



**SANTA-FE™**  
INDOOR AIR QUALITY SOLUTIONS

## ULTRA70 Alternative HVAC System Installations

If the Recommended Dedicated Ultra Series Return to HVAC Supply Installation is not possible, there are several alternative installation options available.

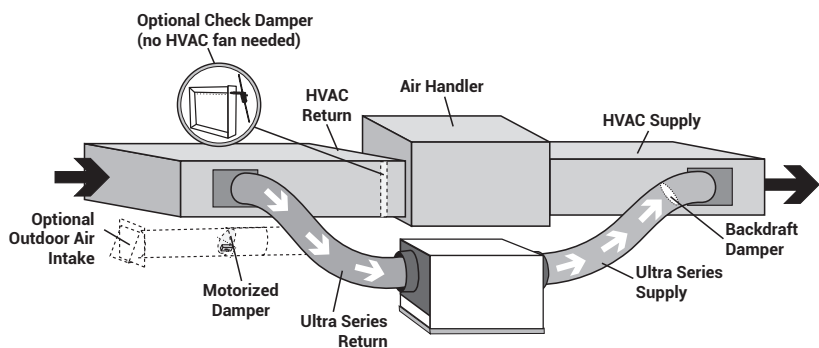
- DO NOT locate return in a bathroom or kitchen.
- Control should be located remotely from the dehumidifier and placed in a central location.
- For basement and crawl space installations, an optional tee can be installed on the Ultra Series Supply.

### a. HVAC Return to HVAC Supply

Check Damper should be in place between the Return and Supply connections of the dehumidifier.

If Check Damper is not in place, the HVAC fan must turn on when the dehumidifier is in operation.

If the system has greater than 0.5" WG the ducting must be reconfigured.

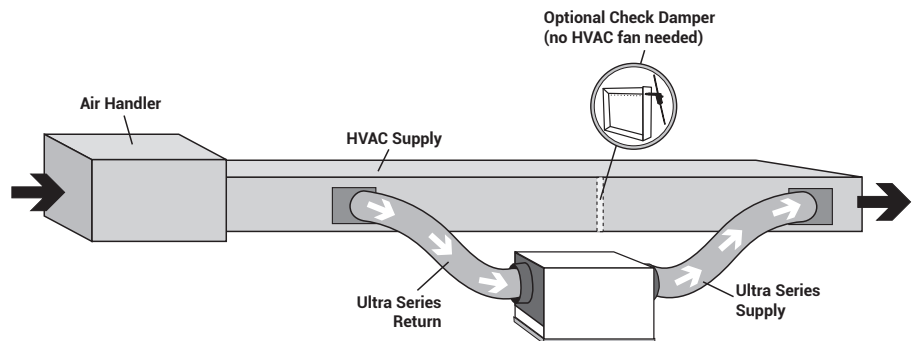


### b. HVAC Supply to HVAC Supply

#### ⚠ CAUTION!

TO AVOID THE DEHUMIDIFIER CYCLING IN AND OUT OF DEFROST, IT IS RECOMMENDED THAT THE LEAVING AIR TEMPERATURE OF THE A/C COIL IS NOT BELOW 55°F. ALSO, THIS INSTALL IS NOT RECOMMENDED FOR CLIMATES WHERE THE HEATING SYSTEM WILL RUN DURING THE SPRING AND FALL TIMES OF THE YEAR, AS THIS COULD DIMINISH THE WATER REMOVAL CAPABILITY OF THE DEHUMIDIFIER.

If Check Damper is not in place, the HVAC fan must turn on when the dehumidifier is in operation.



#### ⚠ WARNING

DUE TO PRESSURE RESISTANCE IT IS NOT RECOMMENDED TO USE THE OPTIONAL OUTDOOR AIR INTAKE WHEN INSTALLING THE DEHUMIDIFIER SUPPLY TO SUPPLY.

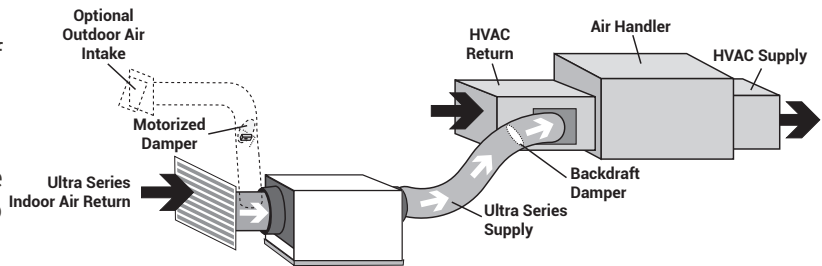
## **⚠ CAUTION!**

PLEASE NOTE: RETURN TO RETURN INSTALLS ARE TO BE CONSIDERED LAST RESORT OPTIONS AND ARE NOT RECOMMENDED. THE DEHUMIDIFIER WILL HEAT THE AC COOLING COILS WHICH DIMINISHES THE AMOUNT OF WATER THE AC SYSTEM WILL REMOVE WHEN OPERATING. IF THIS INSTALLATION IS CHOSEN, THE DEHUMIDIFIER MUST ACTIVATE THE HVAC BLOWER AND AC CALLS NEED TO LOCK OUT THE DEHUMIDIFIER FROM RUNNING. PLEASE CHECK YOUR LOCAL CODES PRIOR TO INSTALLING.

