

CMGT 235 – Electrical and Mechanical Systems

In Class Activity #2 – Mechanical Plans and Specifications

Points: 50 [2 points each properly formatted answer]

Due: At the End of Class Today

WRITE NEATLY

Check One: Worked as a: ☐ GROUP ☐ INDIVIDUAL

Name	
Name	
Name	

- To answer the following questions, you will need a copy of the HomeGoods Distribution Center Mechanical Plans (M-001 through M-210) See: <https://lorisweb.com/cmgt235.html>
- Format for answers. Write answer and directly below write the location it was found (be specific).
Example Answer:
15 KW
M2.0 Mechanical Schedules - Burlington Electric Unit Heater Schedule, Note 5

Plan Questions

- What color shall portion of ductwork and pipe insulation visible through air distribution devices in finished areas be painted?
- Who supplies and installs the Splash Block for the Rooftop Air Conditioners condensate drain?
- What is the required size for the RTU Condensate Drain for 6 thru 10 tons?
- What Minimum Efficiency Rating Value (MERV) is required for the RTUs?
- What is the cooling Design Conditions for the Warehouse?
- What is the supply duct trunk size for the Mail/Work Room A20?
- How many CFM are delivered to General Manager Room A13
- What is the duct trunk size for the Return Air (RA) for RTU-5?

9. How many nominal tons is RTU-5?
10. Where is EF-P1 installed?
11. What must be installed by the Mechanical Contractor for the Guard House?
12. What shall be used to connect Flex Duct Ends to Sheet Metal Duct and Diffuser Neck?
13. What is HVLS and acronym for?
14. What manufacturer is identified for providing the Building Automation System?
15. What manufacturers are acceptable for the HVLS Fans?
16. How many HVLS-A fans are installed in the warehouse?

Specification Questions

17. What manufactures are specified for the Roof Curbs?
18. How shall Grilles, Registers and Diffusers be installed in the T-bar ceiling tiles?
19. For Heating System Steam & Hot Water High Pressure/Temp how thick must the insulation be for pipe sizes 8 in. and larger?
20. What type piping shall be used for refrigerant piping?

21. Within what radius of the job site must the manufacturer of the Single Package Rooftop Air Conditioners have inventory or available parts?
22. What shall the Electric Wall Heaters Front Grille be made of?
23. What must be provided for holes drilled in ductwork for test purposes?
24. How thick of a filter must the air handling unit for the split system heat pump be capable of accepting?
25. What shall be provided for all floor mounted equipment?