# Rolux® Condensing Vent System

These Instructions Should Remain with the Rinnai Condensing Appliance for Maintenance


**⚠ WARNING**

- The Ubbink Rolux® Condensing Vent System was tested and approved with the Rinnai® condensing appliance for a maximum flue gas temperature of 230°F (110ºC).
- Do NOT use this system on any other appliance.
- Do NOT use this system with other vent products.
- Improper installation of the vent system and components, or failure to follow all installation instructions, can result in property damage or serious injury.

## Introduction

**IMPORTANT**

Refer to the Rinnai condensing appliance installation and operation manual or Certificate of Compliance to confirm that the Ubbink Rolux® Condensing Concentric Vent System is approved for your Rinnai condensing appliance.

- The Ubbink Rolux® Condensing Concentric Vent System is considered part of the Rinnai condensing appliance.
- The Rinnai condensing appliance installation and operation manual takes precedence over this document.
- Refer to the Rinnai condensing appliance installation and operation manual before proceeding with the installation of this product.

## 1 Installation Requirements

Installation and service of the Ubbink Rolux® Condensing Concentric Vent System must be performed by a qualified installer, service agency or the gas supplier.

### 1.1 Approvals/Codes

The installation must conform with local codes or, in the absense of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54 and/or CSA B149.1, Natural Gas and Propane Installation Code.

The maximum vent length, as stated in the Rinnai condensing appliance Installation and Operation Manual, and these instructions, should never be exceeded. Ubbink Rolux® Condensing Concentric Vent Systems must be used throughout the entire vent system. Do not use vent components from other vent manufacturers when using the Ubbink Rolux® Condensing Concentric Vent System. Unless approved by Rinnai, do not connect the Ubbink Rolux® Condensing Concentric Vent System into a common vent system.

### 1.2 Inspection

Before installation, inspect each vent component for damage and correct seal placement. Do not attempt to fix or install any damaged vent components.

### 1.3 Condensate

Slope horizontal venting 1/4 in. per foot (25 mm/m) either toward the Rinnai condensing appliance with an integrated condensate collector or toward the exhaust terminal. Ubbink prefers pitching the vent 1/4 in. per foot (25 mm/m) toward the Rinnai condensing appliance.

- The vent system should be inspected annually for signs of damage or condensate leaks. If the vent system appears damaged, the Rinnai condensing appliance must be turned off and the vent system repaired.
- Refer to local code for horizontal termination above a public walkway, driveway or area where condensate or vapor could create a nuisance or hazard.
- Ice can develop in regions of cold climate. A 1/4 in. per foot (25 mm/m) pitch to the Rinnai condensing appliance with the use of the condensate collector is recommended. Ubbink cannot be held liable for personal injury or property damage due to ice formation.

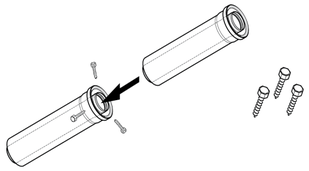
## 2 Recommended Vent/Air Intake Terminal Position

- Ubbink refers to the Rinnai condensing appliance installation and operation manual and/or national and local codes (such as ANSI Z223.1/NFPA 54 or CGA-B149) for the correct position of the vent and air intake position.*
- The Rinnai condensing appliance installation and operation manual takes precedence over this document.
- Terminals should be positioned to avoid products of combustion entering openings into buildings or other flues or vents.
- The Ubbink Rolux® white vent extension material is designed primarily for indoor use. If used outdoors, the material should be protected for UV-radiation (direct sunlight).

* For clearances not specified in ANSI Z223.1/NFPA 54 or CGA-B149, please use clearances in accordance with local installation codes and the requirements of the gas supplier.

## 3 General Installation Instructions

**Joint Connection**



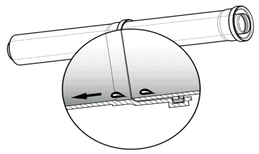
Vent connections must be firmly pressed together so that the gaskets form an airtight seal. To ensure optimum joint connection, it is recommended to secure with three #8 x 1/2 in. self-tapping screws. Secure the vent to the wall or ceiling with pipe clamps or a perforated hanger iron.

Vent connections extending beyond the outside of a building or structure should be enclosed to protect seals and gaskets.

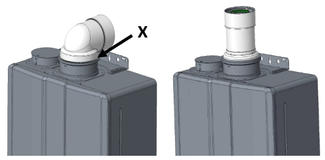
Horizontal vent lengths must pitch a minimum 1/4 in./ft. (25 mm/m) or 1° to the Rinnai condensing appliance.

