

# Construction Specialty Subcontractors: Mechanical, Electrical, and Plumbing

**Industry Digest** 



#### **SUMMARY**

Specialty contractors by definition have specific skills and unique needs across the board. Within this category are specialized plumbing; heating, ventilation, and air conditioning (HVAC); and electrical contractors and subcontractors.

Mechanical, Electrical, and Plumbing (MEP) contractors are addressed together due to a high degree of crossover among the skills. These professionals work with complex and technical aspects of the construction project. Careful planning and execution are needed for success in the MEP trades.

Discover how to transform your MEP business with a modern, cloud ERP application. Get ahead of the competition with best-in-class financials, embedded CRM, AIA billing and reporting, and robust compliance and inventory features. Harness the power of a future-proof business platform with role-based dashboards, configurable workflows, and low-code and no-code customization tools with hundreds of certified marketplace applications for extended functionality.

This Industry Digest provides an overview of the MEP industry along with a spotlight on industry trends. Learn how a construction-specific ERP application can alleviate common MEP challenges, get a construction ERP comparison checklist, and access important MEP resources that support this growing industry.

"The intuitiveness of Acumatica is laid out very nice, and that makes it very simple to use. It's simple to put dashboards together, and it provides notifications for authorizations, which helps keep everyone plugged in and using the solution."





Plumbing, HVAC, and electrical contractors have skills that are necessary within the context of almost all construction projects. The future is bright for MEP contractors because the need for new construction translates to a steady stream of profitable MEP projects. As supply chain backlogs ease, MEP material prices and stock are expected to stabilize. Skilled worker training and retention are also a high priority. It is predicted the MEP market will see steady growth fueled by advances in technology and infrastructure investments.

# INDUSTRY GROWTH PROJECTIONS AND MARKET SIZE

The MEP services market is expected to grow by \$80.54 billion at a CAGR of 11.5%¹ during the forecasted period of 2022–2027. As is the case with the entire construction industry, the pandemic created challenges for MEPs, such as difficulty finding workers and delays from supply chain backlogs. The market is now in recovery mode and looking towards overcoming those setbacks.

The skilled labor shortage continues to challenge specialty contractors. The post-pandemic construction industry saw some workers entering retirement early and others looking at employment in other industries.<sup>2</sup> Specialty contractors have prioritized attracting and training new workers in their respective fields.

The continuation of global supply chain issues<sup>3</sup> means that materials and components used in MEP equipment, such as refrigerants, compressors, and embedded systems are still in short supply. Volatile material availability and unpredictable prices challenge MEP contractors' abilities to bid and budget for construction jobs. To combat rising material costs, contractors and subcontractors are passing these price increases on in the form of higher project bids.

Companies within the MEP services fall under the SIC codes 1711 (Plumbing/HVAC) and 1731 (Electrical). The NAICS code for electrical contractors is 238210 and mechanical contractors and HVAC/Plumbing are grouped under 238220.

Below is a market breakdown of US companies by 6-digit SIC Code for the five largest segments within the MEP specialty contractor industry.

**MEP Market Size**<sup>4</sup> (chart showing the company size and number of companies)

SIC CODE	INDUSTRY SEGMENT	1-20	21-50	51-100	101-250	251-500	501+	TOTAL
1711-02	Heating Contractors	42,634	5,465	1,340	494	107	39	50,079
1711-05	Plumbing Contractors	54,425	5,150	1,329	517	93	43	61,557
1711-14	Mechanical Contractors	16,909	2,858	905	488	87	49	21,296
1711-17	Air Conditioning Contractors	48,000	6,074	1,646	701	155	74	56,650
1731-01	Electric Contractors	51,838	4,933	1,643	890	178	133	59,615

1. Source: Globe News Wire

2. Source: For Construction Pros

3. Source: Dodge Data & Analytics

4. Source: Data Axle 2023



Discover Why the MEP Industry Relies on Acumatica for Its Success

### INDUSTRY DESCRIPTION

MEP contractors must collaborate with all specialty trades on the job site with a keen eye on the project budget. In addition to installation and maintenance, MEP contractors may oversee the full scope of the project and monitor resources on the job site.

