

**NAAEI CAMT CONTENT OUTLINE**

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
<i>Domain I: Essential Trade Skills</i>	<i>010000</i>	<i>35</i>
<b>Task 1: Perform electrical services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010100</b>	<b>5</b>
<b>Knowledge of:</b>		
a. Ohm's Law (Watt's law) and common terms	010101	
b. Common electrical principals and usage of common devices	010102	
c. Operation of MultiMeter	010103	
d. Introduction to schematics and commonly used symbols	010104	
e. Usage of lock-out tag-out and personal protective equipment (PPE)	010105	
f. Fixture use and operation of incandescent, fluorescent and LED lights	010106	
g. Applicable National Electrical Code Regulations	010107	
h. Flash protection	010108	
<b>Skill in:</b>		
i. Using meter to measure Volts, Amps, Ohm's and Continuity	010109	
j. Diagnosing and troubleshooting residential circuits including outlet (switched and direct), switch (single and three way), ground fault circuit interruptor (GFCI), and common safety devices (e.g., smoke detector, CO detector)	010110	
k. Performing proper electrical connections and repairs per National Electric Code (NEC) including terminal connections, lugs, wire to wire (wire nuts), and covered boxes	010111	
<b>Task 2: Perform plumbing services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010200</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Plumbing construction, including supply side common connections and repair techniques, drain side common connection and repair techniques, and venting issues	010201	
b. Proper use of tools, including the toilet plunger (Sink and toilet) and the snake and auger (hand crank; not powered)	010202	

Description	Classification Code	Number of Questions
c. Common fixture repairs and replacements, including toilet, faucet, sink, tub drain, and overflow	010203	
d. Proper installation of caulking and plumbing chemicals including caulk, plumber's grease, thread seal, and plumber's putty	010204	
<b>Skill in:</b>		
e. Repairing common pipe leaks using the appropriate fitting (threaded, barbed (e.g., sharkbite), compression, flare, solvent weld (glue and primer), solder)	010205	
f. Clearing drains without the use of chemical drain opener	010206	
g. Diagnosing and repairing all toilet components from flange repair up, including wax ring and bolts, toilet bowl, tank, fill valve, and flush valve	010207	
h. Diagnosing and replacing fixtures from the supply line in, including angle stop and supply line, faucet leak at counter, faucet underbody, faucet control (valve control adjust and replace), and aerator.	010208	
<b>Task 3: Perform HVAC services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010300</b>	<b>3</b>
<b>Knowledge of:</b>		
a. Commonly used safety equipment, including equipment for lock-out tag-out and personal protective equipment (PPE)(gloves, eye protection, insulated tools)	010301	
b. Thermodynamics (pressure temperature relationship, heat transfer, vapor compression cycle)	010302	
c. Heating and cooling system schematics	010303	
d. Tool identification and use	010304	
e. EPA regulations regarding mercury (older thermostats) and refrigerant (Section 608 certification requirements)	010305	
f. Refrigeration cycle operation and repairs, including superheat and subcool charging, Schraeder core repairs, and application of proper refrigerant handling (recovery, recycling, reusing, reclaiming)	010306	
g. Heating repairs (schematic and operation), including electrical furnace (forced air and convection), gas furnace, hydronic, and heat pump	010307	
<b>Skill in:</b>		
h. Tracing issues on a schematic as to relationship and sequence	010308	

Description	Classification Code	Number of Questions
i. Adding/removing refrigerant (as student certification allows)	010309	
j. Correcting common service issues including clogged filters and clogged/obstructed coils (Evap and Condenser).	010310	
<b>Task 4: Perform painting services correctly and in a timely fashion in order to ensure longevity and appearance of the asset (buildings and/or apartment units).</b>	<b>010400</b>	<b>1</b>
<b>Knowledge of:</b>		
a. Commonly used personal protective equipment (PPE)(gloves, eye protection, respirator)	010401	
b. Safety regulations overview regarding lead, mold, and asbestos (information only, not a certification program)	010402	
c. Proper preparation techniques, including wall texture, dust removal, priming and painting	010403	
d. Texturing methods including smooth, orange peel, knock down, stipple, and popcorn	010404	
e. Paint types, including differences between interior and exterior paints as well as sheen and gloss types (flat, satin, semi-gloss, gloss)	010405	
<b>Skill in:</b>		
f. Cut in and coverage techniques using both brush and roller	010406	
g. Repairing damaged areas and matching textures	010407	
<b>Task 5: Perform construction services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010500</b>	<b>3</b>
<b>Knowledge of:</b>		
a. Commonly used safety equipment, including equipment for lock-out tag-out and personal protective equipment (PPE)(gloves, eye protection)	010501	
b. Caulking (latex, silicone)	010502	
c. Tile repairs including grout and install tile (floor and wall)	010503	
d. Backing materials, including drywall, tile backer (durock, hardibacker, green board etc...), and caulking rod	010504	
e. Drywall patching techniques, including paper tape, mesh tapes, adhesive patch (metal), and scab patches	010505	
f. Mudding techniques (skimming, finishing), tools, and materials (joint compound and spackle)	010506	

