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**Information technology - Building information model (BIM)
software - Part 2: Parameterized model**

信息技术 建筑信息模型 (BIM) 软件 第2部分：参数化模型

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 2 of GB/T 45393 "Information Technology Building Information Modeling (BIM) Software". GB/T 45393 has been published The following parts.

- Part 2: Parameterized model;
- Part 4: Mesh model;
- Part 5: Data interface.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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This document was drafted by: Glodon Technology Co., Ltd., Tsinghua University, China Electronics Technology Standardization Institute, (Shenzhen) Technology Co., Ltd., Beijing Tianzheng Software Co., Ltd., Shanghai Tianhua Architectural Design Co., Ltd., China Design Digital Technology Co., Ltd.

China Academy of Building Research Co., Ltd., Beijing Institute of Architectural Design Co., Ltd., China Railway Design Group Co., Ltd., China Power Construction Group East China Survey and Design Institute Co., Ltd., China Railway Fourth Bureau Group Steel Structure Construction Co., Ltd., China Railway Eighth Bureau Group Third Engineering Co., Ltd.

Co., Ltd., China Construction Eighth Engineering Bureau Co., Ltd., China Construction Southwest Design & Research Institute Co., Ltd., China Railway Nine Bridge Engineering Co., Ltd., China Railway 19th Bureau Group Co., Ltd., Guangzhou Zhongwang Zhicheng Digital Technology Co., Ltd., China Power Construction Group Co., Ltd., Panzhihua Panzhihua Iron and Steel Group Design and Research Institute Co., Ltd., China Communications (Tianjin) Ecological and Environmental Protection Design and Research Institute Co., Ltd., China Construction Technology Group Co., Ltd., China Railway Construction University BRIDGE ENGINEERING BUREAU GROUP LIMITED.

The main drafters of this document are: Yuan Zhenggang, Liu Qian, Wang Yaoyao, Liu Gang, Song Yin hao, Gu Ming, Gao Ge, Liu Han, Shen Rui, Han Zujie, Wang Teng, Peng Cheng, Ju Peidong, Yu Hao, Jin Long, Wang Nan, Zheng Guoqin, Cheng Chao, Hu Jia, Feng Qiaorong, Fan Dengke, Li Hui, Liu Jiyu, Li Zhi, Du A'an, Jiang Wenming, Chen Yajun, Wu Yuanxiang, Cao Han, Cao Huoyong, Qi Ligang, Zhao Guangpo, Zhu Dongming, Shang Erhai, Zhang Yiding, Yu Pengyuan, Yang Fei, Yu Congcong, Tian Huijing, Fan Zesen, and

Yang Tengtian.

Introduction

BIM software is characterized by the establishment and application of three-dimensional, structured, and semantic models.

It has the functions of calculation, performance, management, delivery, inspection and coordination, and plays a supporting role in different stages, professions and applications of the whole life cycle of buildings. effect.

GB/T 45393 "Information Technology Building Information Modeling (BIM) Software" aims to guide practitioners to form a consistent understanding of BIM software.

In the development of BIM software, this series of standards is adopted to achieve the interconnection and interoperability of BIM software, the exchange and sharing of BIM models, and improve The availability, applicability and maturity of BIM software promote the formation of BIM software ecosystem and help the assetization of BIM models.

GB/T 45393 is intended to consist of 5 parts.

- Part 1: General requirements. Clarify the basic concepts, functions and data requirements of BIM software, with the aim of assisting BIM software Requirements definition, development and implementation.
- Part 2: Parameterized model. Gives a model format that uses standardized parameter sets to represent geometric objects. The receiver can parse and Modify geometric object parameters to display and modify objects in the BIM model, with the goal of achieving editable models between BIM software exchange.
- Part 3: Model view definition. Provides a language for formally defining the content in the model, with the purpose of defining the model according to specific requirements.

Perform completeness check or model view extraction on the submitted model.

- Part 4: Mesh model. A model format based on triangular meshes that cannot be parametrically edited is given.

Used for visualization, communication and management of BIM models.

- Part 5: Data interface. Gives the data calling methods, sending and returning information between different BIM software and platforms. The purpose is to Enable different BIM software to share BIM data in the form of interfaces.

Information Technology Building Information Modeling (BIM) Software Part 2:
Parameterized Models