

DIVISIONE: DIVISION: Constructions

LABORATORIO: LABORATORY: **Technical Physics** 

RAPPORTO DI PROVA

(Test Report)

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N° 0005-B/DC/ACU/07

Data: 15/01/2007

Date:

IDENTIFICAZIONE E DESCRIZIONE DEL CAMPIONE: SPECIMEN DESCRIPTION:

Aplomb 22

DATI IDENTIFICATIVI DEL CLIENTE: CLIENT:

Trocellen Italia S.p.A. Via dei Dossi, s.s. 525 del Brembo I-24040 Osio Sopra (BG)

NORMA DI RIFERIMENTO: REFERENCE STANDARD:

UNI EN ISO 140-3:1997 – UNI EN ISO 717-1:1997

DISTRIBUZIONE ESTERNA: OUTSIDE DISTRIBUTION: DISTRIBUZIONE INTERNA: INSIDE DISTRIBUTION:

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### GENERAL DATA

Product supply date:

30/08/2000

Date of test:

31/08/2000

Sampling:

sample supplied by Client

#### Standard reference identification

UNI EN ISO 140-3: Acoustics - Measurement of sound insulation in buildings and of building elements -Laboratory measurements of airborne sound insulation of building elements - September 1997.

UNI EN ISO 717-1: Acoustics - Rating of sound insulation in buildings and buildings elements - Airborne sound insulation - December 1997.

### Identification of test method

Measurement of the sound reduction index R according to UNI EN ISO 140-3 and calculation of rating Rw according to UNI EN ISO 717-1.

Standard procedure:

YES

Standard procedure deviations:

NO

Calculation check:

YES

# DECLARATIONS

The test results contained in this report relate only to the sample tested.

The test report shall not be reproduced except in full without the written approval of the Head of Laboratory.

Except where stated, characteristics of products were taken from client description and were not verified by the laboratory.

Additional test report.

This test report is a translation of the original test report n. 0005-A/DC/ACU/07 issued on 15/01/2007.

This test report replaces the n. DC05/107/00 issued on September 26th 2000

No additional test has been carried out on the sample.



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# Description of test method

Generation of a diffuse sound field using white noise in the source room

Measurement of sound pressure level both in the source room and the receiving

Measurement of reverberation time in the receiving room

Calculation of the sound reduction index according to formula  $R = L_1 - L_2 + 10 \cdot \log \left( \frac{S \cdot T}{0.16 \cdot V} \right)$  where:

R =sound reduction index (dB)

 $L_1$  = average sound pressure level in the source room (dB)

 $L_2$  = average sound pressure level in the receiving room (dB)

T = average reverberation time of receiving room (s)

 $V = \text{volume of the receiving room (m}^3)$ 

 $S = \text{surface area of tested sample (m}^2$ )

# Climatic conditions during the test

Room temperature = not recorded

Relative humidity = not recorded



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Data: 15/01/2007

Date:

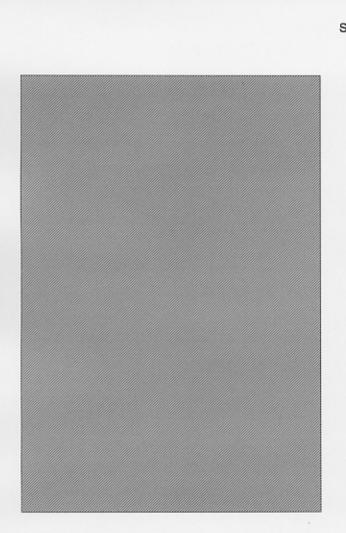
# N° 0005-B/DC/ACU/07

### DESCRIPTION OF TESTED OBJECT

### Aplomb 22

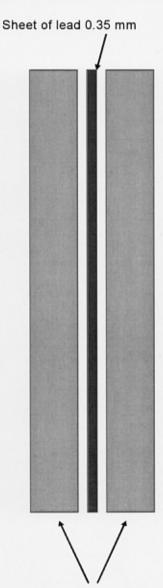
Continuous sheet in coil composed from 3 layers; the composition of the layers is following:

- 1. cross-linked polyethylene foam with compact film of polyolefines of thickness 3 millimetres;
- 2. sheet of lead of thickness 0.35 millimetres:
- 3. cross-linked polyethylene foam with compact film of polyolefines of thickness 3 millimetres.



HEIGHT OF PANEL ...... : 1500 mm

WIDTH OF PANEL ....: 1000 mm



Cross-linked polyethylene foam thickness 3 mm



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Data: **15/01/2007** *Date:* 

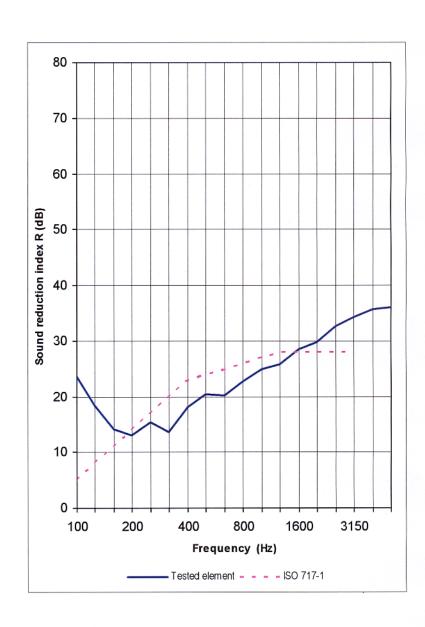
# N° 0005-B/DC/ACU/07

## **TEST RESULTS**

Tested element: Aplomb 22

Sample surface area  $S = 1,27 \text{ m}^2$ Volume of receiving room  $V = 51,5 \text{ m}^3$ Volume of source room 190 m<sup>3</sup>

FREQ.	R
Hz	dB
100	23,6
125	18,5
160	14,1
200	13,0
250	15,4
315	13,6
400	18,2
500	20,4
630	20,3
800	22,8
1000	25,0
1250	25,8
1600	28,4
2000	29,8
2500	32,7
3150	34,3
4000	35,7
5000	36,1



Rating according to ISO 717-1 (int he band 100 ÷3150 Hz) based on laboratory measurements:

 $R_W(C;C_{tr}) = 24(-1;-3) dB$ 

IL RESP. DIV. COSTRUZIONI

**Construction Division Head** 

Ing. P. Mele

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**Managing Director** 

Ing. P. Cau

Mod. 37/2 - Rev. 7