Description	Classification Code	Number of Questions
<b>Skill in:</b>		
g. Performing common drywall repairs including dent/gouge repair, nail pop secure and repair, doorknob/fist hole repair, and larger (stud to stud) repair	010507	
<b>Task 6: Perform mechanical services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010600</b>	<b>3</b>
<b>Knowledge of:</b>		
a. Commonly used safety equipment, including equipment for lock-out tag-out and personal protective equipment (PPE)(gloves, eye protection)	010601	
b. Preventative maintenance techniques for HVAC systems (filter, motor lubrication, coil cleaning) and water heaters (flush and fill)	010602	
c. Inspection protocols, including slip, trip and fall, lighting, liability, landscaping, parking lot and property	010603	
d. Circulation pumps	010604	
e. Roofing	010605	
f. Siding	010606	
<b>Skill in:</b>		
g. Identifying common violations based on company policy and local ordinance (county, city, state)	010607	
h. Helping to develop an appropriate corrective action plan (i.e., when to hire a contractor versus making repairs in house)	010608	
<b>Task 7: Perform appliance services and repairs correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010700</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Commonly used safety equipment, including equipment for lock-out tag-out and personal protective equipment (PPE)(gloves, eye protection, insulated tools)	010701	
b. Proper operation of refrigerator, dishwasher ,garbage disposal, gas range (oven and cooktop), electric range (oven and cooktop), clothes washer (top loading), clothes dryer (electric only)	010702	
c. Common service requests for refrigerator, dishwasher, garbage disposal, gas range (oven and cooktop), electric range (oven and cooktop), clothes washer (top loading), clothes dryer (electric only)	010703	

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
d. Schematic reading including locating on the appliance and common symbol identification	010704	
e. Esterline Chart	010705	
<b>Skill in:</b>		
f. Explaining different methods for troubleshooting, including using meter and schematics and experience-based troubleshooting	010706	
g. Properly moving/removing appliances	010707	
h. Properly accessing common panels and control components on each appliance	010708	
<b>Task 8: Perform lock and key services and repairs correctly and in a timely fashion in order to ensure the safety and security of tenants and staff as well as the protection of property.</b>	<b>010800</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Parts identification and usage, including deadbolt, entry knob, passage knob, privacy knob and lock, and amenity/stockroom knob	010801	
b. Key security access features (coded keys, records, locking standards for key box and key access)	010802	
c. Lock changing protocols	010803	
d. After hours lockout response policies	010804	
e. Measuring key depth for records	010805	
f. Lock installation techniques	010806	
g. Door frame repair techniques	010807	
h. Key blank types (Schlage, Kwickset, Westlock, Weiser)	010808	
<b>Task 9: Process work orders correctly and in a timely fashion in order to ensure safe operation of appliances and devices as well as satisfactory customer service.</b>	<b>010900</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Information found on service requests	010901	
b. Permission to enter "checkbox"	010902	
c. What to/not to write	010903	
d. Fair housing issues	010904	
<b>Skill in:</b>		
e. Properly completing service request documentation	010905	

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
<b>Task 10: Perform customer service tasks according to company policy and procedure in order to ensure satisfactory customer service as well as to accomplish the owner's goals and objectives.</b>	<b>011000</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Importance of presentation	011001	
b. Door hanger/notification protocols	011002	
c. Customer service standards (e.g., no trash left behind, no use of resident's belongings)	011003	
<b>Skill in:</b>		
d. Entering unoccupied units using appropriate techniques	011004	
<b>Domain II: Compliance</b>	<b>020000</b>	<b>20</b>
<b>Task 1: Perform all maintenance activities in a safe and healthful manner in order to minimize damage to person and property.</b>	<b>020100</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Company safety policies and procedures (e.g., emergency plan (including first-aid providers, location of first aid supplies), location of utility shutoffs, eye wash station and safety shower, Safety Data Sheets (SDS))	020101	
b. Company risk/safety policies and procedures	020102	
c. Applicable state and federal OSHA regulations (SDS, lock-out tag-out procedures, personal protective equipment (PPE), respiratory protection)	020103	
d. Universal precautions	020104	
e. Blood borne pathogens	020105	
f. Proper use of tools and equipment	020106	
g. Applicable local, state, and federal statutes and regulations	020107	
h. Regulations pertaining to swimming pools/spas	020108	
i. Crime prevention programs	020109	
j. Fire safety and prevention	020110	
<b>Skill in:</b>		
k. Using and storing chemicals safely and in accordance with manufacturer's recommendations	020111	
l. Using and caring for personal protective equipment (PPE)	020112	
m. Shutting down utility and power sources	020113	

