



**Hundreds of Projects.  
Nine Major Markets Served.**

- » Commercial/industrial
- » Healthcare
- » K-12 education
- » Higher education/institutional
- » Bio-medical research
- » Mission critical data centers
- » Hotel and lodging
- » Theme parks and entertainment
- » Broadcasting and communications



## Professional Repair & Replacement Services. For Cost-Savings & Peace-of-Mind.

EMCOR Services MSI designs, builds, operates, and maintains commercial heating, ventilation and air conditioning systems that help create healthy, productive, and efficient working environments. Backed by a team of some of the region's most highly trained HVAC specialists and professionals, we have the resources necessary to support your needs through every phase of your ownership cycle.

When commercial HVAC equipment breaks down or is running inefficiently, it can be difficult to determine whether it's time for repair or replacement—our team of HVAC experts can help guide you through the process. Whether clients need a minor repair, recurring maintenance, or a complete equipment replacement, we have the capacity and technical expertise needed to complete the job.

EMCOR

### Equipment Service Life Overview

| EQUIPMENT SERVICE LIFE SPAN |               |       |
|-----------------------------|---------------|-------|
| Equipment Type              |               | Years |
| Packaged & Split HVAC Units |               | 15    |
| Chillers                    | Water-Cooled  | 20–25 |
|                             | Air-Cooled/DX | 15    |
| Cooling Towers              |               | 20    |
| Condensers (Air-Cooled)     |               | 15    |
| Boilers                     | Electric      | 15    |
|                             | Others        | 25–35 |
| Pumps                       |               | 15–20 |
| Controls                    |               | 10–15 |
| Coils (CHW and DX)          |               | 20    |

The above service life estimate ranges are based on data in the ASHRAE Applications Handbook (A37-2015, Table 4) relevant to commercial and industrial applications. Actual life can vary widely. To learn more, go to the ASHRAE database.

While actual equipment life span can vary widely, these published estimates and ongoing repair and maintenance records can help determine the "sweet spot" for system replacements.

#### EQUIPMENT FAILURE RATE

### Balancing Budget Demands, Equipment Demands, and Business Demands.

Because it requires a significant investment, clients often try to delay commercial HVAC equipment replacement as long as possible. However, even in the best environment, expenses from repairs, downtime, and system inefficiency can surpass the cost of replacement.

At MSI, we don't simply offer repair and replacement services, we develop a replacement strategy that carefully considers the demands on an HVAC system, the tenants' expectations, and the clients' business needs.

### Assessing Equipment with A Proven Approach.

When MSI assesses equipment replacement, three major factors are taken into account, in order to help minimize costs and maximize system function.

**Lifespan:** We calculate the remaining useful life for equipment by considering the age of the manufacturer, the published service life estimates, and addition factors based on maintenance, run-time, and operating environment.

**Energy Savings:** Often significant energy savings are immediately available when old equipment is replaced with new, high efficiency machines.

**Downtime/Reliability:** From inconvenience and tenant discomfort to actual revenue loss—the negative affects of system downtime are also factored into a replacement strategy.