Date: 22/01/2025 **QREF**#22/1/25-2

To: M/s EMCO QATAR

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Subject: Proposal for Duct Leak Testing and Performance Testing Services (PHCC)

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1. Executive Summary

This proposal outlines the scope, methodology, and cost structure for the **duct leak testing** and **performance testing** services as per the requirements provided in the scope of work (SOW). Our approach ensures compliance with international standards (ASHRAE, ISO) and meets the operational expectations of PHCC health centers over the 5-year contract period. The work will be conducted twice during the contract period and includes all associated reporting and certifications.

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2. Scope of Work

2.1. Duct Leak Testing

- Sealing the duct system to prepare for testing.
- Pressurizing the ductwork to assess air tightness.
- Measuring air leakage rates and identifying leakage points.
- Rectifying leaks using advanced aerosol-based sealing or equivalent methods.
- Compliance with ASHRAE or SMACNA standards.

2.2. Performance Testing

- Operational testing to ensure equipment is functioning within design parameters.
- Assessing system efficiency and cooling capacity.
- Measuring airflow, air pressure, temperature, and humidity at key points.
- Fine-tuning dampers and other adjustments to optimize system performance.

- Generating detailed performance data and deviation reports.

2.3. Documentation and Reporting

- Submitting comprehensive reports with test results, deviations, and recommendations.
- Providing certification of compliance with OEM standards and international guidelines.
- Highlighting any required corrective actions or preventive maintenance.

3. Equipment Quantities

The following equipment will be tested during each cycle of the 5-year contract:

Package	PAC (Units)	HRA (Units)	AHU (Units)	Total Units
Package 01	122	19	17	158
Package 02	121	14	12	147
Package 03	104	15	10	129
Total	**347**	**48**	**39**	**434**

The scope will be executed twice over the contract period.

4. Methodology

4.1. Preparation

- Site surveys to review existing systems and as-built plans.
- Coordination with PHCC representatives for access and scheduling.

4.2. Execution

- Use of calibrated equipment and advanced sealing technology (e.g., aerosol-based sealants) or classical duct sealing methods.
- Monitoring of duct pressure and airflow.
- Adjustments to optimize system balance.

4.3. Documentation

- Recording all measurements and adjustments.

- Delivering reports within two weeks of completion.

5. Price Breakdown (for two cycles)

Package	Total Price (QAR)
Package 01	302,880
Package 02	280,620
Package 03	254,640
Total	**838,140**

6. Pricing and Payment Terms

6.1. Payment Terms

- **Advance Payment**: 30% of the total value per package upon contract award.
- **Progress Payments**: 40% progress invoice for each package.
- **Final Payment**: 30% upon submission of final report for each package.
- Payment to be made within 30 days of invoicing.

6.2. Validity of Proposal

- This proposal is valid for **180 days** from the date of submission.

6.3. Additional Costs

- Any major corrective actions requiring equipment repairs beyond the SOW will be quoted separately and executed upon client approval.

7. Assumptions and Exclusions

7.1. Assumptions

- Scope is executed twice over the 5-year contract.
- Equipment quantities and conditions are accurate as provided.
- Corrective actions are limited to minor adjustments without major repairs.

7.2. Exclusions

- Major equipment repairs or replacements outside the testing scope.
- Non-OEM-approved parts unless authorized.
- Additional corrective maintenance requests beyond the standard SOW.
- Any corrective maintenance beyond the scope or any PPM activities to the units.
- Costs associated with repairs or client-specific requests not outlined in the SOW and will be quoted separately.

9. Conclusion

This proposal is designed to meet the detailed requirements outlined in the SOW while maintaining high-quality standards and cost efficiency. We look forward to your feedback and are happy to discuss any adjustments to the proposal.

For any queries, please feel free to contact me directly.

Best regards,

Metri Engineering Services W.L.L

Eng. Fayez (55572793)