Description	Classification Code	Number of Questions
n. Identifying and reporting vendors/subcontractors who are not OSHA compliant and/or do not meet the company's safety guidelines	020114	
o. Reporting resident health and safety violations	020115	
p. Performing inspections of common area and outdoor lighting per company policy	020116	
q. Performing shop safety surveys	020117	
r. Helping residents understand a crime watch program	020118	
s. Educating staff and residents about fire safety	020119	
t. Working with local emergency response personnel (e.g., fire and police departments)	020120	
<b>Task 2: Perform all maintenance activities in accordance with company policy and procedure and in compliance with fair housing regulations in order to limit liability.</b>	<b>020200</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Fair housing laws (local, state, and federal)	020201	
b. Americans with Disabilities Act (ADA)	020202	
c. Company policy (e.g., apartment modifications and accommodations, resident and prospect communications, service requests, vendor services)	020203	
<b>Skill in:</b>		
d. Responding appropriately to resident and prospect inquiries	020204	
e. Documenting work completed on service requests (e.g., date, time, people, parts, follow-up, outcome)	020205	
f. Protecting resident privacy	020206	
<b>Task 3: Maintain current knowledge of local, state, and national codes through continuous education and research in order to ensure that all maintenance activities conform to requirements.</b>	<b>020300</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Building codes (e.g., local, state, national)	020301	
b. Local, state, and federal regulations	020302	
c. Permitting requirements (e.g., obtaining, posting requirements)	020303	
d. Prevailing regulations in the areas of HVAC, plumbing, electrical, appliances	020304	
e. Requirements pertaining to elevators	020305	
f. Licensure and certification requirements for trade skills	020306	

Description	Classification Code	Number of Questions
g. Fire sprinkler inspections	020307	
h. Building fire and safety equipment and systems	020308	
i. Sources of information about codes, regulations, and compliance	020309	
j. Criteria for determining applicability and hierarchy of codes	020310	
<b>Skill in:</b>		
k. Researching current codes and regulations	020311	
l. Interpreting codes and regulations	020312	
<b>Task 4: Perform all maintenance activities in an environmentally responsible manner in order to ensure compliance with local, state, and federal regulations.</b>	<b>020400</b>	<b>4</b>
<b>Knowledge of:</b>		
a. Local, state, and federal regulations and laws (e.g., Environmental Protection Agency (EPA), coastal resource management, waste management, storm and waste water management)	020401	
b. Materials that are classified as hazardous (e.g., lead, radon, asbestos, mercury, mold, carbon monoxide, refrigerants, petroleum products, chemical products)	020402	
c. Disposal requirements	020403	
d. Issues and precautions related to handling hazardous materials	020404	
<b>Skill in:</b>		
e. Using and interpreting SDSs	020405	
f. Disposing and storing of hazardous materials safely	020406	
g. Identifying hazards	020407	
h. Preventing spills and other problems related to hazardous materials	020408	
i. Taking appropriate action when spills and other problems related to hazardous materials occur	020409	
j. Making repairs when hazardous materials are present	020410	
k. Educating residents on the proper disposal of hazardous materials	020411	
l. Educating residents on how to care for surfaces that contain lead based paint	020412	
<b>Task 5: Use established reporting procedures for documenting maintenance activities in accordance with company policy and local, state, and federal regulations in order to create a detailed record that can be used in the investigation of claims.</b>	<b>020500</b>	<b>4</b>



