INTERNATIONAL STANDARD ISO 3048

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Gypsum plasters — General test conditions

Plâtres — Conditions générales des essais

First edition — 1974-08-01

UDC 691.55/.56 : 620.1

Ref. No. ISO 3048-1974 (E)

Descriptors : gypsum plaster, testing conditions.

Price based on 1 page

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3048 was drawn up by Technical Committee ISO/TC 152, *Gypsum, gypsum plasters and gypsum products,* and circulated to the Member Bodies in March 1973.

It has been approved by the Member Bodies of the following countries :

Australia	Mexico	Spain
Austria	Netherlands	Sweden
Bulgaria	New Zealand	Thailand
France	Poland	Turkey
Germany	Portugal	United Kingdom
Iran	Romania	U.S.S.R.
Ireland	South Africa, Rep. of	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Czechoslovakia
Italy

Printed in Switzerland

Gypsum plasters — General test conditions

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the general test conditions applicable to gypsum plasters (hereinafter referred to as "plasters").[1)]

2 REFERENCE

ISO/R 554, *Standard atmospheres for conditioning and testing — Standard reference atmosphere — Specifications.*

3 GENERAL TEST CONDITIONS

3.1 Reference tests

3.1.1 *Test atmosphere*[2)]

Temperature of the test room, the equipment and the materials (plaster, water) : 20 ± 2 °C.

Relative humidity of the air : 65 ± 5 %.

Atmospheric pressure : 860 to 1 060 mbar.

3.1.2 *Sample*

The laboratory sample shall be kept in hermetically sealed containers.

3.1.3 *Water used*

The water used for all tests (gauging, analysis, etc.) shall be distilled or deionized[3)].

3.1.4 *Appliances and apparatus*

The containers used for gauging and the moulds used for preparing test pieces shall be free from leaks and shall be manufactured from a waterproof material which is non-reactive to calcium sulphate (glass, brass, stainless steel, hardened steel, etc., plastics materials being excluded).

Since the characteristics of plasters are strongly influenced by the presence of particles of calcium sulphate dihydrate which form crystal nuclei, all the equipment used in tests shall be kept in a perfect state of cleanliness.

3.2 Routine tests

3.2.1 *Test atmosphere*[2)]

Temperature of the test room, the equipment and the materials : 20 ± 5 °C.

Relative humidity of the air : 65 ± 10 %.

3.2.2 *Sample*

The laboratory sample shall be kept in hermetically sealed containers.

3.2.3 *Water used*

The specifications concerning the water used will be the subject of future studies.

3.2.4 *Appliances and apparatus*

The containers used for gauging and the moulds used for preparing test pieces shall be free from leaks and shall be manufactured from a waterproof material which is non-reactive to calcium sulphate (glass, brass, stainless steel, hardened steel, etc., plastics materials being excluded).

Since the characteristics of plasters are strongly influenced by the presence of particles of calcium sulphate dihydrate which form crystal nuclei, all the equipment used in tests shall be kept in a perfect state of cleanliness.

---

1) Certain questions concerning test methods for gypsum plasters, such as the gauging water and the mould material, are being studied. It is possible that further details will be provided later.

2) See ISO/R 554.

3) Deionize using ion exchangers (complete elimination of salts).