

CSI
GRUPPO IMQ

DIVISIONE:
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COSTRUZIONI

LABORATORIO:
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FISICA TECNICA

RAPPORTO DI PROVA
(Test Report)

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N° **DC05/106/00**

Data: **26.09.00**
Date:

IDENTIFICAZIONE E DESCRIZIONE DEL CAMPIONE:
SPECIMEN DESCRIPTION:

Product name..... : **APLOMB 11**
Material description : see description following pages

DATI IDENTIFICATIVI DEL CLIENTE:
CLIENT:

Client name..... : **TROCELLEN Italia S.p.A.**
Address : **Via dei Dossi, ss 525 del Brembo**
City : **24040 OSIO SOPRA (BG)**

NORMA DI RIFERIMENTO:
REFERENCE STANDARD:
UNI EN ISO 140/3 - UNI EN ISO 717/1

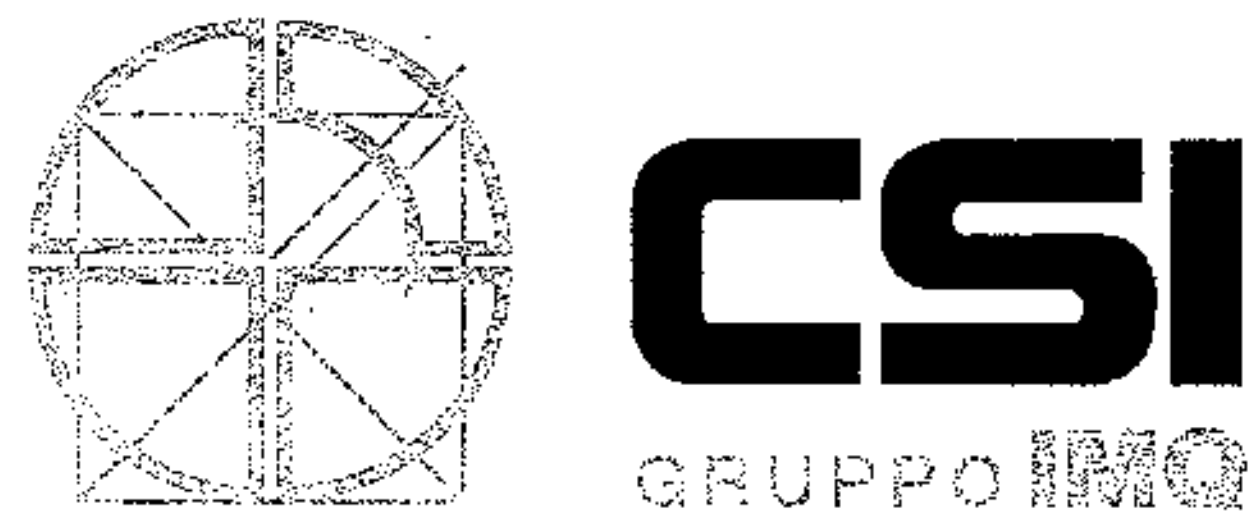
DISTRIBUZIONE ESTERNA:
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RAPPORTO DI PROVA
(Test Report)

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N° **DC05/106/00**

Data: 26/09/00
Date:

GENERAL DATA:

- Product supply date : **30.08.2000**
- Date of test : **31.08.2000**
- 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.

