



THE IMPORTANCE AND HSE BENEFITS OF BUILT ASSET CONDITION SURVEYS WITHIN LEISURE & ENTERTAINMENT VENUES

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WHY THE NEED

- a. Region is booming
- b. This building boom presents unique challenges.
- c. Maintenance alone isn't enough to keep up with the rapid pace of development.
- d. Assets need assessed constantly for compliance and safety status.
- e. This is where built asset condition surveys come in.
- f. These surveys provide a comprehensive picture of a building's health and safety.
- g. They help identify potential problems before they become major issues.



WHY THIS TOPIC, AND WHY IS IT IMPORTANT?

- a. Necessity of the service
- b. Region continues to expand and as those responsible for making this happen, we should understand the tools at our disposal.
- c. Draw attention to a heavily underused, undervalued and misunderstood tool for maintaining the health and performance of your building – The Condition Survey



BY THE NUMBERS

- Preventive vs. Reactive Maintenance:

Studies published by IFMA suggest that every \$1 spent on preventive maintenance can save \$5 in reactive maintenance costs.

- Energy Savings:

Implementing recommended actions from energy audits can reduce energy costs by 10-40%.

- Extended Building Life:

Proper maintenance can extend the life of a building by 10-20 years, significantly deferring replacement costs.

ASHRAE Equipment Life Expectancy chart					
ASHRAE is the industry organization that sets the standards and guidelines for most all HVAC-R equipment. For additional info about ASHRAE the website is www.ashrae.org .					
Equipment Item	Median Years	Equipment Item	Median Years	Equipment Item	Median Years
Air conditioners		Air terminals		Air-cooled condensers	20
Window unit	10	Diffusers, grilles, and registers	27	Evaporative condensers	20
Residential single or Split Package	15	Induction and fan coil units	20	Insulation	
Commercial through-the wall	15	VAV and double-duct boxes	20	Molded Blanket	20
Water-cooled package	15	Air washers	17		24
Heat Pumps		Ductwork	30	Pumps	
Residential air-to-air	15	Dampers	20	Base-mounted	20
Commercial air-to-air	15	Fans		Pipe-mounted	10
Commercial water-to-air	19	Centrifugal	25	Sump and well	10
Roof-top air conditioners		Axial	20	Condensate 15	
Single-zone	15	Propeller	15	Reciprocating engines	20
Multi-zone	15	Ventilating roof-mounted	20	Steam turbines	30
Boilers, hot water (steam)		Coils		Electric motors	18
Steel water-tube	24 (30)	DX, water, or steam	20	Motor starters	17
Steel fire-tube	25 (25)	Electric	15	Electric transformers	30
Cast iron	35 (30)	Heat Exchangers		Controls	
Electric	15	Shell-and-tube	24	Pneumatic	20
Burners	21	Reciprocating compressors	20	Electric	16
Furnaces		Packaged chillers		Electronic	15
Gas- or oil-fired	18	Reciprocating	20	Valve actuators	
Unit heaters		Centrifugal	23	Hydraulic	15
Gas or electric	13	Absorption	23	Pneumatic	20
Hot water or steam	20	Cooling towers		Self-contained	10
Radiant Heaters		Galvanized metal	20		
Electric	10	Wood	20		
Hot water or steam	25	Ceramic	34		

