

Smart Construction

Smart
Helmets

Augmented
Reality (AR)
Glasses

Intelligent
Headbands &
Bracelets

Cooling
Vests

Intelligent
Hooks

Management
Systems

Core Products

- **Smart Helmet and Intelligent Headband:** Monitors movement and proximity detection via geofencing. Captures videos and images. Provides multi-channel safety warnings. Enables two-way communication. Identifies safety violations using AI. Monitors falls, work at heights and user vital signs.
- **AR Glasses:** Overlays digital Building Information Modelling (BIM) data onto the physical job site with millimetre precision and provides quick access to equipment manuals.
- **Smart Locator:** Built-in silent alarm, emergency call function, proximity detection using geofencing and two-way communication.
- **Health Bracelet:** Monitors vital signs such as body temperature, heart rate and blood pressure as well as steps and positioning. Has an inbuilt emergency call function.
- **Intelligent Safety Hook:** IoT enabled anti double release intelligent hook system equipped with load-sensing and fall-protection safeguards to prevent accidental opening while under tension.
- **Cooling Vest:** Monitors ambient temperature and reduces core body temperature.
- **Management System:** Enables real-time worksite monitoring, worker attendance tracking and job dispatch. Detailed tracking of construction progress at job site.

Capabilities

- Site and user requirements assessments.
- Equipment supply, implementation, testing, commissioning and training.
- Maintenance and servicing.
- Local support.

Construction remains one of the most hazardous industries globally. Traditional safety methods on construction sites are typically reactive. The use of IoT on construction sites provides predictive, real-time monitoring and protection to save lives, reduce costs, and ensure regulatory compliance.

Terra Sol provides a range of IoT and AI solutions that transforms construction site safety by using connected sensors and real-time data to prevent accidents before they happen.



Cooling Vest



Management
System



Smart Helmet and AR Glasses



Intelligent
Safety Hook

Reliable

Safe

Practical