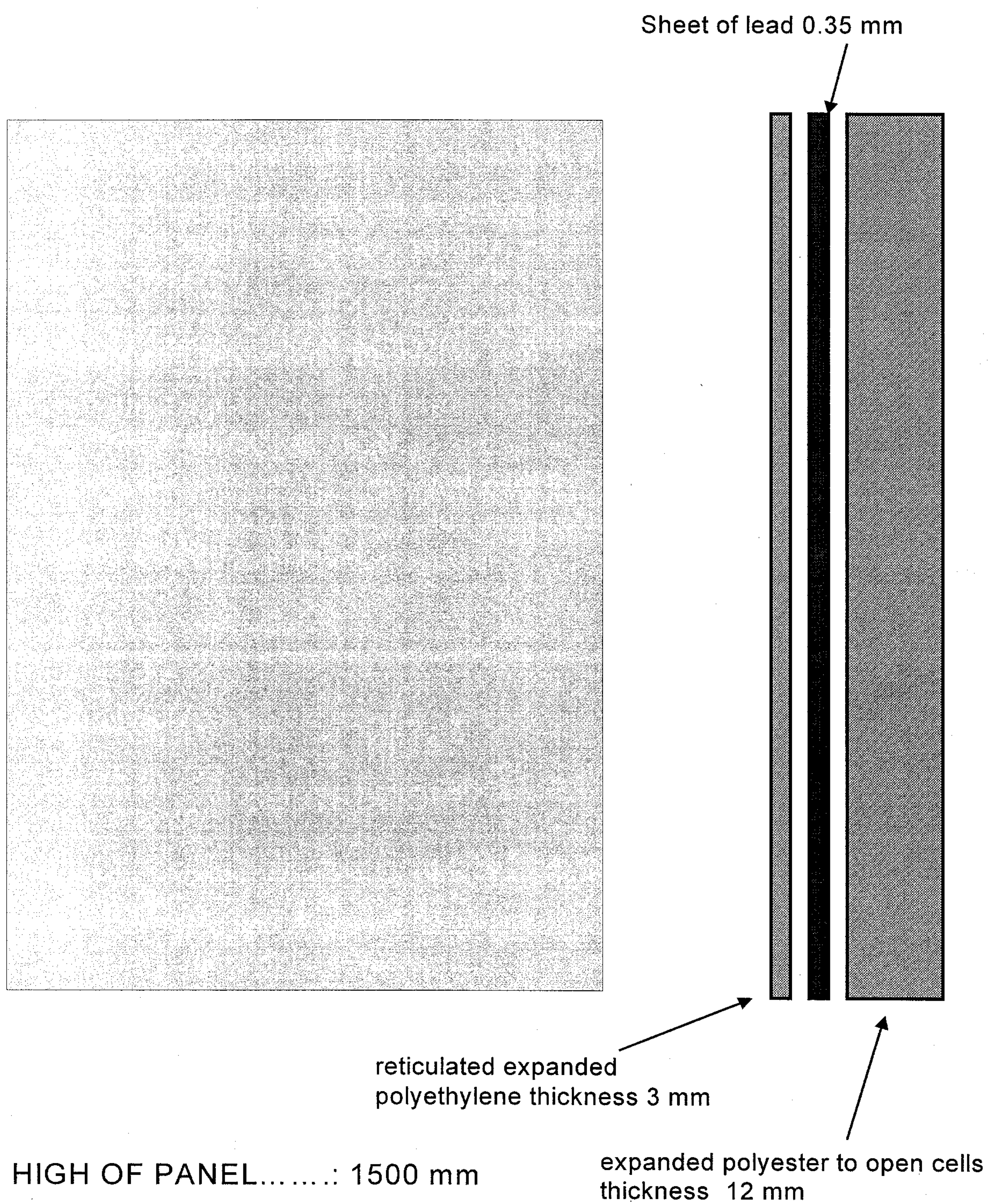
- Identification of test method :
Measurement of airborne sound insulation index R
- Standard procedure : **YES**
- Standard procedure deviation : **NO**
- Calculation check : **YES**

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.

• SPECIMEN DESCRIPTION:

"APLOMB 11": continuous sheet in coil composed from 3 layers: the composition of the layers is following:
1) reticulated expanded polyethylene with compact film of polyolefines of thickness 3 millimetres; 2) sheet of lead of thickness 0.35 millimetres; 3) expanded polyester to open cells thickness 12 millimetres.



HIGH OF PANEL.....: 1500 mm

WIDTH OF PANEL.....: 1000 mm



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MEASUREMENT OF AIRBORNE SOUND REDUCTION INDEX R

SAMPLE BEING TESTED: APLOMB 11

SURFACE OF TEST SPECIMEN: 1,27 m²

L1 = AVERAGE SOUND PRESSION LEVEL
IN THE SOURCE ROOM (dB)

L2 = AVERAGE SOUND PRESSION LEVEL
IN THE RECEIVING ROOM (dB)

D = L1 - L2 = LEVEL DIFFERENCE

T = AVERAGE REVERBERATION TIME
IN THE RECEIVING ROOM sec.

