

THE ISOLATOR

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THE ISOLATOR

As the weather shifts in the Emirates, one thing remains constant—Kinetics' unwavering position as the leading provider of noise and vibration solutions!

Welcome to the October 2024 edition of our newsletter. As we enter the final quarter of the year, we reflect on the significant strides Kinetics Group has made in major projects where we have supplied our specialized vibration isolation, acoustic treatments, and seismic restraints.

With an astonishing 15,000 product installations across the GCC, Kinetics continues to establish ourselves as industry leaders, delivering quality and excellence. Each project we undertake embodies our unwavering commitment to cutting-edge innovation, consistently exceeding expectations and leaving our partners and clients not only satisfied but confident in the exceptional quality and long-term reliability of our solutions.

In this edition, we feature Kinetics Metal Construction Industries (KMCI), our dedicated steel fabrication facility, and a lot more! Enjoy!



SIX SENSES RESIDENCES, DUBAI, UAE



Kinetics Middle East LLC is proud to be part of the Six Senses Residences project on Palm Jumeirah, Dubai—a luxury water front development featuring 162 residences and a hotel with 60 rooms. In collaboration with M/s. Innovo Group, Kinetics Group supplied advanced vibration isolators for inertia bases to address chiller pump noise, ensuring stability and preventing vibration transmission throughout the building. These solutions are crucial in creating a serene, noise-free environment for residents and hotel guests.

Additionally, we provided Stainless-Steel Flexible Hose Connectors for Fan Coil Units (FCUs), designed to minimize noise and vibration from mechanical systems which will further enhance the comfort of the luxurious living spaces.

Our involvement in this hospital project underscores our commitment to providing innovative, high-performance solutions that ensure optimal system efficiency and long-term reliability for our clients across the Middle East.

DR SULAIMAN AL HABIB HOSPITAL AS SAHAFAH RIYADH, KSA



As a leading provider of noise and vibration control solutions, Kinetics played a pivotal role in the execution of this major hospital project in Riyadh. The project began with Kinetics conducting a comprehensive stress analysis and support design for the entire chilled water network, ensuring optimized costs and system efficiency from the start.

Following this, our team implemented a range of specialized solutions, including the installation of Kinetics RIM floating floors in mechanical areas to effectively reduce noise transmission. We also supplied advanced vibration isolators for AHUs, FCUs, and chilled water piping to ensure optimal vibration control.

In addition, floating floor systems and concrete inertia bases were installed to provide enhanced stability and vibration mitigation in critical mechanical spaces. Kinetics Flexible hose connectors were used to accommodate thermal expansion in the chilled water network, ensuring enhanced system flexibility.

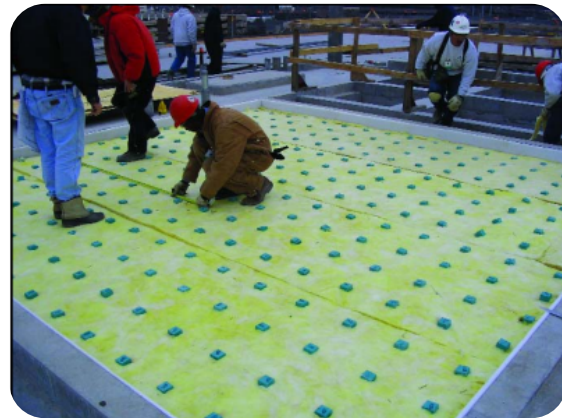
To further address noise concerns, acoustic barrier treatments were applied to the chillers to reduce noise emissions, while perforated metal panels were installed around the generators for effective sound control.



TECHNICAL DISCUSSION: RIM FLOATING FLOOR SYSTEM

RIM is a state-of-the-art noise control system designed for superior acoustic performance and ease of installation. The system comes in the form of rolls, which feature acoustic batting that precisely pre-spaces isolation pads. These pads are a critical element of the system as they create an airspace between surfaces, a key factor in effectively managing and reducing noise transmission. This configuration is ideal for a range of applications where controlling sound is essential, from commercial buildings to industrial facilities.

A standout feature of RIM is the integration of the KIP pad, an advanced isolation medium that serves as the cornerstone of the system's acoustic capabilities. The KIP pad is engineered to provide long-term, consistent performance due to its permanently stable design. One of the key advantages of the KIP pad is its dynamically predictable behavior, which ensures that its acoustic isolation properties remain reliable over time, even under varying load conditions. This stability allows architects and engineers the freedom to design spaces without worrying about changes in the pad's performance under different load distributions.



