



**CORTIZO TECHNOLOGICAL CENTRE**

**ACOUSTIC CALCULATION REPORT  
ACCORDING TO EN 14351-1**

**Nº EXP: 170013**



**ALUMINIOS CORTIZO  
SA  
Extramundi, s/n  
CP 15901 Padrón  
A Coruña**

## INITIAL TEST REPORT

### 1. PETITIONARY.

**CLIENT:** *CORTIZO SISTEMAS S.A.*

**ADDRESS:** *Extramundi S/N  
15910 – Padrón (A Coruña)*

### 2. SAMPLE CHARACTERISTICS.

<b>PROFILE MANUFACTURER :</b>	CORTIZO	<b>SERIES:</b>	COR - VISION PLUS
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<b>OPENING:</b>	Sliding	<b>DATE OF REPORT:</b>	09/03/2017
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This certificate is a translation of the original certificate in Spanish with the same document number. In case of litigation, the Spanish version is considered to be authorized and valid for any purpose.



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### **3. CALCULATION PERFORMED.**

The aim of this report is to determine the acoustic insulation of the sample indicated previously according to the numerical method specified in the standard EN 14351-1:2006+A1:2011 “Windows and doors - Product standard, performance characteristics”

### **4. OBJETIVE.**

The acoustic insulation  $R_w$  ( $C;Ctr$ ) of windows must be determined by a test in accordance with the standard EN ISO 10140-2. Alternatively, the acoustic insulation of single windows with insulated glass units (IGUs) can be determined using tabulated values from the annex B of the same standard.

For those values of the glass which being within the range of validity established by the standard were not tabulated, the values of the next lower one in terms of performance have been taken.

The procedure described in this standard consists of calculating the acoustic insulation value of the windows, based on the insulation values of the glass they incorporate. These tabulated values are based on numerous tests carried out on 1.23 x 1.48 m samples.

### **5. SCOPE.**

Results given in this document are only applicable for windows that meet the following requirements:

- ✓ Single sliding window incorporating an insulated glass unit (double glazing).
- ✓ The air permeability of the window must be Class 2, Class 3 or Class 4, classified according to UNE EN 12207.
- ✓ The sealing shall be smooth, permanently flexible, weather-resistant and easily replaceable, and at least one of the sealing shall be continuous.
- ✓ The data for laminated glasses refer only to glasses with plastic interlayers.
- ✓ Chambers must be between 6 and 16 mm.
- ✓ Results cannot be applied to SF<sub>6</sub> insulating glass units.
- ✓ Results cannot be applied to balcony windows with infill panels.



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## 6. RESULTS.

### 6.1 Acoustic insulation of windows on the basis of glass composition.

Glazing	Rw (C;Ctr) Wa < 2,7m <sup>2</sup>	Rw (C;Ctr) 2,7 m <sup>2</sup> < Wa < 3,6m <sup>2</sup>	Rw (C;Ctr) 3,6 m <sup>2</sup> < Wa < 4,6m <sup>2</sup>	Rw (C;Ctr) Wa > 4,6m <sup>2</sup>
4 / Chamber / 4 <sup>1</sup>	27 (-1;-2)	26 (-1;-2)	25 (-1;-2)	24 (-1;-2)
6 / Chamber / 4 <sup>1</sup>	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
6 / Chamber / 6 <sup>1</sup>	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)	25 (-1;-2)
8 / Chamber / 4 <sup>1</sup>	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
8 / Chamber / 6 <sup>2</sup>	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
10 / Chamber / 4 <sup>2</sup>	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
10 / Chamber / 6 <sup>2</sup>	29 (-1;-1)	28 (-1;-1)	27 (-1;-1)	26 (-1;-1)
6 / Chamber / 6L <sup>2</sup>	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
6 / Chamber / 10L <sup>2</sup>	30 (-1;-2)	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)

<sup>1</sup> Required sealing: 1

<sup>2</sup> Required sealing: 2

L = Laminated Glass

Wa = Window area in m<sup>2</sup>



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## 6.2 Acoustic insulation of windows on the basis of glass insulation.

