

EXCEL FACTORY BUILT CHIMNEY INSTALLATION AND MAINTENANCE INSTRUCTIONS

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

This chimney is intended for use with solid, liquid and gas fired appliances, including wood fired stoves, fireplaces and furnaces.

| | | |
|---|---------------|---------------|
| Maximum continuous flue gas temperature: | 650°C | 1200°F |
| Brief forced firing: | 925°C | 1700°F |
| Tested to: (3 X 30 minutes) | 1150°C | 2100°F |

The chimney should be the size recommended by the appliance manufacturer.

Use only ICC Model EXCEL components. Failure to do so will void the certification and warranty of the product.

Keep these installation and operating instructions in a safe location for future reference.

Contact local building or fire officials about restrictions and installation inspection in your area.

EXCEL has been tested and listed to the ULC S-629 chimney standard by Intertek Testing Services Listing # 5965



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FOR CANADA ONLY

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EXCEL TECHNICAL SPECIFICATIONS

Materials:

Exterior (casing): .015" Type 434 Stainless Steel

Interior (flue): .015" Type 304 Stainless Steel

Insulation: ICC "Thermoplus" Blanket

| Inside Diameter | 5 Inch | 6 Inch | 7 Inch | 8 Inch |
|---------------------------|--|--------|--------|--------|
| Outside diameter | 7" | 8" | 9" | 10" |
| Weight/Foot (lb/ft.) | 3.6 | 4.2 | 4.9 | 5.3 |
| Clearance to combustibles | 2" or as established by factory built supports and firestops | | | |

Rough Opening Required

| | | | | |
|--------------------------------|-----------|-----------|-----------|-----------|
| Round support (ERDS & ES) | 10" X 10" | 10" X 10" | 11" X 11" | 12" X 12" |
| Square support (ESS) | N/A | 10" X 10" | 11" X 11" | 12" X 12" |
| Roof support (ERS) | 11" X 11" | 12" X 12" | 13" X 13" | 14" X 14" |
| Offset support (EOS) | 11" X 11" | 12" X 12" | 13" X 13" | 14" X 14" |
| Radiation shields (ERS & ERSA) | 11" X 11" | 12" X 12" | 13" X 13" | 14" X 14" |
| Wall radiation shield (EWRS) | 10" X 10" | 10" X 10" | 11" X 11" | 12" X 12" |

Maximum Support Capacity

| | | | | |
|---------------------------|---------|---------|---------|---------|
| Round support (ERDS & ES) | 65 feet | 55 feet | 50 feet | 45 feet |
| Square support (ESS) | N/A | 55 feet | 50 feet | 45 feet |
| Roof support (ERS) | 65 feet | 55 feet | 50 feet | 45 feet |
| Wall support (EWS) | 50 feet | 44 feet | 37 feet | 35 feet |
| Offset support (EOS) | 35 feet | 30 feet | 27 feet | 25 feet |

Radiation shields must be used at all floor joist and ceiling areas

CREOSOTE AND SOOT - Formation and need for removal

When wood is burned slowly it produces tar and other organic vapours, which combine with expelled moisture to form creosote. The creosote vapours condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire.

COAL

Some coals contain large quantities of Sulphur (up to 7%). When coal is burned, Sulphur and coal ash are deposited in the chimney flue. This deposit combines with moisture to form a highly corrosive acid (Sulphuric Acid).

In order to protect your chimney, we recommend that you:

1. Burn only low Sulphur coals (less than 1% Sulphur).
2. Have your chimney cleaned within 48 hours of shutting down your stove at the end of the heating season. Be certain that all the soot is removed.

WOOD AND COAL STOVES

If you are planning to install a wood stove, we recommend that you:

1. Choose a stove that has a label of a recognized Testing Laboratory (such as WH, UL, ULC, and CSA). The EPA approved, low emissions stoves are highly recommended.
2. Connect only one solid fuel burning appliance to a chimney. Do not connect an oil or gas burning appliance to a chimney venting a solid fuel burning appliance.
3. Never over fire your stove. If any part of the stove or stove pipe is glowing red, then you are over firing. Immediately close the stove's damper until the system cools. The high temperatures caused by over firing can permanently damage the stove and stove pipe and may overheat nearby combustible walls and furniture.
4. Install the stove and stove pipe as described in the Installation Instructions accompanying the stove. **BE CERTAIN TO MAINTAIN THE REQUIRED CLEARANCES TO COMBUSTIBLE CONSTRUCTION.**
5. Keep your flue gases between 300°F and 500°F. This will maximize efficiency while minimizing condensation and creosote formation.
6. Do not burn sea driftwood. Salt is highly corrosive to all types of stainless steel. Do not burn treated lumber.

OPERATION AND MAINTENANCE

KEEP YOUR CHIMNEY CLEAN Wood stoves can quickly create large deposits of creosote in the chimney. Some wood stoves can create enough creosote in two weeks to cause a chimney fire.

When using a wood stove, we recommend that you:

1. Initially inspect the chimney system weekly. From this you will learn how often it will be necessary to clean your chimney.
2. THE CHIMNEY SHOULD BE INSPECTED AT LEAST ONCE EVERY TWO MONTHS DURING THE HEATING SEASON to determine if creosote or soot has built up. When a maximum of 1/4" of creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.
3. Have your chimney cleaned by a qualified chimney sweep. If you want to clean your chimney yourself, then; clean your chimney using a properly fitting nylon or steel brush. Do not use a brush that will scratch the stainless steel interior of the chimney. Use of an oversize brush may damage the chimney.
4. Do not expect chemical chimney cleaners to keep your chimney clean. Their use does not negate the necessity of periodically inspecting and cleaning your chimney.

CHIMNEY FIRES

If you are having a chimney fire, follow these steps:

1. Close all heater doors and combustion air controls. For fireplaces, block the fireplace opening with a non-combustible material (such as a steel sheet).
2. Alert your family to the possible danger.
3. If you require assistance, alert your fire department.
4. If possible, use a dry chemical fire extinguisher, baking soda or sand to control the fire. Do not use water as it may cause a dangerous steam explosion.
5. Watch for smouldering or fire on combustibles next to the stove, stove pipe and chimney. Check outside to ensure that sparks and hot embers coming out of the chimney are not igniting the roof.
6. Do not use the stove again until your chimney and stove pipe have been inspected by a qualified chimney sweep or Fire Department Inspector.

INSTALLATION NOTES

1. The chimney is intended for use with cooking, heating and other low-heat appliances.
2. A chimney venting a fireplace or an incinerator shall not vent any other appliance.
3. The clearance between single wall stove pipe and unprotected combustible material must not be less than 18" (reference the National Building Code and B365).

The distance between a vertical stove pipe and the ceiling may be less than 18" when it is installed with an EXCEL support. The reduced clearance in this area has been confirmed as part of the chimney safety testing.

The distance between the horizontal stove pipe and a vertical wall may be less than 18" where the insulated chimney passes horizontally through the wall. The distance will be determined by the Wall Radiation Shield.

4. The maximum height of un-guyed chimney above the roof is 5 feet.
5. Portions of the chimney which may extend through accessible spaces shall be enclosed in all cases to avoid personal contact with the chimney and damage to the chimney.
6. Do not fill the air space around the chimney with insulation or any other material. Do not fill the factory built supports or radiation shields with insulation. Insulation placed in this area could cause adjacent combustibles to overheat. Do not allow sawdust or construction debris to accumulate around the chimney. Clean all areas surrounding the chimney before closing up any enclosed areas.
7. The chimney shall extend at least 3 ft. above its point of penetration with the roof and at least 2 ft. higher than any wall, roof or adjacent building within 10 ft. of it. For chase installations, the chimney must extend at least 8" above the top of the chase.

8. The following does not apply to installation in single and two-family dwellings:

Factory built chimneys which extend through any story above that on which the connected appliance is located are to be provided with enclosures having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.

FACTORY BUILT FIREPLACE

When Excel is approved with a factory-built fireplace, the chimney and fireplace are tested in combination, as a complete system. It is not possible to include specific installation instructions for each make and model of fireplace in these instructions, you must follow the instructions included with the fireplace you are installing.

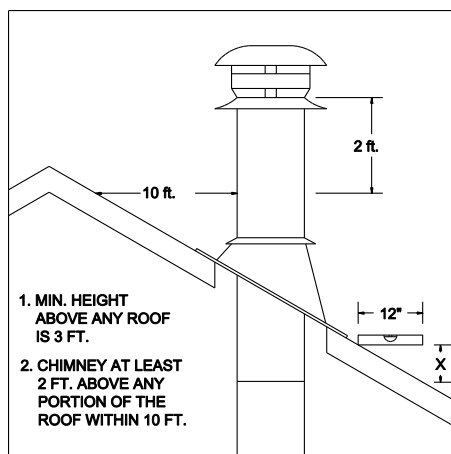
NOTE: When EXCEL is certified for use on a factory-built fireplace it is tested without the use of our patented radiation shield tubes (ERSF or ERST). These radiation shields are not required for any factory-built fireplace installations, including interior chases.

