



FLEXIBLE
to the
FINISH

“BIMspeak”

Here’s a beginning glossary of terms you may hear said in an upcoming conversation about BIM (Building Information Modeling)...

A & D – Analysis and Design

AEC – Architecture, Engineering and Construction

AECbytes – AEC newsletter – www.aecbytes.com

aecXML – term for a specific standard format used for BIM electronic data exchange

AGC – Associated General Contractors – trade organization trying to take lead in the development process of BIM standard procedures

AISC – American Institute of Steel Construction

AGC BIM Guide – published by AGC

API – Application Programming Interface

BIM ADDENDUM – current model of contractual language

BIM Master or Model Manager – whoever contractually has control of the 3-D model, the gatekeeper and possibly manager of the server

BIM Handbook – published 2008 by John Wiley & Sons – 500 page guide

BPM – Building Product Manufacturer

BuildingSmart – trademarked NIBS effort to standardize and coordinate the business sector’s effort in IFC

CD – Construction Drawings or documents

CIS/2 – an AISC approved steel industry file format for electronic exchange of data, one of several file formats being considered as “interoperable” for BIM participation, not supported by contractor software

Clashes – instances noted by a 3D drawing where two elements occur in the same space and conflict, i.e. ductwork that collides with joist members

Clash Detection – property built into some but not all 3D software

Clash Meetings – meetings (possibly weekly) by A/E, G.C., subs and others to resolve clashes

Collocate – putting employees from different disciplines on the same site to expedite the BIM coordination and clash resolution process. i.e., joist draftsman going to the steel detailer’s site

4D – schedule simulation

“BIMspeak” - glossary of terms continue

5D – cost accounting simulation

DD – Design Drawings or documents

DB – Design-Build

DBB – Design-Bid-Build

DWF – Drawing Web Format

DWG – AutoCAD drawing format

DXF – Drawing Exchange Formats

ERP – Enterprise Resource Planning – a computer system

ETO – Engineered to Order

EXPRESS – data modeling language

FCI – Facility Condition Index – metric related to BIM for older pre-existing facilities

gbXML – new subset of BIM efforts that focuses on green building design and operation and organizes information for energy simulation purposes

IAI – International Alliance for Interoperability

IFC – Industry Foundation Classes – broad term for standard formats used for most BIM electronic data exchange, developed by the IAI

IDM – Information Delivery Manual – European effort in IFC, see NBIMS

IGES – Initial Graphics Exchange Specification – standard format for exchanging three-dimensional data and information

IPD – Integrated Project Delivery

Lean principles – controlling project to minimize cost i.e. steel products delivered to site in accurate liftable bundles, ready for trailer straight to erection

LOD – Level of Detail – extent to which components are modeled

Lonely BIM – modeling for one’s own use as opposed to Social BIM – modeling done by one or a group for general group use

MEP – Mechanical, Electrical, and Plumbing – generally encompassing construction elements of various trades to be considered in a BIM approach

MPS – Model Progression Specification

Native – description applied to data that is allowed to be changed after it has been transferred

NCS – National Cad Standard – developed through the cooperation of the American Institute of Architects (AIA), the Construction Specifications Institute (CSI), and NIBS

NIBS – National Institute of Building Sciences – Federal agency, has downloads

NBIMS – National BIM Standard – US effort in IFC

Parametric – describes objects or components characteristics and relationships

PMC – Project Management Contract

Semper Gumbie – Marine speak for “always flexible”, a principle requirement of BIM based collaboration among all participants in a construction project

“BIMspeak” - glossary of terms continue

SD – Schematic Drawings or documents

SDNF – electronic exchange format, one of many

SQL – Structured Query Language

STEP – electronic exchange format, one of many

VBE – Virtual Building Environment – an alternative or synonym to BIM

VDC – Virtual Design and Construction – an alternative or synonym to BIM

WBDG – Whole Building Design Guide – a NIBS supported web based portal to information on building related guidance

Wire Frame – 3-D aspect of Building Information Modeling, whereby a three dimensional virtual design can show construction details including connectivity

XML – Xtensible Markup Language – a protocol for tagging text, creating a structure and semantics that both humans and computers can understand

.NET – Microsoft operating system platform or framework