Venu at Grayhawk Community Association HVAC Equipment Noise Reduction Policy

1. Purpose

- A. This document outlines the policy for the Venu at Grayhawk Condominium Association ("the Association") on noise reduction pertaining to the maintenance, repair and operation of air conditioning units. This policy has been developed to assist in maintaining a high quality of life and property values for Venu residents by abating excessive noise associated with Heating, Ventilation and Air Conditioning ("HVAC") equipment located on the flat roof wells of the Association.
- B. This policy implements Section 4.11 on Nuisances and Offensive Activity and Section 4.18 on Noise Reduction of the Association CC & R's.
- C. This policy shall be read in accordance, but shall not conflict, with any of the Association's governing documents or Arizona Statutes.
- D. This policy shall be made available on the Association's web portal.

2. HVAC Noise Transmission Standard

- A. Multiple rooftop HVAC units are located on a flat roof directly above a bedroom at certain third floor condos. Vibrational noise from these rooftop HVAC units has been identified as potentially excessive inside the affected third floor condo bedrooms. The vibration and noise has been found to also travel into adjoining bedrooms.
- B. It is recommended that the maximum decibel level generated by the rooftop HVAC units be no more than 45 decibels as measured inside the affected bedrooms.
- C. This decibel level has been found to be at or above the upper range of acceptable sound level for sleeping environments.

3. HVAC Noise Reduction Solution

- A. A cost effective, feasible solution for reduction of vibrational noise is to replace the original cedar wood HVAC supports with a padded platform.
- B. For existing and new HVAC equipment installations the padded platform should:
 - a. Consist of Trex brand deck boards and vibration isolation (ISO) pads as located below:
 - b. Stacked and placed under each board two at each end and two in the center. On top of each board one at each end and one in the center.

c. The HVAC equipment sits on top of the upper pads. After installation of the padded platform support the HVAC equipment will sit at approximately the same height as the original cedar wood supports.

4. Specifications for Padded Platform

- A. TREX brand composite deck boards are typically used for exterior decking in both residential and commercial applications and are available at most home supply/lumber stores. Trex Enhance Basics 1 inch x 6 inch, nominal, Saddle Grooved Composite Deck Board. The ISO pads must have a thick rubber exterior with a blue EVA core and designated as "heavy duty" with minimum dimensions of 4"x4"x7/8" thick and with a minimum 60psi max load. LBG Products Rubber Anti-Vibration Isolator Pads, Heavy Duty EVA, 4 inch x 4 inch x 7/8 inch thick.
- B. No ISO pads without a core or with a cork core are permitted.
- C. While there is no stated useful life for the pads, they should generally last several years and should be included in the visual inspection during the required Annual Maintenance Inspection.
- D. For information on approved vendors for installation of the padded platform contact the Association Community Manager.
- E. See Attachment "A" for padded platform assembly sketch.

5. Application of this Policy to Unit Owners

- A. All rooftop HVAC units are required to conform to the Noise Transmission Standard described herein.
- B. The Unit Owner's annual inspection of HVAC equipment, pursuant to Section 5.2 of the Association CC & R's, shall include an assessment of the unit's noise level.
- C. During such annual assessment each rooftop HVAC unit should be labelled with the corresponding condo number.
- D. Upon normal replacement of HVAC equipment the padded platform must be installed.

6. Enforcement of this Policy

- A. This Policy shall be enforced by the Association.
- B. An affected Unit Owner may file a noise complaint, via the Association Community Manager, should they believe that existing HVAC equipment is not in compliance with this policy.
- C. The Association Community Manager shall attempt to identify the rooftop HVAC equipment that is generating the noise that is not in compliance with this policy. The applicable equipment Owner(s) of such complaint will be

- notified accordingly and directed to have their equipment brought into compliance with this policy within thirty (30) days of notification receipt.
- D. If the HVAC equipment Owner fails to comply with the Noise Transmission Standard as requested by the Association Community Manager, the Association shall have the right, but is not obligated, to have the padded platform support installed as specified in this Policy.
- E. If the Association has the padded platform support(s) installed, pursuant to Section 6(D) above, it will assess the Unit Owner for the costs associated with this action in accordance with Section 7.4 of the Association CC & R's.
- F. In lieu of Sections D and E above, the Association may instead choose to assess violation fines for failure to comply with the Noise Transmission Standard.
- G. After installation of the new padded platform support assembly, if the HVAC equipment is still in violation of the Noise Transmission Standard, the Owner shall engage a qualified HVAC contractor to troubleshoot and remedy the violation via equipment modification or replacement.

7. Flat Roof Replacement

A. At the time of required flat roof replacement the new padded platform support assemblies will be proactively installed, if not already completed, by the Association and the cost will be assessed to the applicable equipment Owners.

Attachment "A"

Padded Platform Support Assembly

