

CAUBERG-HUYGEN RAADGEVENDE INGENIEURS B.V.
Maastricht - Rotterdam - Zwolle - Amsterdam - 's-Hertogenbosch

werknummer : 5.1, 2, e Loopbrug vloer plafond = stuc-/spuitwerk
 datum : 28-09-2004
 initialen : 5.1, 2, e
 project : Gerenstein 3 te Amsterdam
 ruimte : Corridor op nivo 2 en 3, tussen as 1-13/1-14 en 1-17
 volume : 423 [m³]

BEREKENING NAGALMTIJD

| nr. | materiaal | oppervlak [m ²] | absorbtiecoëfficiënt | | | | | |
|-----|---------------------------------------|--------------------------------|---------------------------------------|------|------|------|------|------|
| | | | Oktaafband met middenfrequenties [Hz] | | | | | |
| | | | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 1. | vloer rubber op beton | 77.2 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| 2. | plafond gips op regelwerk | 77.2 | 0.28 | 0.14 | 0.09 | 0.06 | 0.05 | 0.10 |
| 3. | wanden/plafond stuc-/spuitwerk | 204.6 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.04 |
| 4. | glas/balustrade enkel glas | 79.5 | 0.04 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| 5. | deuren hout | 20.8 | 0.14 | 0.10 | 0.06 | 0.08 | 0.10 | 0.10 |
| 6. | meterkastdeur hout | 27.0 | 0.14 | 0.10 | 0.06 | 0.08 | 0.10 | 0.10 |
| 7. | wanden corridor metalstud+fineer/spui | 23.2 | 0.32 | 0.07 | 0.05 | 0.04 | 0.05 | 0.08 |
| 8. | loopbrug vloer rubber op beton | 27.9 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 |
| 9. | trap eikenhouten treden | 4.3 | 0.04 | 0.04 | 0.06 | 0.12 | 0.10 | 0.15 |

| nr. | materiaal | absorberend oppervlak [m ² O.R.] | | | | | |
|-----|-----------------|---|------|-----|------|------|------|
| | | Oktaafband met middenfrequenties [Hz] | | | | | |
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| 1. | vloer | 1.5 | 2.3 | 2.3 | 2.3 | 2.3 | 1.5 |
| 2. | plafond | 21.6 | 10.8 | 6.9 | 4.6 | 3.9 | 7.7 |
| 3. | wanden/plafond | 2.0 | 2.0 | 4.1 | 4.1 | 4.1 | 8.2 |
| 4. | glas/balustrade | 3.2 | 2.4 | 2.4 | 2.4 | 1.6 | 1.6 |
| 5. | deuren | 2.9 | 2.1 | 1.2 | 1.7 | 2.1 | 2.1 |
| 6. | meterkastdeur | 3.8 | 2.7 | 1.6 | 2.2 | 2.7 | 2.7 |
| 7. | wanden corridor | 7.4 | 1.6 | 1.2 | 0.9 | 1.2 | 1.9 |
| 8. | loopbrug vloer | 0.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 |
| 9. | trap | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.6 |

absorberende oppervlak aanwezig [m² O.R.] : 43.2 25.0 20.9 19.5 19.1 26.9

eis volgens artikel 25 van het Bouwbesluit [m² O.R.] : 52.9 52.9 52.9 52.9

| | Tgemiddeld [s] | | | | | | | | |
|--|----------------|------------|------------|------------|------------|------------|-----|-----|-----|
| | 250-2000Hz | 125-2000Hz | 125-4000Hz | 125-4000Hz | 125-4000Hz | 125-4000Hz | | | |
| nagalmtijd T [s], diffusietijdsfactor 1.00 : | 1.6 | 2.8 | 3.4 | 3.6 | 3.7 | 2.6 | 3.4 | 3.0 | 3.0 |
| nagalmtijd T [s], diffusietijdsfactor 0.80 : | 2.0 | 3.5 | 4.2 | 4.5 | 4.6 | 3.3 | 4.2 | 3.8 | 3.7 |
| nagalmtijd T [s], diffusietijdsfactor 0.65 : | 2.5 | 4.3 | 5.2 | 5.6 | 5.7 | 4.0 | 5.2 | 4.7 | 4.6 |