MEP contracting companies often report to a general contracting company. Therefore, they must maintain certifications, insurance, and compliance documentation themselves. MEPs create and submit competitive bids to win work with general contracting companies. This selection process hinges upon meeting safety standards and fostering a rapport with the GCs.

While a GC may hire MEP contractors to subcontract out parts of a construction job, many specialty contractors provide independent services outside of the GC contract. MEP contractors are therefore service-oriented, providing equipment installation and remote field services including repairs and maintenance. As a result, MEP service companies must manage service requests, schedule service jobs, dispatch technicians, manage equipment and warranty services, plan for inventory requirements, and respond to customer needs.

## **MECHANICAL CONTRACTORS**

Mechanical contractors handle the heating, cooling, and refrigeration systems within a building. Once installed, they may also handle system maintenance and repairs. A mechanical contractor can work on varying projects. This includes large-scale plumbing, HVAC, electrical, piping, ductwork, and gas work. If mechanical parts are involved, they may inspect and ensure everything is working correctly. Mechanical contractors often manage staff and may even hire subcontractors for more specific activities.

The HVAC segment of MEP installs and repairs heating and air conditioning equipment as well as building ventilation. They handle the movement of heated or cooled air throughout a building. HVAC contractors are trained in all three areas: heating, air conditioning, and ventilation. Some HVAC contracting companies employ technicians who travel to customer sites to install, repair, and service HVAC systems.

# **ELECTRICAL CONTRACTORS**

The responsibilities of an electrical contractor include the design, installation, and maintenance of all electrical systems within a building. They may also install and maintain communications and security systems. These professionals ensure that systems work effectively, safely, and sustainably.

Interior electrical construction encompasses outlets, fixtures, panel boxes, and any other electrical needs within the structure. As the name suggests, exterior electrical contractors complete electrical work outside of the building, but this term also includes the people who work on telecommunication lines. There is a growing need for integrated electrical contractors who install and maintain the electrical systems in a larger building network, such as comprehensive climate control systems.

#### **PLUMBING CONTRACTORS**

A plumbing contractor is licensed to install and maintain pipes, valves, fittings, and drainage systems in both commercial and residential buildings. They can design plumbing systems, layout the water supply, and fit new plumbing fixtures. Plumbing contractors require more rigorous training, certifications, and experience than a general plumber. Consequently, there are fewer plumbing contractors than plumbers in the workforce. Because they have more training, plumbing contractors may oversee the work of general plumbers. Plumbing contractors are well-suited to oversee the plumbing needs on a construction project for these reasons.

"With Acumatica, the entire department can see the support ticket, all technicians and support agents have the visibility needed to make sure customer issues aren't getting lost. Our team is much more efficient."





Selecting a solution to run your MEP company is a decision that affects your company for years to come. Many products offer the same or similar features, and it can be confusing to sort out what is important and what is not. Acumatica's **Construction ERP System Evaluation Checklist** is a good starting point when evaluating ERP solutions. The interactive checklist below provides a list of critical features that MEP contractors need to thrive in the market.

