

ISSUE

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# Lodging Engineer

## 1st Person

**Jeanette Clarke, Vice President  
of Capital Investments for  
Apple Hospitality REIT**



**COURTYARD**

**Marriott**

**2015 OSHA Regulatory Update  
Quality Assurance QA  
Certifications for Today's Engineer**



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LODGING ENGINEER™ reports about people, events, technology, public policy, practices, study and applications relating to hotel and motel engineering, maintenance, human communication and interaction in online environments.

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# 1<sup>st</sup> Person Interview *Jeanette Clarke, Vice President of Capital Investments, Apple Hospitality REIT*



Thank you so much Bob! It's been an exciting few years, both personally and professionally. May 18th, 2015 was a notable day for us as it was the day Apple Hospitality REIT was listed on the NYSE. Broadly speaking, we focus on upscale select service and extended stay products in the Marriott and Hilton families of brands. I joined Apple REIT approximately seven years ago and I knew from my very first day that I was joining an extraordinary team. In graduate school, I learned about REITs and became familiar with Apple REIT while attending a local real estate conference. A few years later I was fortunate enough to join the Apple REIT team. Before Apple REIT, I was on various finance and accounting teams of a large national retailer.

*After working with Apple REIT for the past 3 years, it is a pleasure to interview you for our magazine, Lodging Engineer. I think it is appropriate to start with a congratulations on three areas: your recent marriage and newborn, your recent promotion, and Apple Hospitality's recent listing on the New York Stock Exchange. As you know, Craig Amos, EVP of Capital Investments, first contacted me about our Certified Chief Engineer program in April of 2012. Since then we have just about certified your company's entire portfolio, so maybe one more congratulations is due. It has been quite a ride these past few years. I really don't know how you find time for everything. Most of our readers are hotel engineers, but we get a lot of GMs and asset managers that find Lodging Engineer interesting. I would like to start our interview with you telling us a little on your background and how you got started in the hospitality industry and a little bit about Apple REIT?*



***“Broadly speaking, we focus on upscale select service and extended stay products in the Marriott and Hilton families of brands.”***



*What are some of the biggest challenges you have faced as you have risen through the ranks of the hospitality industry? Did you start out working for hotel ownership groups such as Apple REIT?*

Coming into my position with Apple REIT, I had an extensive background in finance and accounting, but had limited knowledge of the hotel industry. I think it's critical to have a strong understanding of the teams you are supporting, and it was a challenge because I wanted to learn it all overnight. Our leadership team has a tremendous amount of experience and expertise in the industry so they were able to teach and guide me. Most of our leadership team have been with the company from the very beginning, Apple REIT has been in the hospitality industry for fifteen years, and are members of multiple brand owner advisory councils. We also work with industry leading management companies,

and I am fortunate because my position allows me to interact with those teams on a daily basis. They teach me something new every day and I am grateful so many of them take the time to share their wealth of knowledge with me.

*If you would please, tell us what a manager of capital assets does. I know hotels have renovations based upon wear and tear of the property as well as tax advantages of buying and selling properties.*

It's imperative that we carefully manage our capital spend to help predict future needs and ensure our guests have a great experience at our properties. Between our two companies, we currently own 233 hotels across 33 states.

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*Many capital expenditure projects require the hotel engineer to assist in the hotel's renovation.*

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I am responsible for the cash flow modeling, tracking and corporate reporting for our large renovation projects, which are managed by our in house project management group. Our team plans, executes and reports on the capital spend for all of our properties. This includes renovation budgets as well as normal capital requests. I review and approve the annual capital budgets, as well as emergency requests that come up throughout the year.

*Many capital expenditure projects require the hotel engineer to assist in the hotel's renovation. Often the hotel engineer is responsible for a variety of tasks ranging from notifying the guests of contractor working hours and areas of construction, to monitoring the contractor's worker's interaction with both hotel guests and the staff. Where does the owner fit in the process of capital expenditure projects? Does the owner get involved with getting bids out to contractors and the day-to-day management of a project or do you concentrate more on the front end such as budgeting and getting the architectural plans drawn up?*

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***Our engineering teams are leading the charge to ensure our assets are properly cared for and well maintained.***

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Our large renovation projects are managed by our industry leading in-house project management team. The focus of all large scale renovation projects is to support the teams who are onsite at our hotels, minimize business interruption and provide exceptional service to our guests during the actual renovation. Our in-house project managers are responsible for managing the design, procurement and the general contractor. This also allows us to take advantage of economies of scale for FF&E and professional services, given our size. It also provides control over the consistency of the product and design. Throughout the history of the Company and other Apple REIT entities, we have completed hundreds of renovations, which has given us the opportunity to create tools and put processes in place that we feel makes the renovation more efficient and effective for the onsite teams. The goal is to make the entire renovation process as painless as possible for the onsite teams so that they can focus on the operations at the hotel. General Managers and engineers are critical to the success of the renovation, so we engage with them frequently throughout the process.





*I know from my own experience that the hotel engineer also works with his or her GM and the prime contractor to schedule which floors and rooms to take off line and determine which areas of the hotel will cause the least impact to meeting rooms' and general noise throughout the property. I know I am simplifying the process, but doesn't the engineer also act as your 'eyes and ears' so to speak for many projects as the cost of a superintendent or project manager adds so much to the cost of projects.*

**Engineering is a critical position at our hotels. There are always projects and needs at the property, even when they are not under a large scale renovation. We rely on engineers to give advice on how projects should be prioritized at each property and how to best protect our assets. We rely on them to execute many of**

**these projects throughout the year outside of the renovation. This includes procuring bids and making recommendations on the best way to proceed on each project, as well as ensuring the project is executed properly. Our assets are important to us, and our engineering teams are leading the charge to ensure they are properly cared for and well maintained.**

*When I first started in the industry I didn't know the difference between the Real Estate Investment Trust (REIT) which is the ownership group and the hotel management company which is the company that provides the employees and day-to-day operations side of managing the hotel property. Apple Hospitality REIT and Apple REIT*





*Ten collectively own 233 properties and contract with 22 hotel management companies. And, your portfolio has multiple brands including both select and full-service properties. So where does the hotel engineer come into play and how much do you rely on them to maintain your company's assets?*

**The third-party management teams we work with are some of the best in the industry. We try to pair managers with assets they will succeed with, based on a variety of factors. One position that we find critical and encourage all of the management companies we work with to have is a corporate or regional engineering position to assist the onsite team with training and provide guidance on a range of issues the hotel may be faced with. The Certified Chief Engineering (CCE) program has been a great initiative for our portfolio. We see the program as an opportunity to invest in associates and provide them with a resource to reference when needed. We are proud that our portfolio will be 100% certified by the end of this year.**

