



United States National CAD Standard® - V6

a product of the National Institute of Building Sciences buildingSMART alliance™

0.0 Introduction

The buildingSMART alliance™ continues to develop standards to streamline information sharing of digital content for the building industry. Along with the United States National CAD Standard® (NCS), the National BIM Standard-United States™ (NBIMS-US™) has become a well-established consensus standard that continues to be further developed by its membership. It has been a general understanding that BIM projects should incorporate the NCS as noted in the references of this section. However, the NCS was primarily developed for CAD workflow and the workflow of BIM is very different; therefore, difficulties of complying with the NCS arise when implementing BIM. Furthermore, the NBIMS-US™ does not duplicate the information contained within the NCS so there have been limitations between the standards for practical BIM implementation that maintains consistency in common industry deliverables (i.e. CAD files and printed or digital documents). Many other BIM standards have been developed by various entities to meet the specialized needs of those entities but, like the NBIMS-US™, they do not duplicate the NCS; thus, the NCS remains the primary standard for paper-centric drawings.

The intent of this section is to outline the implementation of the NCS for BIM use. The *BIM Implementation* section identifies relevant topics within the NCS that can be incorporated within BIM workflow by adding clarification as needed without displacing an established CAD workflow. It is important to remember that the NCS and NBIMS-US™ may not be the only applicable standards for any given BIM project. As with all NCS content this section is intended to be general in order to be applicable to most BIM projects regardless of software platform used. Further, it avoids being too specific regarding topics that are better defined within an owner's or organization's specific BIM standard or items that vary by project and are best documented in a project execution plan. Successful implementation of the NCS for BIM use is dependent on the user having an overall understanding of required versus optional or recommended NCS content. In general, if the optional and/or recommended NCS content is implemented for any given BIM project, then the content should be compliant.