

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

**Household and similar electrical appliances – Safety –
Part 2-25: Particular requirements for microwave ovens, including combination
microwave ovens**

**Appareils électrodomestiques et analogues – Sécurité –
Partie 2-25: Règles particulières pour les fours à micro-ondes, y compris les
fours à micro-ondes combinés**



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FOREWORD

This amendment has been prepared by subcommittee 61B: Safety of microwave appliances for household and commercial use, of IEC technical committee 61: Safety of household and similar electrical appliances.

The text of this amendment is based on the following documents:

FDIS	Report on voting
61B/494/FDIS	61B/505/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months or later than 36 months from the date of publication.

2 Normative references

Add the following reference to the existing list:

IEC 60335-2-5:2012, *Household and similar electrical appliances – Safety – Part 2-5: Particular requirements for dishwashers*

7 Marking and instructions

7.12 Addition:

Add, after the sixth dashed item, the following new dash:

- Metallic containers for food and beverages are not allowed during microwave cooking. This requirement is not applicable if the manufacturer specifies size and shape of metallic containers suitable for microwave cooking.

Add, after the last dashed item, the following new dash:

- The instructions for use for **fixed appliances** and **built-in appliances** being used equal or higher than 900 mm above the floor and having **detachable** turntables shall state that care

should be taken not to displace the turntable when removing containers from the appliance. This is not applicable for appliances with horizontal bottom hinged door.

Add, after the last paragraph, the following new paragraph:

The instructions for **microwave ovens** that are not in compliance with 22.118 shall state that the appliance must not be installed equal or higher than 900 mm above the floor.

15 Moisture resistance

Add, after 15.101, the following new subclauses:

15.102 Microwave ovens intended to be built-in as underbench installation and therefore subject to spillage of liquid from containers onto working surfaces shall be constructed so that such spillage does not affect their electrical insulation.

Compliance is checked by the following test (see Figure 102).

*The **microwave oven** is built-in as underbench installation as specified by the manufacturer. The test cabinet including the working surface is tilted to an angle of 2° in the most unfavourable direction. 500 ml of water containing approximately 1 % NaCl and approximately 0,6 % acid rinsing agent is poured steadily over a period of 20 s through a funnel onto the complete width of the working surface above the **microwave oven**. The funnel has an outlet diameter of approximately 8 mm and the lower edge of its outlet is positioned 20 mm above the working surface. The centre of the funnel is positioned 15 mm inwards from the leading edge of the working surface.*

The leading edge of the working surface shall be rounded with a radius of 25 mm and the working surface shall be 50 mm in thickness and free of any drain slots, drain edges, tearing edges and similar.

*Immediately after the test, the appliance shall withstand the electric strength test of 16.3 and inspection shall show that there is no trace of water on insulation that could result in a reduction of **clearances** or **creepage distances** below the values specified in Clause 29.*

The composition of the water containing approximately 1 % NaCl and approximately 0,6 % acid rinsing agent is described in Annex AA of IEC 60335-2-5:2012.

15.103 Microwave ovens intended to be built-in in cabinets underneath other built-in appliances and therefore subject to spillage of liquid from filled containers which are handled during usage of these other appliances shall be constructed so that such spillage does not affect their electrical insulation.

Compliance is checked by the following test (see Figure 103).

*The **microwave oven** is built-in as specified by the manufacturer. The test cabinet is tilted to an angle of 2° in the most unfavourable direction. 200 ml of water containing approximately 1 % NaCl and approximately 0,6 % acid rinsing agent is poured steadily over a period of 8 s through a funnel onto the complete width of the separation board above the **microwave oven**. The funnel has an outlet diameter of approximately 8 mm and the lower edge of its outlet is positioned 20 mm above the separation board. The centre of the funnel is positioned 15 mm inwards from the leading edge of the separation board.*

*If the manufacturer states in the installation instructions that a separation board above the **microwave oven** is not required, the test shall be repeated while pouring the water containing approximately 1 % NaCl and approximately 0,6 % acid rinsing agent directly onto the complete width of the top surface of the **microwave oven**. The lower edge of the funnel outlet*

is positioned 20 mm above the top surface of the **microwave oven** and its centre is positioned 15 mm inwards from the leading edge of the **microwave oven**.

Immediately after the test, the appliance shall withstand the electric strength test of 16.3 and inspection shall show that there is no trace of water on insulation that could result in a reduction of **clearances** or **creepage distances** below the values specified in Clause 29.