BEST PRACTICE METHODOLOGY & APPROACH



BEST PRACTICES FOR THOROUGH ASSESSMENTS

Not simple checklist exercise

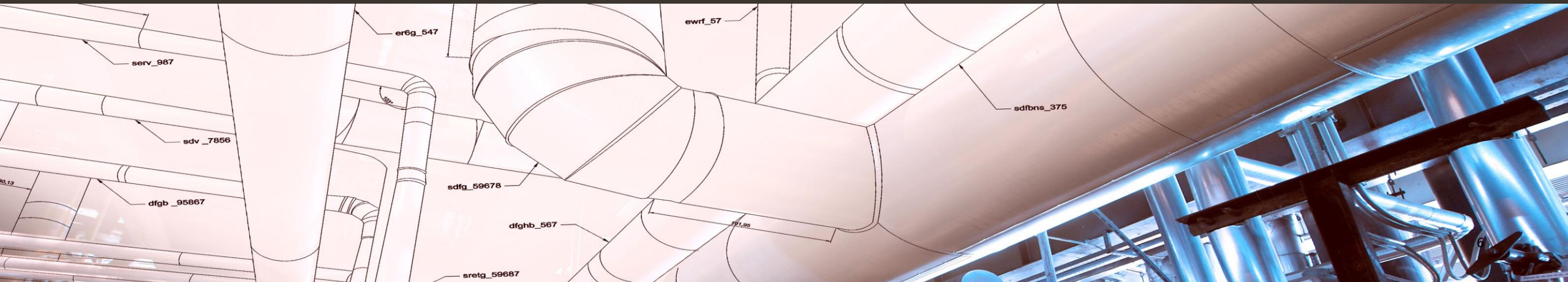
Systematic

Thorough, Detailed, physically taxing services

Produces technically rich data for clients

Some standard features- Red / Amber / Green categories

Good consultants will work with clients to customise surveys to their needs



PROTECTING PEOPLE AND ASSETS WITH CONDITION SURVEYS

- The safety of guests and staff should always be the top priority.
- Surveys highlighting potential hazards and mitigating risks.
- Systematic inspection of the building.
- They look for signs of wear and tear, damage, and code violations.
- The findings are then compiled into a detailed report that highlights areas of concern.
- Early detection of problems .
- This prevents small issues from escalating.
- By addressing these issues proactively, operators can create a safer environment for everyone.



SAFETY BENEFITS OF A CONDITION SURVEY

Early Detection of Hazards:

Structural Integrity:

Regular surveys can identify issues such as cracks, corrosion, or weakened structural elements that could pose safety hazards if left unaddressed.

Electrical Safety:

Surveys can detect electrical faults, outdated wiring, or overloaded circuits, reducing the risk of electrical fires.

Fire Safety:

Assessments of fire safety systems, including alarms, sprinklers, and fire exits, ensure they are functional and compliant with safety regulations.

Preventing Accidents and Injuries:

Slip, Trip, and Fall Hazards:

Surveys can identify and mitigate risks such as uneven flooring, poor lighting, and obstructed walkways.

Mechanical Failures:

Regular inspections of mechanical systems like elevators, escalators, and HVAC units help prevent sudden failures that could cause injuries.

Compliance with Safety Regulations:

Building Codes:

Ensuring that buildings comply with local building codes and safety standards prevents legal issues and promotes occupant safety.

Health and Safety Standards:

Regular surveys help maintain compliance with occupational health and safety regulations, protecting both occupants and workers.

Enhancing Emergency Preparedness:

Emergency Systems:

Surveys ensure that emergency lighting, signage, and communication systems are operational, aiding in efficient evacuation during emergencies.

Risk Assessments:

Regular evaluations of potential hazards and emergency response plans improve preparedness and response strategies.

Prolonging Asset Life and Safety:

Maintenance Planning:

Proactive maintenance based on survey findings extends the life of building components, maintaining safety standards over time.

Resource Allocation:

Prioritizing repairs and maintenance based on survey results ensures that critical safety issues are addressed promptly.

Protecting Occupant Health:

Indoor Air Quality:

Surveys can identify issues affecting indoor air quality, such as mold, asbestos, and poor ventilation, which can impact occupant health.

Water Quality:

Assessing plumbing systems helps ensure clean and safe water supply, preventing health issues related to contaminated water.

Reducing Liability:

Risk Management:

Identifying and mitigating safety hazards reduces the risk of accidents and injuries, thereby minimizing potential liability and legal claims.



REGIONAL ISSUES RELATING TO DESIGN, CODES, AND ENVIRONMENTAL FACTORS EFFECTING ASSET LIFESPAN





UNIQUE CHALLENGES IN THE MIDDLE EAST

The pitfalls of asset management and maintenance are many, and they are varied.