F = 10 log (S x T) / (0,16 x V)

VOLUME OF RECEIVING
ROOM 51,50 m³

R = D + F = SOUND REDUCTION INDEX

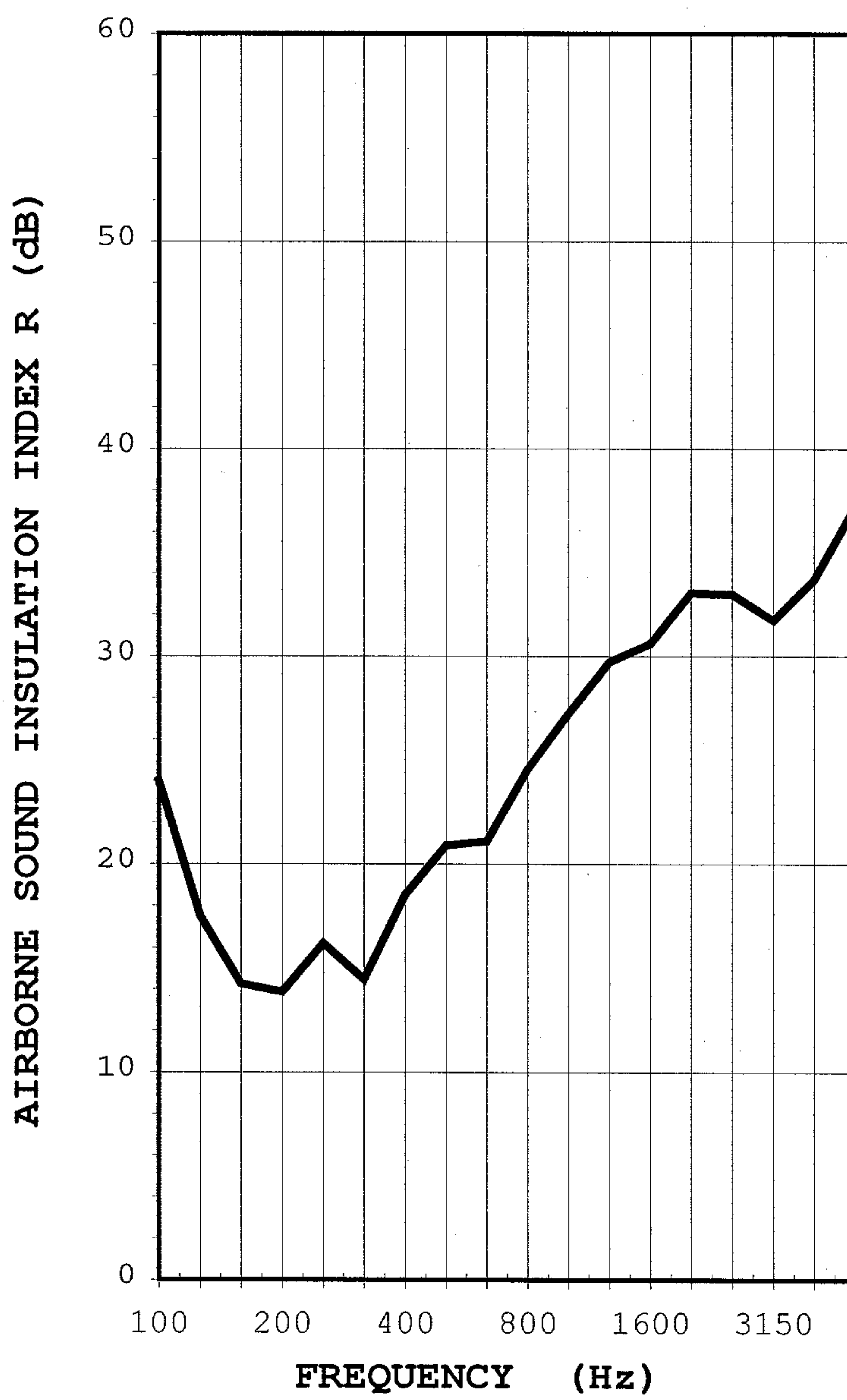
Sound reduction index Rw = dB 26,0

FREQ. Hz	bkg dB	L1 dB	L2 dB	D dB	T sec	F dB	R dB
100	21,90	78,30	47,30	31,0	1,29	-7,0	24,0
125	28,90	79,00	54,60	24,4	1,33	-6,9	17,5
160	19,10	79,90	60,00	19,9	1,76	-5,7	14,2
200	11,40	79,90	58,80	21,1	1,22	-7,3	13,8
250	14,00	82,30	59,70	22,6	1,48	-6,4	16,2
315	12,20	83,40	61,80	21,6	1,25	-7,2	14,4
400	9,30	80,40	55,50	24,9	1,49	-6,4	18,5
500	5,50	83,50	56,20	27,3	1,48	-6,4	20,9
630	4,30	84,40	56,20	28,2	1,26	-7,1	21,1
800	2,50	83,90	52,90	31,0	1,47	-6,4	24,6
1000	2,50	82,70	48,50	34,2	1,3	-7,0	27,2
1250	4,00	82,20	45,40	36,8	1,27	-7,1	29,7
1600	3,70	80,10	42,00	38,1	1,15	-7,5	30,6
2000	4,40	80,70	40,10	40,6	1,14	-7,6	33,0
2500	5,20	81,40	40,80	40,6	1,12	-7,6	33,0
3150	5,90	81,70	41,90	39,8	1,01	-8,1	31,7
