



Different standards used at our laboratory - beginning more than 30 years ago

Standard	Test time	Disturbance	Tracer substance	Total amount of tracer substance	Air intake with diffuser plate	Dimensions of pan/spreader	Temperature	Height above hob	Test room volume	Temperature test room	Temperature inlet air
Swedish Standard SS 433 05 01	10 min	Yes	N₂O	510 liter	Close to the ceiling	Ø = 200 mm H = 20 mm	200±5°C	≥ 500 mm *	23 ± 1 m ³	20±5°C	20±2°C
"Hybrid method" (mix of SS 433 0501 and IEC 61591)	10 min	Yes	MEK	100 g	Close to the ceiling	Ø = 200 mm H = 25 mm	170 ± 10 °C	≥ 500 mm *	23 ± 1 m ³	20 ± 5 °C	20±2°C
IEC 61591:2019	30 min	No	MEK	312 g	Close to the floor	Ø = 200 ± 20 mm H = 125 mm	170 ± 10 °C	600 mm	22 ± 2 m ³	23±2°C***	No requirements
EN 13141-3:2017	10 min	Yes	MEK	100 g	Close to the floor	Ø = 200 ± 20 mm H = 45 ± 2 mm	170±5°C	≥ 600 mm	22 ± 2 m ³	No requirements	No requirements

^{*)} Distance to the front lower edge of the test object, transparent hood not included (or other height specified by the manufacturer)
**) Before 2017 EN 13141-3 used the same testing procedure for odour reduction as in IEC 61591
***) Before 2019 the requirement was 20 ± 5 °C

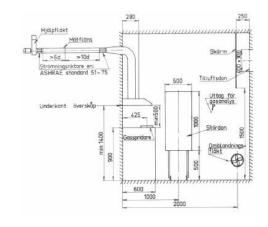


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Swedish Standard SS 433 05 01

- Published in 1981
- Used for testing of cooker hoods with or without a built in fan
- Disturbance in front of hob
- Only for extract air cooker hoods
- · Gives reasonable odour extraction

For recirculating cooker hoods a hybrid metod has been used where N_2 0 had been exchanged with MEK as in EN 13141-3:2017



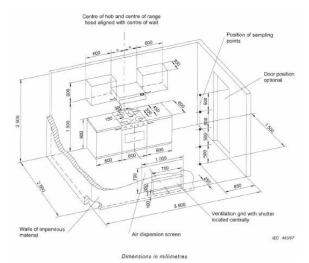
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IEC 61591:2019

- First published in 1997
- Only used for testing of cooker hoods with built in or dedicated roof fan
- · No disturbance in front of hob
- Both for extract and recirculating air cooker hoods
- · Gives unrealisticly high odour reduction

Based on a German method for mainly testing the performance of carbon filters in range hoods with recirculating air.





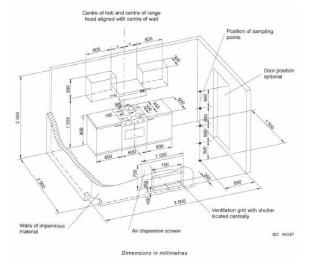
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EN 13141-3:2017

- Before 2017 the same test method for odour reduction as in IEC 61591 was used
- Only used for testing of cooker hoods witout built in or dedicated roof fan
- Disturbance in front of hob
- Only for extract air cooker hoods
- · Gives reasonable odour extraction

Wery similar to the "Hybrid method" used by RISE



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Conclusions

- · Cooker hood should be tested in the same way regardless of
 - built in fan or not
 - extract air or recirculating air
- The test procedure for odour reduction used in EN 13141-3:2017 should be used for all types of range



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