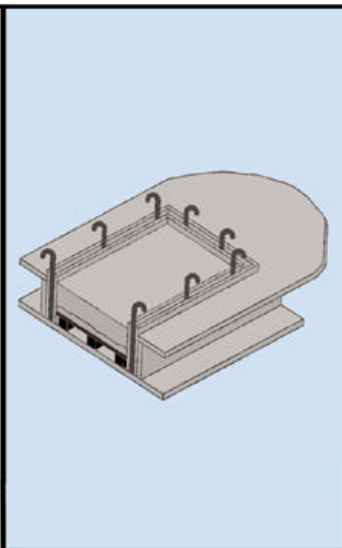


Box Design Procedures (Cont.)

With this approach the GK Blocks are placed in a prepared pit, forms are constructed, and concrete is poured. A corrugated steel bottom plate is frequently used to provide a cost effective way of forming the inertia block. The creation of an air gap around the perimeter of the foundation assures that the system functions at maximum efficiency.

Plywood & Re-bar Design Procedures

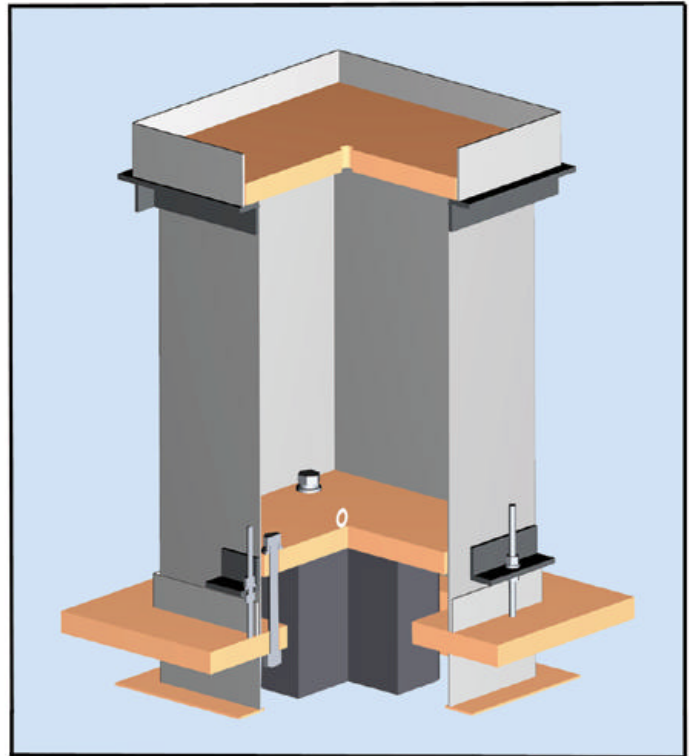
Pour structural pit floor	
Pour pit wall	
Place GK Blocks	
Place channels	
Place corrugated steel	
Form and place re-bar hooks	
Pour inertia block	
Place ethafoam backer rod around perimeter and pour Joint Filler V-100	

Special design procedures are followed to facilitate form removal after concrete curing is complete. This approach is often used for larger foundations. After the concrete is sufficiently cured the re-bars which have been installed to hold the plywood side forms in position are removed permitting the sidewall forms to be easily stripped. This method permits a small sidewall air gap to be maintained. Once the sidewall forms have been removed, an ethafoam barrier is placed into the sidewall air gap and positioned in such a way as to provide a channel for Unisorb Joint Filler V-100 to be poured to create a seal at the top.



Typical large GK Block foundation under construction. Notice that the workmen are placing the plywood decking that in this case will support the concrete foundation.

UNISORB RD FOUNDATION INSERT SYSTEM



The system consists of a foundation insert package that is cast into the inertia block foundation. Each insert is equipped to accept a wide variety of isolation materials or devices ranging from simple pad materials, Unisorb GK Blocks, or Unisorb Spring Systems.

