F. HYDRONIC PIPING

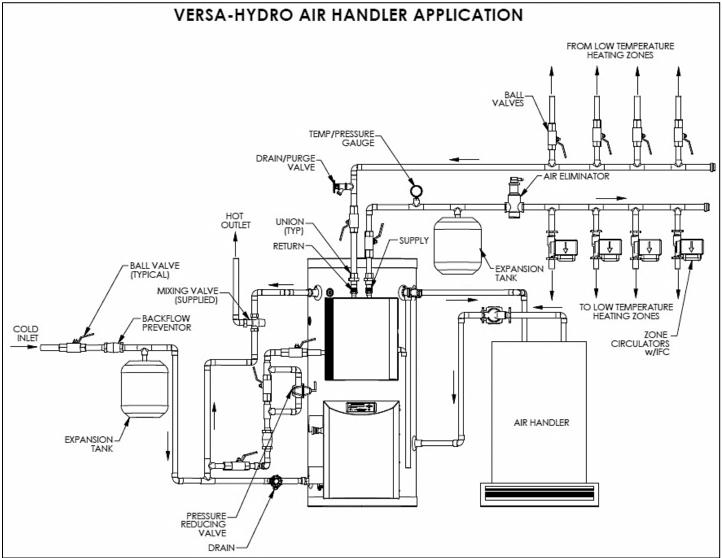


Figure 9 - LP-314-3

NOTES:

- 1. Minimum pipe size should match connection size on appliance. Upsize pipe accordingly if greater flow is required.
- 2. A thermal expansion tank suitable for potable water must be sized and installed within the piping system between the check valve and cold water inlet of the appliance.
- 3. Gas line must be rated to the maximum capacity of the unit. Unit must have 10 feet of pipe after gas regulator.
- 4. All circulators shall have an integral flow check.

NOTES FOR AIR HANDLER APPLICATION (APPLIES TO DOMESTIC WATER OUTLET CONNECTIONS ONLY):

- 1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
- 2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
- 3. ALL WATER PIPING MUST BE INSULATED.
- 4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.

NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.

CAUTION

DO NOT use the heat pack for high temperature (over 160°F) applications. Failure to comply will result in substantial overworking of the appliance, and possibly lead to early appliance failure. Use of the heat pack for high temperature applications WILL VOID the warranty.

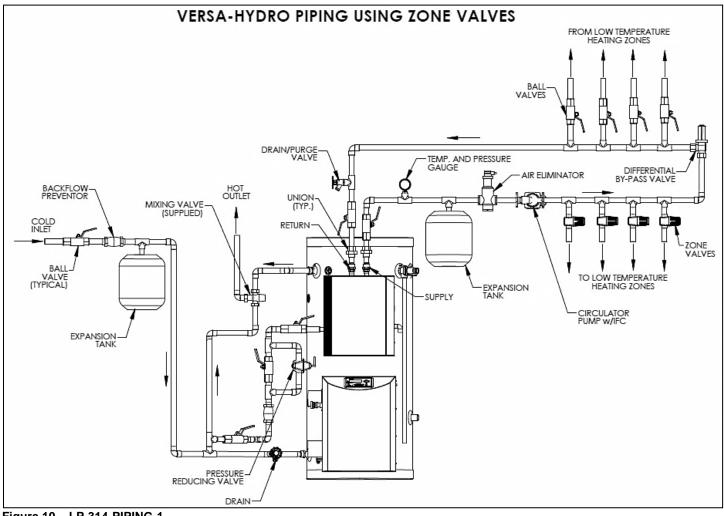


Figure 10 - LP-314-PIPING-1

- 1. Minimum pipe size should match connection size on appliance. Upsize pipe accordingly if greater flow is required.
- 2. A thermal expansion tank suitable for potable water must be sized and installed within the piping system between the check valve and cold water inlet of the appliance.
- 3. Gas line must be rated to the maximum capacity of the unit. Unit must have 10 feet of pipe after gas regulator.
- 4. All circulators shall have an integral flow check.

NOTES FOR AIR HANDLER APPLICATION (APPLIES TO DOMESTIC WATER OUTLET CONNECTIONS ONLY):

- 1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
- 2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
- 3. ALL WATER PIPING MUST BE INSULATED.
- 4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.

NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL **EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.**

CAUTION

DO NOT use the heat pack for high temperature (over 160°F) applications. Failure to comply will result in substantial overworking of the appliance, and possibly lead to early appliance failure. Use of the heat pack for high temperature applications WILL VOID the warranty.

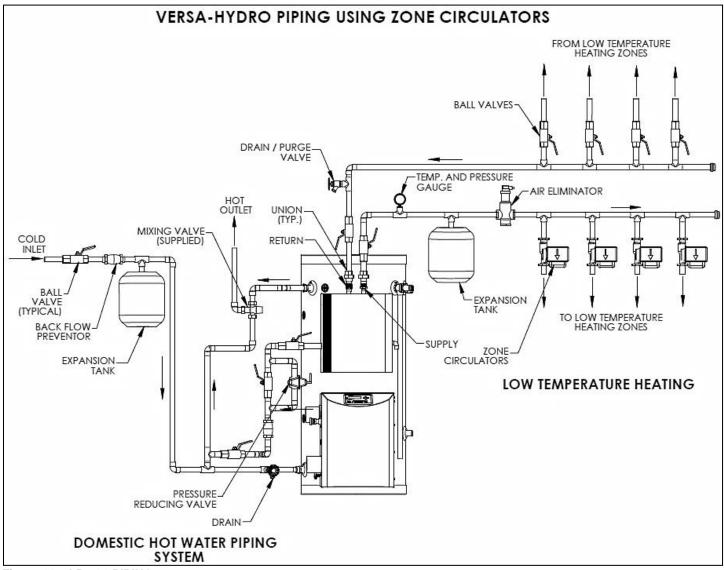


Figure 11 - LP-314-PIPING-2

NOTES:

- 1. Minimum pipe size should match connection size on appliance. Upsize pipe accordingly if greater flow is required.
- 2. A thermal expansion tank suitable for potable water must be sized and installed within the piping system between the check valve and cold water inlet of the appliance.
- 3. Gas line must be rated to the maximum capacity of the unit. Unit must have 10 feet of pipe after gas regulator.
- 4. All circulators shall have an integral flow check.

NOTES FOR AIR HANDLER APPLICATION (APPLIES TO DOMESTIC WATER OUTLET CONNECTIONS ONLY):

- 1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
- 2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
- 3. ALL WATER PIPING MUST BE INSULATED.
- 4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.

NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.

CAUTION

DO NOT use the heat pack for high temperature (over 160°F) applications. Failure to comply will result in substantial overworking of the appliance, and possibly lead to early appliance failure. Use of the heat pack for high temperature applications WILL VOID the warranty.

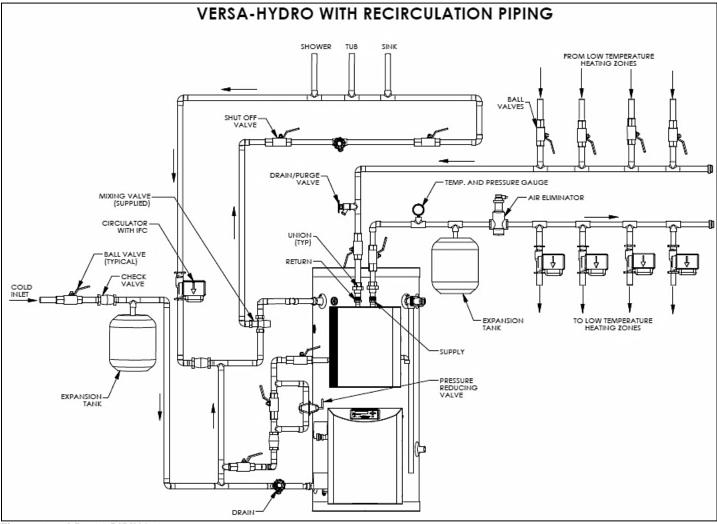


Figure 12 - LP-314-PIPING-4

NOTES:

- 1. Minimum pipe size should match connection size on appliance. Upsize pipe accordingly if greater flow is required.
- 2. A thermal expansion tank suitable for potable water must be sized and installed within the piping system between the check valve and cold water inlet of the appliance.
- 3. Gas line must be rated to the maximum capacity of the unit. Unit must have 10 feet of pipe after gas regulator.
- 4. All circulators shall have an integral flow check.

