

ICS 13.220.20  
CCS C82



**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB 12441-2018**

Replacing GB 12441-2005

**Finishing fire resistant coating**

饰面型防火涂料

**Issued on: February 6, 2018**

**Implemented on: September 1, 2018**

**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine of the People's Republic of China;  
Standardization Administration of China**

## Table of Contents

Foreword

1 Scope

About this edition

Classification and status

How a Chinese national standard is set out

### Foreword

This document was issued on 6 February 2018 by the State Administration for Market Regulation and the Standardization Administration of the People's Republic of China, and has been in force since 1 September 2018.

It replaces GB 12441-2005.

Classification: ICS 13.220.20, CCS C82.

### 1 Scope

China's mandatory national standard for finishing fire-resistant coatings. These are the intumescent paints applied to interior surfaces - the ones that look like ordinary decorative finishes and behave completely differently in a fire, swelling into a thick insulating char that keeps flame from spreading across the surface. Their whole purpose is to buy time in the first minutes, when a fire is still confined to the room where it started and the occupants are still deciding what to do. The requirements are therefore about performance in that window: the flame spread and smoke produced, the char formation, and the adhesion and durability that determine whether the coating still works years after it was applied. The second half of the standard is about what the coating releases in normal use, because a product spread over the walls of a room people live in is a source of formaldehyde and volatile organics. Being mandatory, it governs what may be sold in China.

### About this edition

GB 12441-2018 is the current edition. It was issued on 6 February 2018 and has been in force since 1 September 2018, replacing GB 12441-2005.

GB 12441-2005 has been superseded: a specification that still cites it is citing a withdrawn edition.

The interval between issue and effect is the transition period. It exists so that producers,

laboratories and buyers can requalify products, revise procedures and use up documentation before the new text becomes the one that applies. The date on this page is the official one from the record of the Standardization Administration.

## Classification and status

GB 12441-2018 is classified under ICS 13.220.20, in the field of environment and health protection, safety. ICS is the International Classification for Standards, the same scheme used by ISO and by the national bodies of most countries, which is what allows a Chinese standard to be placed beside its foreign counterparts on subject rather than on number.

Its Chinese Standard Classification code is CCS C82. CCS is the domestic scheme, a letter for the sector and two digits for the subject within it, and it is the code by which the standard is filed and searched in China.

The GB prefix without a suffix marks a mandatory national standard: compliance is required by law for the products or activities within its scope, and a product that does not meet it may not lawfully be placed on the Chinese market.

## How a Chinese national standard is set out

Chinese national standards are drafted to the rules of GB/T 1.1, which fixes the order in which a standard is set out. The document opens with a foreword recording the issuing bodies, the relationship to any previous edition and the technical committee responsible for it. Clause 1 is the scope. Clause 2 lists the normative references - the other standards that have to be applied together with this one, and without which its requirements cannot be met. Clause 3 gives the terms and definitions. The technical clauses follow: the requirements themselves, the test or measurement methods by which conformity is established, the inspection rules that say how a lot is sampled and judged, and, for a product standard, the provisions on marking, packaging, transport and storage. Annexes, normative or informative, come last.

GB 12441-2018 runs to 13 pages in the English translation. What is delivered is the complete document in that order: every clause, every table, every figure and every annex of the Chinese original, with the same numbering, so that a reference to a clause number in a contract or a test report points to the same place in both languages.