MECHNEX
ENGINEERING & CONTRACTING

GENERAL PRE-QUALIFICATION · 2026

Technical Capability Statement

Integrated MEP and fire & life-safety contractor. Design, supply, installation, testing & commissioning and maintenance across the Kingdom.

- Fire Protection
- Fire Alarm
- CCTV & Security
- HVAC & Ductwork
- Electrical
- Plumbing
- Maintenance

AN AL-RIFAI GROUP COMPANY

KINGDOM OF SAUDI ARABIA

01 · COMPANY OVERVIEW

One contractor for every building system.

MECHNEX Engineering & Contracting is a Saudi MEP and fire & life-safety contractor that designs, supplies, installs, commissions and maintains building services across the Kingdom. It is a wholly owned company of Al-Rifai Group.

This statement summarises our technical capability for general pre-qualification by owners, consultants and main contractors.

100+	13	6	5
Clients served	**Regions covered**	**Service lines**	**Operating cities**
Banking, retail, industry, healthcare, education	Every administrative region of the Kingdom	One contract, one point of contact	Riyadh, Jeddah, Madinah, Taif, Jazan

Company profile

ITEM	DETAIL
Legal name	MECHNEX Engineering & Contracting
Parent company	Al-Rifai Group (Al-Rifai Development & Investment)
Country of operation	Kingdom of Saudi Arabia
Operating cities	Riyadh · Jeddah · Madinah · Taif · Jazan
Core business	Fire protection, fire alarm, CCTV & security, HVAC & ductwork, electrical, plumbing and maintenance
Delivery model	Design · Supply · Install · Test & Commission · Maintain
Clients served	100+ across banking, retail, industry, logistics, healthcare and education

Why MECHNEX

Integrated delivery
Fire, security, HVAC, electrical and plumbing coordinated by one team.

Approval-ready
Submittals prepared for consultant and Civil Defense review.

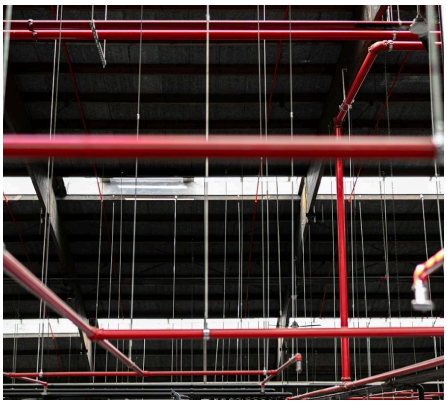
Listed equipment
UL / FM listed systems from recognised manufacturers.

Life-cycle care
Testing, maintenance and support long after handover.

02 · CORE CAPABILITIES

Seven service lines under one contract.

Each service line is delivered by specialised engineers and technicians, coordinated by one project team.



SERVICE 01

Fire Protection

Water-based and special-hazard suppression, hydraulically calculated for each building and hazard class.

- Wet and dry pipe sprinklers
- Deluge and pre-action systems
- Foam systems
- Clean-agent and CO2
- Kitchen hood suppression
- UL/FM fire pump sets and controllers
- Hydrants, standpipes and hose reels
- Portable extinguishers



SERVICE 02

Fire Alarm & Life Safety

Early detection, alarm and evacuation, from device layout to cause-and-effect testing.

- Addressable and conventional systems
- Smoke, heat and multi-sensor detection
- Voice evacuation
- Emergency lighting and exit signage
- Networked fire alarm panels
- Interfaces to lifts, HVAC and access control

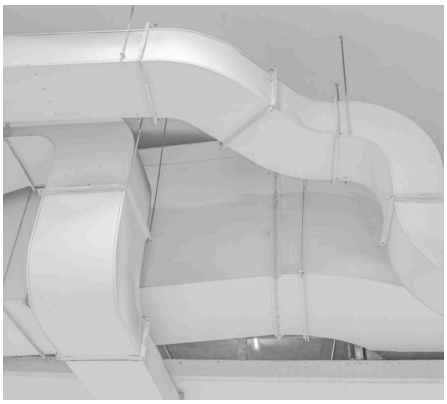


SERVICE 03

CCTV & Security

Surveillance planned for identification, recognition and observation, handed over ready to operate.

- IP and analogue cameras
- PTZ, dome and bullet cameras
- NVR / VMS recording and storage sizing
- Control rooms and video walls
- Network switching, PoE and cabling
- UPS backup for security systems

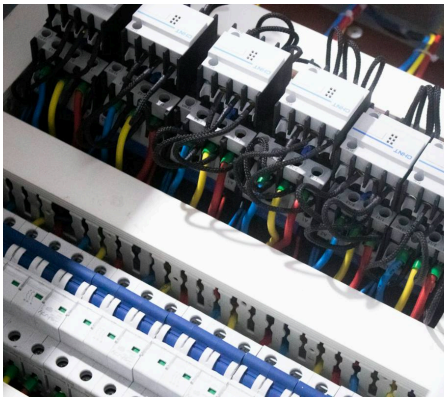


SERVICE 04

HVAC & Ductwork

Air systems that keep buildings comfortable in daily use and escape routes clear in an emergency.

