

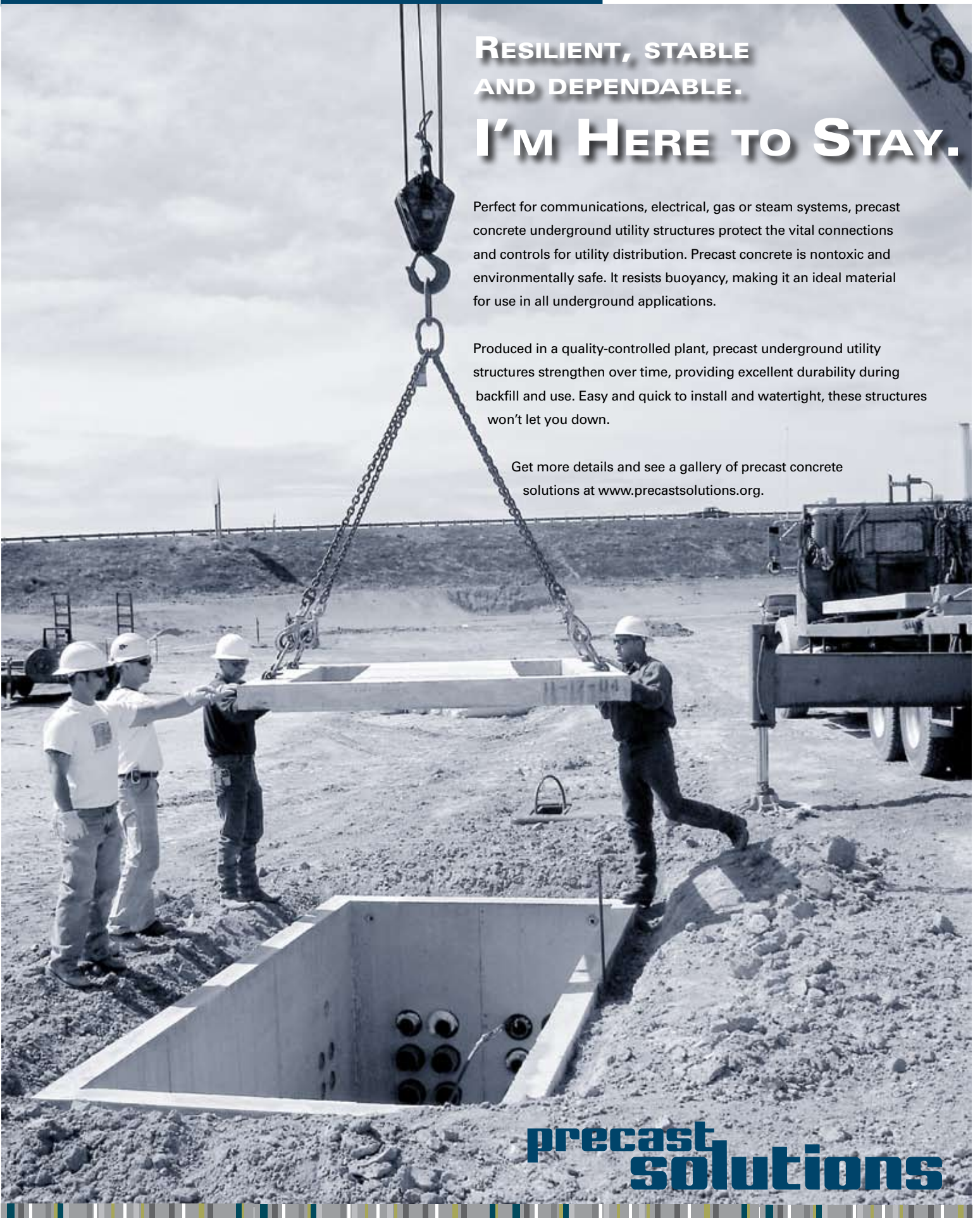
**RESILIENT, STABLE  
AND DEPENDABLE.**

**I'M HERE TO STAY.**

Perfect for communications, electrical, gas or steam systems, precast concrete underground utility structures protect the vital connections and controls for utility distribution. Precast concrete is nontoxic and environmentally safe. It resists buoyancy, making it an ideal material for use in all underground applications.

Produced in a quality-controlled plant, precast underground utility structures strengthen over time, providing excellent durability during backfill and use. Easy and quick to install and watertight, these structures won't let you down.

Get more details and see a gallery of precast concrete solutions at [www.precastsolutions.org](http://www.precastsolutions.org).



**precast  
solutions**



## WHY PRECAST CONCRETE?

Precast concrete underground utility structures are the perfect solution for most underground applications. The use of precast concrete utility structures has become so widespread that they are covered by four ASTM standards:

### ASTM C 857

Standard Practice for Minimum Structural Design Loading for Underground Precast Concrete Utility Structures

### ASTM C 858

Standard Specification for Underground Precast Concrete Utility Structures

### ASTM C 891

Standard Practice for Installation of Underground Precast Concrete Utility Structures

### ASTM C 1037

Standard Practice for Inspection of Underground Precast Concrete Utility Structures

These specifications govern the structural design, installation and inspection of underground precast concrete utility structures. They also help specifiers ensure a quality precast concrete product during and after installation.

## EASY TO INSTALL

Precast concrete is desirable over cast-in-place concrete due to the relative ease of installation. Precast concrete underground utility structures can be easily installed and immediately backfilled — there is no need to wait for concrete or mortar to cure. The structural capacity of other materials is often dependent on the design and quality of backfill material. In addition, precast concrete underground utility structures have several other advantages over competing materials:

## CAN TAKE THE HEAT

Precast concrete utility structures are noncombustible and can withstand high temperatures. Fiberglass loses its structural integrity at 200 F; HDPE melts at 266 F.

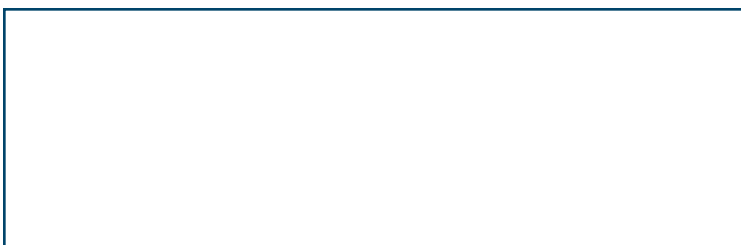
## ROCK SOLID

Precast concrete gradually strengthens over time. Other products, such as fiberglass and steel, can deteriorate and lose strength, especially in the presence of ground water.

## HEAVYWEIGHT CHAMPION

With a specific gravity of 2.40, precast concrete structures resist buoyant forces better than other materials. Fiberglass has a specific gravity of 1.86, and HDPE has a specific gravity of 0.97. Additional labor-intensive and time-consuming on-site preparation is necessary for anchoring structures made of more buoyant materials.

Precast concrete is the material of choice for underground utility structures. Precast is modular and can fit any design situation. It is produced in a quality-controlled environment and can be installed immediately upon arrival at the job site. Precast concrete utility structures can be manufactured for watertightness and are durable during storage, transportation and use. They are easily installed and environmentally friendly.



# precast solutions