*I remember being told once that a typical three to four story select service hotel is a valued asset costing around \$19 million to produce, if this is an appropriate ball-park figure, knowing that land and cost of construction varies from city to city, what percentage of the typical hotel asset's operating budget is dedicated to maintenance not including utility costs?*

**It varies by property based on a range of factors including age, how the asset was maintained prior to our ownership and the location of the property. The management teams that we have in place execute preventative maintenance programs and work closely with outside vendors to ensure**

**our equipment is properly cared for and maintained, which we believe ultimately helps keep our repairs and maintenance costs down long term.**

*So many changes have come about as a result of our recent country's recession, do you see a lot of deferred capital projects starting to open up?*

**We consistently reinvest in our properties, which we believe maintains strong guest satisfaction and allows for more predictable future capital needs.**

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***Marriott and Hilton both have brand specific programs to encourage hotels to reduce water consumption.***

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*For the past decade and even longer, the hotel industry's engineering and operations have spent considerable effort on going green and reducing utility costs. Obviously all the low hanging fruit such as, inefficient lighting, automated temperature settings for unoccupied rooms, and shifting times of peak demands for electricity have all been pretty much 'picked' so-to-speak. Where do you see the next focus for cost savings for the industry? Is water usage and its reduction of inefficiencies, such as those found in older shower heads and toilets, the next frontier for savings?*

**There are still a variety of great initiatives and rebate programs and we continue to evaluate opportunities in this space. Marriott and Hilton both have brand specific programs to encourage hotels to reduce water consumption. We have installed energy management systems in numerous properties in our portfolios and continue to**



evaluate these opportunities at the remaining properties. Recently, we researched and implemented adding aerators to the guestroom bath faucets to help conserve water. We have replaced toilets with more efficient units to reduce water and sewer costs. Rebate programs also are available for some initiatives through the local utility companies, which helps the ROI. As an industry, we will continue to find ways to reduce our footprint and be more green.

do you see the industry heading in the next few years?

Technology will continue to be a large piece of our capital spend. In today's world, travelers have an average of three devices that need wifi. Having fast, reliable wifi is as important, if not more important, than having a television in the room. As hotel owners, we work to keep our hotels relevant from a technology perspective while keeping our capital costs at a reasonable level.

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## *Hotel engineers play a major role in overall guest satisfaction.*

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*Can you speak to sustainability and the green movement in the industry? Do you see this more as a trend or are you finding guests and, perhaps more importantly, event planners asking for certain sustainable features as a part of their selection process for their company's business?*

Sustainability is important to both our transient and corporate guests. We see questions around our green movement on RFPs from corporate accounts and event planners. The brands see this as an important initiative as well, and their commitment can be seen in their brand standards. Many brands have towel re-usage programs, recycling programs and lighting requirements just to name a few examples.

*Changes in the industry are coming about rapidly. More and more municipalities are beginning to defer costs associated with storm water and snow removal as well as helping with infra-structure costs to hotels. Guests are already substituting their laptop for in-room movies as a form of entertainment. And, changes in technology are providing guests a whole new set of services such as checking-in by cell phone or using RFID to unlock the guest's room door among many others. Many new guest services require a local WiFi hub on hotel floors and capital expenditures for developing the property's infra-structure so they can take advantage of these new conveniences and remain competitive. Where*

*One last question, what do you think are going to be the biggest challenges for the hotel engineer in the coming years?*

Hotel engineers play a major role in overall guest satisfaction. Ensuring the hotel is in top shape for guests and correcting any condition related issues the hotels may have is very important to the overall guest experience. I think their challenge is that they have so many pieces to handle, being able to prioritize ensures our hotels are exceeding guests' expectations and overcoming any issues that arise with exceptional customer service.

*Most of our readers probably do not know that you and Mr. Amos were instrumental in helping NAHLE develop our Certified Chief Engineer program for select service properties. I want to personally take this opportunity to thank you for all of the hours and effort you and Apple Hospitality REIT have contributed both to our study guide's text and the over-all program. Do you have any closing words for our readers?*

Engineering will always be an important and critical position at our properties. I'd like to thank the engineering teams we work with for all that they do to preserve the exceptional guest experience at our hotels.

Interview by Robert Elliott.



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# Protect Your Property from Invading Pests

Diminishing daylight, tumbling temperatures and autumn rains signal the start of fall's slide into winter. Pests register these seasonal changes and start the search for winter quarters. And, of course, your property promises to keep those pests just as snug and dry as it keeps you and your guests.

As the temperature outside drops, our guests cozy up inside our nice, warm hotels. Unfortunately, so do insects and rodents. Whether the invaders are as small as an ant or as big as a family of skunks, your best defense against pests is sealing off their entry points into your property. As you winterize, consider adding a few tasks to help pest-proof your property and avoid inadvertently inviting insects indoors.

The experts have provided us with tips about keeping pests out—and what to do if they get past your defenses. Typically, insects seek areas that offer moisture, food, and shelter – places to rest, reproduce, or hide from predators. So think like an insect. Look for bug-size bridges, things that could give nonflying pests a leg up onto your property's structure. Also scout for places of refuge, spots where pests can hide out.

## Evaluate the Exterior

Inspect your property's exterior carefully and take steps to seal any openings you find. This not only can help keep pests out, but also can help keep

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***“Whether the invaders are as small as an ant or as big as a family of skunks, your best defense against pests is sealing off their entry points into your property.”***

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the heat in and cold air out. Mice are probably the biggest wintertime pest concern. A mouse can squeeze in through a hole no bigger than a dime, while a raccoon-size creature can enter through a 6-inch opening. Look at eaves and fascia boards carefully, and examine flashing. Damp wood is an invitation to insect pests so replace any rotting wood. When examining your property's exterior walls, experts say to look for light coming through cracks. Also, feel for air movement, which can sometimes point you to a crack you cannot see.

## Focus on Windows and Doors

Doors and windows are the most likely entry points. Seal any cracks around windows and door frames with caulk or foam. Weather stripping and door sweeps can seal the moving parts of the door, so make sure it is in good condition. Not that NAHLE encourages smoking, but an old carpenter's trick is to literally blow smoke where you suspect infiltration (like around a window) and see if it makes it inside.

## Put Screens on Vents

Not every hole should be plugged up. Some are there for a reason, such as air vents. If holes are meant to be there, they will be pretty obvious. Place screens over them to keep critters out.

## Control Plantings Around the Foundation

Plantings around the foundation provide a haven for insects. Keep plants 1 to 2 feet away from the foundation and weeds trimmed to a minimum. Pull mulch back so it is not resting against the property.

## Double Check Repairs

Holes made during installations or repairs may not get sealed up. Anytime plumbing or electrical work is done, double-check the job to make sure you are not left with holes through which pests can enter.