### **c. Dedicated Ultra Series Return to HVAC Return**

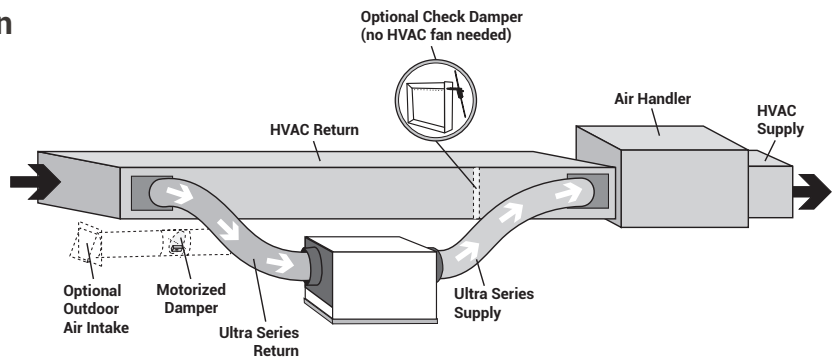
Create a separate return for the Ultra Series Dehumidifier in a central area of the building.

Installing the supply air from the Ultra Series Dehumidifier to the return of the HVAC system requires the HVAC fan to run when the Ultra Series Dehumidifier is operating.



### **d. HVAC Return to HVAC Return**

If Check Damper is not in place, the HVAC fan must turn on when the dehumidifier is in operation.



### **e. No Existing Ductwork Installation**

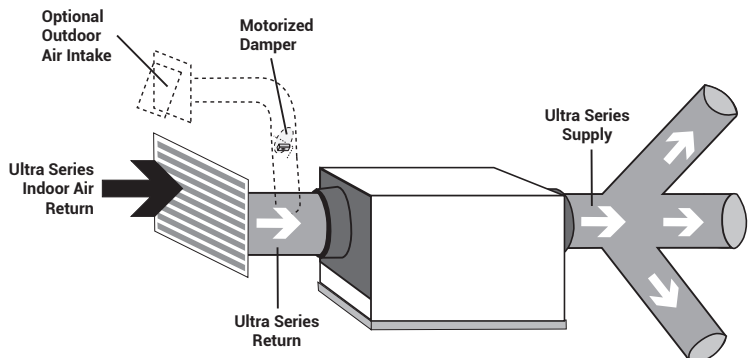
When installing the Ultra Series Dehumidifier in a structure that does not have a forced-air HVAC system or is not being tied into the system, a single return for the Ultra70 should be installed in a central location.

Install a 6" insulated duct from outside, teeing into the 8" return duct of the Ultra Series Dehumidifier to provide outdoor air ventilation (optional).

The supply of the Ultra Series Dehumidifier should be ducted to the rooms in the home that have the ductless mini-split heads and as close to the heads as possible. Be sure to utilize multiple rooms to allow air inside the structure to properly circulate. Proper air distribution is important to ensure even humidity control and heat distribution throughout the structure.

A 6" diameter duct is recommended for branches to bedrooms. An 8" diameter duct is recommended for branches to larger areas.

- DO NOT locate return in a bathroom or kitchen.
- DO NOT locate the supply in rooms where doors may be closed.
- Control should be located remotely from the dehumidifier and placed in a central location.



## **⚠️ WARNING!**

**WHEN INSTALLING THE DEHUMIDIFIER AS PART OF A COMBUSTION TYPE HVAC SYSTEM (GAS, OIL, PROPANE, ETC.), FOLLOW ALL LOCAL AND NATIONAL BUILDING AND SAFETY CODES.**

