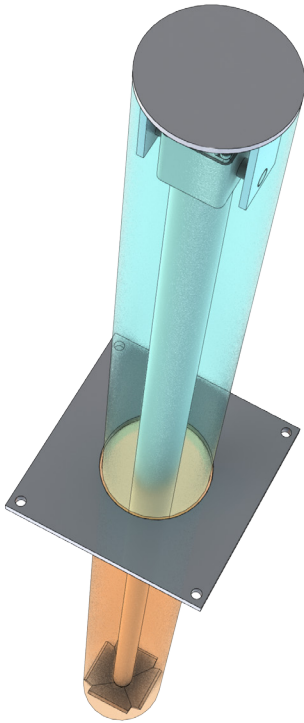


**APPLICATION SOLUTION: Residential Security Bollard**

**Product Family:** Electric  
**Product Used:** ERD Rod Cylinder  
**Product Type:** Standard

**Application Requirements:**  
**Stroke:** 27 inches  
**Thrust:** <100 lbf

**Application Description:**

Security bollard barrier for light residential and public areas.

**Challenge:**

A customer had traditionally used hydraulic cylinders to lift and lower a bollard post. Typical installations included a small number of hydraulic cylinders that still required a hydraulic power unit. Additionally, due to outdoor installations, the cylinders were required to operate in both warm and cold weather extremes. In cold weather, the cylinders required a warm up period and the wide temperature swings subjected the cylinders to frequent maintenance in order to ensure proper and safe operation. Also, environmental concerns due to potential contamination from leaking hydraulic fluids in some installation areas forced the customer to seek an electric actuator replacement for the hydraulic cylinders currently in use.

**Tolomatic Solution:**

The ERD electric rod actuator was chosen as an economical alternative to the hydraulic cylinder. The ERD was outfitted with an IP67 option to withstand water or rain runoff in the inground bollard installation. Additionally, the actuator was built with high / low temperature grease to withstand the wide range of temperature swings.

**Customer Benefit:**

- Eliminated costly hydraulic power unit
- Eliminated environmental and contamination concerns
- No required warm up period in cold temperatures
- Zero maintenance electric actuator eliminated repair costs