## Monitor the Enemy

Vigilance is key. Pests mount their primary attacks twice a year—once when the temperature drops at the beginning of winter and once when it goes up again in the spring. Weather stripping can crack and new holes can develop, so you should check your defenses at least twice a year before the temperatures change.

Using preventive tactics to keep pests out is an easy, low-cost solution that offers solid pest protection. Make inspecting your property's exterior each fall part of your annual maintenance. Not only will it reduce time spent on indoor pest control, it will also help ensure structural upkeep.





# 2015 OSHA: REGULATORY UPDATE

By NAHLE Staff

OSHA reporting may be an unpleasant reality of the workplace, but it is necessary to help improve the safety and working conditions of all workers, and compliance means keeping in line with the law. Under the Occupational Safety and Health (OSH) Act, employers are responsible for providing a safe and healthful workplace. OSHA's mission is to assure safe and healthful workplaces by setting and enforcing standards, and by providing training, outreach, education and assistance. Employers must comply with all applicable OSHA standards. Employers must also comply with the General Duty Clause of the OSH Act, which requires employers to keep their workplace free of serious recognized hazards.

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***It is the contractor or employer of employees, not OSHA, who issues and posts the permit required for employees who are going to be entering a permit-required confined space.***

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## Injury Reporting Requirements

On January 1st 2015, new OSHA recordkeeping requirements with regard to injury and illness went into effect. The rule requires employers to notify OSHA when an employee is killed on the job or suffers a work-related hospitalization, amputation, or loss of an eye. OSHA issued the rule to keep America's workers safe and healthy. U.S. Secretary of Labor Thomas E. Perez stated: "Workplace injuries and fatalities are absolutely preventable, and these new requirements will help OSHA focus its resources and hold employers accountable for preventing them."

As of January 1, 2015, you must submit reports to OSHA on,

- All work-related inpatient hospitalizations, amputations, and losses of eye within 24 hours.
- All work-related fatalities within 8 hours.

Previously, OSHA's regulations required an employer to report only work-related fatalities and in-patient hospitalizations of three or more employees. Reporting single hospitalizations, amputations, or loss of an eye was not required under the previous rule.

Reports to OSHA can be made by,

- A call to OSHA's toll-free number at 1 (800)-321-OSHA (6742),
- Calling your local OSHA area office, or
- Using the online form that will soon be made available.

For additional information on reporting, please see [https://www.osha.gov/report\\_online/index.html](https://www.osha.gov/report_online/index.html).

All employers covered by the OSH Act, even those who are exempt from maintaining injury and illness records, are required to comply with OSHA's new severe injury and illness reporting requirements. To assist employers in fulfilling these requirements, OSHA has developed a Web portal for employers at <https://www.osha.gov/recordkeeping2014/>.



In addition to the new reporting requirements, OSHA has also updated the list of industries that, due to relatively low occupational injury and illness rates, are exempt from the requirement to routinely keep injury and illness records. The previous list of exempt industries was based on the old Standard Industrial Classification system and the new rule uses the North American Industry Classification System to classify establishments by industry. The new list is based on updated injury and illness data from the Bureau of Labor Statistics. The new rule maintains the exemption for any employer with 10 or fewer employees, regardless of their industry classification, from the requirement to routinely keep records of worker injuries and illnesses.

### Confined Spaces

The final rule for confined spaces in the construction industry was published and became effective August 3, 2015. In October, OSHA announced it will delay enforcement of the Confined Spaces in Construction Standard until January 8, 2016. Although the ruling went into effect August 3rd, OSHA has agreed to refrain from issuing citations to any employer that is making good-faith efforts to comply with the standard. Confined spaces are not designed for continuous occupancy and are difficult to exit in the event of an emergency. Attics and crawlspaces now classified as confined spaces, areas where HVAC equipment is frequently located. People working in confined spaces face life-threatening hazards including toxic substances, electrocutions, explosions, and asphyxiation.

According to OSHA, a permit-required confined space, or permit space, is a confined space that has one or more of the following characteristics: it contains or has a potential to contain a hazardous atmosphere, it contains a material that has the potential for engulfing an entrant,

it has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor that slopes downward and tapers to a smaller cross-section, or it contains any other recognized serious safety or health hazard.

**"ALL EMPLOYERS COVERED BY THE OSH ACT ARE REQUIRED TO COMPLY WITH OSHA'S NEW SEVERE INJURY AND ILLNESS REPORTING REQUIREMENTS."**

The new confined spaces standard requires employers to, among other things, ensure their workers know about the existence, location, and dangers posed by each permit-required confined space, and that they may not enter such spaces without authorization. Per the standard, employers must provide pre-entry planning before entering the confined space, including:

- Having a competent person evaluate the work site for the presence of confined spaces, including permit-required confined spaces;
- Identifying the means of entry and exit, proper ventilation methods, and elimination or control of all potential hazards in the space once the space is classified as a permit-required confined space;
- Ensuring that the air in a confined space is tested before workers enter for oxygen levels, flammable and toxic substances, and stratified atmospheres;



- Removing or controlling hazards in the space and determining rescue procedures and necessary equipment if a permit is required for the space; and
- Ventilating or using whatever controls or protections are necessary so employees can safely work in the space.

The word ‘permit’ usually means paying a certain amount of money, but, in this case, the permit is actually created and issued by the contractor — not OSHA. The permit is completed and posted by the contractor or employer of employees who are going to be entering a permit-required confined space. This permit is basically a sheet of paper that lists the name of the space, the reason you are going in, the date, and the duration for which the permit needs to be issued. In other words, the permit provides that if you are in there for one day, you need to have that listed on the permit, what are the acceptable entry conditions, who can enter, who the attendant is, the name of the supervisor and signature, any hazardous conditions that exist, methods to detect increases in hazardous atmospheric conditions, and more.

long-term priorities for the agency. One of the key priorities for OSHA is releasing the new silica rule, which has been in the pipeline for years. Under the new rule, exposures would be limited to a new Permissible Exposure Limit (PEL) of fifty (50) micrograms of respirable crystalline silica per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ), averaged over an 8-hour day. In addition to silica, according to the agenda, OSHA plans to address beryllium exposure.

Additionally, OSHA is continuing to pursue a recordkeeping system that would require employers to report injuries quarterly on a public online posting website. OSHA has listed this new rule under the “final rule-making stage,” meaning that the proposed rule could be issued as soon as later this year. The rule would amend 29 CFR § 1904.41, which addresses the annual OSHA injury and illness survey for employers with ten or more employees, to add three new electronic reporting requirements. Similarly, OSHA intends to provide clarity on an employer’s continuing duty to make and maintain accurate records of each recordable injury and illness—the obligation does not expire if the employer initially fails to create the necessary records.

