

# Model RIS

## 6" - 24" Chimney

### Installation and Maintenance Instructions

**CHIMNEY TYPE:** Type "A" factory-built chimney suitable for venting negative or neutral draft (non-pressurized) appliances including boilers, building heating equipment, fireplaces and stoves. RIS has been designed, tested, and listed to vent large wood burning fireplaces and to extend masonry chimneys. RIS is listed to the UL 103HT standard for use in the USA **Note for customers in Canada:** Model RIS is not certified to the ULC S-629 Standard.

**A MAJOR CAUSE OF CHIMNEY RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCE (AIR SPACE) TO COMBUSTIBLE MATERIALS. IT IS OF UTMOST IMPORTANCE THAT THIS CHIMNEY BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.**

**Use only factory supplied components. Failure to do so will void the certification and the warranty of this chimney.**

If possible, install the chimney on the interior of the building as it will provide better performance than an exterior chimney. In areas with continuous temperatures below 0°F the use of an exterior chimney may result in operating problems such as poor draft and excessive condensation of combustion products. If you do install an exterior chimney, we recommend that you install it within an insulated enclosure.

**Read these instructions and keep them for future reference. Contact local building or fire officials about restrictions and installation inspection in your area.**

RIS has been tested and listed to the UL 103HT chimney standard by Warnock Hersey - Intertek Testing Services Listing # 50195-C7-704800

WARNOCK HERSEY



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## TECHNICAL SPECIFICATIONS

### MATERIALS:

CASING: Standard: Type 304 Stainless Steel  
Optional: Galvalume, Type 430, 444 or 316 Stainless

FLUE: Standard: Type 304 Stainless Steel  
Optional: Type 444 or 316 Stainless Steel

INSULATION: "THERMOPLUS" HIGH TEMPERATURE MINERAL FIBRE

SIZE: 6" TO 24" Inside Diameter

### ALLOWABLE FLUE GAS TEMPERATURES:

Maximum Continuous: 1000°F

Brief Forced Firing: 1400°F

Tested To: (3 X 10 min.) 2100°F

CLEARANCES: To Combustible Materials: 2" Air Space Minimum  
To Non-Combustible Materials: No Clearance Required

**NOTE: NFPA 211 requires that all chimneys used on solid fuel residential applications to be listed to UL 103HT**

## Extending a masonry chimney lined with a metal chimney liner

RIS may be used to extend a masonry chimney which has been lined with an approved chimney liner. This type of repair is generally found where the original flue tile has been damaged by chimney fire or moisture and in cases where the flue has been relined to reduce its cross section. The RIS anchor plate has a single wall connector section designed to allow a metal chimney liner to be screwed directly to it.

## Masonry Transitions

Masonry flue liners are typically rectangular, oval, or square, and they are rarely consistent in size. When installing an RIS chimney to extend a clay tile liner the new round chimney must have a cross sectional area equivalent to the original masonry flue. In some cases this requires a dramatic change in the shape of the flue (e.g: a 6 X 12 flue adapted to 10" round).