OIL AND GAZ APPLIANCES



When Excel is used to vent an oil or gas burning appliance, the ERSF or ERST radiation shield tubes are not required, even where the chimney is enclosed.

CHIMNEY HEIGHT

The minimum height of chimney required is the same for all support styles and sizes. The diagram below shows minimum chimney height as required by code. A quick way to calculate this dimension is to multiply the vertical rise per 12" of horizontal distance (X in the diagram) by 10 and add 24". When the chimney is installed within 10' of the peak it must clear the peak by 24". The minimum chimney height is 3'.



We recommend that our products be installed and serviced by professionals who are certified in the U.S. by NFI (National Fireplace Institute) or in Canada by WETT (Wood Energy Technical Training).



Wood Energy Technical Training
www.wettinc.ca

INSTALLATION INSTRUCTIONS

ROUND SUPPORT (ERDS) & SQUARE SUPPORT (ESS)

If you are installing your chimney in an energy efficient house which has sealed vapour barriers (e.g.: R2000 construction) we manufacture a special round support so that you can maintain your vapour barrier integrity. (See part ERDSI.) The ERDSI comes with its own set of installation instructions.

Typical round and square support installations are shown in drawings 1 thru 4 on page 10. The clearance between the chimney and combustible material must not be less than 2" except for areas protected by the support. Do not fill this area with insulation. If the support is installed in a cathedral ceiling, follow the instructions for Cathedral Ceilings.

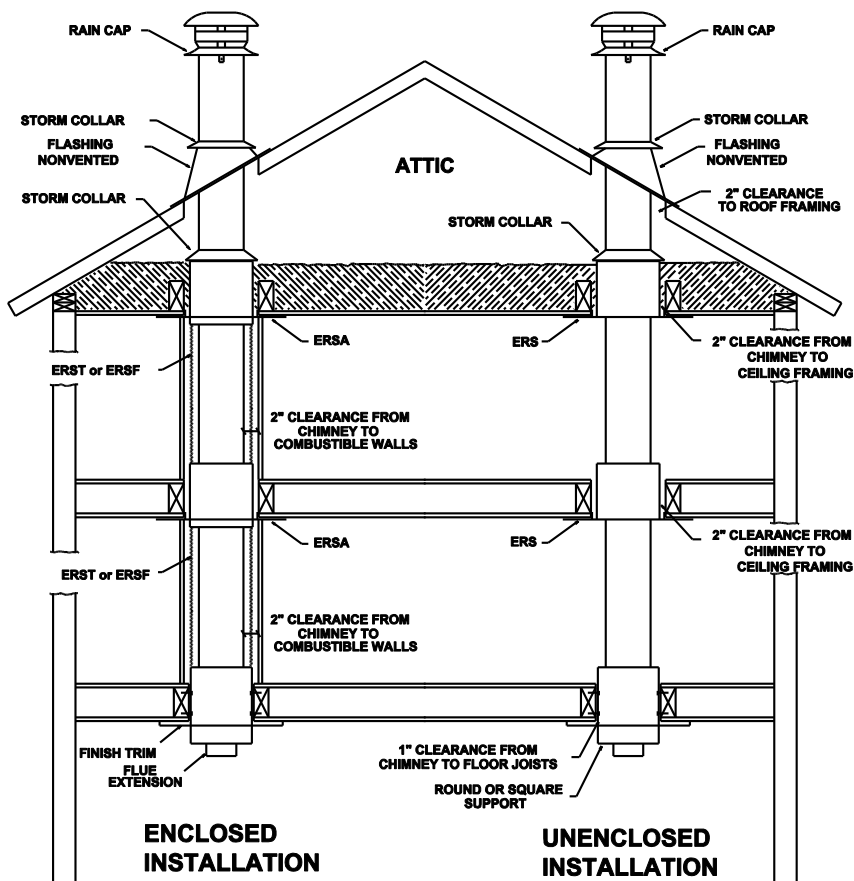
TYPICAL INSTALLATIONS

If the support is installed in a ceiling with an attic directly above, the support also acts as the attic radiation shield when installed with a universal storm collar (ESC).

1. Locate the chimney in a convenient place as near as possible to the appliance outlet. Cut and frame the holes in the floor ceiling and roof where the chimney will pass. Refer to the technical specifications on page 3 to determine the required rough opening for the support model and size you are installing.

NOTE: *Look Up - The round and square supports are designed to protect the surrounding combustible materials and as a result they permit 1" clearance from the chimney to combustible framing - in the area that they protect. When these supports are installed in a roof truss insure that the chimney has 2" clearance at the top of the truss. This may require you to block out the support at the bottom. Another option is to install a support extension (see page 13). Trim the support extension flush with the roof, this will permit the chimney to pass within 1" of the truss.*

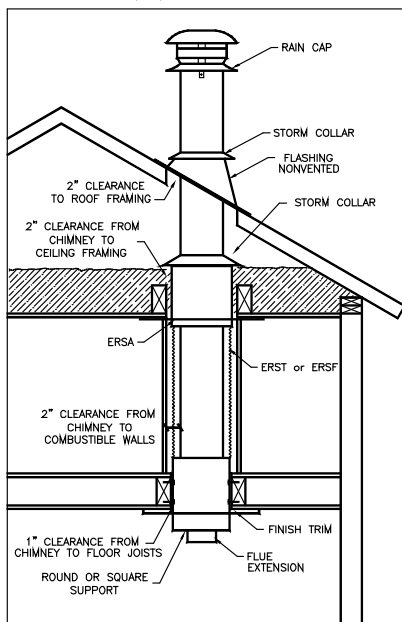
2. From below, push the support into the framed hole. The support must protrude at least 3" below the finished ceiling. Nail the support to the framed joist using 8 - 3" spiral nails or # 8 X 1½" wood screws. Place the Finish Collar around the support and fasten it to the ceiling using the two screws provided. **NOTE:** *If you are using a 6" square support you may find it difficult to screw it in place because there is not much room inside it. We have provided angle brackets with this support which can be screwed to the outside of the support box and nailed to surrounding framing as required. Use a minimum of four # 8 X ½" metal screws per bracket. In some cases these brackets may need to be trimmed (e.g.: to fit under a flashing).*



NOTE: Excel is required to be enclosed (framed in) when it passes through an occupied area in the building. In the event that Excel passes through an unoccupied area and is not enclosed it should be installed with ERS radiation shields instead of ERSA radiation shields. If the chimney is not enclosed then the ERST or ERSF radiation shields are not required. See drawing above.

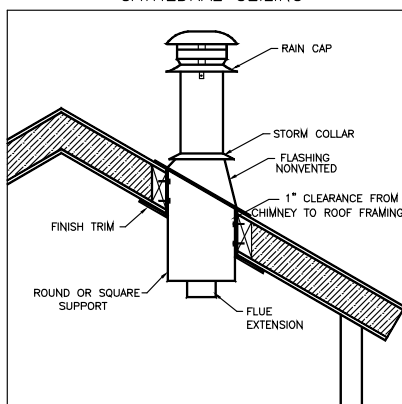
Please note that Excel may be used to vent a factory built fireplace, an oil burning appliance, or a gas burning appliance. The ERSF or ERST radiation shield tubes are not required when venting these appliances, even when the chimney is enclosed.

UNENCLOSED ATTIC



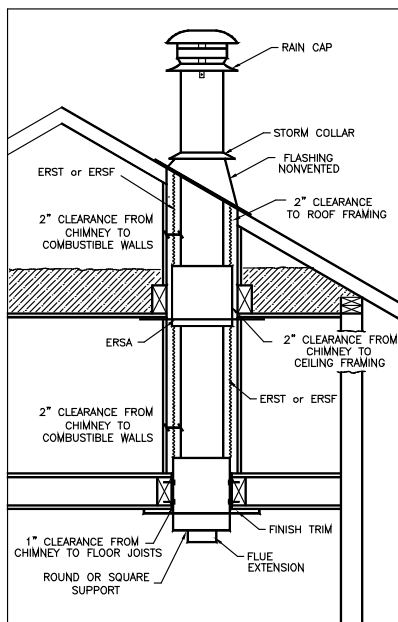
DRAWING 1

CATHEDRAL CEILING



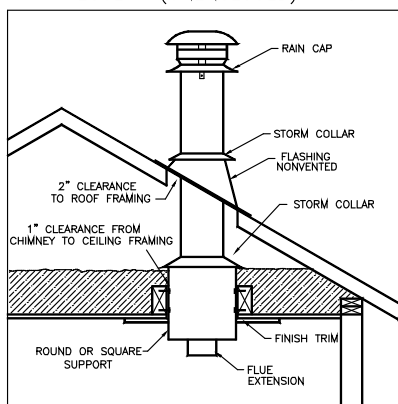
DRAWING 3

ENCLOSED ATTIC



DRAWING 2

REGULAR (UNENCLOSED) ATTIC



DRAWING 4

3. Fasten the flue extension (EX) to the first length of chimney with the three screws provided. Place the first section of chimney into the support with the flue extension protruding through the hole in the support. When installing additional sections of chimney line up the vertical seams to insure that the pre-punched screw holes line up with the slots in the outside casing. If the chimney passes through additional floors above the support follow instruction 4. If the chimney passes directly into the attic without going through another floor proceed to instruction 5.