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## ***OSHA is continuing to pursue a recordkeeping system that would require employers to report injuries quarterly on a public online posting website***

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The point is to make sure each employer documents their standard operating procedures for permit-required confined spaces. The rule also ensures a level of quality management so employees that are working in these confined spaces know what the procedures are for working in there. It all goes to making sure the right hand knows what the left is doing.

### **Upcoming Changes for 2015**

In May 2015, OSHA released its Spring Regulatory Agenda reflecting new regulations that are in the pipeline for this year, and other

Other key regulatory issues in the “proposed rulemaking” stage include: amendments to the crane and derricks construction standard, an amendment to the final rule on respiratory protection to address the qualitative fit test requirements, and changes to the crane operator qualification requirements in construction. Interesting issues in the “final rule-making stage” include changes to the working surfaces and personal fall protection systems regulations to address new technology in fall protection, and updating OSHA standards regarding eye and face protection to align with national consensus standards.



# You need more engineers...*really?*

By Richard Manzolina



Richard E. Manzolina, CEOE  
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Of course, putting more staff in the budget is easy; it's getting that budget approved that's not quite as easy. In the coming weeks, I will be preparing for my budget meeting, and mounting my defenses for the three additions to staff. To help ensure my success, I have come up with a few presentation tactics. These same tactics would apply to any request requiring senior approval, so use them to help secure whatever you might need for the coming year.

## *Don't go it Alone*

Going into a budget meeting with a request for a 30% increase in payroll without any advanced warning would be as welcome as leaving the seat up at home...and would likely garner equally displeasing feedback. Instead, make it a point to identify an ally or two in advance, explain your case, and get their buy in. There's no sense in going it alone, especially if your allies are in a position of influence. In my example, I solicited the support of my controller, knowing full well I'll need to fund the addition to staff, as well as my human resources director. The latter may seem like an odd choice, but actually makes a lot of sense. Staffing up the maintenance team to better meet the needs and requests of the property's associates would have a direct impact on their morale and engagement; two benefits that feed directly into our property's performance goals.

If you are like me, you are in the midst of budget season... a time when you create your fiscal roadmap for the coming year. Your hope is to ensure you will have all the resources needed to keep the lights on and the property safe, warm, and looking sharp. If you're smart, you'll include all those things you know you'll need, and not just tack on 3% to last year's expenses. For me, I like to keep a post-it note on the bulletin board in my office to keep track of unforeseen expenses throughout the year...a gentle reminder to myself not to forget snow removal in March, or flowers in October.

This year, my post-it note has a number "3" on it. Just a three. What's the reminder? It's my note-to-self to add three more engineers to next year's budget. That's a tall order in a 10 man department, but they are sorely needed. The hotel's managers are entering maintenance requests faster than they can be completed, and our preventive maintenance efforts are falling by the wayside as well.





## *Appeal to Appeal*

Right out of the gate, find a way to tie your request to the property's overall goals. Using our staffing example, the hotel is promoting an initiative to get department leaders to take greater ownership of their respective work areas. Scores of department managers are expected to operate their areas as successful individual business units. This heightened expectation of accountability puts greater pressure on the maintenance department to keep their areas comfortable and well maintained, and has resulted in a huge influx of work requests; much more than could be handled within a reasonable amount of time.

## *Know your data cold*

Once you have your allies in place and your audience's interest peaked, it's time to prove the validity of your request and put together a presentation. In doing so, be sure to collect all the pertinent data and make sure it supports your case. Anticipate your audience's likely questions and have answers by the ready. The more prepared you are, the more likely to succeed you will be.

In our example, such validation and preparation would include obtaining data to support the need for more maintenance personnel. Such data will likely include:

---

***“Of course, putting more staff in the budget is easy; it’s getting that budget approved that’s not quite as easy.”***

---

Recently, I pointed out this phenomena to my executive team. I explained that in response to this influx of work, “... we can either alter our expectations of our managers, or we can alter the maintenance department's ability to meet those expectations. I vote for the latter.” Then, leveraging my knowledge of the property's business plan, I appealed to my executive team's desire to enhance the marketability and profitability of our hotel by adding... “We're holding our managers more accountable for keeping their areas up to standard, right? Well then give me the tools I need to help them help themselves.” That last line got their attention, but that was the easy part. Now my staff addition is on the agenda for further discussion, and that will require a little more homework.

- Relative age of the property and equipment
- Trends in workload
- Maintenance expectations / desired level of finish
- Benchmarking statistics such as the number of staff per square foot or per room, as compared to:
  - Same property in the past
  - Sister properties and/or the competition
  - Industry wide within your market segment
- Cost implications for whatever it is you are requesting.
- When factoring labor into any calculations, be sure to include PTEB burden, when applicable.





Further elaborating on our example, the property in question is 26 years old with mostly original equipment. Its age puts its right at or just beyond the traditional useful life span for most equipment, making it maintenance intensive. The management has raised the level of maintenance expectation to remain competitive in the marketplace, and work requests are rising dramatically. In addition, the property has added 50,000 sf of mixed use space with no commensurate addition in maintenance personnel, increasing its ratio of space to maintenance staff to 36,000 sf per person...and awful lot of real estate in a 4 star resort setting, and substantially higher than other hotels within their competitive set.

Statistics such as these are commonly used

and relatively easy to obtain or calculate. They are also an excellent tool for supporting your cause. In addition, your hotel's maintenance management system is likely a great source of information, and can often provide all sorts of useful data in support of modifying staffing levels, entering into or canceling maintenance contracts, changing shifts, or making a host of other business decisions.

### *Best Graph Wins*

Content aside, your presentation's form will also greatly influence the outcome of your pitch. In this vein, there is an old saying relating to business presentations...the "Best Graph Wins".