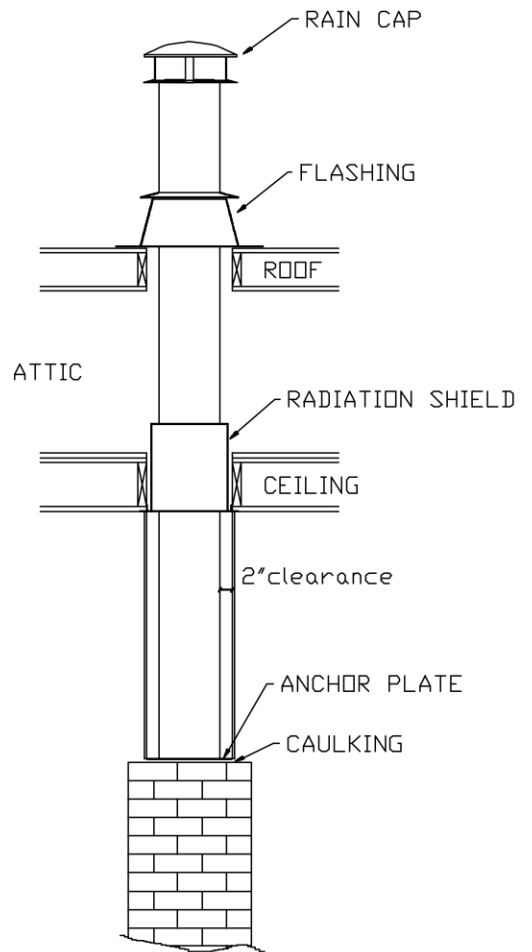
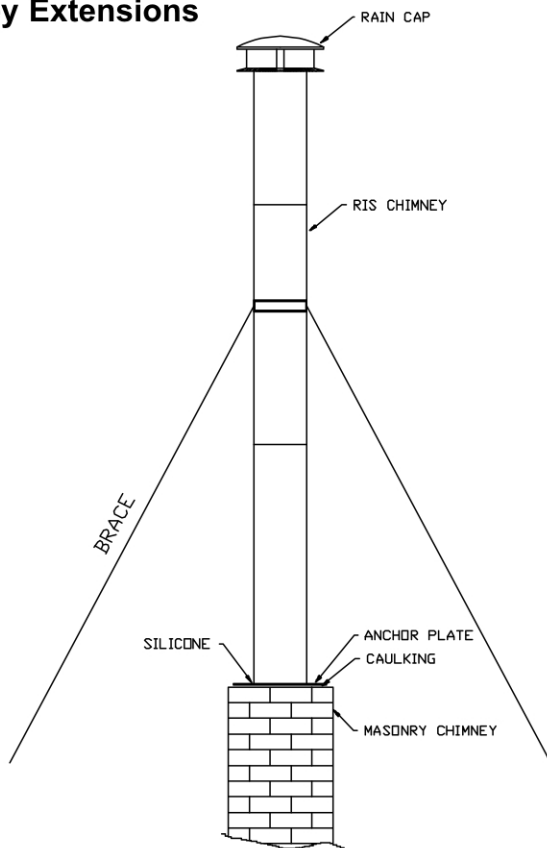
When the original clay tile liner being extended is close to the same size and shape as the RIS chimney it is generally sufficient to construct a smooth, hand laid, refractory cement transition.

When the original clay tile liner is substantially different in size or shape from the RIS chimney it is recommended to install a locally fabricated stainless steel transition section between the two systems in order to insure smooth gas flow. It is not possible for ICC to offer transition sections as a stock item because of the variations in flue tile size - even a "standard size" flue tile varies quite a bit from piece to piece. We recommend that this transition be locally constructed using the following procedure (**see the drawing on page 11**)

- Make a paper template of the existing tile liner
- Have a local sheet metal fabricator make a rectangular to round tapered transition having the following properties:
- **Constructed of .025 (22 gauge) or heavier type 304 or 316 stainless steel**
- The rectangular section should correspond as closely as possible to the shape of the template and should have a 1" flare at the end to allow it to seat squarely on top of the existing chimney - **see drawing**.
- The single wall connector on the RIS anchor plate should fit snugly inside the round section of the transition.
- For radical shape changes the tapered section should be 6-8 inches long - this will require a thicker bond beam.

The transition section should be wrapped with 1" of mineral fibre insulation prior to pouring the bond beam. This allows for expansion and contraction and creates a thermal break between the metal and masonry.

# Typical Masonry Chimney Extensions



- SEAL WITH CAULKING BETWEEN THE MASONRY CHIMNEY TOP AND THE ANCHOR PLATE
- SEAL WITH SILICONE BETWEEN THE RIS CHIMNEY AND THE ANCHOR PLATE

# Typical Site Built Transition