The composition of the water containing approximately 1 % NaCl and approximately 0,6 % acid rinsing agent is described in Annex AA of IEC 60335-2-5:2012.

22 Construction

Add, after 22.117, the following new subclause:

22.118 Inadvertent operations during handling of the container during normal use of **fixed appliances** and **built-in appliances** being used equal or higher than 900 mm above the floor having **detachable** turntables shall not lead to a hazardous situation due to falling down turntables. This is not applicable for appliances with horizontal bottom hinged door.

Compliance is checked by inspection and the following test.

The bearing of the **detachable** turntable of **microwave ovens** shall be placed in the most unfavourable position. A force which will be increased from 0 N up to the maximum of 10 N is applied vertically downwards to the front edge of the turntable.

During the test, the turntable shall not slide out of the **cavity** and fall down.

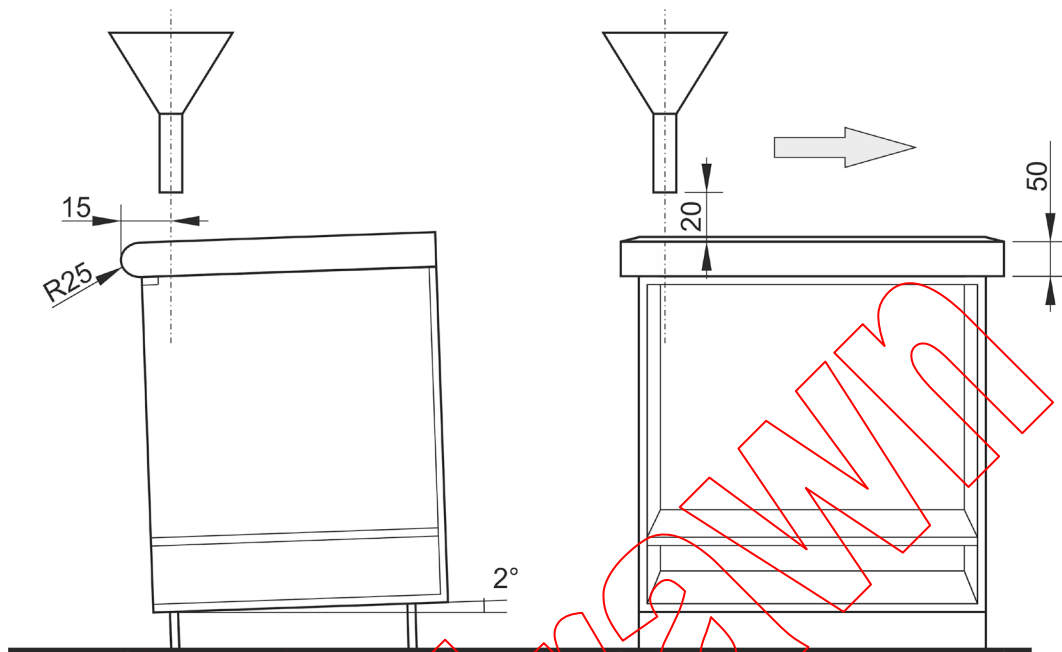
A cylindrical container of borosilicate glass with a maximum thickness of 3 mm, an external diameter of approximately 190 mm, a height of approximately 90 mm and an outer bottom curvature of approximately 5 mm is filled with 1 000 g ± 50 g cold water and placed on the turntable. With a horizontal force applied at the top of the container which will be increased from 0 N up to the maximum of 10 N an attempt is made to pull the container out of the **cavity** without any lifting from the turntable.

During the test, the turntable shall not slide out of the **cavity** and fall down.

NOTE During the test, it is possible that the container falls out of the cavity.

