ICS 59.100.20
CCS Q 53

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 45470-2025

Recycled carbon fiber for cement concrete

水泥混凝土用回收碳纤维

Issued on: March 28, 2025 **Implemented on: October 1, 2025**

Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC

Table of Contents

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.

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.

This document is proposed and coordinated by the National Carbon Fiber Standardization Technical Committee (SAC/TC572).

This document was drafted by: Yangzhou University, Suzhou Concrete Cement Products Research Institute Testing Center Co., Ltd., Zhongfu Shenying Carbon Fiber Co., Ltd.

Co., Ltd., Nanjing Fiberglass Research and Design Institute Co., Ltd., Xisi New Materials Co., Ltd., Jilin Carbon Valley Carbon Fiber Co., Ltd., Jiangsu Hengshen Co., Ltd., Jiangsu Huajian Construction Co., Ltd., Suzhou Concrete Cement Products Research Institute Co., Ltd., Shenzhen Weihai Building Materials Co., Ltd., Jiangsu Aosheng Composite Materials Technology Co., Ltd., Jiangsu Yangjian Group Co., Ltd., Chengdu Construction Engineering Industrial Construction Construction Co., Ltd., CCCC Tianjin Port Engineering Research Institute Co., Ltd., Shenzhen Building Decoration (Group) Co., Ltd., Jiangsu Hanjian Group Co., Ltd.

Company, Jiangsu Chengdong Construction Engineering Co., Ltd., Zhenjiang Tanshi Technology New Materials Co., Ltd., Langfang Feize Composite Materials Technology Co., Ltd., Beijing BBMG Concrete Co., Ltd., Henan Jiaoyuan Engineering Technology Group Co., Ltd., Changzhou Building Science Research Institute Group Co., Ltd.

Company, Yangzhou Urban Planning and Design Institute Co., Ltd., Shanghai Tunnel Engineering Intelligent Manufacturing Haiyan Co., Ltd., Harbin Institute of Technology, Zhejiang University of Science and Technology, Tongji University, Xi'an University of Architecture and Technology, China Construction Eighth Engineering Bureau Co., Ltd., Nantong First Construction Group Co., Ltd., Yangzhou Huayun New Materials Technology Co., Ltd., Taizhou Jinjiangjiao Building Materials Co., Ltd., Yangzhou Huazheng Construction Engineering Quality Inspection Co., Ltd., Jiangsu and Tianxia Energy Saving Technology Co., Ltd., Chongqing Chengfei New Materials Co., Ltd., Lianyungang Fiber New Materials Research Institute Co., Ltd., Gansu Chongtong Chengfei New Materials Co., Ltd., Zhifu Environmental Protection Industry (Jiangsu) Co., Ltd., Henan Yongmei Carbon Fiber Co., Ltd., Karamay Vision New Materials Co., Ltd., Zhejiang Hongxin Composite Materials Co., Ltd., China Construction Second Engineering Bureau Third Construction Engineering Co., Ltd., Harbin Fiberglass Research Institute Co., Ltd.

Company, China Communications Construction Second Highway Engineering Bureau Fourth Engineering Co., Ltd., Chongqing Monorail Construction Technology Co., Ltd., Guangzhou Zhujiang Industrial Group Co., Ltd., China Railway 11th Bureau Group Co., Ltd., Hunan Transportation Research Institute Co., Ltd., Shandong Public Construction Group Co., Ltd., China Railway Urban Construction Group East China Construction Co., Ltd., China Railway Shanghai Engineering Bureau Group Co., Ltd., Suzhou Founder Engineering Technology Development and Testing Co., Ltd., China Construction Fifth Engineering Bureau Fourth Construction Co., Ltd., China Railway 20th Bureau Group Second Engineering Co., Ltd., China Railway 23rd Bureau Group Co., Ltd., China Railway 22nd Bureau Group Fourth Engineering Engineering Co., Ltd., China Railway Construction Group Co., Ltd., China Railway 18th Bureau Group Fifth Engineering Co., Ltd., China Railway 24th Bureau Group Co., Ltd., China Construction Second Engineering Bureau Co., Ltd., Wenzhou Xinda Traffic Engineering Testing and Inspection Co., Ltd., Changzhou Institute of Technology, China Construction Science and Engineering Group Co., Ltd.