1. The region's harsh climate

- Extreme Temperatures
- Sand & Dust
- Humidity & Salinity

2. Economic Challenges

- Resource Allocation
- Rapid Urbanization

3. Socio-Political

- Regulatory Compliance
- Political Instability

4. Technical Challenges

- Technological Adoption
- Building Diversity

5. Operational Challenges

- Logistics and Planning
- Communication and Reporting

A CLIENTS APPROACH TO UNDERTAKING CONDITION SURVEYS



MAXIMIZING VALUE FROM CONDITION SURVEYS

- a. A condition survey is not just a formality.
- b. It's a chance to gain insights and make informed decisions.
- c. Integrate it into your asset management plan.
- d. Develop a proactive maintenance schedule.
- e. Prioritize investments and track progress.
- f. Communicate findings and use them to learn and improve.
- g. Transform the survey into a powerful management tool.





THE VALUE OF EXPERIENCE AND EXPERTISE

- The true value of a condition survey lies in the experience and expertise of the surveyor.
- Survey Professionals can spot subtle signs of trouble that might escape an untrained eye.
- They can analyze the interplay of various factors to provide a holistic assessment.
- Valuable insights beyond the immediate findings.
- Alternative solutions, recommend specialized contractors, and provide guidance on navigating local regulations.
- Save you time, money, and headaches in the long run.

LONG-TERM BENEFITS OF PROACTIVE ASSESSMENTS

- Regular built asset condition surveys avoid problems today and safeguard your investment for the future.
- Ensure the comfort and wellbeing of all your staff and occupants.
- Extend the lifespan of your assets and reduce operational costs.
- Proactive maintenance is cheaper than reactive repairs.
- Enhance safety and reduce liability.
- Improve energy efficiency and sustainability.
- Regular condition surveys increase safety, reduce costs, and enhance asset value.



COMMERCIAL EXAMPLE

- Let's consider a hypothetical scenario:
- **Venue Size:** A global chain of entertainment venues with **1,000 locations**.
- **Average Annual Maintenance Cost:** **\$50,000 per venue**.
- **Preventive Maintenance Savings:** **20% reduction** in reactive maintenance costs.
- **Without Condition Surveys:**
 - Total Annual Maintenance Cost: 1,000 venues * \$50,000 = **\$50,000,000**
- **With Condition Surveys:**
 - Preventive Maintenance Savings: 20% of \$50,000,000 = **\$10,000,000**
 - Total Annual Maintenance Cost After Savings: \$50,000,000 - \$10,000,000 = **\$40,000,000**
- **Annual Cost Savings:** **\$10,000,000**



BUILDING A SAFER, MORE SUSTAINABLE FUTURE

- a. As the GCC region continues its rapid development, ensuring the safety and sustainability of its built environment becomes paramount.
- b. Built asset condition surveys play a crucial role in this endeavor.
- c. By providing a comprehensive understanding of a building's condition, these surveys empower owners and operators to make informed decisions about maintenance, refurbishment, and risk mitigation.
- d. They are essential for creating safer, more resilient, and sustainable leisure and entertainment venues for generations to come.
- e. Investing in regular condition surveys is not just good business practice; it's an investment in the well-being of our communities and the future of our built environment.



