

## **POLYBASE FAQS**

## WHY USE POLYBASE™

Why Polybase instead of a precast concrete block? There is no standard that exists regarding the strength of a precast concrete block, strengths could range from anywhere between 1500 to 4000 psi. Different manufacturers utilize different mix designs and different casting and curing methodologies. Thusly, load capacities will fluctuate greatly with precast blocks. Polybase is a proof tested, structurally rated base shown to be 3X stronger than dry cast deck blocks, providing a reliable engineered load capacity each and every time it is used.

What should I be concerned with when utilizing the Polybase foundation? Weak soils should be the utmost concern. The soils beneath the Polybase will fail before the base itself. It is recommended that a visual inspection of the soil be made. If the soil beneath appears to be good, simply ensure that the soil underneath the base plate is level in both directions prior to seating. A small amount of sand or even a thin layer of grout will help to provide uniformity filling in any irregularities, but not necessary in most cases.

What should I do if I encounter wet soils beneath the Polybase? Should wet or weak soils be encountered beneath where the Polybase is to be installed, it is recommended that the soils encountered be removed to a virgin soil and the void be filled with gravel (do not use crushed stone) prior to installing and leveling the Polybase.

What if I encounter rock underneath where the Polybase is to be installed? If irregular rock and loose gravel is encountered beneath where the Polybase is to be installed, consider your options: (1) is it feasible to relocate the support? (2) can I add an additional support to span the rock irregularity? (3) if the answer is no and the support cannot be relocated or added to, create a pad seat beneath the base plate utilizing high-strength non-shrink grout over the rock irregularity creating a level base for Polybase seating.

I have noticed cracks and chipping on precast concrete blocks. Is this a problem? Cracks in precast concrete can be a problem. Any crack in, or developed in a precast block can be exposed to higher stress. In addition, there is potential for further cracking when exposed to a freeze/thaw environment. Polybase is water impervious and resistant to freeze/thaw environments having been manufactured from the strongest most durable reinforced materials.

Why is the surface area exposure important? The exposed surface area to the soil is of utmost importance. This is where the Polybase foundation shines in that the entire load transferred to the Polybase is spread over the bearing area on a footprint in excess of two square feet. This

footprint is 3 times the surface area of support most precast concrete blocks has to offer. (see Fig.1) Simply put, the greater the surface area the greater the footprint, the greater the footprint, the greater the stability and capacity to support the structural load being imposed on the foundation!

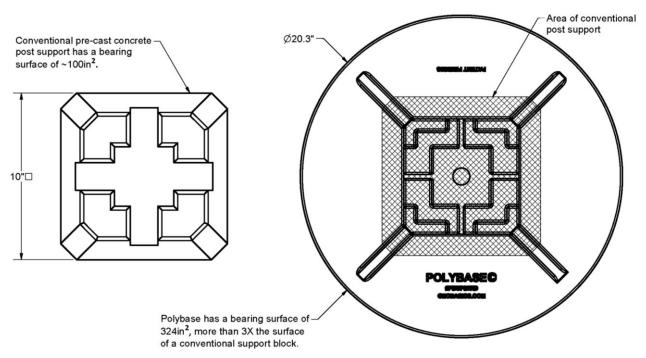


Fig. 1

Is the Polybase easy to use in limited crawl space applications? Yes, the Polybase is very easy to use in the tight confines of a crawlspace or in interior building applications. The Polybase is substantially lower profile than the precast concrete deck block, and is lighter weight. (see Fig. 2)

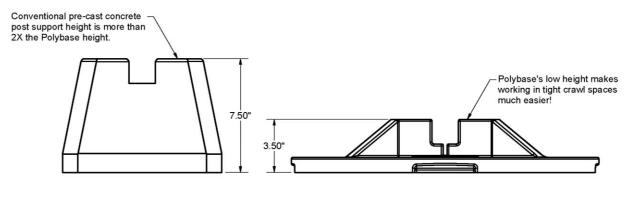


Fig. 2

**How is the quality of a Polybase monitored?** Polybase is manufactured in a climate-controlled facility under a strict quality assurance production setting. Each block is manufactured to rigid specifications and sampled periodically in order to proof test for quality assurance. This eliminates any potential problems or concerns one would have in lieu of using concrete blocks, providing peace of mind for the homeowner.

**Can I support longer spans with the Polybase foundation?** Yes, you can, if the capacity of the vertical support is sufficient to carry the load. The greater strength, as well as the greater bearing capacity, of the foundation will allow you to do this resulting in potential cost savings in labor and materials. We recommend engineering assistance when doing so.

**Will Polybase rust?** Polybase will never rust or corrode since it is manufactured and reinforced utilizing non-corrosive materials.

**How much load can Polybase support?** Polybase has been tested by a certified and accredited independent ASTM laboratory. Test results revealed that the base can support 114.82 tons of ultimate peak load force in compression and is conservatively rated at 80% of the yield load in testing providing 76 tons of capacity.

## What are the advantages of using Polybase?

- An instant foundation
- Has a much stronger section modulus
- Is manufactured with the most durable materials in application
- Multi-functional
- No excavation required when soil strength meets specifications, only level strike off of surface beneath is key
- Material savings (no concrete or gravel required when exposed soils meet specifications)
- Easier to manipulate underneath a crawlspace
- Eliminates the need to pour a concrete foundation (no need to pour a foundation and come back the next day to install the vertical support after the concrete has set)
- Labor savings from an installation that is quick and easy due to less labor required to install eliminating remobilizations due to concrete curing.