Hong Kong Institute of Qualified Environmental Professionals Limited (HKIQEP)
香港合資格環保專業人員學會有限公司(香港環專會)
Environmental Integrity & Excellence

**Comments on Practice Note on Application of Sound Insulation in Residential Buildings to Reduce Noise Transmission Between Units**

1. We welcome and support the publication of this Practice Note to provide guidelines to relevant stakeholders in the building industry for designing and applying sound insulation in residential buildings to achieve better indoor sound environment in Hong Kong.
2. It would be helpful to have a section discussing the different roles of the stakeholders and their level of influence during different stages of building design, construction and operation.
3. Please consider stating the intended applicability of the Practice Note, whether it is for all types of residential buildings, public or private, high-rise or village houses, existing or new buildings. Moreover, it would be helpful to include the options and consideration for new vs. existing buildings.
4. Referring to Green Building Requirements, please consider including BEAM Plus for Existing Buildings, which is applied for certifying existing buildings. Relevant criteria can be found in BEAM Plus EB 2.0 IEQ 14.
5. It is noted that the proposed Airborne sound insulation criteria of at least ≥ 48dB and preferable ≥ 50 dB $D_{nT,w}$ + C for residential units are generally higher than the criteria set out in BEAM Plus but of similar magnitude to that prescribed in China Healthy Building Label/China Green Building Label. On the other hand, the proposed Impact sound insulation criteria of at least ≦55dB and preferable ≦50 dB $L'_{nT,w}$ for residential units are more stringent (at least 5dB lower) than most of the commonly adopted green or healthy building standards in Hong Kong. Given that the criteria are based on field measurement of impact sound pressure levels, would EPD consider allowing a buffer given that most of the impact isolation flooring system design would be based on lab test result of the resilient mat.
6. Table 2 - Thickness of screeding would also affect the overall performance. Typical screeding thickness is 40mm.
7. Paragraph 6 - Recommend to also mention the common practice of screeding layer on top of resilient mat, e.g., sand and cement screed of

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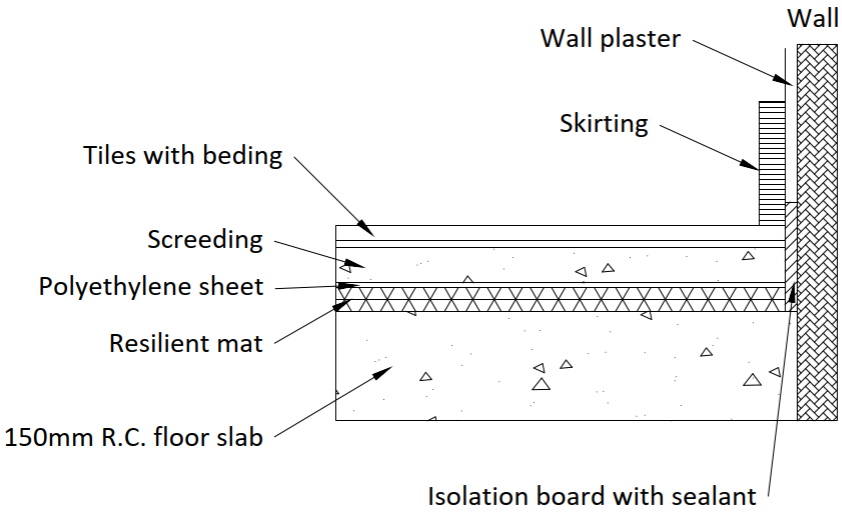
minimum 40mm, or the minimum thicknesses of other bonded and unbonded screeding materials.

8. Figure 2 - Isolation Board with sealant shall overlap with skirting to minimize the vibration short-circuit. Polyethylene sheet shall be between screeding and resilient mat as shown in figure below.




9. Programme and cost implications – Please note that in addition to material costs, the cost of construction and installation is about HKD 500/$m^2$ from previous projects. Please consider showing a range of price instead of a discrete figure.
10. Please consider including guidance on good practices for implementing airborne and impact sound insulation design provisions, such as suitable contract specification, tender cost allowance, laboratory or mock-up tests, construction supervision to ensure workmanship, testing and commissioning upon construction completion, etc.