

Transformed

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 580

OVEN TEST FOR MOULDED FITTINGS
IN UNPLASTICIZED POLYVINYL CHLORIDE (PVC)
FOR USE UNDER PRESSURE

1st EDITION

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BRIEF HISTORY

The ISO Recommendation R 580, *Oven Test for Moulded Fittings in Unplasticized Polyvinyl Chloride (PVC) for Use under Pressure*, was drawn up by Technical Committee ISO/TC 5, *Pipes and Fittings*, the Secretariat of which is held by the Association Suisse de Normalisation (SNV).

Work on this question by the Technical Committee began in 1962 and led, in 1963, to the adoption of a Draft ISO Recommendation.

In June 1965, this Draft ISO Recommendation (No. 821) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies:

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

One Member Body opposed the approval of the Draft:

United Kingdom

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in April 1967, to accept it as an ISO RECOMMENDATION.

OVEN TEST FOR MOULDED FITTINGS IN UNPLASTICIZED POLYVINYL CHLORIDE (PVC) FOR USE UNDER PRESSURE

1. SCOPE

This ISO Recommendation describes 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

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

- (a) The heating capacity should 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 minutes.
- (b) The oven should be provided with a thermostat to maintain the temperature at $150 \pm 4^{\circ}\text{C}$.

3. TEST SPECIMENS

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

4. TEST 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 during one hour 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 show 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.