



Client: Mr David Walker

Site: Ground Floor, 31 Elm Grove, Hayling Island, Hampshire, PO11 9EA

Date: 2nd September 2020

Project: Noise Management Plan to protect against commercial noise sources associated with the proposed gym at ground floor level at 31 Elm Grove, Hayling Island.

Written by: Mr Michael D Vine ~ BSc Hons, MIOA

Site Description:

31 Elm Grove is a purpose built property on the end of a terrace of commercial shops. It is located on the corner of Elm Grove & Hollow Lane with the front facing Elm Grove. The commercial units are located at Ground Floor with residential dwellings located at upper floors.

The proposed gym will be located at Ground Floor level with residential dwellings located above. The separating floor between the 1st & 2nd floor dwellings has been tested for airborne sound insulation and it achieved a $D_{nT,w} + C_{tr}$ of 63 - 9 = 54dB. The $D_{nT,w}$ level of 63dB exceeds the recommended levels of airborne sound insulation between commercial space & residential as listed in Annex H of BS8233: 2014. The separating ceiling treatments is the same between the ground floor space and the residential dwellings above so the level of sound attenuation would be expected to be similar of that shown above.

The building has been built using traditional building methods with masonry facades & timber roof details.

The hours of operation for the gym are shown below:

1. Monday to Friday 0700-2000hrs with classes in operation between 0700-0830, 1200-1330, 1700-1830 & 1840-2000.
2. Saturday 0900-1600hrs with classes in operation between 0800-0930, 1000-1130 & 1200-1330
3. Sunday 1000-1500hrs with classes in operation between 0900-1030 & 1100-1230

It can be seen from above that the gym will not be in operation during the night time period and therefore should not cause any sleep disturbance to the dwellings above. The classes will not be in operation all day, but rather at specific times as shown above. This will also reduce the impact on the dwellings located at 1st & 2nd floor level.

The venue will tightly control the operation of the gym and classes on a daily basis.

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In addition to the classes in operation, there will also be an open gym area, the equipment to be used within this area are shown below:

1. Medicine Balls step ups
2. Bar bells & bumper plates (best bumper plate for shock absorption)
3. Box Jump
4. Dumbbell & kettle bell
5. Ski concept 2 machines
6. Air runners
7. Air bike assault bike
8. Rower concept 2 machines
9. AB matt core pillows
10. Mobile standing rack & rigs
11. Skipping ropes
12. Bench
13. Sand bags

There will be no fixtures & fittings fixed to the ceiling or walls or any equipment run via electricity. In addition to the above, the entire gym floor will be covered with:

1. Again faster X Combativo 30mm rubber gym flooring tiles. This will greatly reduce the vibration through the stricture of the floor & building.

The maximum number of people in any one class will be 10 people with a maximum of 4 people using the open gym at any one time.

The area will be predominantly ventilated using an internal fresh air conditioning unit. During busier times of the day and in summer months then the door may be opened, but this will be regularly checked to ensure noise break out is reduced and minimised.

Dealing with complaints:

The client will identify a Designated Premises Supervisor who will be responsible for keeping a log of all complaints received and offer measures of how the complaints will be resolved. The client will keep the log on the premises, and this can be inspected by the LPA at any time.

Implementing the Noise Management Plan:

The supervisor will review the implementation of the plan on an annual basis, then prepare a report with recommendations for improvements where identified.

The table below indicates the noise sources which could emanate from the venue & also the measures to be taken by the management to ensure the impact is negligible.

Separating Ceiling Detail:

The separating ceiling comprises of the following details as received by the client:

1. 2 layers of 15mm fireboard staggered - perimeters mastic with fire mastic
2. Resilient bars to underside of joists
3. In between the joists is 9" acoustic insulation
4. 18mm chipboard flooring
5. Hush battens at 400 centres
6. In between hush battens is acoustic insulation slabs

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7. Half inch dense plasterboard
8. 18mm chipboard flooring
9. Underlay
10. Carpet

Component	Noise Management Plan – Measures to be Taken
Internal Music Noise	1. Where possible all windows & doors are kept closed during operating hours – It is recommended that the area is ventilated by standing fans, with the fresh machine in operation as required 2. Internal music to be no louder than background levels as discussion is required between staff & members during all classes 3. Regular control and implementation of the above by the venue 4. Regular spot check and sound checks externally to ensure music levels are not increased 5. Pre commencement checks undertaken before classes to ensure levels are adequate 6. Immediate review and observation undertaken if any complaints are received 7. All operations to take place internally with no classes etc outside
External Music Noise	1. No external activity to take place at all
Smoking Area	1. The venue will be a no smoking area and the clients may smoke either before or after the classes but away from the venue
Deliveries & Collections:	1. All goods deliveries to the premises and waste collections shall only take place between 0700hrs and 1900hrs Monday to Friday
Customers leaving the venue:	1. Ask customers to refrain from shouting 2. Clear entrance & exit doors will be labelled, and they should be used as per the request of the owners. There will be a one-way system in place for the entering & leaving of the venue
Staff Training:	1. Ensure staff are aware of Noise management plan 2. Staff to receive induction and refresher training on noise management. Training to be specific to noise control requirements and measures in place for the premises. 3. Ensure staff monitor internal music noise levels and these levels are reduced if required, by way of observation and regular checks with the gym instructors. 4. Ensure staff implement the emphasis of leaving the premises quietly.

The purpose of the noise management plan is to ensure the venue provides some measures to ensure that the noise created within the venue does not have an adverse impact on the residential dwellings located at upper floors. The client has operated gyms previously with no complaints, so they have a very good understanding of the level of operation to be performed and the manner in which to successfully run the business.

The NMP is a dynamic document that will evolve over time and the client will continue to take measures to reduce the impact of the venue of the nearby dwellings, these measures will include:

1. Regular reviews of the operation levels & general aspects of the NMP
2. Keeping doors and windows closed where possible – to improve noise breakout through the glazed doors
3. Installing some absorption to the venue to reduce the echo and thus reduce noise break out if required at a later stage
4. Regular monitoring of policies and regular updates & discussions with the local area

The above are measures that may take place over time, with the evolving NMP.

The immediate area is mixed use with commercial & residential buildings working in close proximity to one another, this in conjunction with the high level of sound attenuation afforded by the separating ceiling should ensure a suitable acoustic environment for the proposed gym & residential scheme.

Whilst the client will try to ensure the doors are kept closed when necessary, this should not be a policy that must be implemented. During the summer months it will be essential to open the doors to allow natural ventilation and based on the proposed hours of operation this should not have an adverse impact on the residential dwellings. The doors will remain closed during the early hours of the morning and may be only opened during the busier times of the day.

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The attitude and implementation of a good working environment by the client and their team will be a vital part of ensuring this venue does not have an adverse impact on the residential dwellings. Regular meeting and observations relating to operation levels will also help to ensure a suitable level and volume can be established and maintained.

The NMP will be regularly checked to ensure it is being followed and implemented.

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