# ATTACHMENT 1 MAINTENANCE SERVICE CONTRACT CHECKLIST

Service Contract must include the following items. All items NOT listed below must be provided as optional services.

## ANNUAL OUTDOOR UNIT MAINTENANCE SERVICE CHECKLIST

#### GENERAL

- Check with facility maintenance manager to discuss any operating issues or deficiencies, including complaints from residents
- Clean filters annually (where applicable). Replace filters per manufacturer service interval

### **REFRIGERANT LEAKAGE AND CHARGING**

- Visually inspect units, piping, and accessories for any signs of oil or refrigerant leakage. It is critical to have a refrigerant leak assessment within the first year, as the equipment and installation is still in warranty. If leaks are found, they must be reported and repaired
- Check condenser pressures to ensure within recommended ranges for ambient temperatures and current unit operation

### **ELECTRIC AND MOTORS**

- Inspect electric terminals, and, if necessary, clean and tighten connections, and apply non-conductive coating
- Visually inspect condition of starter contacts and overloads for wear, pitting, and any signs of overheating and clean/ tighten as required
- Lubricate motors and inspect belts for tightness and wear

### CONTROLS

- Inspect, calibrate, and adjust operating and safety controls, including thermometers and gauges.
- Review all microprocessor diagnostic codes where applicable.

## OUTDOOR UNIT MAINTENANCE SERVICE CHECKLIST Every 5 years (or as needed)

- Verify thermostat sensors are working properly
- Replace filters on indoor units (every 5-10 years or as required by manufacturer)
- Inspect condition of unit and vent. Review settings and perform vane operation check
- Clean coils, using an EPA-registered disinfectant labeled for HVAC if necessary (especially critical if mold is suspected) and remove obstructions
- Inspect condensate drain and condensate pans to ensure they are draining properly
- Visually check for and repair duct leakage, if applicable (ducted systems only). Failure is most likely to happen at the connection to the registers and can be easily repaired
- Controls: Verify correct thermostat operation and settings and make sure that heating is locked out when the thermostat calls for cooling and vice versa

## UNIT COSTS

## Contractor to provide the following unit costs as part of the service agreement proposal:

- Annual cost, per building, for the Mandatory Annual Requirements listed above
- Annual cost, per building, for any optional service being offered, itemized as necessary
- Cost for expected equipment replacement (e.g., filters, crankcase, etc.) that are expected within the
  equipment's lifetime







# ATTACHMENT 1 CONTINUED MAINTENANCE SERVICE CONTRACT CHECKLIST

- Cost for Periodic or 5-year Requirements listed above (to be billed at the time of service)
- Unit rates for the following:
  - Typical repairs, (e.g., refrigerant evacuation and recharge, refrigerant line repairs and braising)
  - Labor cost for service call, per person hour including travel. Please include specific costs for off-hour visits or specialty labor

# **EQUIPMENT LIST**

Service Contract must provide a list or table of all equipment covered by the service contract including quantities, locations, and specifications as outlined in the table below. The table below is provided as an example only.

Outdoor Unit Name	Manufacturer & Description	Model Number	Indoor Units Served	Qty.	Description	Location
Apts 1-4	10-Ton, 230V VRV Acme Heat Pump	HP XYZ 200	W12345	10	<i>0.5-Ton Wall</i> Mounted Unit	Unit 1a, 1b, 2c
			F123246	10	0.5-Ton Floor Mounted Unit	Unit 1a, 1b, 2c
			W2347	5	0.75-Ton Wall Mounted Unit	Unit 4 a, 4b

# ADDITIONAL RESOURCES

- <u>HPD-NYSERDA Retrofit Electrification Pilot (nyc.gov)</u>
- <u>Resource Packet for Residents HPD (nyc.gov)</u>
- Operating and Maintaining Your Heat Pump | Department of Energy
- <u>us-doe\_evaluating-refrigerant-charge.pdf (nascsp.org)</u>