NOTES FOR AIR HANDLER APPLICATION (APPLIES TO DOMESTIC WATER OUTLET CONNECTIONS ONLY):

- 1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
- 2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
- 3. ALL WATER PIPING MUST BE INSULATED.
- 4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.

NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.

CAUTION

DO NOT use the heat pack for high temperature (over 160°F) applications. Failure to comply will result in substantial overworking of the appliance, and possibly lead to early appliance failure. Use of the heat pack for high temperature applications WILL VOID the warranty.

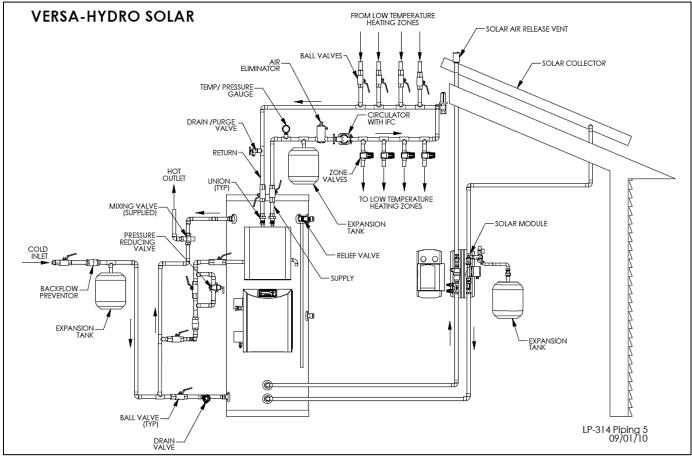


Figure 13 - LP-314-PIPING-5

NOTES:

- 1. Minimum pipe size should match connection size on appliance. Upsize pipe accordingly if greater flow is required.
- 2. A thermal expansion tank suitable for potable water must be sized and installed within the piping system between the check valve and cold water inlet of the appliance.
- 3. Gas line must be rated to the maximum capacity of the unit. Unit must have 10 feet of pipe after gas regulator.
- 4. All circulators shall have an integral flow check.

NOTES FOR AIR HANDLER APPLICATION (APPLIES TO DOMESTIC WATER OUTLET CONNECTIONS ONLY):

- 1. MASSACHUSETTS STATE PLUMBING CODE REQUIRES A DISTANCE NO GREATER THAN 50 FEET FROM THE WATER HEATER TO THE FAN COIL IN THE AIR HANDLER.
- 2. MASSACHUSETTS STATE PLUMBING CODE REQUIRES AN ELECTRONICALLY TIMED CIRCULATOR PUMP TO ACTIVATE EVERY SIX HOURS FOR 60 SECONDS. THIS CIRCULATOR IS REQUIRED TO BE BRONZE OR STAINLESS.
- 3. ALL WATER PIPING MUST BE INSULATED.
- 4. YOU MUST INSTALL A VACUUM RELIEF VALVE PER 248 CMR.

NOTE: THIS DRAWING IS MEANT TO DEMONSTRATE SYSTEM PIPING ONLY. THE INSTALLER IS RESPONSIBLE FOR ALL EQUIPMENT AND DETAILING REQUIRED BY LOCAL CODES.

CAUTION

DO NOT use the heat pack for high temperature (over 160°F) applications. Failure to comply will result in substantial overworking of the appliance, and possibly lead to early appliance failure. Use of the heat pack for high temperature applications WILL VOID the warranty.

PART 6 - VENTING, COMBUSTION AIR AND CONDENSATE REMOVAL

A DANGER

The appliance must be vented as detailed in this Venting Section. Ensure exhaust and intake piping complies with these instructions regarding vent system. Inspect finished exhaust vent and intake piping thoroughly to ensure all joints are well secured, airtight, and comply with all applicable code requirements, as well as with the instructions provided in this manual. Failure to properly install the vent system will result in severe personal injury or death.