4a. STRAIGHT CHIMNEY, NO OFFSETS: If you are venting a factory-built fireplace or an oil or gas burning appliance see the notes on page 7 before proceeding. From the floor above the support place the radiation shield tube (ERST) over the first chimney length and onto the support. Screw it to the support using the self drilling screws provided. Install additional chimney lengths as required making sure that you install a radiation shield (ERSA) where the chimney penetrates the ceiling - the ERSA should be installed from the bottom, screw or nail the ERSA solidly to the framing. The ERST is designed to slide like a telescope. Pull the ERST up around the chimney and screw it to the flange on the ERSA. Multiple ERST's may be screwed together if necessary. If the chimney is enclosed through additional floors repeat the process starting at the top of the ERSA until the chimney is installed into the attic.

NOTE: You may use an ERSF flexible radiation shield instead of an ERST if you prefer. Go to instruction 5.

4b. OFFSET CHIMNEY: Place the bottom half of the flexible radiation shield (ERSF) over the first chimney length - the ERSF connector ring will fit inside the support. Screw through the support into the ERSF connector ring to fasten it in place. Install additional chimney lengths and offsets as required. Place the other half of the ERSF over the first chimney length above the offset. Install a radiation shield (ERSA) where the chimney penetrates the ceiling. Continue installing chimney up into the attic. Screw the top of the ERSF to the flange which projects below the ERSA. Pull the top half of the ERSF down over the top elbow - the flexible duct is compressed so that it can stretch up to 66% longer. Pull the bottom half of the ERSF up over the bottom elbow in the same manner. Screw the two halves together at a convenient location between the elbows. If the offset is close to the top or bottom of the enclosure you may need to shorten one half of the ERSF and attach the extra length to the other half. An extra coupling is included with the ERSF for this purpose. Install an offset support on one of the vertical lengths above the offset, the offset support may be fastened to the roof if necessary - see page 17 for offset support instructions.

5a. IF THE CHIMNEY IS NOT ENCLOSED IN THE ATTIC: Install a storm collar (ESC) on top of the support or radiation shield. This will prevent loose insulation from falling into the area between the chimney and the support. Install a regular roof flashing. Go to instruction 6.

5b. IF THE CHIMNEY IS ENCLOSED IN THE ATTIC: Continue installing chimney sections up through the roof opening. Lower a radiation shield tube (ERST) through the roof opening and adjust it so that it sits on the support or radiation shield below. Adjust the length of the ERST so that it terminates just above the roof opening but under the flashing. Screw the four sections of the ERST to each other. Install a regular roof flashing.

6. Install the roof flashing: Seal the joint between the roof and the flashing with roofing tar or silicone. For sloping roofs, Place the flashing

under the upper shingles and on top of the lower shingles - approximately half of the flashing should be under the shingles. Seal the joint between the roof and the flashing with roofing tar or silicone. Nail the flashing to the roof using roofing nails. Place the storm collar over the chimney and the flashing. Tighten it in place. Caulk the joint between the chimney and storm collar with silicone.

7. Continue adding chimney sections until the required chimney height is reached. See the drawing on page 7 to determine the correct height.
8. If the chimney height above the roof exceeds 5 feet then a roof brace must be installed.
9. Fit the rain cap to the top of the chimney. Screw the four metal screws provided through the straps and into the top chimney length.

CATHEDRAL CEILINGS

If your home has a cathedral ceiling (no attic space between the ceiling and the roof), install the chimney and support as follows.

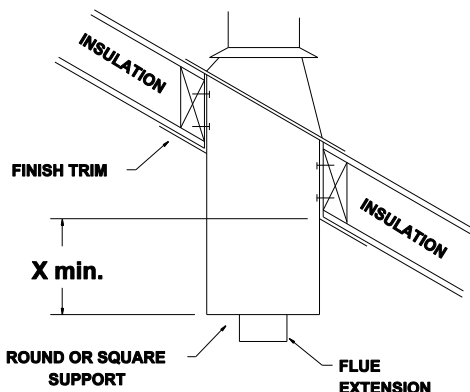
1. Situate the chimney in a convenient location as near as possible to the appliance outlet. Cut and frame a hole in the roof for the support. The sides of this hole must be vertical. See page 3 for hole size.
2. Place the support in the opening. Lower it to the correct height as determined by the table and diagram on page 13.

Using a level, make sure the support is vertical. If the support extends above the roof, cut it flush with the top of the roof. Nail the support to the frame opening using 8 - 3" spiral nails or # 8 x 1½" wood screws.

Note: *If you are using a 6" square support you may find it difficult to screw it in place because it is fairly small inside.*

We have provided angle brackets with this support which can be screwed to the outside of the support box and nailed to surrounding framing as required. Use a minimum of four # 8 x ½" metal screws per bracket. In some cases these brackets may need to be trimmed (e.g.: to fit under a flashing).

| SLOPE | X |
|---------------|---------|
| 0/12 - 2/12 | 3" |
| 2/12 - 7/12 | 5 1/2" |
| 7/12 - 12/12 | 6 3/4" |
| 12/12 - 24/12 | 7 1/2" |
| 24/12+ | 12 1/2" |



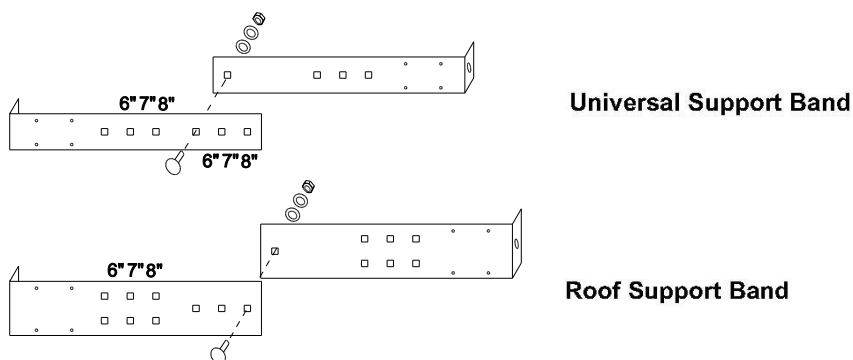
Place the Finish Collar around the support and fasten it to the ceiling using the screws provided.

3. Attach the flue extension (found in the support box) to the bottom of the first chimney length using the 3 metal screws provided. Put this chimney length in the support. Push it down firmly in place.
4. Use a regular roof flashing. Put the roof flashing in place. Place the flashing under the upper shingles and on top of the lower shingles - approximately half of the flashing should be under the shingles. Seal the joint between the roof and the flashing with roofing tar or silicone. Nail the flashing to the roof using roofing nails. Place the storm collar over the chimney and flashing. Caulk the joint between the chimney and collar with silicone caulking.
5. Put the remaining required lengths of chimney in place. Fasten the lengths together using three metal screws at each joint (provided with the chimney). If the chimney extends more than 5 feet above the roof, install a roof brace.
6. Fit the rain cap to the top of the chimney. Screw the four metal screws provided through the straps and into the top chimney length.

SUPPORT EXTENSIONS - ROUND (ERDSE) OR SQUARE (ESSE)

Steep pitched cathedral ceilings, or attics with greater than average insulation depth, may require the use of a support extension. This piece fits down inside the support and can be adjusted to increase the support's length by up to 22". The extension is attached to the support using the eight metal screws provided. Be sure there is at least a 2 inch overlap where the extension joins the support.

UNIVERSAL BAND AND ROOF SUPPORT BAND ASSEMBLY



The universal band is a sub-component of the following parts:

- **Wall Support (EWS)**
- **Roof Brace (ERB)**
- **Offset Support (EOS)**

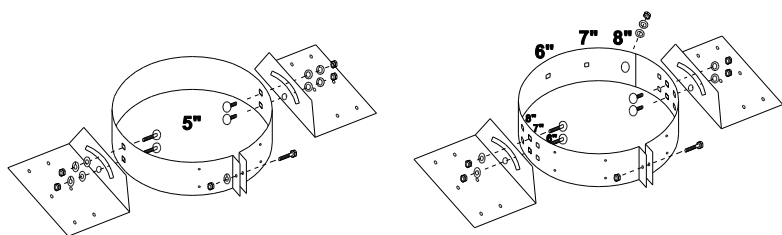
The Roof Support Band is a sub-component of the roof support and is assembled in the same manner as the universal band.