Description	Classification Code	Number of Questions
<b>Knowledge of:</b>		
a. Company policies and procedures	020501	
b. Inspection timeline	020502	
c. Inspection reports and forms	020503	
d. Incident report	020504	
e. OSHA recordkeeping requirements	020505	
f. Worker's compensation claims	020506	
g. Requirements for supporting documentation (e.g., police and/or fire reports, photographs, code violation notices, medical reports)	020507	
h. Service requests	020508	
i. Pool logs	020509	
j. Entry key logs (including backup for electronic key tracking)	020510	
k. Snow and ice removal logs	020511	
l. Light check logs	020512	
m. Inspection logs (e.g., daily, weekly, monthly)	020513	
n. Vehicle maintenance inspection logs	020514	
o. Mold tracking logs	020515	
p. Refrigerant logs	020516	
q. File retention	020517	
r. Grounds perimeter and controlled access systems	020518	
<b>Skill in:</b>		
s. Organizing information (e.g. writing reports, storing and filing data)	020519	
t. Completing reports and forms thoroughly and in a timely manner	020520	
u. Meeting deadlines	020521	
<b>Domain III: Facilities Operations</b>	<b>030000</b>	<b>25</b>
<b>Task 1: Maintain curb appeal and mitigate loss by performing daily property inspections and executing daily maintenance activities in accordance with company procedure in order to address and correct identified concerns.</b>	<b>030100</b>	<b>6</b>
<b>Knowledge of:</b>		
a. Procedures for removing trash and unwanted material	030101	
b. Company standards	030102	
c. Safety hazards	030103	
d. Procedures for reporting and documenting deficiency	030104	
e. Opening and closing procedures	030105	
f. Location and proper operation of lights	030106	

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
g. Procedures for performing and documenting a visual inspection of common areas	030107	
h. Impact of curb appeal on new leases and resident retention	030108	
<b>Skill in:</b>		
i. Identifying and remedying objects that negatively affect curb appeal	030109	
j. Maintaining current knowledge of safety regulations	030110	
k. Maintaining current knowledge of company policies and procedures	030111	
l. Communicating effectively	030112	
<b>Task 2: Prepare recreational facilities and common areas using established procedures in order to maintain all operational components and ensure safety and health.</b>	<b>030200</b>	<b>7</b>
<b>Knowledge of:</b>		
a. Opening and closing procedures	030201	
b. Location and proper operation of lights in common areas	030202	
c. Procedures for performing and documenting a visual inspection of common areas	030203	
d. Appropriate corrective actions	030204	
e. Basic pool and spa maintenance	030205	
f. Appropriate chemical balance in aquatic areas	030206	
g. Mechanical components of aquatic areas	030207	
h. Signage maintenance	030208	
<b>Skill in:</b>		
i. Operating locks and entry doors/gates appropriately	030209	
j. Applying policies and procedures pertaining to the maintenance of recreational facilities	030210	
k. Identifying hazards	030211	
l. Performing chemical tests for aquatic areas	030212	
m. Converting essential units of measurement (e.g., ounces to gallons, ounces to pounds)	030213	
<b>Task 3: Help plan and implement a preventive maintenance program including scheduled service activities and follow up inspections in order to ensure function and longevity and to minimize downtime and emergencies.</b>	<b>030300</b>	<b>6</b>
<b>Knowledge of:</b>		

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
a. Goals and components of the preventive maintenance program	030301	
b. Procedures and checklists used in inspecting the property and apartment homes	030302	
c. Pertinent codes and regulations	030303	
d. Manufacturer guidelines	030304	
e. Budgetary guidelines	030305	
f. Preventive maintenance procedures and tasks (e.g., routine, seasonal, annual)	030306	
g. Customer service fundamentals	030307	
h. Electrical fundamentals	030308	
i. Plumbing fundamentals	030309	
j. Mechanical fundamentals	030310	
k. Irrigation fundamentals	030311	
l. HVAC fundamentals	030312	
m. Carpentry	030313	
n. Painting	030314	
o. Roofing and roof repair	030315	
p. Flooring	030316	
q. Construction fundamentals	030317	
r. Pest control	030318	
s. Landscaping	030319	
t. Appliances (e.g., gas burning, electrical, fireplaces)	030320	
u. Electronic devices (e.g., intercoms, thermostats)	030321	
v. Locks and keys	030322	
w. Appropriate use of tools and equipment	030323	
x. Approved vendors	030324	
y. Documentation requirements pertaining to preventive maintenance	030325	
z. Energy management	030326	
<b>Skill in:</b>		
a. Anticipating property needs (e.g., routine, seasonal, annual)	030327	
b. Creating maintenance schedules in accordance with property needs and owner goals and objectives	030328	
c. Performing tasks necessary to complete the preventive maintenance schedule	030329	
<b>Task 4: Help diagnose whether products should be repaired or replaced in order to maximize net operating income.</b>	<b>030400</b>	<b>6</b>
<b>Knowledge of:</b>		
a. Company policy and procedures	030401	