This uniquely designed system is capable of producing system natural frequencies as low as 1.5 Hz, and is very effective for the most sensitive machines, laboratory floors, and other applications where extreme isolation levels are required. The RD System is equally effective when applied under vibration source machines, such as shakers.

The RD System allows the foundation to be poured flat while using the pit liner or "mud mat" as the base form, thus greatly simplifying construction.

Once the inertia block foundation has cured sufficiently, the isolators are inserted into the RD units, and the RD System is adjusted to raise the foundation into operating position.

Primary features of the RD Foundation Insert System include the following:

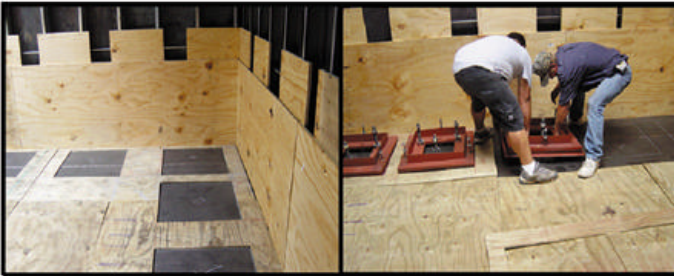
- **Finished foundation may be leveled and height adjusted after construction**
- **Horizontal and vertical stiffness may be tailored to the specific application**

Primary Features of RD System (Cont.)

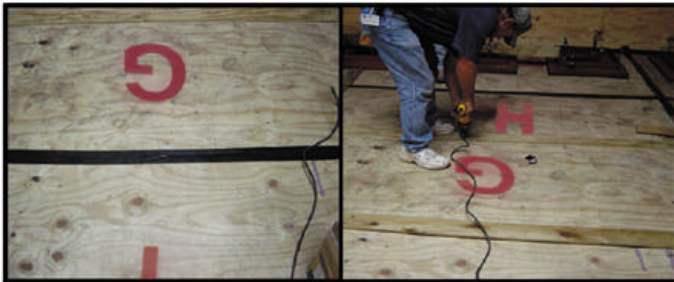
- Individual isolator units may be easily serviced or replaced, utilizing the RD Unit to access the isolator from the top
- Foundations may be reused by simply changing the isolator units to suit the new application

The RD Foundation Insert System is very well suited for use in medical or clean room environments, as well as in general industrial areas, because the need for providing below grade manways for perimeter access is eliminated.

RD System Installation Procedures



Here we are beginning the installation of a typical RD unit foundation. Plywood forms are used (supplied by Unisorb) to act as a template for the location of the individual RD units, and to provide a smooth surface on which to seal the concrete forms. This plywood is secured to the foundation block, and is lifted clear of the sub-slab when the foundation is raised into operating position. The RD Anchor Rings are then placed into the openings in the plywood.



The joints between the plywood base form sheets are being sealed with Unisorb Premium Grade IB-500 Seam Tape and fasteners are being installed to extend into the concrete to assure that the form is lifted with the foundation. Splice boards are then attached to the plywood base form sheets to provide sure continuity between them.



The adjustable length upper tubes are being installed. The finished upper level of the foundation is at the top of the RD unit.

Note that all of the RD unit components are small enough to fit through most doorways, and can be positioned without the use of lifting equipment.

Upper tube heights are adjusted by the bolts on three sides of the RD unit flanges.



On the left the alignment process is shown as the RD units are brought into final position before the placement of reinforcing bars and the concrete pour.

Note that the plywood top plates are temporary. Steel, fiberglass or aluminum finish top plates will be used as dictated by each individual application according to the customer's wishes.

The right view shows a finished foundation with only the top plates being visible. This particular foundation is about 0.6 meters thick and weighs in excess of 50 tons.

In the photo on the right the machine has been placed into the room, and the installation is nearly complete. The floor has been leveled using the RD units, and a vibration analysis is being conducted under full load conditions.



The RD unit is supplied with all necessary materials (including forms, hardware, and pre-fabricated re-bar if desired) and is easily installed by any contractor familiar with basic concrete construction techniques.