- Supply, return and exhaust ductwork
- Smoke extract systems
- Stair and lift-lobby pressurisation
- Fire and smoke dampers
- Split, VRF and packaged units
- Leakage testing and air balancing



SERVICE 05

Electrical Works

Low-voltage power, lighting and containment, every circuit tested before energising.

- LV switchgear and main boards
- Distribution boards and final circuits
- Power cabling
- Cable trays, ladders and trunking
- Lighting and small power
- Earthing and lightning protection



SERVICE 06

Plumbing Works

Water supply and drainage networks, pressure-tested before close-in and handed over clean.

- Cold and hot water networks
- Booster and transfer pumps
- Water tanks and storage
- Soil, waste and vent pipework
- Floor and roof drains
- Sanitary fixtures and water heaters



SERVICE 07

Maintenance & O&M

One maintenance contract for every system, with written schedules and a report after every visit.

- Planned preventive maintenance
- Inspection and testing to NFPA
- Fault response
- Spare parts supply
- Annual maintenance contracts
- Compliance records for inspections

03 · CAPABILITY MATRIX

Full life-cycle delivery for every system.

SERVICE LINE	DESIGN	SUPPLY	INSTALL	TEST & COMMISSION	MAINTAIN
Fire protection	✓	✓	✓	✓	✓
Fire alarm & life safety	✓	✓	✓	✓	✓
CCTV & security	✓	✓	✓	✓	✓
HVAC & ductwork	✓	✓	✓	✓	✓
Electrical works	✓	✓	✓	✓	✓
Plumbing works	✓	✓	✓	✓	✓

Design covers shop drawings, calculations and submittals; final design approval rests with the consultant and the authority having jurisdiction.

04 · CODES & STANDARDS

Designed and installed to recognised standards.

Our work follows the Saudi Building Code and international standards, as required by each project specification.

DISCIPLINE	STANDARDS APPLIED
Fire protection	NFPA 13 sprinklers · NFPA 14 standpipes · NFPA 20 fire pumps · NFPA 10 extinguishers · NFPA 11 foam · NFPA 2001 clean agent · SBC 801 Saudi Fire Code
Fire alarm & life safety	NFPA 72 fire alarm and signalling · NFPA 101 emergency lighting · SBC 801
HVAC & smoke control	NFPA 92 smoke control · NFPA 90A ventilation · SMACNA duct construction · ASHRAE 62.1 · SBC 501 Saudi Mechanical Code
Electrical	SBC 401 Saudi Electrical Code · IEC 60364 · IEC 61439 switchgear · IEC 62305 lightning protection · SEC requirements
Plumbing	SBC 701 Saudi Plumbing Code · SBC 702 private sewage · pressure testing and disinfection
Maintenance	NFPA 25 water-based systems · NFPA 72 testing · NFPA 10 extinguishers · manufacturer schedules

05 · DELIVERY PROCESS

Six steps from survey to handover.

01
Survey & Scope
Site survey, hazard and load review.

02
Design
Shop drawings and calculations.

03
Approvals
Submittals to the consultant and Civil Defense.

04
Supply
Listed equipment with data sheets.

05
Install & Test
Hydrostatic, flow, insulation and alarm tests.

06
Handover
As-builts, O&M manuals, training.

06 · TECHNICAL RESOURCES

Specialists in every discipline, in-house.

A dedicated engineering and technical team covers each stage, from estimation through installation to long-term maintenance.

FUNCTION	ROLES
Engineering	MEP, fire protection, fire alarm and security systems engineers
Projects	Project managers and site supervisors
Technical	Fire, alarm, electrical, plumbing and HVAC technicians
Estimation	Estimators and quantity surveyors
QHSE	Safety officers and QA/QC inspectors
Maintenance	Dedicated service and maintenance crews

07 · QUALITY, HEALTH, SAFETY & ENVIRONMENT

Quality and safety built into every stage.

Inspection & test plans

An ITP for every project, with witnessed tests and signed records.

Approved materials

Submittals approved before procurement; no substitution without written approval.

Site safety

Safety plan, toolbox talks and permit-to-work for hot work and energised systems.

Continuous improvement

Corrective-action log and lessons learned at close-out.

One point of contact, from survey to handover. DESIGN · SUPPLY · INSTALL · MAINTAIN

08 · MANUFACTURERS

Brands we supply and install.

We propose listed equipment from recognised international and Saudi manufacturers; the final make follows the project's approved vendor list.