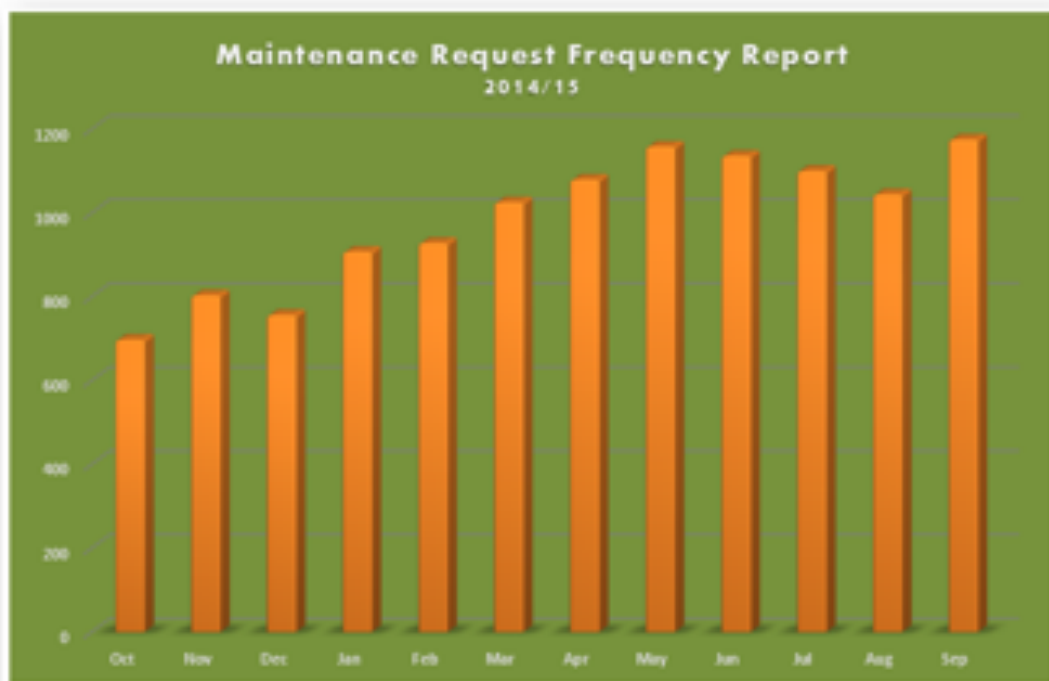
This charmingly simplistic saying means that, in at least in some respects, the appearance of your presentation is just as important, if not more so, than the content. That's not to say it's time to make a viral video or come up with a catchy jingle, but rather to take the time to demonstrate visually the message you are trying to convey verbally. As a decision maker, it's much easier to dismiss a request that you don't understand, so supporting your idea with tangible materials

am trying to send makes itself clearly evident; that maintenance requests are trending upward. More importantly, displaying the graph gives the audience a chance to come to the conclusion you want them to...on their own.

### *In Conclusion...*

Like any sales pitch, success is dependent upon

*Figure 1 – Graphical presentation of call volume over preceding 12 months.*



that can be seen and analyzed will reiterate your message with your audience, and make easier for them to understand.

Relating back to our example, one of the primary reasons for needing more staff is the additional work being requested of them. To demonstrate this, I could simply rattle off the last twelve months call volumes, and subsequently watch as my boss' eyes glaze over. Alternatively, I plan to demonstrate the additional work load visually, such as with the graph shown in Figure 1. By creating this simple graph, the message that I

factors well beyond the intrinsic value of the idea itself. Equally important are your audience, your preparation, and your presentation. Understanding what's important to the decision makers you are attempting to influence, and anticipating their concerns, will bolster your chances of success.

As for me, only time will tell if I am successful in my desire to add staff. But I'm hopeful. Stay tuned...



# QA Quality Assurance

By Todd Isbell



Todd Isbell  
Director of Engineering  
Hilton Clearwater Beach Resort

Let's take a moment to talk about Quality Assurance (QA), usually associated with your bi-annual inspection of the property to ensure our guests have a great experience. From an engineering point of view you must have all of your inspections and documentations up to date and filed; readily accessible for the inspector. I file all of my inspections in a single binder as they come in filed from front to back with the most recent always in front.

A QA is not only that the rooms must be in top order but, the entire property must have a very good "First Impression". Are the curbs painted

and unscathed? Are the parking lot lines well visible? Your QA inspector will be looking at all of this as he or she drives onto your property. Having your plan in place is key to passing the engineering side of the QA inspection.

If you plan your work every day and work your plan, you will be ready for any inspection either from the QA inspector to the state health inspector. In another article I have already mentioned to have a room preventive maintenance plan in place to where all engineers are on board, and have a distinct agenda for each room, and then change it once all rooms have been touched. Each engineer gets 15 to 20 minutes per room to go in and do what the top 5 issues are in the guest complaint section of your calls, i.e. sink and tub clogs, television issues, keys don't work, phone non op, mildew around the tub or toilet... Sound familiar? These are everyday issues that the QA inspector will see. With this in mind, make your every day rooms preventive maintenance list to cover these and other issues and inspect what you expect. I can't stress enough of this to you as a chief to follow up on your engineers.

---

***As chief, follow up on  
your engineers; Inspect  
what you Expect...***

---



Make yourself a daily agenda to walk your property. For me, when I first get to my property, I first check my boilers, just to ensure my guests have hot water for their early morning shower. Next I check the outside lighting to ensure a safe parking lot and garage including guest room balcony lights. I then go to my office and check e-mails, out of order rooms, last night's security report, guest service scores, etc. Then I go to the public areas, checking public area sinks, soap dispensers, checking for loose or discolored seats etc. A walk through the kitchen checking freezer and cooler temperatures, water pressures, air conditioning... ice machines, ovens, fryers; you know the drill.

Checking the fire alarm panel is also a good idea as I have a few times came in to work with a trouble on the panel that no one let me know about. Never depend on anyone to let you know of potential emergency situations, because in the end, it is you that is held accountable. Walk your properties, check ice machines and vending game areas. Go

to the roof. Check your ventilation fans, roof top units, listen for loose belts or bearings going bad. Set your own agenda that fits your property needs and stay with it. Once you have established this goal, it doesn't matter what inspector is coming or already "here"... You will be ready, and don't have to go into the chaotic running around mode that I have seen so many times. Plan your work... work your plan. Keep it simple, perseverance is the key. Know what you need to do and do it. Maintain the full speed ahead attitude and your work life will be much easier.

As an engineer you must use your ears, eyes, nose and sense of touch. Find the issues before they become issues and you'll always come out on top. To repair or replace an item or piece of equipment before it becomes an issue is always much better than repairing it after it became an issue because an unplanned issue often involves the guests dealing with the issue as well as you.







# What would you do?

By Manny Mercado, CDOE



I am sure many of you have seen the show “What Would You do?” So what if we were to change the view from the show’s scenarios of people treating others poorly to “What Would You Do as a Hotel Engineer?” but instead, share different views on how a hotel engineer would or should react in different hotel scenarios. I know several of you have many stories you could tell regarding what you have seen and done in your hotel profession over the years. I think based on the experience you’ve gained, you could train and share with others what you have come across and provide beneficial insight of what should actually be done if one was to run across a similar scenario. I will share some actual experiences and events I have come across throughout my career.

