

maintenance

Vertical circulation

FM Magazine – GCC Edition caught up with Jay A. Popp, the Asia Pacific - Middle East Executive vice president of Lerch Bates and Associates Inc. elevator consulting group to discuss the affect that maintenance of the lift and escalator systems impacts the image value of a property and the ability to attract or maintain tenants.

“The three most important factors in Real Estate are Location, Location, Location. Location is without a doubt, the single most important factor in establishing the value that a building provides to the branding of a particular company.”

The current construction boom in Dubai, Abu Dhabi, and throughout the surrounding G.C.C is producing an unprecedented number of new lift installations requiring quality, comprehensive maintenance. The lift systems being installed today although not yet as sophisticated as other parts of the World, are significantly more sophisticated than anything previously installed.

Historically, the buildings constructed over the past 30 years throughout the Gulf were typically low to mid rise buildings which were often sold during construction prior to completion. Few buildings were retained in an asset portfolio thereby requiring a property manager or an operations manager. During this period, buildings were generally developed to satisfy the office and residential demands of the “regional” area. The lift systems installed in these buildings were relatively uncomplicated and unsophisticated. Demand for high quality lift service and performance was minimal with the expectation that lift systems were only required to provide basic vertical circulation.

Today however, the market focus is shifting from a local, regional market to a world market. Conscious effort has been made to encourage the design and construction of modern, sophisticated buildings and to attract international companies. As a result, the current construction boom in Dubai, the surrounding Emirates, and nearby countries is changing the face of the Gulf States daily with modern office, residential,

and hotel buildings striving to compete on the world market. The buildings currently under construction represent the beginnings of a cultural shift and a complete reshaping of the real estate market in the GCC which is beginning to receive recognition in the world market. Buildings constructed over the next 10 years will continue this direction with designs and building performance further suited to the demands, needs and expectations of sophisticated international clientele.

This article discusses the affect that maintenance of the lift and escalator systems impacts the image value of a property and the ability to attract or maintain tenants. On the premise that the lift and escalator systems for a building were properly designed for the target market, the programmed use of the building has not changed, and that equipment installed during the original construction of the building met the specified design requirements, it then becomes the responsibility of the lift maintenance provider to properly maintain the lift and escalator systems to the same level of quality and performance provided when the building was originally accepted by the employer.

Quality, comprehensive preventive maintenance is the key element in maintaining the availability of lifts or “up time” critical to the operation of the building during the business day. Proper preventive maintenance is a comprehensive program that encompasses precision adjustment,



Elevated: Jay A. Popp, Middle East Executive vice president of lerch bates and associates inc.

proper lubrication, routine cleaning, and timely replacement of worn parts. Lack of proper attention to any one of these four areas can lead to degradation in lift availability and reduced performance.

As construction of a new building is completed and accepted by the employer, daily oversight of the property becomes the responsibility of three individuals each of which has different and somewhat conflicting objectives, goals, and responsibilities to the employer. These three individuals are; the property manager, the operations / facility manager, and the asset manager. The property manager's directive is to operate the building in the most cost effective manner possible to maximise the current cash flow and return on the employers' initial investment through the monthly leasing costs to the tenants. The operations / facility manager's role is to maintain the >>

functional and aesthetic aspects of the property requiring judicious spending of cash flow revenue to maximise the in-service time of all operating and mechanical systems within the building and prevent pre-mature failure of any of the systems that would require an unbudgeted major investment of capital. The asset manager's responsibility is to manage the equity value of the employer's portfolio to maintain and maximise the market value of the property at future resale. These same varying objectives also exist for the management of existing properties.

Because the performance of each

of these individuals is typically evaluated based on their individual efforts and not as a unified effort, these three individuals often have conflicting agendas with regards to the allocation of cash flow and the

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level of maintenance provided for any and all of the buildings' mechanical systems. In many cases, the property

manager, and/or property management company is rewarded for annual reductions in operating costs, which is exactly what the Employer directed them to do. However, faced with an ever decreasing operating budget to properly maintain the building equipment, the operations manager is forced to reduce the quality and quantity of equipment maintenance or even defer maintenance of one or more building system. Over time, the result of this sequence of events is pre-mature failure of a system requiring a major repair which is allocated from an emergency expenditure budget. By the time the building is rotated out of the Employer's asset portfolio, the building has (hopefully) appreciated in value to offset the reduction in sale price by the buyer for the cost of equipment replacement resulting from the deferred maintenance. At the end of the day however, there can be no doubt that the reduction in sale price is money that is left on the table had the proper level of maintenance been provided.

Setting this traditional business model aside, we suggest that the more appropriate model would be for the property manager, operations manager, and asset manager to have joint responsibility and reward for the performance of the property. In this way, the delicate balance between the initial operating costs, annual maintenance allocations, and resale value of the property with each individual having a stake in the long term viability of the property. >>

Tactics for Success

Location: As the adage goes, “The three most important factors in Real Estate are Location, Location, Location. Location is without a doubt, the single most important factor in establishing the value that a building provides to the branding of a particular company. Call it image, recognition that “the company has arrived”, or product differentiation, it is the most important factor in a Corporate decision to locate in a particular building in any sophisticated world class market. There are however, two other significant factors associated with the ability of a building to attract or retain a tenant.

LOBBY: This is the second factor in establishing “image value” for a prospective tenant or existing tenant. The grandeur of the lobby “sets the stage” and creates the tenants' expectation of the quality of the entire building.

