

Curtain wall Reynaers CW 60 – Basic
Glazing: Stratophone 44.2 / 20 / Stratophone 66.2

The single number ratings of airborne sound reduction $R_w(C,C_{tr})$

Contract no. - 03/00948/13/R48NA

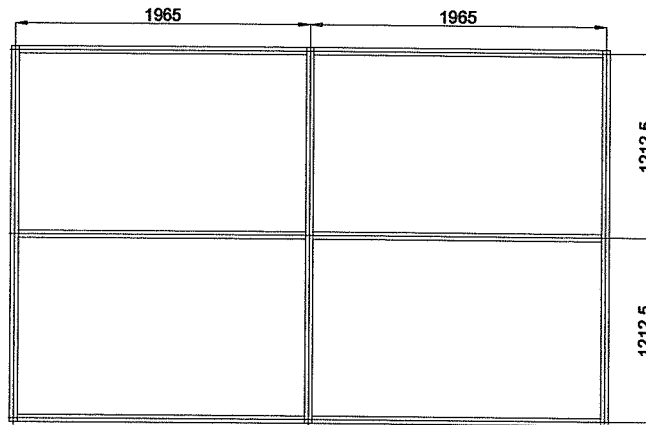
Customer:

Reynaers Polska Sp. z o.o., Okulickiego Str. 12, 05-500 Piaseczno

Reynaers Aluminium NV, Oude Liersebaan 266, B-2570 Duffel, Belgium

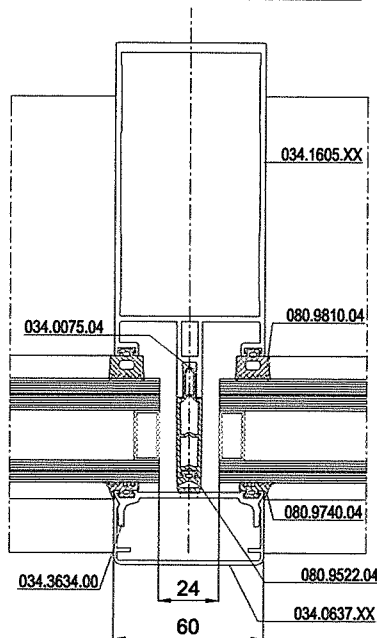
1. Technical details of assessed construction

The object of assessment is a curtain wall sample with the dimensions of H = 2520 mm, S = 4000 mm, built out of 4 modules with fixed glazing with the dimensions of 1965 x 1212,5 mm.

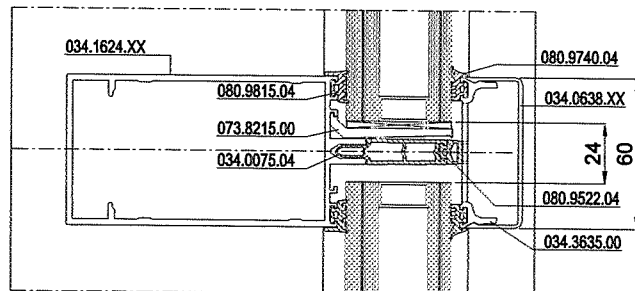


Typical section views through mullion and transom are presented below.

Section view through mullion



Section view through transom





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2. Glazing: Stratophone 44.2 / 20 / Stratophone 66.2.

The air borne sound reduction index of glazing itself is $R_w(C; C_{tr}) = 48(-2,-8)$ dB

No.	Description	Thickness [mm]	Density ρ [kg/m ³]	Surface mass m'' [kg/m ²]
1.	glass	4	2500	10,0
2.	PVB	0,76	1015	0,8
3.	glass	4	2500	10,0
4.	argon	20	0.002	-
5.	szkło	6	2500	15,0
6.	folia	0,76	1015	0,8
7.	argon	6	2500	15,0
Calculated total thickness = 41,52 mm			Calculated total of the surface mass = 51,6 kg/m ²	

3. Basis for the estimation of the air borne sound reduction index

Air borne sound reduction index of a curtain wall built in Reynaers CW60 system – Basic has been estimated based on results of laboratory measurements of a sample of Reynaers CW50 – Classic curtain wall, carried out in Acoustical Laboratory of ITB in 2006 in accordance with PN-EN 20140-3:1999 standard, being equivalent to EN 20140-3:1995 standard.

4. The air born sound reduction index

Sample of Reynaers CW60 - Basic curtain wall, as in p. 1, with Stratophone 44.2 / 20 / Stratophone 66.2 glazing (glazing construction see p. 2) has the air borne sound reduction index of:

$$R_w(C, C_{tr}) = 47(-2, -5) \text{ dB}$$

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