



National BIM Standard - United States® Version 3

5 Practice Documents

5.1 Introduction to Practice Documents

The Practice Documents section of NBIMS-US™ is a compilation of various resources that practicing professionals have and can use to guide their businesses as well as owners who can use BIM to describe and define the lifecycle constraints of their projects. It is important to note that documents in this section include practices that have been successfully used and implemented in BIM based projects. The documents in this version of NBIMS-US™ is not a complete set of all BIM possible practice activities but will evolve as the industry matures using BIM. It is expected that with the rapid adoption of BIM; industry practices will stabilize to establish a new norm of procedures and processes.

The documents in this section are valuable at a conceptual level for all BIM project team members. With these documents the project team can develop a common understanding of the process, thereby, reducing historical conflicts between professionals within the building industry. The project experience in these documents should be used as guidance for future projects as well as providing feedback to NBIMS-US™ to assist in documenting and improving industry. Below is a synopsis of the Practice Documents in the NBIMS-US™ standard.

5.2 Minimum BIM, 2nd Edition (incorporating Minimum BIM – Revised May 2012)

Minimum BIM “opens the aperture” and provides a more inclusive and comprehensive review of multiple maturity models used in industry and by owners in order to evaluate both information modeling and organizational processes associated with BIM.

5.3 BIM Project Execution Planning Guide – Version 2.1

This section provides guidelines on a structured procedure for creating and implementing a Building Information Modeling (BIM) project execution plan. The execution plan will ensure that all parties are aware of the opportunities and responsibilities associated with the incorporation of BIM into the project workflow.

5.4 BIM project Execution Plan Content – Version 2.1

This standard provides guidelines on the content that should be contained in a BIM project execution plan. A project execution plan defines uses for BIM on the project (e.g., design authoring, design review, and 3D coordination), along with a detailed design of the process for executing BIM throughout the project life-cycle.

5.5 Mechanical, Electrical, Plumbing, and Fire Protection Systems (MEP) Spatial Coordination Requirements for Construction Installation Models and Deliverables – Revised May 2011

Mechanical, Electrical, Plumbing, and Fire Protection Systems Spatial Coordination Requirements for Construction Installation Models and Deliverables provides guidance to construction companies and individuals involved in 3D MEP spatial coordination of systems and components for fabrication and installation.

5.6 Planning, Executing and Managing Information Handover-2007 – Revised June 2011

This standard is a non-technical document directed to decision-makers. It provides concise guidelines for

the development of an organizational information strategy, the definition of information requirements based on that strategy, the development of project information handover plans based on those requirements, and the implementation of those plans.

5.7 BIM Planning Guide for Facility Owners

This planning guide provides a structured approach for organizations (with a focus on facility owners) to effectively plan their adoption of Building Information Modeling within their organizational processes. The standard is a logical extension of the BIM Project Execution Planning Standard.

5.8 Practical BIM Contract Requirements

The goal of BIM Contract Requirements is to increase standardization of delivery methods where a Building Information Modeling methodology is used; requiring a well-defined set of contract requirements, specifications, and comprehensive execution planning, paired with efficient and consistent review and quality control procedures.

These requirements are used by the USACE for BIM on design build projects. It is made up of three parts: the Contract Language, the BIM Project Execution Plan, and the Minimum Modeling Matrix. These three items work together to create BIM requirements that are fair, practical, and reasonable. The USACE BIM requirements have been in use since January 2008 with 500+ single and multi-facility projects either proposed, constructed, or in various stages of construction, comprising over \$9 Billion and over 46 Million SF in scope. Over 600 facilities, consisting of over 25 Million SF, have been constructed to date using these requirements.

5.9 The Uses of BIM

The purpose of this document is to define a common language for the Uses of BIM. This document provides the fundamental terminology and organizational structure for the purposes for which BIM is implemented throughout the lifecycle of a facility. Thus, teams can more clearly communicate the purposes for implementing BIM on a project or within their organization.