1. The universal band and the roof support band are shipped pre-assembled to fit 6" chimney. To install the bands on a 7" or 8" chimney carefully remove the three 1/4" x 1" elevator bolts (five bolts for a roof support) and replace them in the corresponding labelled holes for 7" or 8".

For 5" Ø chimney the band that come with the supports (wall, roof or offset) and with the roof brace is made to fit the outside diameter of the 5" chimney only.

2. Bend the band around the chimney section and secure with the 1/4" x 2" bolt, lock washer and nut provided. The band will bend to conform to the diameter of the chimney.

ROOF SUPPORT (ESR)

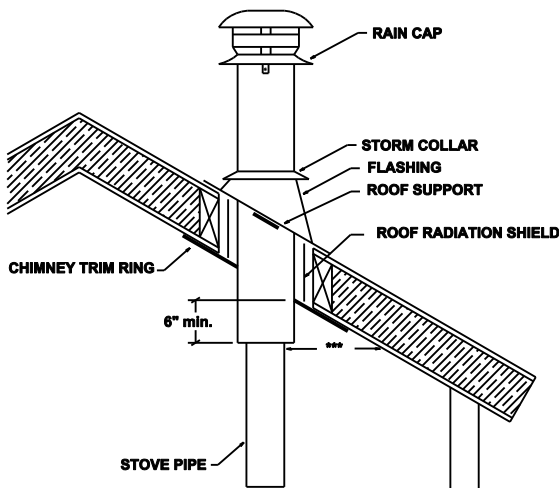


The roof support may be used to support the chimney on a flat or inclined roof.

When using a roof support the chimney must extend in to the room a minimum of 6 inches below a finished ceiling. You must also maintain the required horizontal clearance between the single or double wall connector and the combustible ceiling - see diagram below.

See the table on page 3 to determine the minimum opening required in the roof. The chimney must have 2" of clearance all around - regardless of roof pitch.

1. Assemble the roof support band following the instructions on page 14.
2. Bolt on the two 90° roof support brackets. These brackets require two elevator bolts per bracket - see the drawing above. Leave these bolts loose.



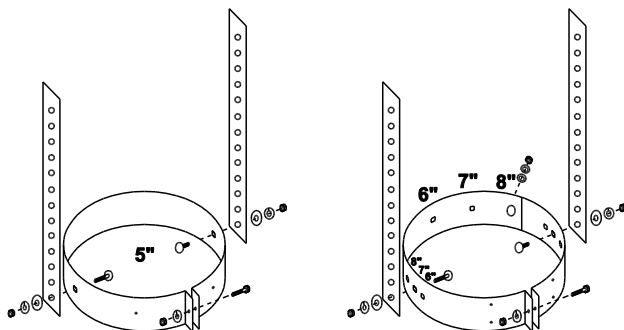
*** MINIMUM DISTANCE 18" FOR SINGLE WALL STOVE PIPE
FOR SHIELDED CONNECTORS FOLLOW MANUFACTURER'S INSTRUCTIONS

3. Slip the support down over the chimney - locate the support on the chimney so that the required amount of chimney projects below the

finished ceiling - tighten the locking nut. Place the chimney in the opening in the roof. Rotate the 90° brackets to adjust for the roof pitch. Tighten the collar around the chimney, then secure it by screwing three metal screws through the holes in the collar and into the chimney. Tighten the four nuts which hold the brackets to the support band.

4. Center the chimney in the hole in the roof and nail or screw the support to the roof using 6 - 2 1/2" nails or # 8 x 1 1/2" wood screws.

OFFSET SUPPORT (EOS)



This support is used for re-supporting a chimney above an offset.

Install the chimney and elbows according to the installation instructions. Install the support as follows:

See the table on page 3 to determine the minimum opening required for the support. The chimney must have 2" of clearance all around.

1. Assemble the band following the instructions on page 14.
2. Bolt on the offset support straps - see diagram above.
3. Slip the support down over the chimney to a convenient location.
4. Tighten the collar around the chimney, then secure it by screwing three metal screws through the holes in the collar and into the chimney.
5. Attach the support straps to the floor or roof structure using two 3" nails or #10 x 2" wood screws per strap.
6. Continue installing the chimney.

OFFSET CHIMNEY

If it is necessary to offset the chimney in order for it to pass through an upstairs cupboard or to clear a joist, do this by using 15°, 30° or 45° insulated elbows.

The maximum number of elbows permitted is four (typically this would consist of two sets of an offset and a return).

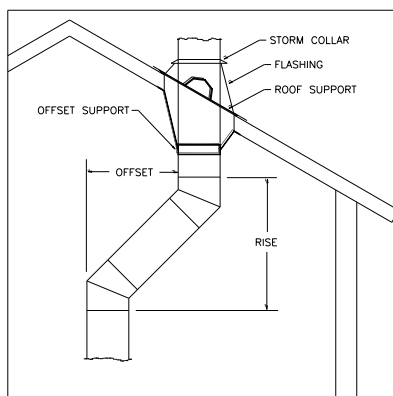
To determine the parts required for your installation refer to the drawing on page 20 and the offset tables on page 18 and 19.

You may find it convenient to install an adjustable length between the elbows. This will allow you to offset the exact distance you require. The offset table on page 18 should be used when no adjustable length is required. Use the table on page 19 when an adjustable length is required.

The maximum length of unsupported offset chimney is 8'. If the offset chimney is longer than 8', then it must be supported at 6' intervals using an offset support (EOS).

When you reach the height at which the elbow will be installed, proceed as follows:

1. Install the insulated elbow on the chimney length. Turn it in the required direction and fasten it to the chimney with the 3 metal screws provided. Since the offset direction varies from installation to installation the pre-punched holes will not line up.
2. Place the required length of chimney on the elbow. Fasten it to the elbow with the three metal screws provided.
3. Use another elbow to turn the chimney vertically. Again secure the elbow to the chimney length using three metal screws.
4. Install the remaining chimney as described in the support instructions.
5. An Offset or Roof Support must be installed above each offset (two elbows) to support the chimney above the offset. This support may be installed on any convenient location on the vertical run above the offset.



EXCEL OFFSET TABLE - Use this table if you are not installing an adjustable length between the elbows.