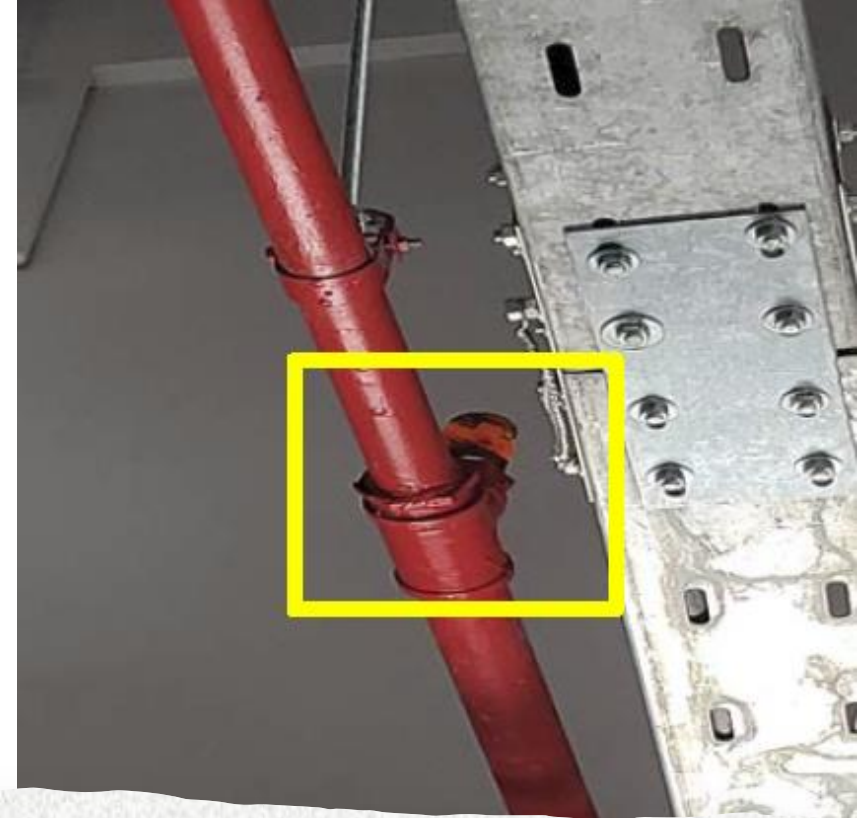
THE MOST COMMON ISSUES FOUND DURING CONDITION SURVEYS ACROSS THE GCC





COMMON ISSUE 1

- Civil - Water Proofing - roof gaps / collapsed or damaged roof structure



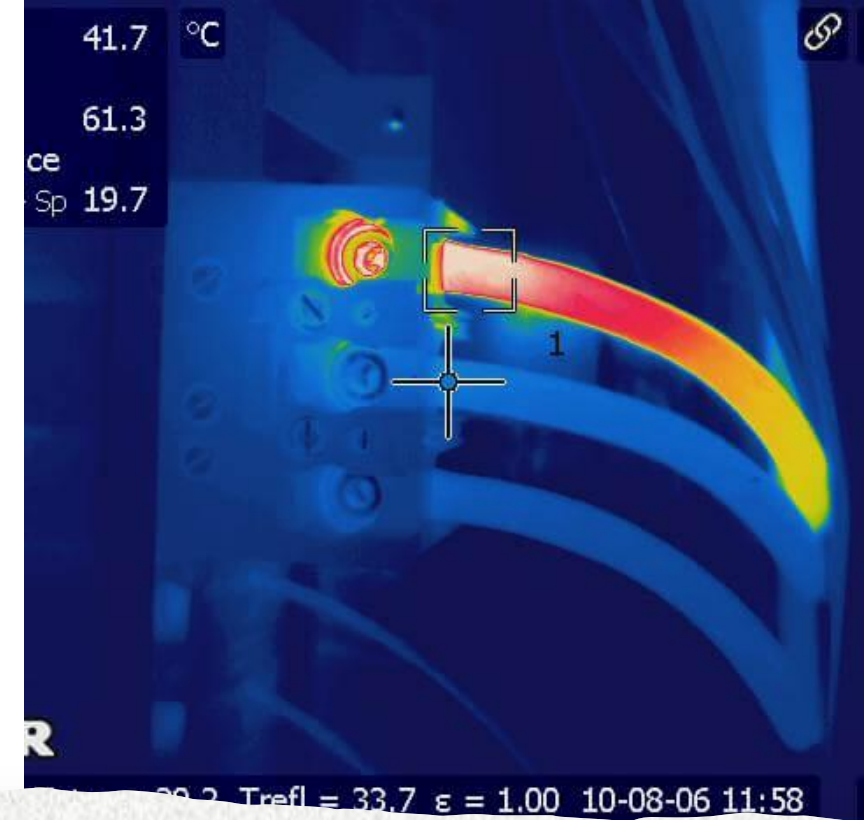
COMMON ISSUE 3

- Fire Fighting - System defects - blocked sprinklers, new MEP block sprinklers



COMMON ISSUE 4

- Fire Alarm – Not Connected.



COMMON ISSUE 5

- Electrical Safety - Worn out parts and loose connection leading to fire and/or thermographic hot spot or both. Due to overloading



COMMON ISSUE 6

- 6. Civil - Leaking pipes , drip trays or AC drains leaking constantly overtime and being hidden within the ceiling voids - the first you know is when the ceiling falls



THANK YOU!



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