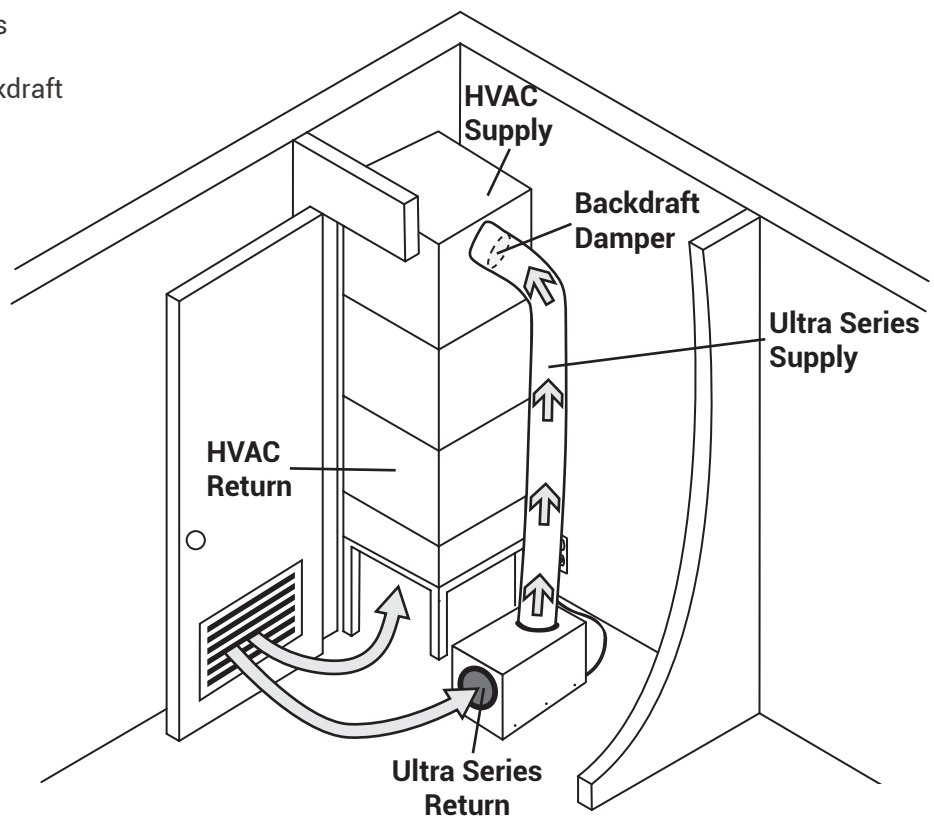
### **1. Recommended Closet Installation**

Due to space limitations, a closet installation may require additional considerations. Locate the dehumidifier under or next to the HVAC system as space allows. A passive vent or louver door is required to allow air to be pulled in from the living space.

- No inlet duct is required. Air is pulled through the louvers or grille from the living space.
- Control should be placed in a central location or the onboard control can be used for this installation.
- Where inlet space is restricted, the inlet duct collar is optional.
- Where outlet space is restricted, the outlet duct collar is optional or vertical flow through may be preferred.

### **Central Return to HVAC Supply**

Duct the supply of the Ultra Series Dehumidifier to the supply of the existing HVAC system with a backdraft damper.



## CAUTION!

PLEASE NOTE: RETURN TO RETURN INSTALLS ARE TO BE CONSIDERED LAST RESORT OPTIONS AND ARE NOT RECOMMENDED. THE DEHUMIDIFIER WILL HEAT THE AC COOLING COILS WHICH DIMINISHES THE AMOUNT OF WATER THE AC SYSTEM WILL REMOVE WHEN OPERATING. PLEASE CHECK YOUR LOCAL CODES PRIOR TO INSTALLING.

### 2. Alternative Closet Installation

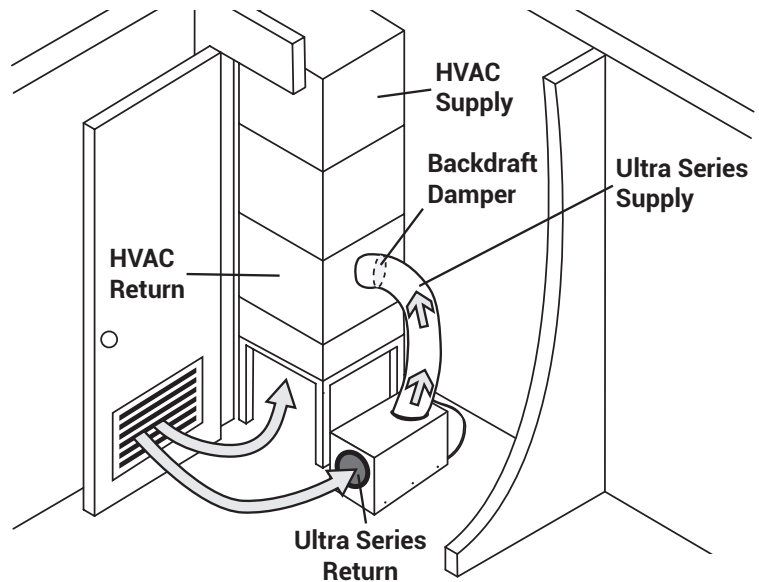
If the Recommended Closet Installation is not possible, there are alternative installation options available.

- No inlet duct is required. Air is pulled through the louvers or grille from the living space.
- Control should be placed in a central location or the onboard control can be used for this installation.

#### a. Central Return to HVAC Return

Duct the supply of the Ultra Series Dehumidifier to the return side of the existing HVAC system.

In a central return system, the HVAC fan must run when the dehumidifier is running.



#### b. No Duct - Central Return to HVAC Return

Attach outlet duct with a vertical flow through so air is not discharged into wall or other obstruction. The HVAC system will naturally pull dehumidified air from the closet and distribute it throughout the structure.