| LENGTH BETWEEN OFFSETS | 15° Elbows | | 30° Elbows | | 45° Elbows | |
|------------------------|------------|--------|------------|--------|------------|--------|
| | RISE | OFFSET | RISE | OFFSET | RISE | OFFSET |
| 5 INCH Ø | | | | | | |
| NO LENGTH | 9 1/4 | 1 1/4 | 10 1/2 | 2 3/4 | 11 1/4 | 4 3/4 |
| 6" Length | 13 1/4 | 2 1/4 | 14 1/4 | 5 | 14 1/4 | 7 3/4 |
| 12" Length | 19 | 3 3/4 | 19 1/4 | 8 | 18 1/2 | 12 |
| 18" Length | 25 | 5 1/2 | 24 1/2 | 11 | 22 3/4 | 16 1/4 |
| 24" Length | 30 3/4 | 7 | 29 3/4 | 14 | 27 | 20 1/2 |
| 48" Length | 53 3/4 | 13 1/4 | 50 1/2 | 26 | 44 | 37 1/2 |
| 24" + 12" | 40 1/2 | 9 1/2 | 38 3/4 | 19 | 34 1/4 | 27 3/4 |
| 48" + 12" | 63 3/4 | 15 3/4 | 59 1/2 | 31 | 51 1/4 | 44 3/4 |
| 48" + 18" | 69 1/2 | 17 1/2 | 64 1/2 | 34 | 55 1/2 | 49 |
| 48" + 24" | 75 1/4 | 19 | 69 3/4 | 37 | 59 3/4 | 53 1/4 |
| 48" + 24" + 12" | 85 1/4 | 21 1/2 | 78 3/4 | 42 1/4 | 67 | 60 1/2 |
| 48" + 48" | 98 1/2 | 25 1/4 | 90 1/2 | 49 | 76 3/4 | 70 |
| 6 INCH Ø | | | | | | |
| NO LENGTH | 9 1/2 | 1 1/4 | 11 | 3 | 12 | 5 |
| 6" Length | 13 1/2 | 2 1/4 | 14 3/4 | 5 | 15 | 8 |
| 12" Length | 19 1/4 | 4 | 19 3/4 | 8 | 19 1/4 | 12 1/4 |
| 18" Length | 25 1/4 | 5 1/2 | 25 | 11 | 23 1/2 | 16 1/2 |
| 24" Length | 31 | 7 | 30 1/4 | 14 | 27 3/4 | 20 3/4 |
| 48" Length | 54 | 13 1/4 | 51 | 26 | 44 3/4 | 37 3/4 |
| 24" + 12" | 40 3/4 | 9 3/4 | 39 1/4 | 19 1/4 | 35 | 28 |
| 48" + 12" | 64 | 15 3/4 | 60 | 31 1/4 | 52 | 45 |
| 48" + 18" | 69 3/4 | 17 1/2 | 65 | 34 1/4 | 56 1/4 | 49 1/4 |
| 48" + 24" | 75 1/2 | 19 | 70 1/4 | 37 1/4 | 60 1/2 | 53 1/2 |
| 48" + 24" + 12" | 85 1/2 | 21 3/4 | 79 1/4 | 42 1/4 | 67 3/4 | 60 3/4 |
| 48" + 48" | 98 3/4 | 25 1/4 | 91 | 49 1/4 | 77 1/2 | 70 1/2 |
| 7 INCH Ø | | | | | | |
| NO LENGTH | 9 3/4 | 1 1/4 | 11 1/2 | 3 | 12 3/4 | 5 1/4 |
| 6" Length | 13 3/4 | 2 1/2 | 15 1/4 | 5 1/4 | 15 3/4 | 8 1/4 |
| 12" Length | 19 1/2 | 4 | 20 1/4 | 8 1/4 | 20 | 12 1/2 |
| 18" Length | 25 1/2 | 5 1/2 | 25 1/2 | 11 1/4 | 24 1/4 | 16 3/4 |
| 24" Length | 31 1/4 | 7 | 30 3/4 | 14 1/4 | 28 1/2 | 21 |
| 48" Length | 54 1/2 | 13 1/4 | 51 1/2 | 26 1/4 | 45 1/2 | 38 |
| 24" + 12" | 41 | 9 3/4 | 39 3/4 | 19 1/4 | 35 3/4 | 28 1/4 |
| 48" + 12" | 64 1/4 | 16 | 60 1/2 | 31 1/4 | 52 3/4 | 45 1/4 |
| 48" + 18" | 70 | 17 1/2 | 65 1/2 | 34 1/4 | 57 | 49 1/2 |
| 48" + 24" | 75 3/4 | 19 | 70 3/4 | 37 1/4 | 61 1/4 | 53 3/4 |
| 48" + 24" + 12" | 85 3/4 | 21 3/4 | 79 3/4 | 42 1/2 | 68 1/2 | 61 |
| 48" + 48" | 99 | 25 1/4 | 91 1/2 | 49 1/4 | 78 1/4 | 70 3/4 |
| 8 INCH Ø | | | | | | |
| NO LENGTH | 10 | 1 1/4 | 12 | 3 1/4 | 13 1/2 | 5 1/2 |
| 6" Length | 14 | 2 1/2 | 15 3/4 | 5 1/4 | 16 1/2 | 8 1/2 |
| 12" Length | 19 3/4 | 4 | 20 3/4 | 8 1/4 | 20 3/4 | 12 3/4 |
| 18" Length | 25 3/4 | 5 1/2 | 26 | 11 1/4 | 25 | 17 |
| 24" Length | 31 1/2 | 7 | 31 1/4 | 14 1/4 | 29 1/4 | 21 1/4 |
| 48" Length | 54 3/4 | 13 1/4 | 52 | 26 1/4 | 46 1/4 | 38 1/4 |
| 24" + 12" | 41 1/4 | 9 3/4 | 40 1/4 | 19 1/2 | 36 1/2 | 28 1/2 |
| 48" + 12" | 64 1/2 | 16 | 61 | 31 1/2 | 53 1/2 | 45 1/2 |
| 48" + 18" | 70 1/4 | 17 1/2 | 66 | 34 1/2 | 57 3/4 | 49 3/4 |
| 48" + 24" | 76 1/4 | 19 | 71 1/4 | 37 1/2 | 62 | 54 |
| 48" + 24" + 12" | 86 | 21 3/4 | 80 1/4 | 42 1/2 | 69 1/4 | 61 1/4 |
| 48" + 48" | 99 1/4 | 25 1/4 | 92 | 49 1/2 | 79 | 71 |

EXCEL OFFSET TABLE - Use this table when an 18 inch adjustable length is required.