4000	6,80	82,40	40,40	42,0	0,96	-8,3	33,7
5000	7,50	82,90	37,00	45,9	0,88	-8,7	37,2
dB(A)	18,70	93,2	61,8	31,4	1,24	-7,2	24,2

MEASURE OF AIRBORNE SOUND INSULATION R

"**APLOMB 11**": continuous sheet in coil composed from 3 layers: the composition of the layers is following:
 1) reticulated expanded polyethylene with compact film of polyolefines of thickness 3 millimetres; 2) sheet of lead of thickness 0.35 millimetres; 3) expanded polyester to open cells thickness 12 millimetres.

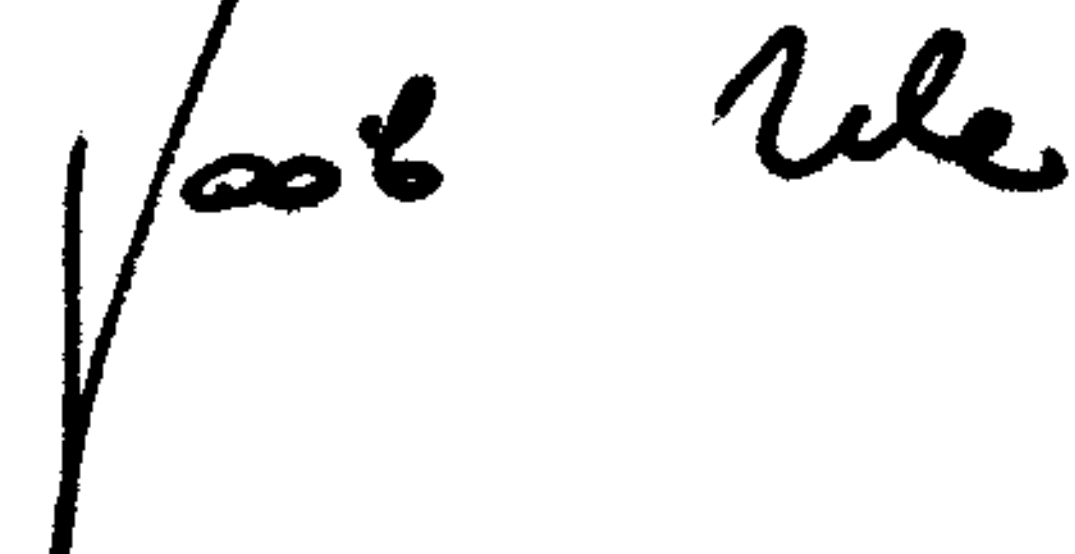
- Test sound: white noise filtered in third-octave band.
 Unfavourable discard > of 8 dB in frequency band.
- Valuation index referred to 500 Hz of the reference curve calculated for frequency band from 100 Hz up 3150 Hz (ISO 717/1):
R_w = 26.0 dB



RESP. DIV. COSTRUZIONI

Laboratory Head

Ing. P. Mele



IL RESP. DEL CENTRO

Managing Director

Ing. P. Cau

