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| <b>M/s CTL Group Qatar</b><br><br><b>Kind Attn: Mr. Daher El Mokdad</b><br><b>Division Manager - NDT &amp; Assessment</b><br><br>Email : <a href="mailto:Daher.Almokdad@ctlgroupqatar.com">Daher.Almokdad@ctlgroupqatar.com</a><br>Mobile: +97450638762 | <b>QREF 06/04/25/-7</b><br><br><b>SUBJECT: PROPOSAL FOR DESIGN<br/>&amp; BUILD OF Concrete TEST<br/>CHAMBER</b><br><br><b><u>Location: Ras Laffan Industrial City</u></b> |
| <b>DATE : 06/04/2025</b>  | <b>Email: mes@mes.qa</b>  |

Dear Sir,

With reference to the above subject and further to our discussion, please find below the scope of works:

### 1. Scope of Work

This proposal outlines the design, engineering, supply, and construction of an environmental test chamber for concrete testing under controlled temperature and humidity. The chamber shall replicate severe industrial and coastal conditions such as those found in Ras Laffan, including high temperatures, variable humidity.

### 2. Breakdown of Scope & Pricing

#### 1. Design & Equipment Selection

Complete engineering design of the test chamber (20m x 3m x 10m), including system design for cooling, heating, humidification, dehumidification, and automation. Includes chamber layout, MEP schematics, system architecture, and equipment datasheets.

**Price: 25,000 Q.R.**

#### 2. Chamber Construction

Structure using PUR-insulated sandwich panels, reinforced concrete base, steel support frame, sealed thermal doors.

**Price: 250,000 Q.R.**

### 3. Refrigeration System

High-capacity cooling system with refrigeration units DX, ducting system, and condensate management. Capable of reducing internal temperature from 70°C to 10°C.

**Price: 120,000 Q.R.**

### 4. Heating System

AHU + Duct heaters + Duct System to achieve 70°C internal temperature with controlled ramp-up profile. Includes safety and protection systems.

**Price: 76,000 Q.R.**

### 5. Humidification System

Humidification system to maintain RH levels up to 95%, integrated with PID control systems for accuracy.

**Price: 40,000 Q.R.**

### 6. Control & Monitoring System

PLC or BMS control system, data logging, alarm management, and sensor integration. Capable of scheduled operation with preloaded setpoints.

**Price: 45,000 Q.R.**

## 3. Total Project Value

**Total Contract Value: 556,000 Q.R.**

## 4. Deliverables

- Engineering drawings & submittals
- Fully constructed insulated test chamber
- Integrated HVAC + Humidification system + Dehumidification system
- Training for operators
- 12-month warranty on all installed systems

## 5. Project Duration

- Design & Engineering: 2 weeks
- Construction & Installation: 12–14 weeks
- Testing & Commissioning: 1 week

## 6. Terms & Conditions

- Prices exclude VAT or customs duties if applicable
- Payment schedule:  
60% Advance  
10% Upon Supply of Construction Material to site  
15% Upon Supply of Equipment to Site  
10% Upon Completion of installations  
5% Upon Testing & Commissioning
- Validity: 30 days from proposal date

## 7. Exclusions & Clarifications

Unless explicitly stated in this proposal, the following items are **excluded** from our scope:

1. **Electrical Power Supply:**
  - Main Incoming electrical power (main cable, breaker, panel) is to be provided by others up to the chamber control panel location.
2. **Civil Works Beyond Chamber Slab:**
  - Structural foundation beyond the reinforced slab directly supporting the chamber (if required by site).
  - External drainage or trenching.
3. **Gas Systems (CO<sub>2</sub>, SO<sub>2</sub>, etc.):**
  - No gas injection or pollutant simulation systems are included unless separately quoted.
4. **Salt Spray, UV, and Corrosive Exposure Systems:**
  - Optional upgrades such as salt misting, UV simulation, or chemical spray systems are excluded unless specified in future scope.
5. **Mechanical Loading Systems:**
  - Any mechanical stress simulation frames or rigs are excluded.
6. **Building Permits & Approvals:**
  - All necessary site approvals, building permits, and environmental clearances are the responsibility of the client.
7. **Local Taxes & Customs Duties:**
  - VAT, customs clearance, or import duties (if applicable) are not included in the above pricing.
8. **IT Infrastructure & Remote Monitoring (Optional):**
  - External remote monitoring or cloud platforms are not included but can be quoted separately if needed.

*Should you need any clarification, please do not hesitate to contact us.*

*Thanks & regards,*

**METRI ENGINEERING SERVICES.**

*FAYEZ METRI (55572793 / 70500311)*



