TEMCOR Clear-Span Aluminum Domes for Bulk Material Storage Applications

BULK MATERIAL STORAGE SOLUTIONS

Temcor Rollwell Domes Pvt. Ltd.
Mumbai, India

Quality • Customer Support • Design Innovation
TEMCOR, founded in 1964, designs, manufactures and erects proprietary aluminum clear-span structures for a wide variety of applications and markets.

Temcor head office is located in Los Angeles, California, with a state-of-the-art manufacturing plant on the eastern seaboard close to the deep-sea port of Savannah, Georgia, enabling effortless shipping to all corners of the globe.

As the worldwide leader in aluminum clear-span structures, Temcor supplies domes and a variety of other structures for bulk material storage, petroleum, water and wastewater, and architectural markets.

Temcor, with Rollwell Conveyor Components Pvt. Ltd., has now formed a joint venture company, Temcor Rollwell Domes Pvt. Ltd., in order to directly serve the needs of the Indian market.

**TEMCOR ALUMINUM DOMES & STRUCTURES designed for all conditions & applications**

- Cost effective cover solutions utilizing technical expertise in aluminum structures for over 30 years
- Over 7000 domes installed in 70 countries
- All structures are manufactured with corrosion resistant aluminum alloys.
- Extreme climatic conditions handled with ease: heat of the Middle Eastern desert typhoon winds of 300 kph on a Pacific Island snow loads of 1500 kg/m² in the Antarctica

**Why Aluminum?**

- **Corrosion Resistance**
  - Surface oxidizes quickly to create a hard protective layer.
  - No additional surface protection required.
  - Superior in sea coast (salt air), industrial (chemicals) and wastewatrer (chlorine/sulfur) environments.

- **High Reflectivity / Low Emissivity**
  - Does not allow external conditions to influence the process or product inside (high reflectivity: reflects heat away; low emissivity: does not emit heat into the process), unlike steel.
  - Maintains more stable & moderate interior temperatures.

- **Smelted (uniform) Metal**
  - Aluminium’s structural properties are not altered in the manufacturing or installation process, unlike concrete.

- **Light Weight**
  - 1/3 of steel

- **High Strength to Weight Ratio**

- **Ease of Installation**

**TEMCOR IS COMMITTED TO THE DEVELOPMENT OF ADVANCED TECHNOLOGY AND INVESTING IN ITS FUTURE.**

**Technology Leader**... always at the leading edge of dome design technology.

**Engineering Excellence**... technical staff with vision and focus.

**Commitment to Quality**... ISO 9001 certified and desire to exceed clients’ expectations.

**GLOBAL REACH**

Innovation borne from the demands of the global market and the ingenuity of the personnel at TEMCOR will ensure our continued leadership role in the design of clear-span aluminum structures for all market sectors.

**Governments and Their Agencies** including U.S. Army Corp of Eng., Kuwait Ministry of Public Works, Marshall Islands Ministry of Public Works…

**International Contractors** including CH2M, Fluor, Bechtel, Degremont, Morse Knutsen, Foster Wheeler, Oderbrecht, Metcalf & Eddy Int'l, Parsons Eng. ...

... have all made TEMCOR a valued member of their design/build teams.

**WHY TEMCOR? Consider the following ...**

**Temcor Stands Behind its Products**

- Our confidence in our design and the manufactured product is absolute.

**Safety During Erection**

- Simple tools required
- Light weight materials
- No large cranes for construction of dome
- No welding, therefore no fire hazard

**Capitol Cost**

- Lighter foundations/less civil work (foundations up to 20% lighter than for similar steel structures)
- Faster erection/lower labor costs
- Single source responsibility

**Erection**

- Reduced labor requirements (up to 33% lower than for steel domes)
- Precision manufacturing eliminates field errors
- All parts are match marked for nearly ‘fool proof’ installation
- Lower-skilled labor force for erection can be utilized
- Reduced construction time: erected in ½ the time of steel domes and 33% faster than competing aluminum domes

**Cost of Ownership**

- 50 - 100 year life
- Corrosion resistant
- No maintenance
- Leak proof
- No painting or re-coating

**Design / High Tolerance Manufacturing**

- Efficient & secure connections
- Reduced field errors
- Reduced field erection time

**Why Temcor?**

- Proprietary aluminum clear-span structures for a wide variety of applications and markets.
- Higher design tolerance: 30% higher panel sizes and 30% faster for erection than steel domes.
- Single source responsibility
- Superior in sea coast (salt air), industrial (chemicals) and wastewatrer (chlorine/sulfur) environments.

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**Ease of Installation**

**For more information please contact TemcorRollwell:**

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Temcor strut and panel system mechanically locks the panels in place securely, incorporating a seal with a fully engaged gasket. This design is the key to being able to provide effective water and gas tight domes.

The robust upper and lower flanges resist transverse deflection. Long-term performance in the intended service is important – structures are designed to keep the customers satisfied for life without any maintenance.

Temcor uses solid silicone for its batten seals. Silicone is an inert material not affected by UV. Proof of performance lies in the fact Temcor has never replaced a silicone gasket because of failure or diminished performance due to UV exposure. Silicone manufacturers such as Pecora offer a 25-year warranty. We have over 30 years of proven use.

The closure system requires high degree of accuracy in the manufacturing process. This system not only ensures a good seal, but also provides a much higher ultimate dome panel load bearing capacity.

The panels in Temcor domes are easily removed and replaced as deemed necessary, typically without the need to replace the batten seals. This unique feature is made possible only through the utilization of the Temcor panel engagement and sealing system. The ability to remove panels facilitates entry in areas of the dome where no access hatches had been provided, without affecting the dome’s future performance.

The use of lockbolts and precise part fit is enabled by high tolerance manufacturing, which in turn facilitate quick and trouble-free dome installations.