<b>Description</b>	<b>Classification Code</b>	<b>Number of Questions</b>
b. Quality standards and expectations	030402	
c. Cost of parts	030403	
d. Cost of repairs	030404	
e. Labor costs	030405	
f. Scheduling implications of various options (e.g., availability, delivery time, time to repair)	030406	
g. Life expectancy of products	030407	
h. Age of products	030408	
i. Immediate needs of residents	030409	
<b>Skill in:</b>		
j. Recognizing the implications of the decision being made for the resident	030410	
k. Making repairs and replacements	030411	
l. Making appropriate decisions concerning time and labor costs	030412	
<b>Domain IV: Professional Development and Collaboration</b>	<b>040000</b>	<b>20</b>
<b>Task 1: Acquire professional and technical skills in compliance with company policies and procedures as well as local, state, and federal laws and regulations in order to perform job duties competently.</b>	<b>040100</b>	<b>5</b>
<b>Knowledge of:</b>		
a. Credible sources of information	040101	
b. Local, state, national codes	040102	
c. Local, state, and federal regulations (e.g., OSHA, fair housing, ADA, EPA)	040103	
d. Effective communication strategies	040104	
e. Ethics	040105	
f. Appropriate patterns of behavior in the community	040106	
g. Conflict resolution	040107	
h. Problem solving strategies	040108	
i. Tools and their appropriate use	040109	
j. Appropriate construction materials and their application and/or use (e.g., paint, wood, glass)	040110	
k. Customer service fundamentals	040111	
l. Electrical fundamentals	040112	
m. Plumbing fundamentals	040113	
n. Mechanical fundamentals	040114	
o. Irrigation fundamentals	040115	
p. HVAC fundamentals	040116	
q. Carpentry	040117	

Description	Classification Code	Number of Questions
r. Painting and drywall	040118	
s. Roofing and roof repair	040119	
t. Flooring	040120	
u. Construction fundamentals	040121	
v. Pest control	040122	
w. Landscaping	040123	
x. Appliances (e.g., gas burning, electrical, fireplaces)	040124	
y. Electronic devices (e.g., intercoms, thermostats)	040125	
z. Locks and keys	040126	
<b>Skill in:</b>		
a. Acquiring new information and skills	040127	
b. Applying new information and skills	040128	
c. Communicating effectively	040129	
<b>Task 2: Adopt appropriate patterns of behavior, communication, and appearance in accordance with prevailing community standards in order to comply with fair housing and business requirements.</b>	<b>040200</b>	<b>5</b>
<b>Knowledge of:</b>		
a. Company's standards pertaining to behavior, communication, and appearance	040201	
b. Company's policies and procedures	040202	
c. Prevailing community standards	040203	
d. Fair housing regulations	040204	
e. Federal and state Equal Employment Opportunity Commission (EEOC) regulations and other employment laws and regulations	040205	
<b>Skill in:</b>		
f. Exhibiting appropriate patterns of behavior, communication, and appearance	040206	
g. Communicating effectively	040207	
h. Applying standards and regulations	040208	
<b>Task 3: Communicate with internal and external customers in accordance with company policy in order to achieve clear understanding, facilitate daily operations, and promote resident retention.</b>	<b>040300</b>	<b>5</b>
<b>Knowledge of:</b>		
a. Company policy and procedures	040301	
b. Company culture and core values	040302	

Description	Classification Code	Number of Questions
c. Owner's goals and objectives	040303	
d. Communication strategies	040304	
e. Definition of internal and external customers	040305	
f. Relationship building strategies	040306	
g. Resident relations	040307	
h. Effective scheduling practice	040308	
<b>Skill in:</b>		
i. Communicating effectively	040309	
j. Demonstrating appropriate patterns of behavior	040310	
k. Making appropriate decisions	040311	
l. Resolving conflicts	040312	
m. Solving problems	040313	
<b>Task 4: Communicate with management, team members, contractors and government agencies in a clear and respectful manner in order to ensure understanding, promote team work, foster a positive work environment, and present a professional image.</b>	<b>040400</b>	<b>5</b>
<b>Knowledge of:</b>		
a. Business ethics	040401	
b. Company policy and procedures	040402	
c. Company culture and core values	040403	
d. Owner's goals and objectives	040404	
e. Communication plan	040405	
f. Communication strategies	040406	
g. Cultural diversity and customs	040407	
<b>Skill in:</b>		
h. Communicating with the appropriate people	040408	
i. Using the communication plan effectively	040409	
j. Demonstrating ethics in all interactions	040410	
k. Exhibiting appropriate patterns of behavior, communication, and appearance	040411	
l. Demonstrating cultural acceptance/tolerance	040412	
m. Fostering cohesiveness in the group	040413	
n. Exhibiting leadership qualities	040414	