

related test method	EN 1634-3
subject	Calculation of adjusted leakage rate Reference of original query: TC2 N613
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Problem

In the standard is mentioned in paragraph 10.2 that the leakage rate should be determined. The standard however has an unclear definition on what is meant with 'leakage rate'. Various interpretations can be given: leakage rate referred to 0°C, 20°C, 200°C ...

This is especially relevant for determination of the leakage rate at medium temperature (200°C). The table below shows the error of the different interpretations assuming there should be referred to 20°C as described in the draft standard (CEN/TC 127 N872) and the German standard (DIN 18095 Teil2 , 1991 : Rauchschutztüren).

LEAKAGE RATE REFERRED TO X°C	LEAKAGE RATE REFERRED TO 20°C	ERROR
1 m ³ /h bij 0°C	1,07 m ³ /h	-7 %
1 m ³ /h bij 20°C	1,00 m ³ /h	0 %
1 m ³ /h bij 200°C	0,62 m ³ /h	61 %

Tabel 1. error on leakage rate.

Recommendation

The leakage rate shall be adjusted to standard reference conditions (293,15 K = 20 °C) and pressure 10 1325 Pa, as included in Draft prEN 1634-3 and according to the calculation reproduced in annex.