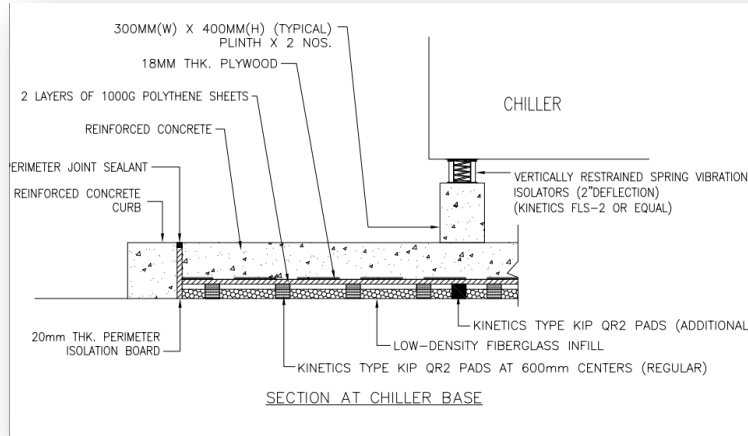
Moreover, the natural frequency of the KIP pad remains stable across a wide range of load scenarios, which is crucial for ensuring consistent noise control in environments where conditions may fluctuate. This performance predictability makes the system adaptable to many different project specifications and acoustic needs.

The system offers flexibility in terms of pad sizes and densities, allowing it to be customized for specific projects. Pads are available in various dimensions and material densities, enabling them to meet diverse acoustic performance targets. Additionally, the spacing of the pads within the RIM roll can be adjusted to optimize noise control for each installation. This level of customization ensures that the system can be tailored to meet the unique acoustic challenges of different environments.

To further assist in the design and installation process, shop drawings are provided with the RIM system. These drawings incorporate detailed information on pad selection and spacing, helping engineers and installers achieve optimal performance by ensuring that the system is configured correctly for the specific conditions of the project. This combination of flexibility, predictability, and easy installation makes RIM an effective solution for a wide range of noise control applications.

RIM FLOATING FLOOR WORKING PRINCIPLE

The original Model RIM System is designed to deliver continuous, high-performance noise control in critical applications. This pour-in-place floor isolation system integrates all the essential components required for top-tier acoustic performance. At the heart of the system are the Model KIP isolators, which are securely fixed within fiberglass batting to ensure consistent and reliable sound isolation. Additionally, the system includes key elements such as the Model PIB Perimeter Isolation Board, spray adhesive, plywood junction plates, polyethylene sheeting and tape, and a resilient, non-hardening perimeter sealant for optimal sealing and long-term performance.



The Model KIP isolators can be spaced at intervals of 12, 16, or 24 inches on center, providing flexibility in their application. These isolators come in a variety of densities, allowing the system to accommodate a wide range of load conditions under a single slab, all while maintaining a consistent natural frequency. This flexibility ensures that the RIM system can be adapted to various project specifications, making it ideal for applications that demand precise noise control.

Factory-trained sales representatives are available to assist designers in selecting the appropriate system based on dead and live load requirements. This personalized support ensures that each project receives a tailored solution that meets its specific acoustic and structural needs. To further streamline the process, Kinetics engineering team provides design submittals, which include all necessary specifications for a smooth and accurate installation.

For convenience, the fiberglass batting with pre-spaced Model KIP isolators is delivered in rolled-up form, packaged in durable poly bags along with all specified accessories. This allows for easy handling and efficient installation on the jobsite, ensuring that all components are readily available and ready for integration into the project. The Model RIM System is engineered to deliver lasting noise control performance for a variety of critical applications, making it a reliable and high-performing solution in the field of sound isolation.

Watch this video from Kinetics of the RIM Floating floor installation.

<https://www.youtube.com/watch?v=bYCv2qawwhE>

Kinetics YouTube

[Introducing KMCI-Video](#)

We are excited to showcase our video Introducing Kinetics Metal Construction Industry (KMCI) – Where Precision, Innovation & Quality Meet!

At KMCI, our in-house manufacturing offers unmatched flexibility, faster lead times, and stringent quality control, making us the go-to partner for projects across the Middle East. Enjoy Watching and don't forget to subscribe.

<https://www.youtube.com/watch?v=Zr-ma2ffsUA>



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“Kinetics excelled, particularly in general responsiveness, communication, and order fulfillment.”

**Mahboob Ali Shah
(Bright Electrical Works LLC)**

“The Kinetics team provided timely response to enquiries and to the consultant comments and re-submission”

**Engineer Abdelrahman Khalil
(MAG International
Electromechanical Works)**

“Overall, Kinetics was indeed supportive, from responding to inquiries to product delivery and post-sale support.”

**Engineer Alan Rajan Mathew
(International Electromechanical
Services)**

“I was impressed by both the product's quality and the seamless service provided by Kinetics”

**Engineer Khaled Al Karmi
(AL Andalus Power Electro
Mechanical Works LLC)**