| LENGTH BETWEEN OFFSETS | 15° Elbows | | 30° Elbows | | 45° Elbows | |
|------------------------------|-------------------|-----------------|-------------------|-----------------|-----------------|-----------------|
| | RISE | OFFSET | RISE | OFFSET | RISE | OFFSET |
| 5 inch Ø | | | | | | |
| 6" Length | 23 - 28 3/4 | 5 - 6 1/2 | 22 3/4 - 28 | 10-13 | 21 1/2 - 25 3/4 | 14 3/4 - 19 |
| 12" Length | 28 3/4 - 34 1/2 | 6 1/2 - 8 | 28 - 33 1/4 | 13 - 16 | 25 3/4 - 30 | 19 - 23 1/4 |
| 18" Length | 34 1/2 - 40 1/4 | 8 - 9 1/2 | 33 1/4 - 38 1/2 | 16 - 19 | 30 - 34 1/4 | 23 1/4 - 27 1/2 |
| 24" Length | 40 1/4 - 46 1/4 | 9 1/2 - 11 | 38 1/2 - 43 1/2 | 19 - 22 | 34 1/4 - 38 1/2 | 27 1/2 - 31 3/4 |
| 48" Length | 63 1/2 - 69 1/4 | 15 3/4 - 17 1/4 | 59 1/4 - 64 1/2 | 31 - 34 | 51 1/4 - 55 1/4 | 44 1/2 - 48 3/4 |
| 24" + 12" | 50 1/4 - 56 | 12 1/4 - 13 3/4 | 47 1/4 - 52 1/2 | 24 - 27 | 41 1/2 - 45 3/4 | 34 1/4 - 39 |
| 48" + 12" | 73 1/2 - 79 1/4 | 18 1/2 - 20 | 68 - 73 1/4 | 36 - 39 | 58 1/4 - 62 1/2 | 51 3/4 - 56 |
| 48" + 18" | 79 1/4 - 85 | 20 - 21 1/2 | 73 1/4 - 78 1/2 | 39 - 42 | 62 1/2 - 66 3/4 | 56 - 60 1/4 |
| 48" + 24" | 85 - 90 3/4 | 21 1/2 - 23 | 78 1/2 - 83 3/4 | 42 - 45 | 66 3/4 - 71 | 60 1/4 - 64 1/2 |
| 48" + 24" + 12" | 95 - 100 3/4 | 24 1/4 - 25 3/4 | 87 1/4 - 92 1/2 | 47 1/4 - 50 1/4 | 74 - 78 1/4 | 67 1/2 - 71 3/4 |
| 48" + 48" | 108 1/4 - 114 | 27 3/4 - 29 1/4 | 99 1/4 - 104 1/2 | 54 - 57 | 83 3/4 - 88 | 77 1/4 - 81 1/2 |
| 6 inch Ø | | | | | | |
| 6" Length | 23 1/4 - 29 | 5 - 6 1/2 | 23 1/4 - 28 1/2 | 10-13 | 22 1/4 - 26 1/2 | 15 - 19 1/4 |
| 12" Length | 29 - 34 3/4 | 6 1/2 - 8 | 28 1/2 - 33 3/4 | 13 - 16 | 26 1/2 - 30 1/2 | 19 1/4 - 23 1/2 |
| 18" Length | 34 3/4 - 40 1/2 | 8 - 9 1/2 | 33 3/4 - 39 | 16 - 19 | 30 1/2 - 34 3/4 | 23 1/2 - 27 3/4 |
| 24" Length | 40 1/2 - 46 1/2 | 9 1/2 - 11 1/4 | 39 - 44 | 19 - 22 | 34 3/4 - 39 | 27 3/4 - 32 |
| 48" Length | 63 3/4 - 69 1/2 | 15 3/4 - 17 1/4 | 59 3/4 - 65 | 31 - 34 | 51 3/4 - 56 | 44 3/4 - 49 |
| 24" + 12" | 50 1/2 - 56 1/4 | 12 1/4 - 13 3/4 | 47 3/4 - 53 | 24 1/4 - 27 1/4 | 42 - 46 1/4 | 35 - 39 1/4 |
| 48" + 12" | 73 3/4 - 79 1/2 | 18 1/2 - 20 | 68 1/2 - 73 3/4 | 36 1/4 - 39 1/4 | 59 - 63 1/4 | 52 - 56 1/4 |
| 48" + 18" | 79 1/2 - 85 1/4 | 20 - 21 1/2 | 73 3/4 - 79 | 39 1/4 - 42 1/4 | 63 1/4 - 67 1/2 | 56 1/4 - 60 1/2 |
| 48" + 24" | 85 1/4 - 91 | 21 1/2 - 23 | 79 - 84 1/4 | 42 1/4 - 45 1/4 | 67 1/2 - 71 3/4 | 60 1/2 - 64 3/4 |
| 48" + 24" + 12" | 95 1/4 - 101 | 24 1/4 - 25 3/4 | 87 3/4 - 93 | 47 1/4 - 50 1/4 | 74 3/4 - 79 | 67 3/4 - 72 |
| 48" + 48" | 108 1/2 - 114 1/4 | 27 3/4 - 29 1/4 | 99 3/4 - 105 | 54 1/4 - 57 1/4 | 84 1/2 - 88 3/4 | 77 1/2 - 81 3/4 |
| 7 inch Ø | | | | | | |
| 6" Length | 23 1/2 - 29 1/4 | 5 - 6 1/2 | 23 3/4 - 29 | 10 1/4 - 13 1/4 | 22 3/4 - 27 | 15 1/4 - 19 1/2 |
| 12" Length | 29 1/4 - 35 | 6 1/2 - 8 | 29 - 34 1/4 | 13 1/4 - 16 1/4 | 27 - 31 1/4 | 19 1/2 - 23 3/4 |
| 18" Length | 35 - 40 3/4 | 8 - 9 1/2 | 34 1/4 - 39 1/2 | 16 1/4 - 19 1/4 | 31 1/4 - 35 1/2 | 23 3/4 - 28 |
| 24" Length | 40 3/4 - 46 3/4 | 9 1/2 - 11 1/4 | 39 1/2 - 44 1/2 | 19 1/4 - 22 1/4 | 35 1/2 - 39 3/4 | 28 - 32 1/4 |
| 48" Length | 64 - 69 3/4 | 15 3/4 - 17 1/2 | 60 1/4 - 65 1/2 | 54 - 57 | 52 1/2 - 56 3/4 | 45 - 49 1/4 |
| 24" + 12" | 50 3/4 - 56 1/2 | 12 1/4 - 13 3/4 | 48 1/4 - 53 1/2 | 1 1/2 - 4 1/2 | 42 3/4 - 47 | 35 1/4 - 39 1/2 |
| 48" + 12" | 74 - 79 3/4 | 18 1/2 - 20 | 69 - 74 1/4 | 36 1/4 - 39 1/4 | 59 3/4 - 64 | 52 1/4 - 56 1/2 |
| 48" + 18" | 79 3/4 - 85 1/2 | 20 - 21 1/2 | 74 1/4 - 79 1/2 | 39 1/4 - 42 1/4 | 64 - 68 1/4 | 56 1/2 - 60 3/4 |
| 48" + 24" | 85 1/2 - 91 1/4 | 21 1/2 - 23 1/4 | 79 1/2 - 84 3/4 | 42 1/4 - 45 1/4 | 68 1/4 - 72 1/2 | 60 3/4 - 65 |
| 48" + 24" + 12" | 95 1/2 - 101 1/4 | 24 1/4 - 25 3/4 | 88 1/4 - 93 1/2 | 47 1/2 - 50 1/2 | 75 1/2 - 79 3/4 | 68 - 72 1/4 |
| 48" + 48" | 108 3/4 - 114 1/2 | 27 3/4 - 29 1/4 | 100 1/4 - 105 1/2 | 54 1/4 - 57 1/4 | 85 1/4 - 89 1/2 | 77 3/4 - 82 |
| 8 inch Ø | | | | | | |
| 6" Length | 23 3/4 - 29 1/2 | 5 - 6 1/2 | 24 1/4 - 29 1/2 | 10 1/4 - 13 1/4 | 23 1/2 - 27 3/4 | 15 3/4 - 20 |
| 12" Length | 29 1/2 - 35 1/4 | 6 1/2 - 8 | 29 1/2 - 34 3/4 | 13 1/4 - 16 1/4 | 27 3/4 - 32 | 20 - 24 1/4 |
| 18" Length | 35 1/4 - 41 | 8 - 9 3/4 | 34 3/4 - 40 | 16 1/4 - 19 1/4 | 32 - 36 1/4 | 24 - 28 1/2 |
| 24" Length | 41 - 47 | 9 3/4 - 11 1/4 | 40 - 45 | 19 1/4 - 22 1/4 | 36 1/4 - 40 1/2 | 28 1/2 - 32 3/4 |
| 48" Length | 64 1/4 - 70 | 15 3/4 - 17 1/2 | 60 3/4 - 66 | 31 1/4 - 34 1/4 | 53 1/4 - 57 1/2 | 45 1/4 - 49 1/2 |
| 24" + 12" | 51 - 56 3/4 | 12 1/4 - 13 3/4 | 48 3/4 - 54 | 24 1/2 - 27 1/2 | 43 1/2 - 47 3/4 | 35 3/4 - 40 |
| 48" + 12" | 74 1/4 - 80 | 18 1/2 - 20 | 69 1/2 - 74 3/4 | 36 1/2 - 39 1/2 | 60 1/2 - 64 3/4 | 52 1/2 - 56 3/4 |
| 48" + 18" | 80 - 85 3/4 | 20 - 21 3/4 | 74 3/4 - 80 | 39 1/2 - 42 1/2 | 64 3/4 - 69 | 56 3/4 - 61 |
| 48" + 24" | 85 3/4 - 91 1/2 | 21 3/4 - 23 1/4 | 80 - 85 1/4 | 42 1/2 - 45 1/2 | 69 - 73 1/4 | 61 - 65 1/4 |
| 48" + 24" + 12" | 95 3/4 - 101 1/2 | 24 1/4 - 25 3/4 | 88 3/4 - 94 | 47 1/2 - 50 1/2 | 76 1/2 - 80 1/2 | 68 1/4 - 72 1/2 |
| 48" + 48" | 109 - 114 3/4 | 27 3/4 - 29 1/2 | 100 3/4 - 106 | 54 1/2 - 57 1/2 | 86 - 90 1/4 | 78 - 82 1/4 |

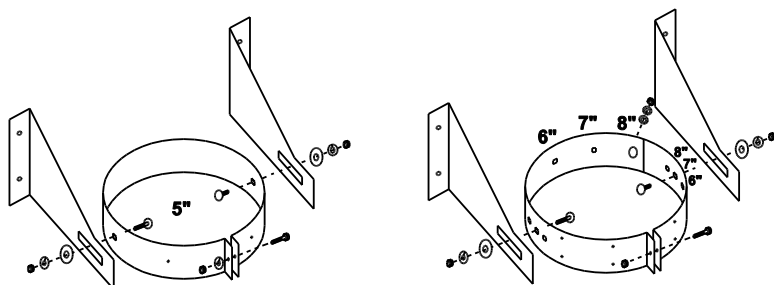
The best place to install the adjustable length is immediately below the top elbow.

The adjustable length can then be adjusted to give you the offset you require.

NOTE: An adjustable length can not be used immediately above an elbow, there must be a straight length below it.

WALL SUPPORT (EWS)

1. Assemble the band following the instructions on page 14.
2. Fasten the wall support components to the band - see diagram above. The components are attached to the two elevator bolts projecting from the sides of the band.



WALL RADIATION SHIELD (EWSR)

If you are installing your chimney in an energy efficient house which has sealed vapour barriers (e.g.: R2000 construction) we manufacture a special wall radiation shield so that you can maintain your vapour barrier integrity. (See part EWSR1.)

If possible install an interior chimney as it will provide better performance than an exterior chimney. In area with continuous temperatures below -18°C (0°F) the use of an exterior chimney may result in operating problems such as poor draft, excessive condensation of combustion products and rapid accumulation of creosote when connected to a wood burning appliance. If you do install an exterior chimney, we recommend that you enclose it using an insulated enclosure.

NOTES:

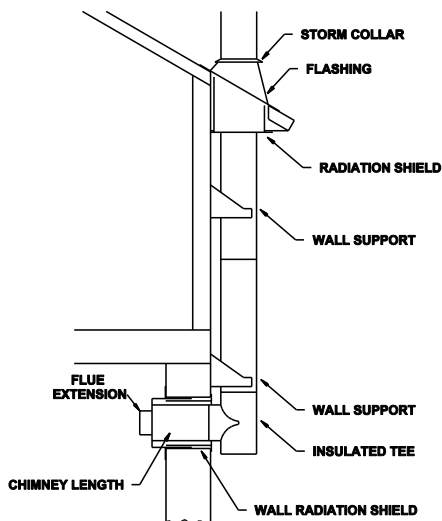
1. The chimney may be enclosed or un-enclosed. Always maintain 2" clearance to combustible materials. Do not fill the space around the chimney with insulation or any other material.
2. A wall support must be used to secure the chimney to the wall. Maximum distance between wall supports is 8 feet if the chimney is not enclosed.
3. The chimney must extend in to the room at least 4 inches.
4. The distance between a single wall stovepipe and a parallel combustible wall or ceiling must not be less than 18". The distance between the

horizontal stove pipe and the un-shielded vertical wall through which the insulated chimney passes is determined by the Wall Radiation Shield.

