.
31-60 00 00	Implementation Phase	Phase to implement the coordinated design through construction planning, prefabrication, and field execution characterized by constructor 'means and methods,' and Basis of Construction strategies, controlled by quality assurance and control protocols.
31-70 00 00	Handover Phase	Phase to evaluate the completed Work through testing, inspection, and commissioning activities, including for any Owner-furnished equipment, to ensure that design/performance criteria are met while conforming to applicable codes and standards, and transfer project knowledge from the design/construction team to the Owner/facility management team via demonstrations, training, and documentation.
31-80 00 00	Operations Phase	Phase in which owner or a designated agent occupies, uses, and manages and maintains a facility, which may also include partial or whole facility renovation, repair, reconditioning or remodelling activities as part of the project use lifecycle.

2012 DRAFT OmniClass™ Table 31 - Phases		
OmniClass™ Number	OmniClass™ Title	Definition
31-90 00 00	Closure Phase	Phase which includes facility closure, preparation for unknown future use, demolition in whole or part, foreclosure, sale, or similar dispensation initiated by the decision that the facility no longer meets the needs of the Owner and cannot be feasibly reconfigured for continued use by that Owner.
End of Table		