Manny Mercado  
Director of Property Operations  
The Westin Governor Morris  
2 Whippany Rd, Morristown, NJ 07960

**Scenario One:** *Back when I first started my career in hotels, I used to walk the floors early in the morning. I came across a naked person lying down outside a room. I freaked out since it had only been two years into my career and had not seen anything like this so far. So I crept up to the person and I observed them breathing which was a good sign. I got a sheet from the housekeeping closet and approached with caution. I called out loud to the person, “Hey, are you ok?” The person woke up and was startled. I threw the sheet to the person and they covered up. I called my GM and he met us on the floor. It turned out that this person was intoxicated and registered to a room that was shared. The person went out to get ice with no clothes on and eventually passed out in the hall.*

**What would you do?** Well with this experience I would advise calling someone first to assist you. Whether this person that assists you is security or a staff member this should be done before approaching anyone you suspect is intoxicated or potentially dangerous. If you are alone overnight as an auditor or staff member and receive a questionable call, be sure to call the police and request assistance before approaching this person. Always think about your safety first.

**Scenario Two:** Another time when I 'was' working at a 'brand hotel', a smoke detector went off on the sixth floor. The food and beverage manager responded first and reported smoke coming out of the storage room. He opened the door to the storage room and saw a mattress bed smoldering in flames. He grabbed it and ran down the nearby stairwell with it under his right arm. As he ran down the stairs, the bed burst into flames leaving only the metal spring frame behind. He got burnt on the right side of his body from this aggressive flash flare-up.

sitting in his car asking for help. When the houseman approached the man in his car, the distressed man said he was shot. The houseman ran back into the hotel and alerted us. We called the police and they responded immediately. We stayed inside the building until police arrived. It turned out that this man tried to commit suicide.

**What would you do?** During this type of situation, it is advised to alert all staff members on duty of the given circumstances and ensure

## *“What would you do?”*

**What would you do?** This experience taught me a lot about fire safety and the dangers of interacting with fire. Never open a door that has smoke coming out from it. Many hotel doors are fire rated and give you enough time for the fire department to act and take care of it. We are not fire fighters and are not well protected with fire gear to react to such a scenario. We don't want to spread the fire or get exposed to it, so keep it contained and alert others.

**Scenario Three:** We had a houseman who was in charge of housekeeping duties around the hotel, which included cleaning restrooms and the exterior lot. He once came across someone in the parking lot

that management is keeping everyone in the hotel safe and confined inside. This is how we reacted because we did not know the details of the situation. Always think about your safety as well as others. There is law enforcement for that purpose and you just need to stay a safe distance away.

**Scenario Four:** Let's finish off on a happier note. When I was still working at the Ramada Inn, we had an interior pool about 8 feet deep and 40 feet in length. If you have an interior pool I feel bad for you. Maintaining a pool year round is a headache. So anyways, when I was instructed to fill the pool I stayed by





*it to ensure it was filling up with water properly. As the pool was filling up with water, something happened and I was forced to leave. I left the property and went to purchase emergency parts for a kitchen leak. While I was gone I got sidetracked shopping at Home Depot. Twenty minutes into my shopping trip and I got a page on my beeper (yes we had beepers back then). My GM paged me saying "Manny, we are taking in a lot of water in our meeting rooms. How do you shut the pool water off?" At that moment I froze and said to myself "I'm fired. I forgot to shut the water off." I hurried back to the hotel and found the meeting room next to the pool with two inches of water. I spent hours extracting the water that night. I met with the GM and he told me not to let it happen again. I promised the GM and myself that I would never make that mistake again. Well, about two years after that incident I did it again while I was working for the same GM. We just laughed it off because we got along well and I am a valuable member to the staff. I ended up extracting water from the room again all throughout the night.*

**What would you do?** Well for starters, make sure you fill the pool and shut the water off before moving onto another task. I had a great GM who overlooked many of my episodes due to a great working relationship. Also the pool was located in a good spot in the hotel so the damage was limited to two meeting spaces. Others are not that fortunate. Water damage can get costly and believe me, you don't want it to be your fault. Lastly, we eventually got a new GM that took over; one day when I was not on site he facilitated a training session on how to filter backwash a pool. He took some staff members into the pool room and demonstrated how to backwash a pool. When he was at the valve area, he turned the handle to backwash. The head of the handle cracked open and he got sprayed with so much water. He called me into work to help assist him with the backwashing. He turned out to be the joke of the day and admitted he should have asked for training rather than assuming he knew how simple it was.



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# Certifications For Today's Engineer

By George Drumhiller, CCE  
Residence Inn Marriott  
1150 Eldridge Parkway  
Houston TX. 77077



I returned to the hotel industry after being gone for 18 years as a renovator, remodeler, and general contractor. I came back into the hotel engineering field with the last eighteen years of my work involving painting, sheetrock repair, plumbing repairs, and electrical work. Considering my extensive past with hotels and all of the skills I had acquired in the past eighteen years, you'd think this transition to becoming a hotel engineer was going to be a no brainer, right? Well not so fast. Going back to school and continuing my education was the best thing for my future as a chief engineer.

The first thing that I needed to learn about was HVAC. I thought I had a good idea of the working A/C systems, but it turns out I did not. The first A/C system I worked on was ptacs and I had seen them before so they were not a challenge for me. Then I was moved to another property and they had vpacs units. Unfortunately for me, I had never seen them before. So, after calling for service on these, I watched the service guys fix the vpac units. I gained important knowledge from this experience by learning from them. Now I thought, "I can do this, I just needed a little help at the beginning" I got ahold of my HD Supply vender and asked him to send me some R-22 refrigerant..

Again I hit a road bump; I was informed I needed an EPA certification to purchase this. I had no idea that I needed a certification card just to get R-22 refrigerant! I then realized I did not know everything about being a hotel engineer, as I had previously thought I did. This became the first of my many certifications and subsequent studying. I enrolled at Houston Community College where I earned my HVAC Technician 1 and 2 certifications. Going to community college and working meant that even before my day started at the hotel, I went to class. The HVAC was a big expense for the hotel but it meant I now could do most of the work myself, and in turn was able to cut costs for my hotel. That one class alone has saved the hotel a few thousand dollars in just the first year. The HVAC class at Houston Community College was certainly money well spent.

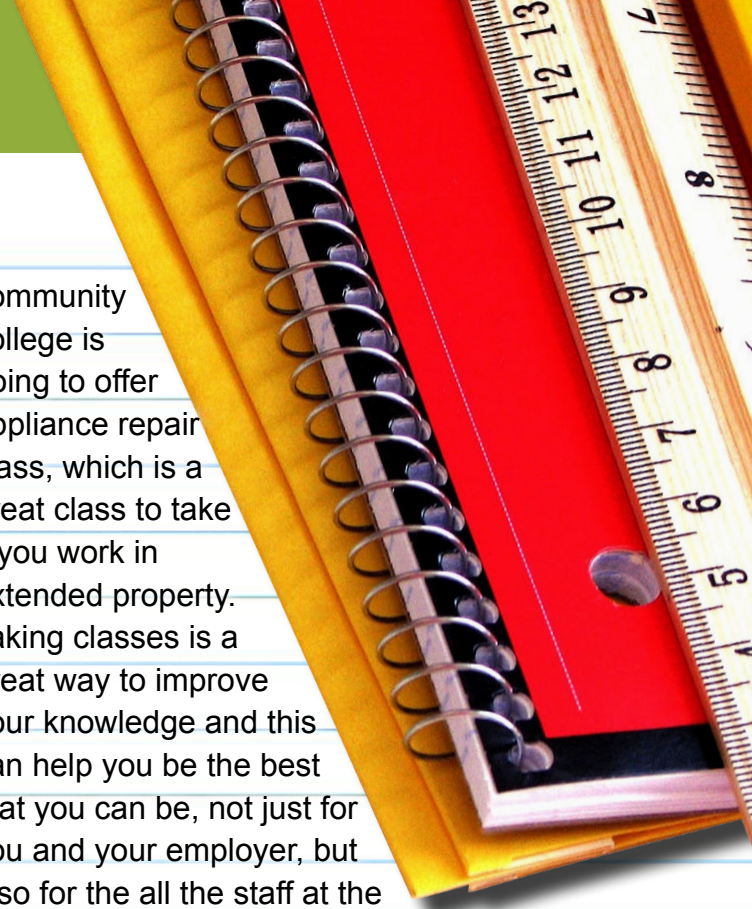
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***I had no idea that I needed  
a certification card just to  
get R-22 refrigerant!***

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I have had to learn a lot of things through experience in my career. Some aspects of this job were easily learned by myself, while others took time and patience learning from those who knew more than me.





One thing I learned myself is that if I have to call out a vendor to look at a big roof Aeon unit, I will use the same service tech to work on the unit. I don't like to pay for other service techs to stand there and try to figure out what the last guy did. I have been using the same service company and the same tech for the last two years on this property and it has saved me both time and money. Most hotel engineers should know how to check the chlorine and pH levels in fresh water pools. No one ever explained to me how the alkalinity, calcium hardness, cyanuric acid, and water saturation all come together to create a salt-water pool. So at first, I had to turn to the vender that only came once a month to service the salt-water equipment, to learn all that I could from him. Rick the service tech has helped me to understand how all of the chemicals in the pool work. After this experience I realized I really had no clue how pools worked, even though I thought I did. Again I found myself learning new information from others. From my experience I have learned vendors are a great source of knowledge as long as they are willing to share what they know with you.

Fire safety awareness is very important to being a hotel engineer. Knowing how fire panels, pumps, sprinklers, and fire equipment works is critical knowledge to have. Lock out tag out, before it was just go fix it. After you have been in this job for a long time and truly take pride in it you will find out what it is all about: Safety, Safety, Safety! It is the number one priority and I would not want one of my hotel staff or any guest at my hotel to be injured or hurt on my property from something that could have been prevented in the first place.

For the past year I have been studying and getting certified. Going to your local community college to see what they offer will help you get ahead in your career. For example my

community college is going to offer appliance repair class, which is a great class to take if you work in extended property. Taking classes is a great way to improve your knowledge and this can help you be the best that you can be, not just for you and your employer, but also for all the staff at the hotel. By sharing knowledge and teaching your staff, they can learn something that will help the hotel as a whole to function better. For small things like water shut off in the rooms after a guest leaves, every second counts because it is money wasted if it is not turned off. When most of the staff knows how to turn off the water, it can help save the hotel money. When a supply line breaks, if the housekeeper, houseman, front desk, van drivers, and even the night security know how to shut it off, efficiency in the hotel can be improved as a whole. Just sharing a little knowledge goes a long way.

Even after taking classes at community college and receiving certifications, I was told that I had to take the Hotel Engineering Certification for limited service properties. I thought do I have time for that? I decided to look into the program. After getting the study guide and looking it over, I then took the 3-part exam. I did well enough on the exam to pass. After completing this course, I now look back and see just how far I have come as a chief engineer in the past few years. I still have a

lot to learn for sure, but knowing how far I have come has made me more certain about my future success as a hotel engineer. Now I know that I can be instrumental in helping the next younger generation of hotel engineers. I can teach them things that I had to learn by myself. This knowledge and mentorship can help them become the best hotel engineers that they can be. It can be very overwhelming when you start a job and there is no one to give you any guidance. Sometimes you will just be handed the keys and a list of work that has not been done for weeks or months because there's was no maintenance personnel on the property. I have seen some young men and women come in at \$12.00 per hour and have no clue what to do. They are in charge of looking over a multi-million dollar property, and sure they know how to do some painting, sheet rock repair, a little plumbing, and if you are lucky they know something about vinyl repair, but they do not know nearly enough to be the chief engineer of the hotel. There is no one to tell them that you have to keep both copies of

the traps and cleanouts for five years or how to fix swimming pools or door locking systems. Every day I learn something new about this job so this is what I have to say to the new hotel engineers: find a good company to work for and give them all you got. If you do this, a good company will notice. With this advice you can go as far as you want. I personally have found a great company that gives me all the support and confidence that I can ask for. I also have the best management team and the greatest hourly employees you would ever want to work with; it is one big family. Keep learning and take classes! Just remember, all of us that have spent time fumbling our way through the beginning of what is a great career path. If we all help each other out, others will not have to make the same mistakes we have made. I would like to thank people like Robert Elliott that have helped us on our way and by creating the National Association of Hotel & Lodging Engineers; it gives all of us the support we need so we can become the best hotel engineers we can be.

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***“By sharing knowledge and teaching your staff, they can learn something that will help the hotel as a whole to function better.”***

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# *The Holiday Season and Stress*

The holiday season is supposed to be a time full of joy, parties, and gathering with friends and family. But the holidays can be times of stress for everyone; the shopping and crowds, the back-to-back diet-busting parties. The endless chats with the in-laws. We understand how easy it is to feel not so wonderful at this most wonderful time of the year.

For quick stress-survival strategies, here's your cheat sheet to holiday cheer.

- Try as much as possible to maintain your daily routine and keep yourself on track.
- Get enough sleep.
- Eat regular meals.
- Exercise.
- Don't obsess about doing it all.
- Ask for help.

Despite our good intentions, remember that the holidays rarely turn out as planned. Set realistic goals and be flexible. The holidays are about love and caring for one another. Try to let go of the image of the "perfect" holiday and focus on making it a special time for you and your family, no matter what the circumstances.





