

# **DELTA Test Report**



Laboratory measurement of airborne sound insulation of a INWIDO Denmark A/S "coupled" side-hung construction with 4 mm glass in the external sash and a Float 3-16-3 mm argon filled insulating glass unit in the internal sash (Koblet Dannebrogsvindue 1 + 2 (4-26,5 / Fl3-16-3))

## Performed for INWIDO Denmark A/S

DANAK 100/2196 Project no.: I101054 Page 1 of 12 incl. 1 graph sheet 7 annexes

15 September 2016

DELTA Venlighedsvej 4 2970 Hørsholm Denmark

Tlf. +45 72 19 40 00 Fax +45 72 19 40 01 www.delta.dk VAT No. 12275110

## Title

Laboratory measurement of airborne sound insulation of a INWIDO Denmark A/S "coupled" side-hung construction with 4 mm glass in the external sash and a Float 3-16-3 mm argon filled insulating glass unit in the internal sash (Koblet Dannebrogsvindue 1 + 2 (4-26,5 / Fl3-16-3))

Journal no.Project no.Our ref.Date of testDANAK 100/2196I101054MBH/LSS/ilk16 August 2016

#### Client

INWIDO Denmark A/S Fabriksvej 4 9640 Farsø

## Client ref.

Jens Bo Nielsen

## Laboratory

DELTA Agro Food Park 13 8200 Aarhus N Denmark

## **Test conditions**

Application rules for specific products:

Measurement of airborne sound insulation:

Measurement procedures and requirements:

Requirements for test facilities and equipment:

Evaluation:

EN ISO 10140-2:2010

EN ISO 10140-4:2010

EN ISO 10140-5:2010

EN ISO 717-1:2013



#### Results

Airborne sound insulation measured in the laboratory, weighted sound reduction index according to EN ISO 717-1:2013:

$$R_w(C; C_{tr}) = 32 (-3; -8) dB$$

Graph Sheet no. 1 shows the sound reduction index of every one-third octave band in the frequency range 50-5000 Hz together with the shifted reference curve corresponding to the measured weighted sound reduction index. The one-third octave band values are shown both in tabular form and graphically. Additionally, the octave band values are calculated from the onethird octave band in the frequency range 63-4000 Hz and are shown in tabular form.

## Remarks

Description of the test specimen:

See Annex A

Mounting in the laboratory:

See Annex A

Drawings of the test specimen:

See Annex B1-B3

Measuring conditions and procedure: See Annex C

Measurements at low frequencies:

See Annex D

Measuring equipment:

See Annex E

The test result applies to the tested specimen only.

DELTA, 15 September 2016

Elaborated by:

Morten B. Hansen

Acoustics

Lors S. Sprdespeard Released by:

Lars S. Søndergaard

Acoustics