LIFTS: The lift system is the third factor,

and is the first “system” that a tenant or visitor comes in contact with after entering a building. The impression that the tenant receives from this initial contact either reinforces and enhances the psychological expectations created by the visual lobby experience or negates it. For the ideal experience, the lift system should appear transparent to the operations of the building. They should operate smoothly and silently. The perceived quality of the lift system from this brief encounter is the final critical element in determining whether or not a prospective tenant will contract for space in the building, renew an existing lease, or, in certain instances, whether an existing tenant will even terminate an existing lease. Organizations such as the Building Owners & Managers Association (BOMA) have analyzed the reasons tenants leave a building, and have found in over 20 years of case studies that vertical transportation is the number one or number two reason every year.

In the course of contracting for maintenance, the property manager will face numerous questions, some of which are as follows:

- Does the lift providers "standard" maintenance contract provide the proper coverage for the lift and escalator equipment?
- Does one lift provider's maintenance contract offer better protection of the equipment vs. another?
- Does the maintenance contract include all or only a portion of the mandatory periodic safety tests?
- Is the labor for the lift service provider to conduct the required annual safety tests included?
- What is the difference in protection offered between the providers' standard maintenance agreement and a "performance" based maintenance agreement?
- What are the benefits of a "performance" based maintenance contract?
- Is the cost of the maintenance contract appropriate for the scope of services identified in the providers' contract?
- Is the cost too low, unnecessarily exposing the equipment to premature wear and tear?
- Is the cost too high?
- What is the right price for maintenance for this particular building?
- How do I know if the maintenance is being performed adequately or if it is even being performed?
- How can I tell if I am receiving the proper value for my maintenance dollar?
- Does the lift provider offer remote

monitoring of the equipment?

If you are in an existing situation where the quality of maintenance is in question, you have a number of options that can assist you in managing your lift and escalator systems and in-service time. These include the following:

- Remote monitoring by the lift service provider with monthly reports provided indicating the callback history and repair history over the past month.
- Performance monitoring.
- On site maintenance evaluations.
- Third party intervention.

The lift consultants' role as an independent, objective 3rd party, has you and your Employers' direct interests in mind, not the interests of the service providers' company. They offer an objective opinion as to what the "right price" for quality, comprehensive maintenance should be and the scope of work required for any particular building.

Over the years, we have seen a variety of maintenance agreements in the Gulf with varying degrees of protection from liability, equipment coverage, and maintenance. Full maintenance agreements that had they been executed, would have obligated the Employer to purchase and warehouse on site at his cost, the equivalent of one years' of anticipated replacement parts solely for the benefit of the service provider. Full maintenance however, by its very nature, includes all required replacement parts resulting from normal wear and tear in the

monthly cost of the service agreement.

Fortunately, in this instance, the Employers' property manager made the decision to seek 3rd party advice before executing and obligating themselves to this type of agreement.

Lift consultants' can also provide on site evaluation of the level of maintenance being performed under an existing service providers' maintenance agreement. These evaluations can determine if the maintenance being performed fulfills the obligations of the maintenance agreement, if the existing agreement is appropriate for the requirements of the building, and identify specific deficiencies requiring correction by the service provider under the terms of the existing maintenance agreement. The consultant then coordinates with the service provider to correct any deficiencies noted to restore the lift system to a level of operation consistent with the capabilities of the existing equipment. They also assist the property manager, operations manager and asset manager in determining the appropriate capital expenditures for budget planning purposes on an annual basis.

In summary, long term maintenance, scheduled interim capital expenditures, and timely modernization of the lift systems will ensure that the asset value of the Employers' property is maintained at the highest level. The first step in this process is obtaining quality, comprehensive maintenance at the right price.

Proper lift maintenance cannot be viewed as a commodity that can be purchased in bulk similar to consumable items in a building, i.e. the greater the number of lifts contracted with a maintenance provider, the greater the unit savings. Granted, there are some economies of scale in number of units however, this must necessarily be tempered with the fact that reliable lift operation requires comprehensive preventive maintenance by highly trained technicians to ensure public safety in addition to maximising in-service time.

As the level of sophistication of the installed lift systems increases throughout the Gulf States, so to must the contracting for quality, comprehensive lift and escalator maintenance increase to meet this new level of sophistication. Obtaining the proper level and quality of maintenance requires that the property manager becomes familiar with the basic requirements of a proper lift maintenance agreement. Further, these requirements will be different depending upon the type of building, its location (i.e. an inland building vs. a coastal building), hours of operation, environmental factors, etc. The more of the current buildings that are retained in an employers asset portfolio, the more demands will be placed on the property manager to secure and administer appropriate lift maintenance contracts.

The Gulf States have historically allowed lift equipment to be installed that was manufactured under any one of the three main recognized lift codes, the ASME A17.1, the EN81-1,



Lift / Elevator's in Burj al arab


and the JIS (Japanese Industrial Standards) code, each of which define differing requirements for inspection and testing of the lift and escalator systems at the time construction is completed, as well as the requirements for periodic inspection

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and safety testing after the taking over certificate has been issued. Following the initial testing conducted at the completion of construction, completion of the requirements for periodic testing has, in our experience, been inconsistent. Today, this is changing. The various jurisdictions are undergoing the process to understand the requirements of the various lift codes

and recognize the benefits, importance, and necessity of periodic safety testing. Further, periodic inspection and safety testing of the installed lift and escalator systems in all buildings by third party lift inspection companies is required on an annual basis by the Civil Defence to satisfy recognized lift safety code requirements such as those found in the North American ASME A17.1 safety code for the installation of elevators and escalators or in the European EN81-1 Lift code. Additionally, some periodic testing of systems is required to satisfy some insurance requirements.

If you have or are currently negotiating a new maintenance agreement with a lift service provider you should evaluate the contents of the agreement with the questions listed above and ask the service provider to clarify any of the provisions that you do not understand or are questionable. You may also choose to seek the advice of a 3rd party consultant to assist in the tendering and negotiation process.

**Article contributed by; Jay A. Popp, Vice President, Lerch Bates and Associates inc. *