

## DO ABOVE GROUND POOLS REQUIRE ISOLATION?

ASK EMBELTON

### DID YOU KNOW?

General pool activities in above ground swimming pools are a significant noise and vibration source.

If you live in an apartment complex constructed with a rooftop or above ground swimming pool, it is likely that the pool has vibration attenuating supports, so that apartments close to the pool do not suffer from unwanted noise.

These products have to operate with minimal maintenance whilst carrying the significant mass of a swimming pool. A 15x3m concrete pool will usually exceed 75 Tonnes when filled.

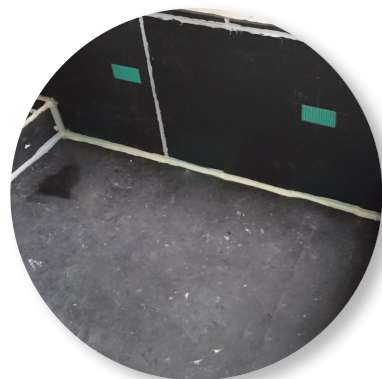




# Building a Rooftop Pool?

# Have you allowed for isolators under your pool?

## 1 What Isolation Systems are there?



### SHEET/MATTING ISOLATION

A full coverage layer of matting or resilient foam under a pool is the simplest installation. However, this method often results in a layer of high stiffness which doesn't significantly reduce vibration transmission. Typically implemented in applications where thermal expansion is the major concern and a structural break required.



### ELASTOMERIC PADS

Discrete pads enable a thicker, more resilient product to be used than matting, and less contact area from the pool to the structure. Implemented when a sensitive space is not directly underneath and the supporting structure is relatively rigid. Requires a at least 50mm cavity between pool shell and structure.



### STEEL SPRINGS

Steel springs provide the highest level of attenuation, resulting in inaudible structure-borne noise for most installations. Marine grade coatings are utilised to ensure long life for the high strength spring steel in a corrosive environment. If springs cannot be located at the perimeter in a corbel support design, then a cavity between 150mm and 280mm is required. Access for maintenance to all spring packs is highly recommended.

## 2

### What considerations need to be made at design stage?

- Is the pool structure in close proximity to sensitive spaces such as bedrooms?

**If Yes,** pool isolation may be required, engage an acoustic consultant and allow a cavity suitable for spring isolation if possible as it may be difficult to put in once design progresses

### The Complete Engineered Solution

- Site measurements and walk through
- Isolator layout along with preliminary drawings by Embelton Engineering
- Installation
- Warranty & Testing

### What should I do next?

Contact your local Embelton representative to discuss the process of getting a specification for your Swimming Pool or Spa installation.

**T: 1800 339 638**



Swimming Pool Spring System Isolation In Construction



## AUSTRALIA

### VICTORIA | HEAD OFFICE

147 - 149 Bakers Road  
Coburg, VIC 3058  
T: 03 9353 4811  
F: 03 9353 4855

### VICTORIA

72 Fenton Street  
Huntingdale, VIC 3166  
T: 03 9545 6499  
F: 03 9545 6599

### NEW SOUTH WALES

50 Newton Road  
Wetherill Park, NSW 2164  
T: 02 9748 3188  
F: 02 9748 3122

### QUEENSLAND

361 Fison Avenue East  
Eagle Farm, QLD 4009  
T: 07 3359 7100  
F: 07 3350 3382

### WESTERN AUSTRALIA

21 Pearson Way  
Osborne Park, WA 6017  
T: 08 9204 1300  
F: 08 9204 1311

T: 1800 339 638

E: [customerservice@embelton.com](mailto:customerservice@embelton.com)