

AOBA Engineering Talent Task Force

Building Engineer Competencies at a Glance

Experience Level	Approximate Years of Experience ¹	Common Titles ²	Qualities	Skill Sets	Knowledge	Suggested Education and Training Courses
Entry-Level	0-3 years	Maintenance Helper	Dedicated	Physical requirements ³	Basic hand tool use	Basic Electricity
		Maintenance Mechanic	Self-motivated	Mechanical aptitude	Basic fasteners	Basic HVAC
		Maintenance Technician	Career-oriented	Ability to learn new skills	Safety	OSHA 10-hour Course for General Industry
		Assistant Building Engineer	Communications	Innovative/creative thinking		Basic Plumbing
			Interpersonal skills	Hand/eye coordination		
			Responsible	Computer/technical skills		
			Adaptable/flexible	Manual dexterity		
			Reliable/dependable	Read, write, speak, and comprehend English ⁴		
Mid-Level (Supervises Small Teams)	3-5 years	Maintenance Mechanic	All of the above plus:	All of the above plus:	Operation of major building systems, including:	Low Pressure Boilers
		Maintenance Technician	Leadership/Management skills	Ability to apply training to real life situations	Electrical	CFC Universal
		Building Engineer	Decision making	Read and comprehend blueprints and specifications	Plumbing	Basic computer skills (Microsoft Word and Excel)
			Problem-solving	Assist with budgets	HVAC	DDC Controls I
			Discretion		Fire and life safety	Pneumatics I
			Ability to lead by example		Project management	Electricity II
					<i>In some jurisdictions, licenses and certifications might be required (CFC, operating engineer, etc.)</i>	HVAC II
						High Pressure Steam
Senior-Level (Manages Large Teams)	5-10 years	Lead Engineer	All of the above plus:	All of the above plus:	All of the above plus:	Operating engineer license (DC-3 ⁷ , NIULPE 1, or MD 1 ⁷)
		Assistant Chief Engineer	Self-starter	Ability to transfer knowledge	Intimate knowledge of local and national codes	Mid-level computer skills (Microsoft Word and Excel)
		Chief Engineer	Ability to work independently	Strategic thinking	Human resources	OSHA 30-hour Course for General Industry
		Regional Engineer	Effective verbal/written communications	Project coordination and implementation	Emergency plans	DDC Controls I
		Regional Manager	Ability to plan and organize	Ability to set/achieve goals	Sustainability	Pneumatics II
			Teamwork	Ability to "manage up"	Energy management	Electrical III
				Analytic and budgeting skills	Commissioning	HVAC III
				Ability to coach, manage, and train	Due diligence	Management Skills I
Executive-Level (Directs Engineering Function)	10+ years	Operations Manager	All of the above plus:	All of the above plus:	All of the above	LEED Green Associate or Accredited Professional Management Skills II
		Director	Develops best practices/policies	Contract administration		
		Vice President	Ability to see "big picture"	Financial aptitude (forecasting, budget control, capital expenditure plans, etc.)		
		Senior Vice President	Discretion			
			Understands property life cycle			
			Strategic asset management	Ability to communicate with executives		

NOTES

- Employees advance within the various experience levels based upon the employee's readiness for promotion and the opportunities that are available to him/her. Years of experience are approximate. Some employees will advance faster - and others will advance more slowly.
- There are many different titles assigned to employees at various levels of experience. The task force believes these are the most common titles used in the region for employees at each experience level.
- The physical requirements described as follows are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions to the extent the Company may do so without undue hardship. While performing the duties of this job, engineering employees are frequently required to talk or hear, stand, sit, walk, use hands to finger and feel, and reach with hands and arms. The employee is regularly required to climb or balance, stoop, kneel, crouch or crawl. The employee is occasionally required to taste/smell and lift and/or move up to 50 pounds. Special vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception, and the ability to adjust to focus.
- Bilingual employees can offer a major benefit. Employees might need to take English as a Second Language (ESOL) and other courses to ready them for a career in engineering. Managers of employees from different cultures could benefit from training about how to manage a diverse workforce, how to be sensitive to other people's customs, etc.