Rw (C;Ctr) Glazing	Rw (C;Ctr) Wa < 2,7m <sup>2</sup>	Rw (C;Ctr) 2,7 m <sup>2</sup> < Wa < 3,6m <sup>2</sup>	Rw (C;Ctr) 3,6 m <sup>2</sup> < Wa < 4,6m <sup>2</sup>	Rw (C;Ctr) Wa > 4,6m <sup>2</sup>
27 (-1;-3)	25 (-1;-1)	24 (-1;-1)	23 (-1;-1)	22 (-1;-1)
28 (-1;-3)	26 (-1;-1)	25 (-1;-1)	24 (-1;-1)	23 (-1;-1)
28 (-1;-4)	26 (-1;-2)	25 (-1;-2)	24 (-1;-2)	23 (-1;-2)
29 (-1;-2)	27 (-1;-1)	26 (-1;-1)	25 (-1;-1)	24 (-1;-1)
29 (-1;-3)	27 (-1;-1)	26 (-1;-1)	25 (-1;-1)	24 (-1;-1)
29 (-1;-4)	27 (-1;-2)	26 (-1;-2)	25 (-1;-2)	24 (-1;-2)
29 (-1;-5)	27 (-1;-3)	26 (-1;-3)	25 (-1;-3)	24 (-1;-3)
30 (-1;-2)	28 (-1;-1)	27 (-1;-1)	26 (-1;-1)	25 (-1;-1)
30 (-1;-3)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)	25 (-1;-2)
30 (-1;-4)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)	25 (-1;-2)
30 (-1;-5)	28 (-1;-3)	27 (-1;-3)	26 (-1;-3)	25 (-1;-3)
32 (-1;-2)	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
32 (-1;-4)	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
32 (-1;-5)	29 (-1;-3)	28 (-1;-3)	27 (-1;-3)	26 (-1;-3)
34 (-1;-2)	29 (-1;-1)	28 (-1;-1)	27 (-1;-1)	26 (-1;-1)
34 (-1;-4)	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)	26 (-1;-2)
36 (-1;-4)	30 (-1;-2)	29 (-1;-2)	28 (-1;-2)	27 (-1;-2)

*\* For other values of the parameter "C", the acoustic insulation values remain invariable, as this value is not involved in the calculation.*

*David Macía Arias  
Laboratory manager*



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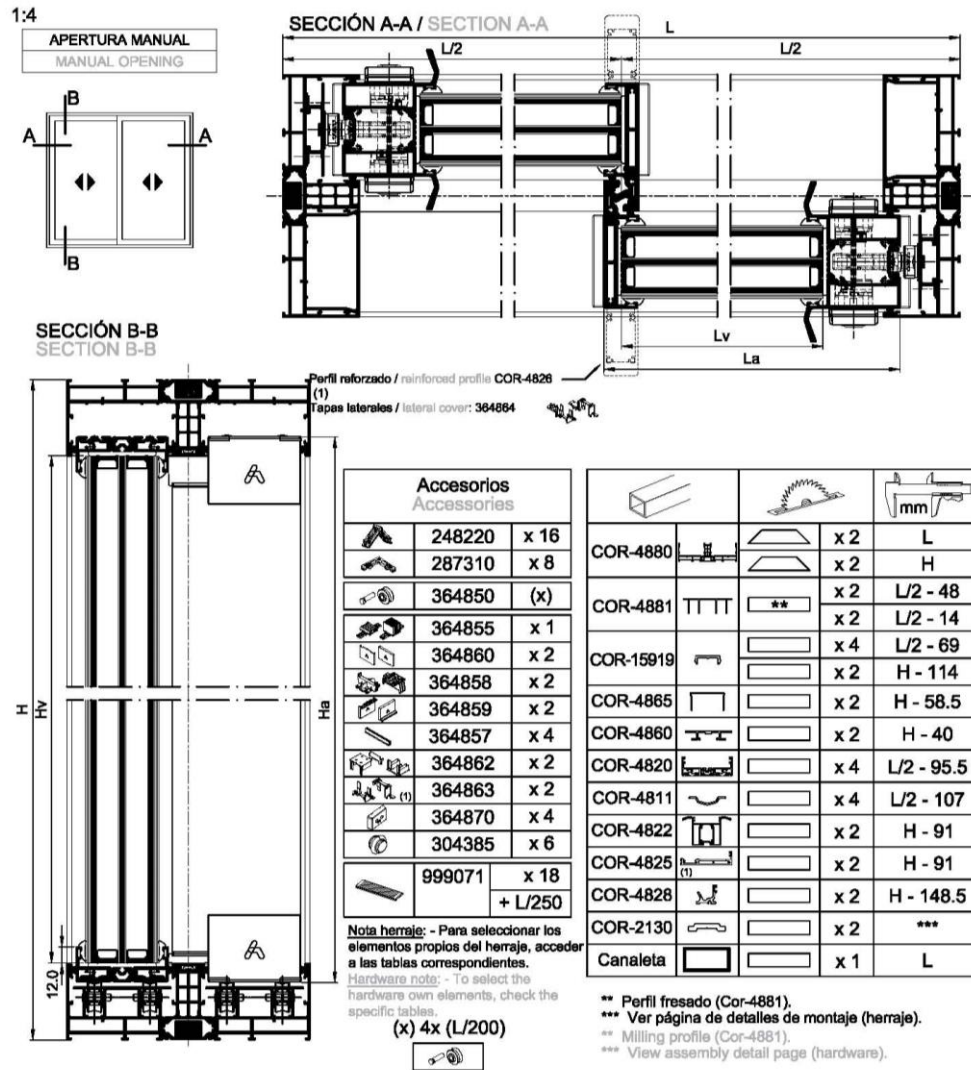
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### 7. TECHNICAL ANNEX.

The information provided by the client is described below.



	400 kg.	1000 < La < 4000 Ha < 4000
	e = 48 mm. 6/14/6/16/6	x 2 Lv = L/2 - 101.5 Hv = H - 113

	360704	8L + 6H
	360006	4L + 8H