**CSI 3-Part Specification for CAHP**

1. **General**
   1. **Summary**
      1. Related Documents
         1. Drawings and general provisions of the Subcontract apply to this Section.
         2. Review these documents for coordination with additional requirements and information that apply to the work under this section.
      2. Section Includes
         1. Water Heater
   2. **References**
      1. General
         1. The following documents form part of the Specifications to the extent stated. Where differences exist between codes and standards, the one affording the greatest protection shall apply.
         2. Unless otherwise noted, the referenced standard edition is the current one at the time of commencement of the Work.
         3. Refer to Division 01 Section "General Requirements" for the list of applicable regulatory requirements.
   3. **Submittals**
      1. Submit shop drawings/product data sheets for all products specified in Part 2 of this Section.
   4. **Quality Assurance**
      1. All materials shall meet or exceed all applicable referenced standards, federal, Province/State and local requirements, and conform to codes and ordinances of authorities having jurisdiction.
2. **Products**
   1. **Water Heater**
      * 1. The heater(s) shall be Commercial Heat Pump Model Number CAHP 120 as manufactured by A. O. Smith Water Products Company or equivalent.
        2. Heater(s) shall be rated at (specify) 12 kW @ 240V or 9 kW @ 208V, single phase, 60 cycle AC as listed by Underwriters’ Laboratories.
        3. Water heater shall have LCD display with built-in diagnostic and troubleshooting information.
        4. Tank(s) shall be 119 gallon (450 litre) capacity with 160 psi working pressure and equipped with a commercial grade anode.
        5. All internal surfaces of the heater(s) exposed to water shall be glass-lined with an alkaline borosilicate composition that has been fused to steel by firing at a temperature range of 1400°F to 1600°F.
        6. Internal power circuit fusing shall be provided.
        7. The heat pump water heater shall be capable of operating in Efficiency, Hybrid or Electric only modes.
        8. 3/4” NPT inlet and outlet water connections shall be provided.
        9. The water heater tank shall have a three-year limited warranty; the compressor, refrigeration components and all other parts shall have a one year limited warranty.

Basis of Design:

* + - * 1. A.O. Smith CAHP

1. **Certifications & Regulatory Compliance**
   1. All models meet National Sanitation Foundation NSF-5 requirements.
   2. Meets or exceeds the efficiency and standby loss requirements of NRCan and current edition of ASHRAE 118.1.
2. **Execution**
   1. **Demolition**
      1. Refer to demolition requirements specified in Section entitled Demolition and Revision Work.
   2. **Installation**
      1. Installed in accordance with manufacturer’s instructions.

**End of Section**