Add, after Figure 101, the following new Figures 102 and 103:

Dimensions in millimetres



IEC

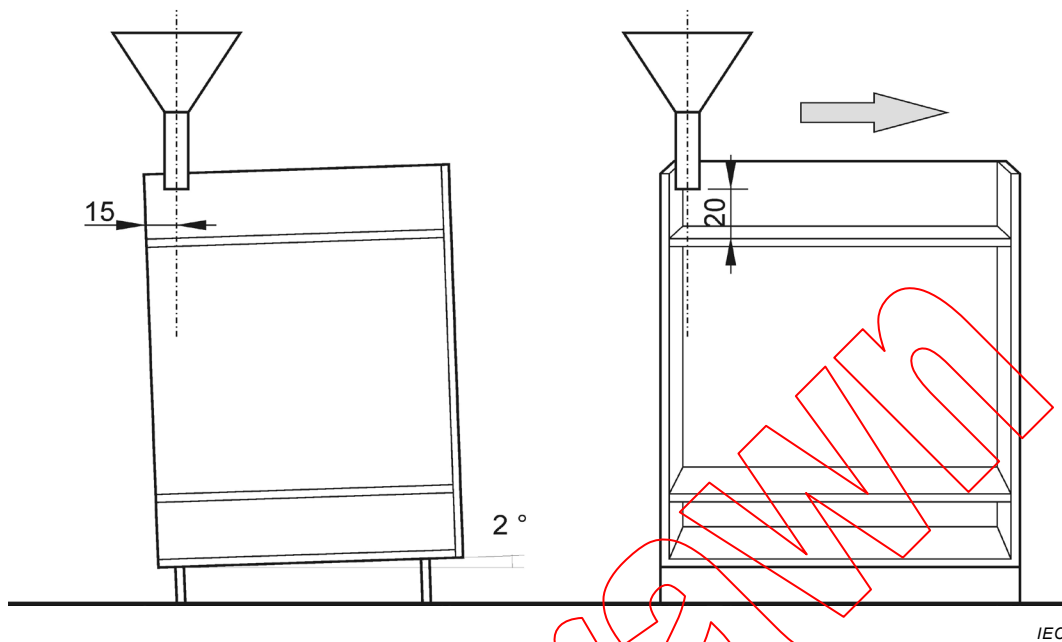
a) Side view

b) Front view

**Figure 102 – Test cabinet including working surface,
position of funnel and example for direction of tilt**

<https://standards.iteh.org/standards/sist/60335-2-25-2010-amd1-2014>

Dimensions in millimetres



a) Side view

b) Front view

Figure 103 – Test cabinet including separation board,
position of funnel and example for direction of tilt

<https://standards.iteh.org/catalog/standards/sist/60335-2-25-2010/iec-60335-2-25-2010-amd1-2014>

Withdrawing

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[IEC 60335-2-25:2010/AMD1:2014](#)

<https://standards.iteh.ai/catalog/standards/sist/bc9f05f76-e10b-40ca-9272-8a153cb2dd8d/iec-60335-2-25-2010-amd1-2014>

AVANT-PROPOS

Le présent amendement a été établi par le sous-comité 61B: Sécurité des fours à micro-ondes à usage domestique et commercial, du comité d'études 61 de l'IEC: Sécurité des appareils électrodomestiques et analogues.

Le texte de cet amendement est issu des documents suivants:

FDIS	Rapport de vote
61B/494/FDIS	61B/505/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cet amendement.

Le comité a décidé que le contenu de cet amendement et de la publication de base ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous "<http://webstore.iec.ch>" dans les données relatives à la publication recherchée. A cette date, la publication sera

- reconduite,
- supprimée,
- remplacée par une édition révisée, ou
- amendée.

NOTE L'attention des Comités Nationaux est attirée sur le fait que les fabricants d'appareils et les organismes d'essai peuvent avoir besoin d'une période transitoire après la publication d'une nouvelle publication IEC, ou d'une publication amendée ou révisée, pour fabriquer des produits conformes aux nouvelles exigences et pour adapter leurs équipements aux nouveaux essais ou aux essais révisés.

Le comité recommande que le contenu de cette publication soit entériné au niveau national au plus tôt 12 mois et au plus tard 36 mois après la date de publication.

2 Références normatives

Ajouter la référence suivante à la liste existante:

IEC 60335-2-5:2012, *Appareils électrodomestiques et analogues – Sécurité – Partie 2-5: Exigences particulières pour les lave-vaisselle*

7 Marquage et instructions

7.12 Addition:

Ajouter après le sixième tiret le nouveau tiret suivant:

- Les récipients métalliques pour aliments et boissons ne sont pas admis lors de la cuisson par micro-ondes. Cette exigence n'est pas applicable si le fabricant spécifie une taille et une forme de récipients métalliques adaptés à la cuisson par micro-ondes.

Ajouter après le dernier tiret le nouveau tiret suivant: