



MSCA HVACR AND PLUMBING **BEST PRACTICES** DURING COVID-19





BEST PRACTICES

1. Always follow ALL the safety recommendations of the government, industry experts, UA and MSCA (go to https://www.mcaa.org/wp-content/uploads/2020/03/MCAA-Safety-Talk_Coronavirus_031920.pdf). Ensure that every employee is properly notified of these new safety procedures and then advertise your new safety program to reassure your clients and customers of your enhanced precautions.
2. Make sure your customers know that HVACR and plumbing services have been designated as an essential service and that your company is open for business (<https://www.mcaa.org/wp-content/uploads/2020/03/CISA-Guidance-on-Essential-Critical-Infrastructure-Workers-1-20-508c.pdf>)
3. Reassure customers that your company is taking all necessary precautions and following all government recommendations to protect your employees and customers. Emphasize that when technicians arrive at a facility they have been instructed to:
 - a. Do not touch a non-sterile surface with their skin or come within 6 feet of another person during the entire day and leave every area cleaner than when they started.
 - b. Sanitize tools and equipment prior to and after working onsite.
 - c. Sanitize any surface they come in contact with, both on the way in and also on the way out.
 - d. Sanitize any piece of equipment they come in contact with and leave equipment cleaner than when they arrived.
 - e. Work independently as much as possible and always stay at least 6 feet apart from others
 - f. Limit intrusion in common areas and in many cases may not even need interior access other than mechanical rooms or methods for roof access.
4. Develop a daily safety checklist for all service techs before they are dispatched to ensure they have no coronavirus symptoms nor have been near anyone with the virus. Document continually and maintain all records. This can be done through a mobile application.



5. Develop a letter for your service technicians to carry with them indicating that under local/state mandates (reference specific regulations/sections if possible) they have been deemed essential employees. Ideally work with your local union to develop such letter. Also, can distribute “Essential Critical Infrastructure Worker” Badges and vehicle placards indicating that employees are allowed to travel and continue to work during current Stay at Home Orders.
6. Customers should be required to provide notification if they have knowledge of anyone in the facility or residence who either have COVID-19 or have been exposed to the virus.
7. Encourage your sales personnel to maintain contact with customer base. Now, more than ever, you don’t want to lose your current customer base. Set up ZOOM or FaceTime meetings. Assess their upcoming needs. Now is the perfect time for future planning.
8. Perform some jobs on regular time that previously demanded OT now that buildings are less occupied or not occupied at all, which otherwise would be concerned with noise or tenant complaints (good time to perform such jobs such as hot water system flushing, air balance, chiller annuals, boiler annuals)
9. Offer “special” services such as filter changes, coil cleanings, and UV lighting so that your customers’ employees “Feel Safe” to come back to the building knowing that all appropriate steps have been taken.
10. Cash Flow is your primary concern. Control payables by deferring payments if possible. Contact insurance companies, suppliers, all vendors, etc. All outstanding receivables must be immediately billed to your customers. Keep all your cash on hand, you will need it when we get to the other side of this thing.
 - a. Create cost codes to capture all costs and productivity impacts related to COVID19 in the field and the office. These costs may, in the future, be covered under your business interruption policies. It’s very possible Congress could legislate that COVID19 is an insurable matter. Better to document and track costs now.
 - b. Work with your banker to apply for the CARES Act loans (grants) but do not count on seeing a check for two to four months. Your banker can guide you to the right loan program for your company.
<https://www.mcaa.org/wp-content/uploads/2020/03/Alston-Bird-Overview-Cares-Act-Funding-Sources-March-30-2020.pdf>
 - c. Have your CPA firm advise you regarding any tax planning opportunities arising from the CARES Act.



11. If you have a strong balance sheet, prepare to act now!
 - a. Look to buy talent, cheap acquisitions, etc.
 - b. Use this time to innovate – develop new products and solutions.
 - c. Also, use this time to digitize and streamline your work processes and train your people.
12. Develop a proactive four-tier cost cutting plan and implement it immediately when the pre-established triggers are met
13. Decrease hours or compensation for in-house salaried personnel to decrease overhead. Instead of layoffs, decrease hours for all techs/plumbers so more employees can continue to work – even if less hours. If you choose to pay union employees to stay home then ensure that your collective bargaining agreements only require benefit contributions on hours worked.
14. Review your client/project list for essential work that will continue and keep enough service mechanics to handle emergency calls. Use your off-hour night systems to route the calls and minimize staff handling.
15. Update emergency contact lists for all employees – you may need to get in touch with all employees very quickly
16. Know how to get someone tested for COVID-19 (ie locations, phone numbers, website to find test centers) before the need may arise
17. Stay in constant communications with your teams – whether it be through Microsoft TEAMS, ZOOM meetings, conference calls, daily emails, text messages, etc.
18. Do not have technicians come to the shop unless absolutely necessary
19. Review full coverage contracts with your customers. Make sure you have continued access to equipment so required work can be performed.
20. Ensure all techs have the proper PPE for working near plumbing vents and rooftop HVAC equipment – specifically exhaust fans
 - a. Safety glasses with face shield
 - b. 95 respirator or equivalent respiratory protection
 - c. Protective suits/coveralls
 - d. Cut resistant outer gloves
 - e. Nitrile inner gloves
 - f. Disposable booties