**Note:** See exception for wall terminals in section “1.3 Condensate.”

**Condensate**



## 4 Appliance Connection



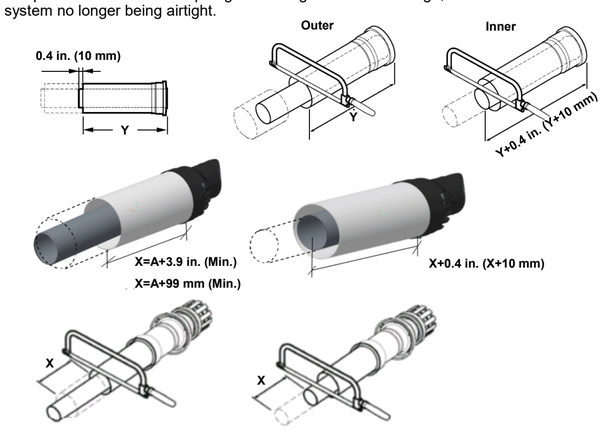

Insert the male end of a vent component into the female vent top.

The molded line on the male end of the elbow (X) indicates the proper insertion depth into the vent top.

Secure the connection with the supplied #8 x 1/2 in. self-tapping screw.

## 5 Shortening of Vent Extensions and Terminals

The 2 in. (60 mm) inner pipe (translucent or black) should always extend 0.4 in. (10 mm) beyond the white outside pipe on the male end. Always cut the male end of the component. Deburr the sharp edges as the gaskets can damage, which can result in the system no longer being airtight.

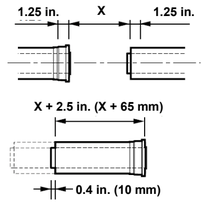



**⚠ WARNING**

- Special Ubbink-branded lubricant is supplied with the vent system termination. This lubricant, or water, is the only approved lubricant for the lubrication of the flue seals.
- Do not use fat, grease, soap, or other substances, as these can damage the seals, resulting in malfunctioning of the vent system.

### Shortening of Vent Extensions

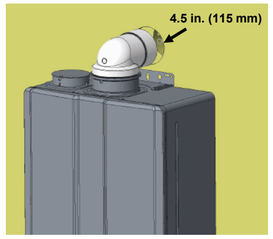
Pipes overlap by 1.25 in. (32 mm). When cutting to size, add 2 x 1.25 = 2.5 in. (65 mm) to the extension pipe length (X) needed for installation.

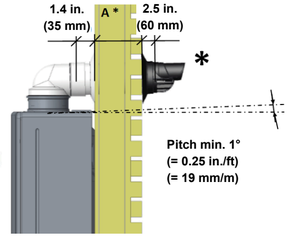



## 6 Installation Instructions: Condensing Horizontal Discharge Vent System

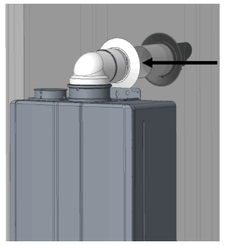
- Identify the vent location.
- Place the 90° vent pipe elbow or horizontal starter adapter on the Rinnai condensing appliance.
- Mark position on wall or use template supplied with the Rinnai condensing appliance.
- Cut hole, and then cover the top of the Rinnai condensing appliance to prevent debris from entering.

The hole is minimum 4.5 in. diameter (115 mm).

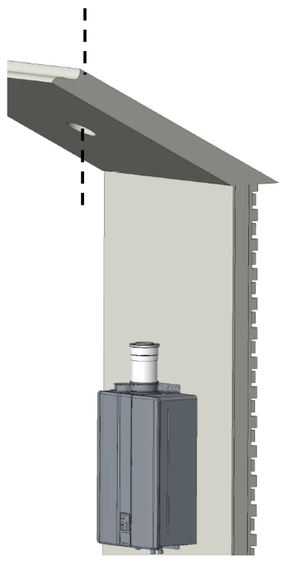



- Cut the terminal to length as described in Section 5. Add 3.9 in. (99 mm) to the wall thickness as illustrated. The white section of the termination should not be visible outdoors.
- After cutting the appropriate length, slide the horizontal wall terminal through the hole in the wall.
- Position the grey rubber wall plate around the male end of the termination.
- Position the inner white wall plate between the wall and horizontal discharge adapter.
- Slide the male end of the termination in the horizontal discharge adapter.
- Fill the gaps between the wall and vent pipe penetration with a weather-proof sealant.

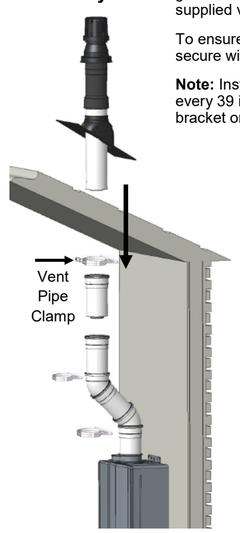


## 7 Installation Instructions: Condensing Vertical Discharge Vent System



- Identify the vent location.
- Determine the location where the roof discharge termination will be installed.
- Taking into account the angle of the roof, cut the hole with a dimension that allows the vertical discharge roof termination to be installed.
  - 6 in. x 6 in. (150 mm x 150 mm) hole for flat roof
  - 9 in. x 6 in. (225 mm x 150 mm) hole for 12/12 pitch (45°)
  - 12 in. x 6 in. (300 mm x 150 mm) hole for 16/12 pitch (55°)
- After cutting the hole, cover the top of the Rinnai condensing appliance to prevent debris from entering.