## Training Today's Hotel Engineer To Be Tomorrow's Asset Manager

### Certified Director of Engineering

The (CDOE) is designed for full-service property engineers and their department heads or second(s) in command. 31 Chapters – 437 pages

### Certified Chief Engineer

Our (CCE) program is designed for limited-service property engineers and maintenance professionals who are often hourly employees. 19 Chapters – 265 pages

**Our Curriculum** is written in plain English with simple and easy to understand words. Our program includes information related to the planning and organizing of tasks, overviews of building engineering systems, and the financial and ethical skills required to operate effectively within a hotel organization. The limited-service program includes many common CDOE chapters as well as additional chapters that among others, focuses on; low-rise wood-frame construction, through-wall penetrations, saline pools, moisture infiltration and PTAC units.

The following provides a detailed program chapter analysis:

Management	Building Systems	Building & Grounds
<p><b>Both Full &amp; Limited Service</b></p> <ul style="list-style-type: none"> <li>INTRODUCTION **</li> <li>PRIORITIZE TASKS / TIME MGMT. **</li> <li>PROJECT MANAGEMENT **</li> <li>ENVIRONMENTAL HEALTH &amp; SAFETY **</li> <li>EMERGENCY RESPONSE PLANNING **</li> <li>MAINTENANCE OF THE HOTEL **</li> </ul> <p><b>Full Service Only -----</b></p> <ul style="list-style-type: none"> <li>REPORT &amp; LTR. WRITING*</li> <li>RECORD KEEPING*</li> <li>BUDGETING*</li> <li>SUSTAINABLE OPERATIONS*</li> <li>CONTRACTING FOR SERVICES*</li> <li>BUSINESS ETHICS*</li> <li>PROPERTY ACQUISITION/ DISPOSITION*</li> <li>RISK MANAGEMENT*</li> <li>BUSINESS CONTINUITY*</li> </ul>	<p><b>Both Full &amp; Limited--</b></p> <ul style="list-style-type: none"> <li>ELECTRICAL SYSTEMS **</li> <li>LIGHTING SYSTEMS **</li> <li>FIRE &amp; LIFE SAFETY SYS **</li> <li>PLUMBING SYSTEMS **</li> <li>HVAC **</li> <li>VERTICAL TRANSPORT SYSTEMS **</li> </ul> <p><b>Full Service Only----</b></p> <ul style="list-style-type: none"> <li>SECURITY SYSTEMS*</li> <li>ENERGY MANAGEMENT*</li> <li>BUILDING MANAGEMENT SYSTEM*</li> </ul>	<p><b>Both Full &amp; Limited---</b></p> <ul style="list-style-type: none"> <li>BUILDING DESIGN &amp; CONSTRUCTION **</li> <li>PARKING STRUCTURES **</li> <li>SWIMMING POOLS &amp; SPAS **</li> <li>INTEGRATED PEST MANAGEMENT **</li> </ul> <p><b>Full Service Only-----</b></p> <ul style="list-style-type: none"> <li>BUILDING COMMISSIONING*</li> <li>WASTE MANAGEMENT*</li> </ul> <p><b>Limited Service Only--</b></p> <ul style="list-style-type: none"> <li>MOLD &amp; MILDEW*</li> <li>PTAC UNITS*</li> <li>THROUGH-WALL PENETRATIONS*</li> </ul>
<p>FULL SERVICE = *</p> <p>LIMITED SERVICE = *</p>	<p>Both programs are available for \$685 each.</p>	<p>Additional test is \$125 per.</p>

National Association of Hotel & Lodging Engineers  
www.nahle.org



## Program Attributes

**Transferable:** By focusing on the principles of management, building engineering systems, and the hotel building and its property grounds, we created a curriculum that is easily transferable across different hotel brands and property types.

**Informed Decision Making:** When hotel engineers become better informed, their decision making process improves and they in turn tend to lead others, especially their own staff, to a higher quality standard. This new level of professionalism is best reflected in your property's appearance, staff productivity and efficiency and increasing the useful life of your property's building systems and equipment.

**Hotel Centric:** Both our Certified Director of Engineering (CDOE) and our Certified Chief Engineer (CCE) programs are written exclusively for hotels and lodging properties. From the heart-of-the-house to the property's perimeter access, NAHLE's certification programs are all about hotels and the unique environment of mixed-use occupancies.

**Self-Paced Study:** Our programs are designed for engineers to study at their property and learn at their own speed. An experienced engineer should complete our full service (CDOE) program in about 40 hours typically stretched out over a few months. While the limited-service (CCE) program averages about 20 hours of study. Our curriculums are both based upon the engineer remaining on property and studying on the job.

**Online Registration & Technical Support:** Both Nahle and EI register candidates online and provide technical phone support.

**Reporting:** Nahle has online software available should you want to track study hours for limited-service candidates. We can also provide exam results for groups of properties.

**Multiple Property Roll-Out:** Our programs are designed for management companies to enroll multiple engineers in the program at the same time and have all candidates working toward their certification concurrently.

**Online Exams:** Candidates are designated as a certified engineer upon the successful completion of multiple sectional tests administered online by EI. The CDOE program has two tests and the CCE has three tests. Each sectional test is comprised of numerous multiple-choice test questions drawn from the Study Guide's individual chapters. A minimum passing score of 70% is required. Applicants may take Sectional tests twice.

**Nahle's Value Proposition:** Investing in your staff's professional development challenges engineers to apply their knowledge to the very same systems they are responsible for maintaining on a daily basis. Educational training creates trust and loyalty among your employees. And, perhaps most important, uniform education and training creates an environment of informed decision making. For hotel engineers and maintenance workers, completing a certificate program can be the most cost effective way to **Catch Up, Keep Up and Stay Ahead** of the competition. Studies show that men who complete certificate programs of less than one year earn roughly 10% more than those who do not have such a certificate ([Georgetown University Study: -Certificates: Gateway to Gainful Employment and College Degree](#)). More and more owners expect their engineers to know and apply what is quickly becoming 'common knowledge'.



# Asset Management Begins at the Property

The National Association of Hotel & Lodging Engineers (NAHLE) partners with the American Hotel & Lodging Educational Institute (AHLEI) to provide two self-paced online professional development and training programs for hotel engineers and maintenance professionals.

- **Certified Director of Engineering**  
**Full Service Properties**
- **Certified Chief Engineer**  
**Select Service Properties**

Our programs are exclusively hotel centric. By focusing on the principles of management, building engineering systems, the building and its grounds, we've created a curriculum that is easily transferable across different hotel brands and property types. From the heart-of-the-house to the property's perimeter access, our certification programs are designed to create a uniform environment of informed decision making. Our management reports track the progress of multiple candidates and our most popular program, the Certified Chief Engineer, has online software allowing select service employees to track their hours of study while on the job.

**Contact us today:**

703.922.7105 or [Certification@nahle.org](mailto:Certification@nahle.org)

[www.nahle.org](http://www.nahle.org).