Company, China Railway 25th Bureau Group First Engineering Co., Ltd., China Communications Construction Co., Ltd., and China Railway Construction Group Xi'an Engineering Co., Ltd.

The main drafters of this document are: Yang Dingyi, Tan Yongquan, Chen Qiufei, Wang Jiaqing, Wang Yumei, Qian Jing, Song Dewu, Liu Jin, Zhou Xuejun, Luo Jingjing, Yang Genhong, Lang Minghua, Yang Zhongwei, Feng Shenqiang, Cao Zhonglu, Wu Fugui, Gong Yongfan, Luo Mian, Wu Huajun, Zhou Yuehuai, Yin Hui, An Peng, Zhang Quangui, Shao Jinggan, Zhou Liping, Zhao Hui, Zhu Hailiang, Gao Xiaojian, Shi Tao, Yu Kequan, Wang

Yan, Qi Ligang, Qu Peng, Chen Guangming, Qian Wei, Liu Yuelin, Zhang Sheng, Luo Shasha, Li Zhiqiang, Zhang Zheng, Zhu Qiang, Wang Junfeng, Zhan Zhao, Lin Xinjian, Sun Yuxia, Wang Baorui, Duan Defeng, Li Hui, Zheng Hongwei, Lan Mingqing, Chen Yuliang, Bu Dexin, Tang Bo, Huang Xin, Wang Songlin, Zhou Guosen, Dong Shenghu, Li Jieyong, Feng Jianzhou, Wang Shuo, Hao Yongjie, Feng Wenbo, Su Zhou, Wang Junwei, Gong He, Xiao Heshun, Lin Gaoshan, Han Minhui, Song Weiqing, Li Congqi, Xu Chaoyang, Xu Ye, Wang Tianqi, Fan Zhiyong, Liu Dong, Li Guo, Song Nan, Gao Shengyang, Pan Wei, Wu Hao, Xu Gang, Yu Changjiang, Zhao Xiang, Ni Yingsheng, Song Yufeng, Zhu Jinchun, Tai Delong, Xu Guoxiang, Kuang Naihang, Yang Dongmei, He Shasha, Luo Qizheng, Liu Fusheng, Li Zhenqiang, Yang Kai, Shao Mingzhi, Gao Bingqiang, Jiang Rongqi, Wu Bin, Han Xiaodong, Niu Zengcong, Xiao Hongwu, Liu Side, Lv Guangjun, Li Hanyuan, Qiang Gawen, Feng Long, Yu Tao, Luo Pei, Shen Lizhong, Meng Lingxin, Li Guohui, Hu Wenquan, Liang Yuling, Liu Miao, Lu Shimin, Ji Ao, Qian Yunfeng, Zhang Zhiyu.

Recycled carbon fiber for cement concrete

1 Scope

This document specifies the classification and marking, general rules, technical requirements, inspection rules and marking, packaging, transportation, etc. of recycled carbon fiber for cement concrete.

transport and storage, and describes the corresponding test methods.

This document applies to chopped recycled carbon fibers that can improve the properties of cement concrete.

2 Normative references

GB 175

GB/T 191

GB 8076

GB/T 9914.1

GB/T 14684

GB/T 14685

GB/T 26752-2020

GB/T 29762

GB/T 30019

GB/T 40724

3 Terms and definitions

The terms and definitions defined in GB/T 40724 and the following apply to this document.

3.1 Recommended dosage

The recycled carbon fiber dosage range recommended to users by production or sales companies, scientific research institutions, etc.

3.2 referenceconcrete

Cement concrete without recycled carbon fiber added under the same test conditions.

3.3 tested concrete

Cement concrete added with recycled carbon fiber under the same test conditions.