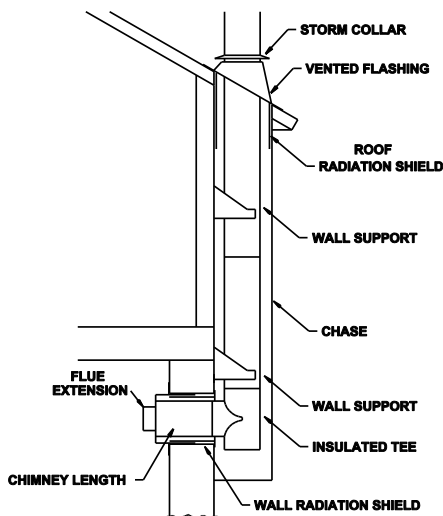
5. If an exterior installation is to be enclosed, allow for access to the base of the Tee to facilitate cleaning.
6. The minimum distance between the bottom of the chimney and any horizontal combustible is 12".

THROUGH WALL INSTALLATION

Unenclosed Exterior Installation



Enclosed Exterior Installation



1. Determine where the chimney will pass through the wall.

For concrete walls cut a hole slightly larger than the chimney. If the concrete wall has a wood wall inside it follow the instructions for a combustible wall.

For combustible walls cut and frame a hole corresponding to the rough opening required in the table on page 3.

2. Combustible wall:

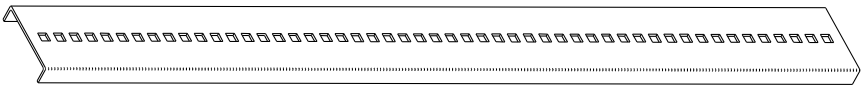
From outside, put the exterior portion (the galvanized part with the square plate) of the wall radiation shield in the hole. Nail the shield in place using 4 - 2" nails or # 8 x 1 1/2" wood screws. Seal the joint between the shield and the wall with silicone caulking.

3. Assemble the Wall Support - follow instructions on page 20.

4. Fasten the required chimney length to the Tee side entrance. The horizontal chimney section must extend through the finished interior wall by at least 4 inches. In some cases you may wish to use an adjustable length in combination with a short length for this purpose. Attach the flue extension (EX) found in the EWRS box, to the end of the horizontal chimney length using the 3 metal screws provided.
5. Fasten a chimney length to the top of the Tee.
6. The wall support should be installed on the first vertical chimney section above the Tee. Tighten the universal band locking bolt just enough to hold the wall support in place.
7. Install this assembly through the hole in the radiation shield.
8. Fasten the Wall Support brackets to the outside wall in a convenient location directly above the hole. Use four #10 x 3" or larger screws. Insure that the screws are fastened into a structural member and not only to the wall sheeting. If the stud locations do not line up properly you may wish to use a wall channel - see instructions page 24. The Wall Support brackets are slotted to allow them to adjust in and out. Adjust the brackets so that the chimney is a minimum of 2" from the wall and parallel with it. Tighten the Wall Support collar around the chimney, then secure it using 3 metal screws.
9. Stack the next chimney length in place. Align the vertical seams, this will also align the screw holes. Fasten the lengths together using 3 metal screws. Continue installing lengths until you reach the roof or until the required overall height is achieved. Many installers prefer to screw two or three vertical lengths together in advance because it is easier to screw the chimney sections together in the open than when they are close to a wall.
10. If the chimney is installed in a combustible chase then a roof radiation shield (ERRS) must be installed immediately below the flashing or chase top and a ventilated flashing (EVF) must be installed. See drawing on page 22.
11. If the chimney passes through the roof, cut a hole large enough to provide 2" clearance between the chimney and the roof. Install a radiation shield (ERS) from the bottom to seal the opening. Continue installing lengths as required.
12. Install another Wall Support at 8' intervals. The Wall Support should be adjusted to ensure the chimney is vertical and at 2" (or more) clearance to combustibles.

13. Put the roof flashing in place. Seal the joint between the roof and the flashing with roofing pitch. For sloping roofs, place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof using roofing nails. Place the storm collar over the chimney just above the flashing. Caulk the joint between the chimney and storm collar with silicone caulking.
14. Continue adding chimney sections until the required chimney height is reached. See the drawing on page 7 to determine the correct height.
15. If the chimney extends more than 5' above the roof it should be secured to the roof using a Roof Brace (ERB).
16. Fit the rain cap to the top of the chimney. Screw the four metal screws provided through the straps and into the top chimney length. Install the spark screen if you wish to have a spark screen.
17. FROM INSIDE. Slide the black portion of the Wall Radiation Shield over the galvanized portion which was installed from the outside and push it until it stops against the chimney. The black interior portion of the Wall Radiation Shield must project into the room a minimum of 4". Install the round finish trim with the long black screws provided.

WALL CHANNEL



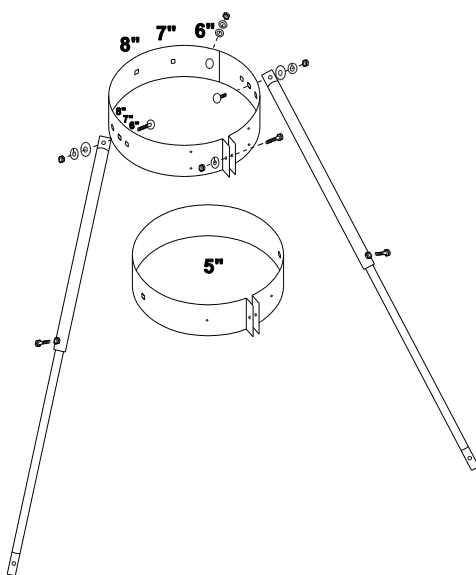
The use of a wall channel will simplify the installation of a wall band or wall support. The wall channel is 26 inches long to allow for 24 inch on centre framing.

1. Locate the framing members you will screw the wall channel to. **Do not screw the wall channel in place yet.**
2. Determine the correct location on the wall channel for the wall band or wall support. The two short sides of the wall channel rest against the wall. Bolt the support brackets to the wall channel with elevator bolts.
3. Screw the wall channel in place using a minimum of four #10 x 3 inch screws.

ROOF BRACE (ERB)

The roof brace is required to provide extra stability for chimneys which extend more than 5 feet above a roof.

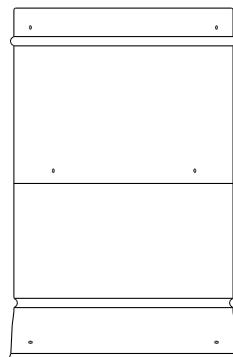
1. Assemble the band following the instructions on page 14.
2. Place the band at a point at least two thirds of the way up the chimney. Fasten the larger diameter section of the braces to the collar using the nuts provided. Adjust the length of the braces by telescoping one tube inside the other until the desired length is reached. The angle of the braces should not be more than 45 degrees from horizontal when fastened to the roof.



3. Fasten the other end of each brace to the roof using a #10 x 4" or larger screw and a washer. Insure that the screws are fastened into a structural member of the roof and not only into the roof sheeting. The two braces should be installed approximately 90° apart.
4. Tighten the bolt which locks the two tubes together very firmly. We recommend that you screw the inside and outside tubes together using # 8 x 1/2" screws to permanently lock them in place.
5. Tighten the locking bolt on the universal band then secure the collar by screwing the metal screws provided through the holes in the collar and into the chimney.

ADJUSTABLE LENGTH (ELA18)

An adjustable chimney length is available for chimney installations that require exact lengths. An adjustable length can not be installed immediately above a support, elbow or tee. It can only be installed above a straight length. When using the adjustable length the flue (inside) does not adjust, only the outside casing.

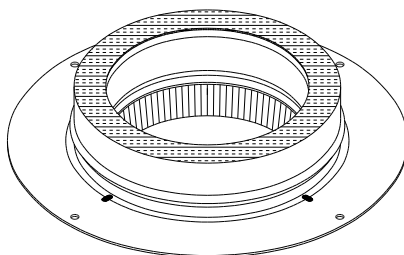


1. Determine the required length.
2. Remove the three screws from the outside casing of the adjustable length. Slide the two sections of the outer casing together until the required overall length is achieved.
3. Using the stainless steel screws provided fasten the two sections of outer casing together through the three pre-punched holes. The screws are self drilling and will make their own holes. Cut off the exposed insulation. The remaining insulation will compress enough to allow the next chimney section to connect. Do not cut the inner flue, it will slide inside the next chimney length.
4. To install the adjustable length slide the flue into the length below until the outside casing seats firmly in place. You may need to press firmly to compress the additional insulation. Fasten the lengths together using the 3 metal screws provided.