FEATURE	BENEFIT	PRIORITY	Acumatica	
Job Cost Accounting	Guarantee important contracts, clients, and revenues are not lost with included AIA reporting and billing. Compare costs with original and revised budgets.		~	
Project Management	Enable flow of project data between managers, field teams, and ofice staff. See changes in project scope, labor, materials, and equipment in real-time.		~	
Change Orders	Manage change orders with automated workflows. Streamline change orders for multiple projects with unit rate changes, custom retainage, and cost-only change requests.		~	
Compliance	Manage lien waivers, insurance certificates, and status updates. Provide expiration dates and other alerts to staff and suppliers. Generate automated compliance documents.		~	
Payroll	Flexible payroll supports multiple unions, locals, classes, benefits packages, complex wages, and certified wages.		<b>~</b>	
Labor Documentation	Each employee's compensation records are easy to track and report on. Certified payroll allows subcontractors to complete all government-required documentation.		~	
Daily Field Reports	Collaborate with other subcontractor teams in the field. Ensure everyone has the same project updates to improve planning, scheduling, and billing.		~	
Embedded CRM	View real-time customer data, including quotes, orders, invoices, payments, support cases, and service calls. Empower customers with a self-service customer portal.		~	
Document Management	Store and retrieve all project documentation electronically for improved communication with all stakeholders.		~	
Field Services	Manage MEP technician schedules and use mobile devices for GPS navigation, voice note dictation, mobile time reporting, and mobile expense receipt capture.		~	
Inventory Management	Track project materials in warehouses, mobile service vehicles, and on other job sites.		<b>~</b>	
Purchasing/ Procurement	Built-in drop shipping ensures materials and equipment arrive at the job site when they are needed.		~	
Equipment Tracking	View equipment service history in the field. Define warranties and schedule recurring preventative maintenance.		~	
CAD and BIM Applications	Reduce design cycles and production times for MEP projects with marketplace applications for CAD and BIM integration.		~	
Mobile Functionality	Empower workers to respond quickly to customers, vendors, contractors, and other subcontractors from the field.		~	
One Source of Truth	Connect all people, projects, and processes with one central location for all project data. Eliminate data silos with a comprehensive 360-degree view of each project.		~	
Easy Integrations	Easily integrate with vetted Marketplace applications to extend functionality and meet unique business needs.		~	
Business Intelligence	Use powerful business intelligence to gain a better understanding of financial and customer data to make informed, actionable decisions.		~	
Ease-of-use	Attract and retain employees with a modern and easy-to-use cloud platform. Customize screens and dashboards to fit different roles in the company.		~	
Scalability	Scale up or down as business needs change without incurring costs for added licenses. Pay for resources used, not the number of users, giving everyone access.		~	

# **INDUSTRY** Resources



Resources are provided below to help MEP specialty subcontractors in their digital transformation projects. Network with peers in MEP-specific associations, attend industry trade shows, and read about construction technologies in trade media and industry reviews. Access Acumatica resources to learn more about software to automate and streamline business operations.

#### **INDUSTRY EVENTS**

- Air Conditioning, Heating, Refrigeration Expo (Link)
- ASHRAE Annual Conference (Link)
- ASPE Convention and Expo (Link)
- Associated Builders and Contractors Convention (<u>Link</u>)
- CFMA's Annual Conference (Link)
- Electrical Wire Processing Technology Expo (Link)
- ENR Future Tech (Link)
- Electronic Security Expo (Link)
- FLOW EXPO (Link)
- Greenbuild (<u>Link</u>)
- Groundbreaking Women in Construction (Link)
- LightFair Trade Show and Conference (Link)
- NAHB International Builders' Show (Link)
- National Electrical Contractors Association Show (Link)
- PHCC Connect (Link)
- POWERGEN International (Link)
- Procore Groundbreak (Link)
- Sheet Metal AC Nat'l Assoc. Annual Convention (Link)
- Spark Conference presented by IEC (Link)
- The Utility Expo (Link)
- Water & Wastewater Equipment, Treatment & Transport Show (Link)
- Water Expo (Link)
- World Plumbing Conference (Link)

#### **INDUSTRY ASSOCIATIONS**

- AC Contractors of America (Link)
- Air Movement and Control Association (Link)
- American Society of Heating, Refrig. & AC Engineers (Link)
- American Society of Mechanical Engineers (Link)
- American Society of Plumbing Engineers (Link)
- The Canadian Institute of Plumbing and Heating (Link)
- Canadian Society for Mechanical Engineers (Link)
- Consortium for Energy Efficiency (Link)
- Construction Financial Management Association (Link)
- Electronic Security Association (Link)
- Independent Electrical Contractors (Link)
- Intl. Assoc. of Plumbing and Mechanical Officials (Link)
- Mechanical Contractors Association of America (<u>Link</u>)
   Membership includes:
  - MSCA (Mechanical Service Contractors of America)
  - PCA (Plumbing Contractors of America)
  - NCPWB (National Certified Pipe Welding Bureau)

