Wolfgang Rink
Noise and Fire Protection Company

Officially Appointed and Sworn-in Expert in Noise and Fire Protection
Measurement Agency for Noise Emissions and Immissions in accordance with § 26 BImSchG

Isw • Wolfgang Rink • Schwarzwaldstr. 37 • 7801 Reute

Gesellschaft für Ingenieur-Projekte
Freiburg mbH
Attn: Mr Hammer
Brühlstraße 7

7800 Freiburg

02.03.93

GIF-Ceilings in dish-washing areas
- Advice in respect of room acoustics

Dear Mr Hammer,

According to your telephone call you wish to have in addition to the results contained in my letter of 08.02.93 further pairs of variates to be considered in respect of the surface relationship active/flat cassettes in the mathematical prognosis of the achieved level reduction. As agreed, I have therefore extended the two tables on page 3 of the above-mentioned letter, as follows:

Variants	Surface relationship active-/flat cassettes	Resulting median degree of noise absorption
I	70 / 30	$\alpha_{mI} = (0,7 . 0,20) + (0,3 . 0,76) = 0,37$
II	50 / 50	$\alpha_{mII} = (0,5 . 0,20) + (0,5 . 0,76) = 0,48$
III	40 / 60	$\alpha_{mIII} = (0,4 . 0,20) + (0,6 . 0,76) = 0,54$
IV	30 / 70	$\alpha_{mIV} = (0,3 . 0,20) + (0,7 . 0,76) = 0,59$
V	20 / 80	$\alpha_{mV} = (0,2 . 0,20) + (0,8 . 0,76) = 0,65$
VI	10 / 90	$\alpha_{mVI} = (0,1 . 0,20) + (0,9 . 0,76) = 0,70$

Variants	Equivalent Absorption Surface	Level reduction
I	$A_{2,I}$ = 58,7 m²	ΔL_I = 7,1 dB
II	$A_{2,II}$ = 78,5 m²	ΔL_{II} = 8,3 dB
III	$A_{2,III}$ = 89,3 m²	ΔL_{III} = 8,9 dB
IV	$A_{2,IV}$ = 98,3 m²	ΔL_{IV} = 9,3 dB
V	$A_{2,V}$ = 116,3 m²	ΔL_V = 9,8 dB
VI	$A_{2,VI}$ = 118,1 m²	ΔL_{VI} = 10,1 dB

Kind regards,