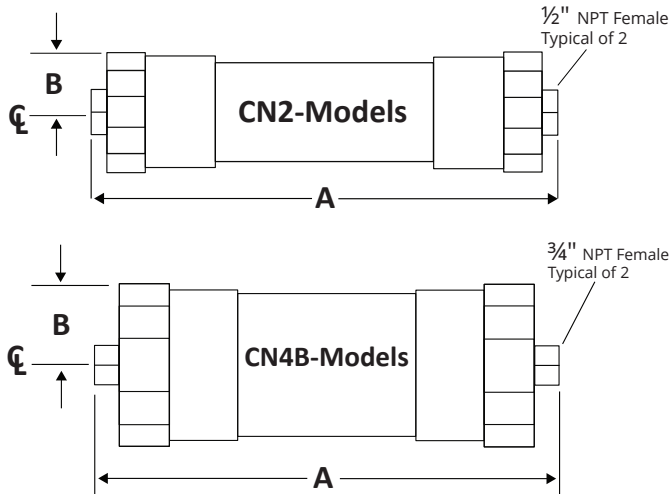




## Neutra-Safe® Condensate Neutralizer

### Tube Style

### Installation, Operation and Maintenance Manual



Dimensions In Inches			
Model	A	B	BTU/h
CN2-220	14-3/4	1-3/8	220,000
CN2-300C	18-3/4	1-3/8	300,000
CN4B-600C	11-3/4	2-1/2	600,000
CN4B-850C	15-3/4	2-1/2	850,000
CN4B-1200C	17-3/4	2-1/2	1,200,000
CN4B-2000C	26-3/4	2-1/2	2,000,000

### ⚠ WARNING ⚠

- Neutra-Safe condensate neutralizers should only be installed by a qualified professional.
- Read all instructions before installing. Perform steps in the order given. Failure to comply could result in substantial property damage, severe personal injury or death.
- Do not allow flue gases to vent through condensate neutralizer. All condensate drain lines must have a gas trap before entering the neutralization unit. Failure to comply could result in substantial property damage, severe personal injury or death.
- Neutra-Safe neutralizers should only be connected to a condensate outlet that is installed per the appliance manufacturer's instructions. Failure to comply could result in substantial property damage, severe personal injury or death.

### IMPORTANT

- All piping should be in accordance with relevant building and mechanical codes, as well as any local, state or federal regulations.
- Do not connect more than one appliance to each neutralizer.
- Neutralizer should be installed below all traps and condensate outlets.
- Neutra-Safe condensate neutralizers should always be mounted with a minimum of 1/4" pitch downwards towards the outlet. It is also recommended that the installer maintain a pitch of 1/4" per foot between the condensate neutralizer outlet and the pump or drain.
- Do not use pipe dope on threaded fittings—use only Teflon tape.
- Neutra-Safe condensate neutralizers may **NOT** be installed in the vertical position (Except CN2-220V).
- It is recommended that the neutralizer be installed before the condensate pump.
- All condensate traps should be primed before commencing operation of the appliance.
- Neutra-Safe condensate neutralizer media sack should be replaced at least annually or when pH falls below local regulations.

## MOUNTING OPTIONS

- It is recommended that Neutra-Safe condensate neutralizers be installed as close as possible to the outlet of the gas trap.
- Maintain a downwards pitch of ¼" towards the outlet of the neutralizer.
- Care should be taken when selecting mounting hardware. It is recommended to use supplied brackets for floor or wall mounting.
- Neutra-Safe condensate neutralizers may be installed on or above the floor so long as a pitch of ¼" per foot is maintained between the neutralizer and the drain or pump.

## INSTALLATION

1. Neutra-Safe condensate neutralizers include built-in unions. Snap in brackets included with all models.
2. Identify suitable location to install condensate neutralizer.
3. If using PVC pipe, apply Teflon tape to the threads of provided PVC socket adaptors and attach to neutralizer.

### **\*DO NOT OVER TIGHTEN\***

Over tightening can crack the end cap and create a leak. If over tightening should occur, replacement end caps and lock rings are available for purchase. Over tightening is not covered under warranty.

4. Position and secure the mounting brackets maintaining a pitch downwards of ¼" towards the outlet.
5. Prime and glue PVC pipe to fittings.  
**Note: If using flexible tubing, be sure to use hose clamps at barb fittings.**  
**Note: It is recommended that PVC pipe be used wherever possible as this will reduce any risk of tube kinking. Neutra-Safe provides two ¾" PVC socket adaptors for this purpose.**
6. Route PVC pipe or tubing to drain or pump, maintaining a pitch of ¼" per foot.
7. All models (except CN2-220V) are bi-directional.
8. Fill condensate trap with water until flow is established through neutralizer.
9. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

## MAINTENANCE

1. All service items should be undertaken by a qualified professional.
2. Visually inspect unit for signs of leaking or damage.
3. Neutralizer media should be replaced at least annually or when pH falls below local regulations. Neutralizer efficiency can only be determined by measuring pH level of condensate outflow with a pH meter. Strips do not provide accurate readings.
4. Refer to chart below for appropriate refill kit.

Neutra-Safe® Replacement Media Kits	
Model #	Recharge Kit #
CN2-220 models	22RCK-S
CN2-300	30RCK-S
CN4B-600C	60RCK-S
CN4B-850C	85RCK-S
CN4B-1200C	120RCK-S
CN4B-2000C	200RCK-S

### Replacement media installation-

#### **\*DO NOT REMOVE MEDIA FROM FABRIC SACK.**

1. Unscrew unions at both ends of neutralizer. If necessary, rotate cartridge to release O-ring. **NOTE: Be careful not to lose the O-rings at either end of cartridge.**
2. Spare O-ring is included in recharge kit (if needed).
3. Remove cartridge and dispose of old media (non-hazardous).
4. Rinse inside of cartridge (if needed).
5. Remove plastic cap from cardboard tube and place opening flush against cartridge opening, tilt to allow new media sack to slide into cartridge. **\*Do not take media sack out of the cardboard tube.**
6. Check to make sure that O-rings are in place before reinstalling cartridge. **\*Do not over tighten. (see above)**
7. Prime flue gas trap with a minimum of 1 gallon of water.
8. Observe neutralizer during boiler operation to ensure unrestricted condensate flow.

### LIMITED WARRANTY

All Neutra-Safe products are warranted against defects in materials and workmanship for **ONE YEAR**. The warranty does NOT cover issues that result from misuse, improper installation, and/or failure to replace the media.