- National Electrical Contractors Association (Link)
- Plumbing Contractors Association (Link)
- Plumbing-Heating-Cooling Contractors Association (Link)
- Radiant Professionals Alliance (Link)
- Refrigeration Service Engineers Society (Link)
- Sheet Metal, Air Conditioning National Association (Link)
- United Association (Link)
- Women in HVACR (Link)

#### TRADE MEDIA AND ANALYSTS



- BIM Learning Center (Link)
- Canadian Contractor (Link)
- Construction Dive (Link)
- Contractor Magazine (Link)
- For Construction Pros (Link)
- Electrical Contractor Magazine (Link)
- Electrical Contracting News (Link)
- Engineering News-Record (Link)
- HPAC Heating, Plumbing, and Air Conditioning (Link)
- HVAC Forum (Link)
- HVAC Informed (Link)
- HVAC & Refrigeration Insider (Link)
- On-Site Mag (Canada) (Link)
- Mechanical Hub (Link)
- Metal Construction News (Link)
- NECA & Electrical Contracting News (Link)
- PHCP Pros (Link)
- Plumber Magazine (<u>Link</u>)
- Plumbing and HVAC Magazine (Link)
- Plumbing & Mechanical Magazine (Link)
- Plumbing Perspective (Link)
- Women in HVACR Newsletter (Link)

#### **ACUMATICA RESOURCES**

Access the Acumatica Resource Center to learn more about Acumatica Construction Edition for specialty contractors.



Visit Resource Center





Acumatica is the choice for progressive MEP contractors. The future-proof cloud platform empowers specialty contractors to tailor the application to their unique needs with low-code, no-code customization tools, configured workflows, and access to hundreds of certified marketplace applications.

Give project accountants and project managers the ability to track all costs and documentation that affects the job. Automatic alerts and mobile access ensure that nothing is left to chance when it comes to the project's profitability. Timesheets and resource allocations link to projects for real-time views on every job. Acumatica streamlines change orders for multiple construction projects with unit rate changes, custom retainage, and cost-only change requests. Easily drop-ship workflows connected to change orders.

With AIA billing and reporting and tax compliance by geographic area natively supported, employee compensation records are easy to track. Effectively manage lien waivers, insurance certificates, and status updates. Acumatica stores insurance and bond certificates electronically, so they are accessible at any time. Provide automated updates when staff or company compliance documents are close to expiring. Create forms within the system to record employee training and occurrence logs.

Real-time access to job progress means materials used on a job are restocked as needed. Track inventory in warehouses, mobile service vehicles, and on other job sites. Ensure the right MEP equipment is in inventory to complete each job.

Acumatica Construction Edition's centralized storage of all data means teams can leverage daily field reports to transmit project updates immediately to prevent issues from escalating. Managers traveling between job sites can access real-time information from mobile devices, including dashboards, submittals, drawings, photo logs, and RFIs.

Acumatica Construction Edition provides ease of use and an adaptable platform facilitating rapid integrations to connect modern technologies. MEP specialty contractors can integrate with BIM, estimating, field service applications, and more. Built on a scalable cloud ERP platform, Acumatica's open architecture is backed by the industry's best value-added reseller network. Acumatica Construction Edition provides the MEP specialty contracting industries with a solution for transforming your business to thrive in today's economy.

"We were looking for the ability to consolidate our results across all our different companies.

And then we were looking for something that would integrate easily with other third-party best-in-class vendors."

 JOHN WEIBKE, DIRECTOR OF FINANCE, ENVELOP GROUP

LEARN MORE >



Acumatica Cloud ERP is a comprehensive business management solution that was born in the cloud and built for more connected, collaborative ways of working. Designed explicitly to enable small and mid-market companies to thrive in today's digital economy, Acumatica's flexible solution, customer-friendly business practices, and industry-specific functionality help growing businesses adapt to fast-moving markets and take control of their future.

For more information on Acumatica, visit www.acumatica.com or follow us on LinkedIn.