



## **CE-MT001      Acoustics.**

### **B.3.3 Procedure for determination of window $R_w$ (C; $C_{tr}$ ) based on IGU data**

For windows fulfilling the general conditions in B.3.2, the following steps are used:

- Table B.1:  $R_w$  for the window is found based on  $R_w$  for IGU;
- Table B.2:  $R_w + C_{tr}$  for the window is found based on  $R_w + C_{tr}$  for IGU;
- window C = -1 dB;
- calculate window  $C_{tr}$  = "Table B.2" ( $R_w + C_{tr}$  (window)) - "Table B.1" ( $R_w$  (window));
- correction according to Table B.3, if needed;
- CE-marking of window:  $R_w$  (C;  $C_{tr}$ ) based on the results of steps a), c), d) and e).

**EXAMPLE** CE-marking of a top-hung single window, dimensions 1,2 m x 1,6 m, 1 seal, air permeability Class 3 and IGU with  $R_w$  (C;  $C_{tr}$ ) = 30 (-1; -4) dB

IGU  $R_w$  = 30 dB implies Window  $R_w$  = 33 dB

IGU  $R_w + C_{tr}$  = 26 dB implies Window  $R_w + C_{tr}$  = 28 dB

C = -1 dB

$C_{tr}$  = 28 dB - 33 dB = -5 dB

Area 1,2 m x 1,6 m = 1,92 m<sup>2</sup> < 2,7 m<sup>2</sup>, so no correction is necessary, i.e. CE-marking  $R_w$  (C;  $C_{tr}$ ) = 33 (-1; -5).

## **B.4 Test results and tabulated values – Range of application**

The extrapolation rules for test results and tabulated values are shown in Table B.3.

**Table B.3 — Extrapolation rules for different window sizes**

Window size range		Sound insulation value for window
Test results (see B.2) for test specimen of any size	Tabulated values (see B.3) <sup>a</sup>	
-100% to +50% of test specimen overall area	Overall area ≤ 2,7 m <sup>2</sup>	$R_w$ and $R_w + C_{tr}$ according to B.2 or B.3
+50% to +100% of test specimen overall area	2,7 m <sup>2</sup> < Overall area ≤ 3,6 m <sup>2</sup>	$R_w$ and $R_w + C_{tr}$ corrected by -1 dB
+100% to +150% of test specimen overall area	3,6 m <sup>2</sup> < Overall area ≤ 4,6 m <sup>2</sup>	$R_w$ and $R_w + C_{tr}$ corrected by -2 dB
>+150% of test specimen overall area	4,6 m <sup>2</sup> < Overall area	$R_w$ and $R_w + C_{tr}$ corrected by -3 dB
<sup>a</sup> The area intervals indicated for tabulated values are identical to the intervals for test results according to B.2 using the recommended test specimen size 1,23 m x 1,48 m.		