

# Penn Presbyterian Medical Center, Philadelphia, USA

CDM-MONT



Client  
Contractor  
Architect  
Acoustic Consultant  
Structural Engineer

Penn Presbyterian Medical Center  
HSC Builders  
BBLM Architects  
Metropolitan Acoustics  
Keast & Hood

- On the 1st floor of a main Philadelphia hospital, a Magnetic Resonance Imaging (MRI) equipment needed to be installed. Vibration transmission from road traffic and its impact on the MRI equipment and its imaging quality was a big concern.
- CDM installed a CDM-MONT solution with 2.5 Hz spring isolators in a 10" floating concrete slab. The floating floor was jacked to create an air gap of 2".
- Thanks to an in-house finite element analysis, CDM could design the special springs needed to guarantee the specified isolation performance with minimum differential deflection and tilting of the MRI equipment, while coping with the eccentric loading.
- "Great job! Measurement results showed that transmissibility reductions from 9 Hz and above are greater than 92%. Thus the system works as designed and the randomly occurring base building peaks at 15Hz are well below the threshold provided by Siemens. So all is well." Sooch SanSouci, Metropolitan Acoustics.



Photo: [www.pennmedicine.org](http://www.pennmedicine.org)



CDM-MONT prior to reinforcement



Installation of spring isolators



Jacking of floating floor

Building

Project Reference