

## **Flexlock® Mortarless Masonry Wall System**

The FlexLock Wall System is a complete load bearing structure designed as a mortarless alternative to standard concrete block construction. The system's multi-patented technology produces significant competitive advantages through the use of an interlocking design, precision bearing surfaces, and post tensioned tendons.

Useful for residential, commercial and industrial application, the FlexLocV system consists of two integrated sub-systems, masonry and hardware. In terms of its application, FlexLocV can be used for load bearing structures such as: big box stores, strip malls, manufacturing facilities, safe rooms, as well as commercial and residential buildings. A wide range of non-load bearing applications exist for both fencing and massive highway sound walls as well. The competitive advantages are:

Mortarless. Except for the first course, the FlexLocV system requires no mortar between the joints or grouting of the horizontal cores.

- **Reduced Construction Time.** The FlexLock Wall System can be assembled at least three times faster than conventional block construction.
- **Work Force/Market Sensitive.** According to the World Center for Concrete Technology, the average age of a master mason in the U.S. is 52 years and estimates indicate a shortage of over 50,000 masons. Because FlexLocV uses one master mason (the rest being laborers), it can accommodate this shortage by being uniquely configured to the current labor pool.
- **Completely Reusable.** The unique interlocking surfaces allow for total disassembly rendering all of the components useful for other construction projects.
- **All Season Construction.** Since the FlexLocV Wall System does not use mortar, it can be assembled in any temperature zone.
- **Lower Overall Construction Costs.** A recent independent study indicated that overall masonry cost decreased 38% using the FlexLocV Wall System.
- **Super Strong Wall.** Variable dynamic resistance is the ability of a structure to "give" slightly under external pressure, radially distribute the force across the whole surface, and then lock-up as a solid interconnected mass. This patented characteristic is exclusive to the FlexLocV Wall System. This feature is expected to make the FlexLocV system applicable to seismic regions.
- **Strong Patent Portfolio.** Currently, Cercorp has two published utility patents and a third utility patent pending. These cover the functionality of the system and subsequent improvements. Two design patents are about to publish covering the block designs. Cercorp has filed a broad utility patent under the PCT for all of the industrialized nations. For branding purposes, "FlexLock" is a registered trademark and "Cercorp" is now pending as a trademark.

Over the years, the available pool of masons and master masons has declined considerably. Some estimate a shortage of near 50,000 masons in the United States. FlexLocV offers an innovative concrete unit that can replace conventional gray block wall systems, conforming itself to the current labor pool. The system does not eliminate the need for masons, but rather allows the mason to be more productive. As a result, apprentices, working with the mason, may erect a structure four times faster than conventional wall systems, becoming more cost effective in building the structure and allowing the mason to outbid his competition and be more profitable. The FlexLock Wall System will be used to create residential foundations, highway sound walls, residential fencing, tornado safe rooms, big box stores, and other facilities.