### Mounting the Vent System



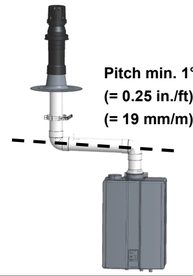

Vent connections must be firmly pressed together so that the gaskets form an airtight seal. Secure the system with the supplied vent pipe clamp or perforated hanger iron.

To ensure optimum joint connection, it is recommended to secure with three #8 x 1/2 in. self-tapping screws.

**Note:** Install a support bracket on each extension, or at least every 39 in. (991 mm). For vertical runs, install a support bracket on each extension, or at least every 78 in. (1,981 mm).

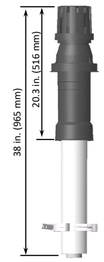
## 8 Installation Example

**Vertical Vent System - Condensate Pitch for Horizontal Sections**



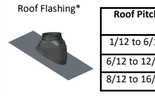

## 9 Polypropylene (PPtl) Vent Components

2/4 (60/100) Condensing Roof Discharge Termination 20 in. above Roof
**Part #: 224359**



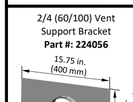

Retrofit Wall Plate
**Part #: 188486 (Gray)**
**Part #: 188481 (White)**

Roof Flashing*

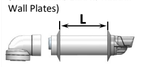


| Roof Pitch | Part No. Shingle Roofs | Part # Tile Roofs |
|---|---|---|
| 1/12 to 6/12 | 189950 | 50171949 |
| 6/12 to 12/12 | 189951 | 50171961 |
| 8/12 to 16/12 | 189952 | 50171954 |

2/4 (60/100) Rubber Wall Plate
**Part #: 710265 (White)**
**Part #: 711262 (Gray)**



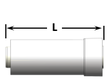

2/4 (60/100) Condensing Horizontal Termination Kit (Termination, Elbow, Rubber Wall Plates)




| Maximum Wall Thickness “L” | Part # |
|---|---|
| 12 in. (305 mm) | 229031 |
| 21 in. (533 mm) | 229032 |

2/4 (60/100) Condensing 21 in. Wall Termination (includes 2 wall plates)
**Part #: 229033**

2/4 (60/100) Condensing Vent Pipe Extension

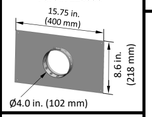



| Length “L” | Part No. |
|---|---|
| 10 in. (254 mm) | 229318 |
| 19.5 in. (240 mm) | 229319 |
| 39 in. (991 mm) | 229320 |

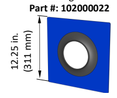
2/4 (60/100) Thimble
**Part #: 224055**

Fits 2x4 or 2x6 Wall Construction

2/4 (60/100) Vent Support Bracket
**Part #: 224056**



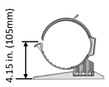

2/4 (60/100) Horizontal Flashing Panel
**Part #: 102000022**



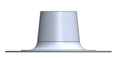

2/4 (60/100) Pipe Clamp Metal **Part #: 169013**

Flashing for Metal Roof*
**Part #: 242141**

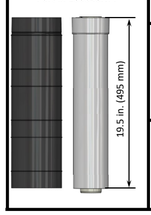
Pipe Clamp Universal Plastic*
**Part #: 169044**




Roof Flashing Assembly-Flat*
**Part #: 146141**



2/4 (60/100) Condensing Roof Termination Extension Kit
**Part #: 185348NPP**

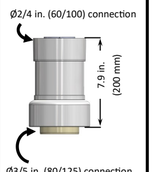



Universal Bug Guard*
**Part #: 224042**

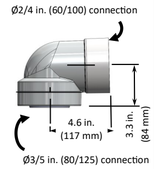
2/4 (60/100) Condensing 90° Diverter Nose
**Part #: 710202NPP**

2/4 (60/100) Condensing 45° Diverter Nose
**Part #: 710215NPP**

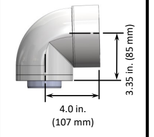
2/4 (60/100) Condensing Vertical Starter Adapter
**Part #: 227413**



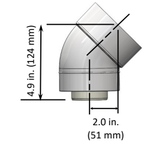

2/4 (60/100) Condensing Horizontal Starter Adapter
**Part #: 229252**




2/4 (60/100) Condensing 90 Degree Elbow
**Part #: 229233**




2/4 (60/100) Condensing 45 Degree Elbow (Qty. 2)
**Part #: 229208**




*Components are universal for use with 2/4 (60/100) and 3/5 (80-125) components.

UBBINK BV NL – 6984 AA Doesburg The Netherlands T + 31 (0) 313 480 200 E-mail: rolux@ubbink.nl Web: www.ubbink.com

100000678(01) Art.nr. 10000072693 V1.0 12/19