21. For plumbers handling human waste and sewage, make sure they have the proper PPE including:
 - a. Safety goggles
 - b. Splash-proof face shield
 - c. NIOSH certified N95 facemask/respirator
 - d. Liquid-repellent coveralls, such as Tyvek
 - e. Nitrile inner gloves (6 mil thickness or greater)
 - f. Rubber outer gloves
 - g. Rubber boots
 - h. Wear two liquid-repellant protective suits (outer suit and inner suit) for additional protection during cleaning of tools and equipment after work is complete.
 - i. After completing work, follow this procedure:
 - o Carefully remove outer suit and glove by rolling inside out.
 - o Place in a plastic bag that can be sealed.
 - o Complete cleaning of tools and equipment (See guidelines below).
 - o Remove inner suit and gloves by rolling inside out being careful not to contact any contaminated surfaces.
 - o Wash hands, arms and face (in that order) with soap and water for at least 20 seconds each body part *immediately after* removing PPE.
 - o Keep your PPE clean by following manufacturer instructions carefully.
22. Stock techs'/plumbers' trucks with disinfectant soap and water for handwashing
23. Spray disinfectant for all tools across the board; prohibit tool sharing
24. Increase outdoor air ventilation rates
 - a. Disable demand-controlled ventilation (DCV)
 - b. Open minimum outdoor air dampers, as high as 100%, to eliminate recirculation
25. Encourage use of MERV-13 filters or the highest compatible with the filter rack and seal edges of the filter to limit bypass
26. Keep systems running longer hours, if possible 24/7, to enhance ventilation and air filtration
27. Humidity control between 30 – 60% at all times is highly recommended with 30% being ideal for winter in cold/dry climates, and 50% – 55% being ideal for summer in warm/humid climates. Humidity that is too low may make COVID-19 worse.



28. More indoor surface sanitizing means more chemical use indoors and more ventilation and dilution needs
29. Consider portable room air cleaners with HEPA filters
30. Offer UV air purification systems for stand-alone or installed in air systems
 - a. Some available products include: REME HALO by RGF the next generation of IAQ technology; HALO LED – first LED in-duct whole home air purification system; Commercial PHI Unit designed to reduce odors, air pollutants, VOCs, smoke, mold, bacteria and viruses (specific testing on COVID-19 not yet done)
31. Needle Point Ionization as an alternative to UV Lighting
32. Indoor Coil Cleaning with Biocides
33. Install remote access to BMS systems
34. Lock box on thermostats – no touching
35. Find alternate forms of egress to mechanical systems – avoid as much contact as possible with customer employees
36. Stockpile three months of water treatment chemicals, filters, belts, etc.
37. Order long lead-time service parts like spray pumps and tower motors now to have on hand.
38. ASHRAE 188 compliant cooling tower cleanings
39. Since many buildings currently unoccupied, this can result in the stagnation of water systems which can lead to the growth of legionella in the plumbing and mechanical systems. Once these buildings start to be re-occupied, every building owner needs to understand that these systems will need to be disinfected, flushed and tested at a minimum. Now, more than ever, ASSE 12000 Infection Control Risk Assessment certification is crucial. ASSE Series 12000 Standard, Professional Qualifications Standard For Infection Control Risk Assessment For All Building Systems now available as free download (<https://asse-plumbing.org/media/23442/12000-2018.pdf>)



40. Prepare a post-COVID19 action plan:
 - a. What was our mission prior to C19?
 - b. How has C19 impacted our service or products we deliver to our customers?
 - c. What changes since C19 will be permanent?
 - d. What new protocols, standards or regulations will be necessary to return to PRE C19?
 - e. What steps should be taken today to ensure the smoothest transition into POST C19?

41. Check out the MCAA/MSCA COVID-19 Resource Center daily (<https://www.mcaa.org/coronavirus-news-resource-center/news/>) for updates on safety issues, legislative and regulatory updates, emergency funding, webinars, and additional COVID-19 resources.