Fire protection

tyco · ANSUL · GIACOMINI · FirePro. · SFFECO · SPS · SAFETY HI-TECH · AL-JAZERA FACTORY · INTERPIPE · HEBA · LIFECO

Fire alarm & life safety

Honeywell · SimplexGrinnell · ESSER by Honeywell · GENT · COOPER · VES · Context Plus

CCTV & security

HIKVISION · alhua · AXIS · BOSCH · Hanwha Vision · UNV · milestone · CISCO

HVAC & ductwork

Carrier · DAIKIN · TRANE · LG Electronics · MITSUBISHI ELECTRIC · systemair · الزامل للصناعة · Honeywell

Electrical

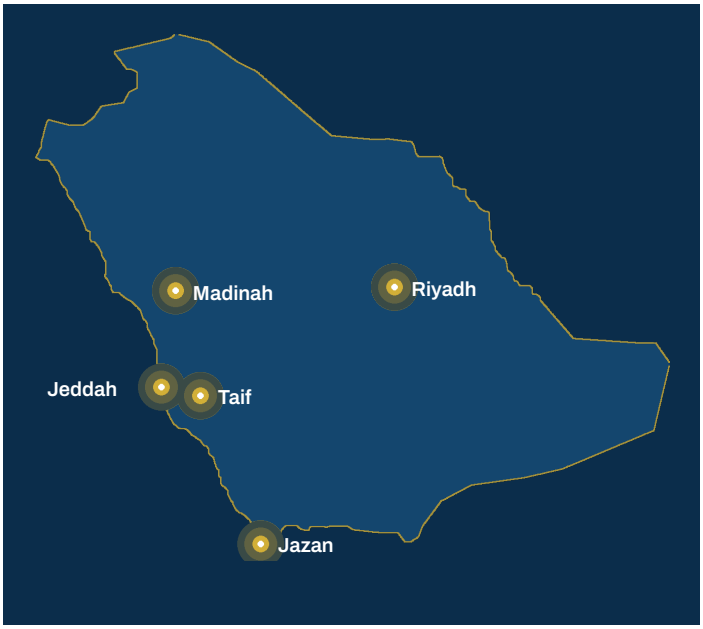
Schneider Electric · ABB · SIEMENS · legrand · hagergroup · EATON · alfanar

Plumbing

wilo · KSB · GEBERIT · GROHE · aquatherm · GIACOMINI · INTERPIPE · AL-JAZERA FACTORY

09 · KINGDOM-WIDE COVERAGE

Teams in five cities, serving all 13 regions.



Teams operating from Riyadh, Jeddah, Madinah, Taif and Jazan mobilise to projects and maintenance contracts in every region of the Kingdom.

Riyadh | Jeddah | Madinah | Taif | Jazan

One project team coordinates fire, security, HVAC, electrical and plumbing works on each site, so interfaces between systems are planned, not discovered.

10 · SECTORS WE SERVE

Built for the buildings our clients run.

SECTOR	TYPICAL SCOPE
Banking & offices	Fire protection, alarm, CCTV and UPS-backed power for branches and head offices
Retail & malls	Sprinklers, smoke extract, ventilation, washrooms and lighting for large public floors
Industry & factories	Foam systems, hydrants, fire pumps, process ventilation and power distribution
Warehouses & logistics	Hydrant networks, high-bay lighting, perimeter CCTV and roof drainage
Healthcare	Life-safety systems, pressure-controlled spaces, hot and cold water
Education & hospitality	Alarm and evacuation, comfort cooling, sanitary systems and term maintenance

11 · SELECTED CLIENTS

Trusted by 100+ clients across the Kingdom.

مصرف الراجحي alrajhi bank	بنك البلاد Bank Albilad	SNB الأهلي	Abdul Latif Jameel	TOYOTA	长安汽车 CHANGAN AUTO
Babgi بابقي Salem Saleh Babgi Trd. Co. ltd	HIYADH CABLE GROUP	اسمنت العربية Arabian Cement	اسمنت أم القرى Umm Al Qura Cement	LuLu	الطائف
عبد الصمد القرشي Abdul Samad al Qurashi	Jeddah Hilton	BOUDI بودل HOTELS & RESORTS	فقيه أكواريوم Fakieh Aquarium	ناقل اكسبرس	مصنع ألف نون للرخام ALIF NOON MARBLE FACTORY
باك كير PACK CARE	علي كيفك ALI KAIFAK	مياه روز ROSE WATER	مياه سما SAMA WATER		

References are available on request.

12 · REGISTRATIONS & DOCUMENTS

Qualification documents.

MECHNEX holds the registrations and approvals required for its scope of work. Certified copies are submitted with the pre-qualification file or on request.

DOCUMENT	AVAILABILITY
Commercial Registration	On request
Civil Defense approval for fire & safety works	On request
Contractor classification	On request
VAT registration (ZATCA), Zakat and GOSI certificates	On request
Chamber of Commerce membership	On request
Saudi Council of Engineers registrations	On request
Manufacturer authorisation letters	On request

13 · CONTACT

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