
INTERNATIONAL STANDARD



580

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Moulded fittings in unplasticized polyvinyl chloride (PVC) for use under pressure — Oven test

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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.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, International Standard ISO 580 replaces ISO Recommendation R 580-1967 drawn up by Technical Committee ISO/TC 5, *Pipes and fittings*. Technical Committee ISO/TC 138, *Plastics pipes and fittings for the transport of fluids*, set up in 1970, took over responsibility for this document.

The Member Bodies of the following countries approved the Recommendation :

Argentina	Finland	Korea, Rep. of
Australia	France	Netherlands
Austria	Germany	Norway
Belgium	Greece	Poland
Brazil	Hungary	Portugal
Canada	India	Spain
Chile	Ireland	Sweden
Czechoslovakia	Israel	Switzerland
Denmark	Italy	U.S.S.R.
Egypt, Arab Rep. of	Japan	Yugoslavia

The Member Body of the following country expressed disapproval of the Recommendation on technical grounds :

United Kingdom

Moulded fittings in unplasticized polyvinyl chloride (PVC) for use under pressure — Oven test

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method for testing oven-moulded fittings of unplasticized polyvinyl chloride for use under pressure, in order to determine the quality of the material under moulding conditions.

2 APPARATUS

Thermostatically controlled oven, so designed and so constructed as to comply with the following conditions :

- a) The heating capacity shall allow for operation at a test temperature of 150°C , and be such that, after insertion of the test specimens, the test temperature is regained within 15 min.
- b) The oven shall be provided with a thermostat to maintain the temperature at $150 \pm 4^{\circ}\text{C}$.

3 TEST SPECIMENS

Complete fittings shall be used as test specimens. From each homogeneous batch of production at least three specimens shall be tested.

4 PROCEDURE

Place the test specimens in the oven at $150 \pm 4^{\circ}\text{C}$ so that each stands on one of its socket mouths.

Keep the test specimens in the oven for 1 h from the moment when the oven temperature has returned to $150 \pm 4^{\circ}\text{C}$.

Remove the test specimens from the oven, taking care not to distort or otherwise damage them.

Allow the test specimens to cool in air. When they are cool enough for handling, examine them for weld line failure and surface damage.

It is also possible to carry out the test in glycerine or an aromatic-free hydrocarbon oil at $150 \pm 4^{\circ}\text{C}$.

5 EXPRESSION OF RESULTS

The batch is considered to have passed the oven test if none of the specimens tested shows any blisters or signs of weld line splitting and if surface damage in the area of any injection point penetrates no deeper than 50 % of the wall thickness at that point. After this test, the weld line may appear to be rather more marked, but this should not be interpreted as a sign of weld line splitting.