ANCHOR PLATE (EAP)

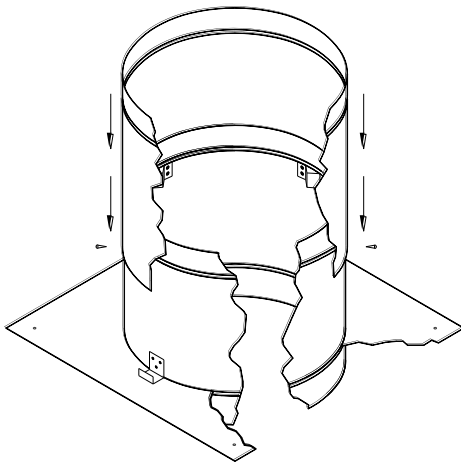
This support is used on a masonry fireplace to provide a positive connection to the chimney. It is not to be used in contact with any combustible material, such as a wood floor.

Once a fireplace is installed, bolt the anchor plate to the fireplace. Install the chimney according to the Installation Instructions for the Ceiling Support. Omit step 2 since the anchor plate acts as the chimney's support.



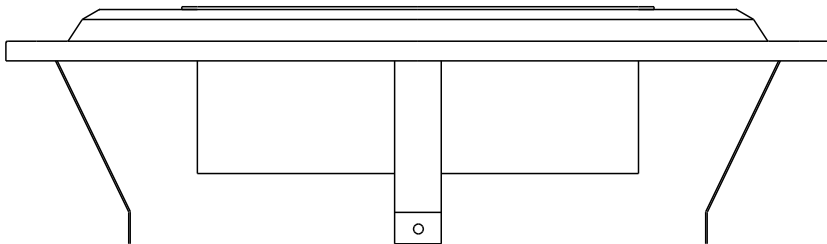
RADIATION SHIELD (ERS & ERSA)

The radiation shield must be used when the chimney passes through a floor, or when it is installed in an attic. See illustrations page 9. The radiation shield is designed to adjust for a variety of attic heights. Always adjust the radiation shield to be as high as the attic will allow, even if the additional height is not required to provide shielding from insulation. This will reduce the chance that loose fill insulation will come in contact with the chimney if additional insulation is added in the future. To adjust the radiation shield simply slide the top tube up as high as possible then screw the two sections together with the self drilling screws provided. When the radiation shield is installed in the attic, a universal storm collar (ESC) must be used. This will prevent the infiltration of insulation between chimney and radiation shield.



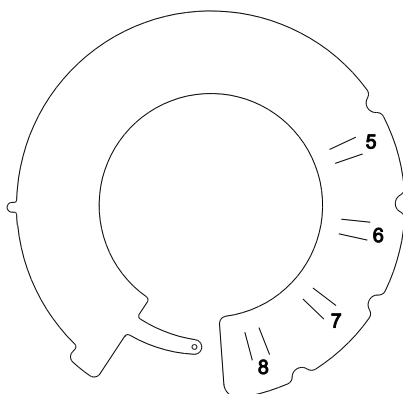
RAIN CAP BASE (ERCB)

The rain cap base is used to seal off the end of the chimney where it is installed without a rain cap. In some Northern areas the use of a rain cap is either not permitted or discouraged. Excel chimneys do not have end caps so the ends of the chimney are open to the weather unless they are protected by a rain cap or rain cap base. **Under no circumstances** can the end of an Excel chimney be left unprotected. If it is necessary for the rain cap to be removed, a rain cap base must be installed.



UNIVERSAL STORM COLLAR (ESC)

The universal storm collar has been designed as a compatible fit for all EXCEL chimneys. The universal storm collar must be used on regular (non-vented) flashing and on the radiation shield when installed in an attic. The universal storm collar, when installed on small diameter chimney (5" and 6"), can be cut for ease of installation. The cut line is shown in the illustration of the piece.

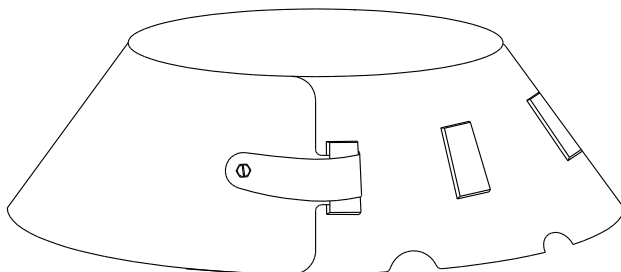


To install the universal storm collar:

1. Place the storm collar around the chimney.
2. Slide the tongue into the appropriate slot for the required diameter.
3. Ensure the tongue is placed into the slot correctly.
4. Use the round notch to tighten the collar around the chimney.

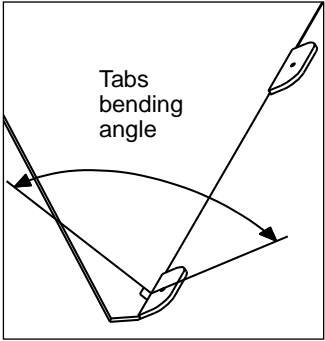
(When the collar is installed in an attic ensure that it's sits properly on the radiation shield)

5. Bend the tongue back over the slot.
6. Bend the two tabs to secure the inner portion of the collar.
7. Hold the tongue in place by inserting a screw into the hole at the tip.
8. Seal the crack between chimney and collar with silicone.
9. Seal the unused slots of the universal storm collar with silicone.

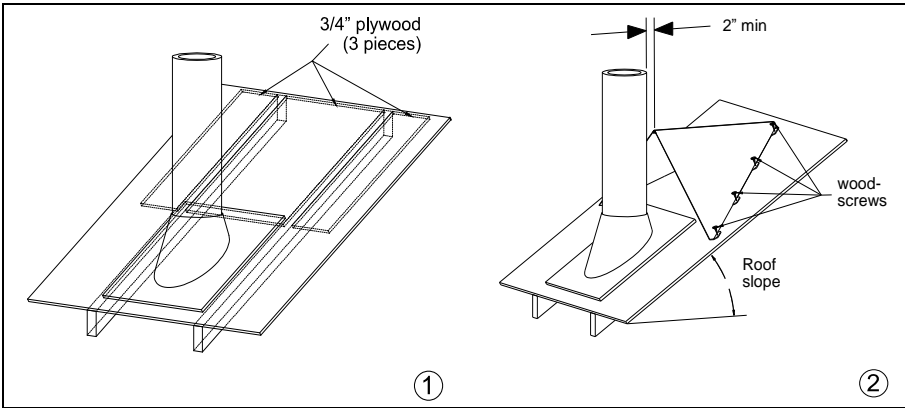


SNOW-BARRIER (ESW)

1. The snow wedge must be solidly fastened to the roof in order to resist the force of a heavy snow load. Simply screwing it to typical roof sheeting is not normally sufficient. We recommend that you install 3/4" plywood or 2 X 6 backing large enough to accept all eight screws.
2. The tabs on the snow wedge are factory adjusted for a 4/12 roof. These tabs must be bent in the field to adjust for the actual roof pitch see attached table. The snow wedge is designed to be adjustable for all pitches up to a maximum of 12/12.
3. Position the snow wedge on the roof with the hinge aligned with the center of the chimney. Adjust the wedge so that the top (hinge) is horizontal. Leave a minimum distance of 2" between the chimney and the top of the wedge.
4. Screw the wedge to the roof using #10 X 3" or heavier screws; be sure to install all eight screws. Before tightening the screws apply some silicone under each tab to seal the screw hole in the roof. Make sure all screws penetrate the backing as well as the roof sheeting.



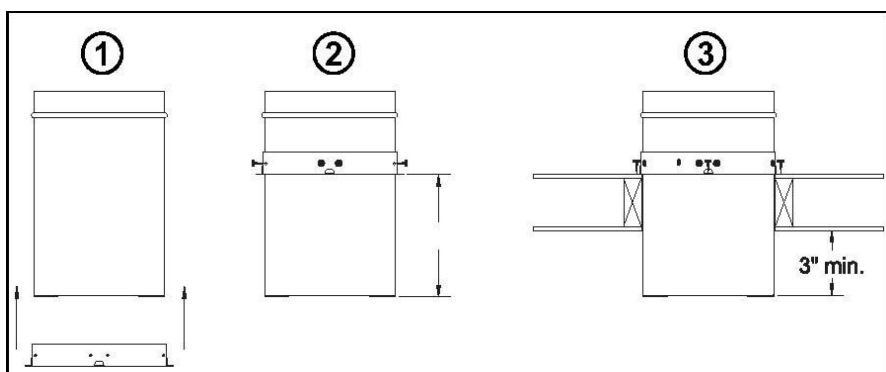
| Roof slope | Locking tabs' bend |
|------------|--------------------|
| 4/12 | 136° |
| 7/12 | 130° |
| 9/12 | 125° |
| 12/12 | 112° |



ROUND SUPPORT (ERDS)

To install the round support using the support collar follow the Excel installation instructions for the round support replacing step #2 with the following:

1. Slide the support collar over the support from the bottom making sure the four tabs are pointing downwards - see drawing below. Before screwing the collar in place you must measure to compensate for the thickness of the framing materials and also insure that the bottom of the support extends a minimum of 3" below the finished ceiling. Fasten the collar to the support with the self tapping metal screws provided.



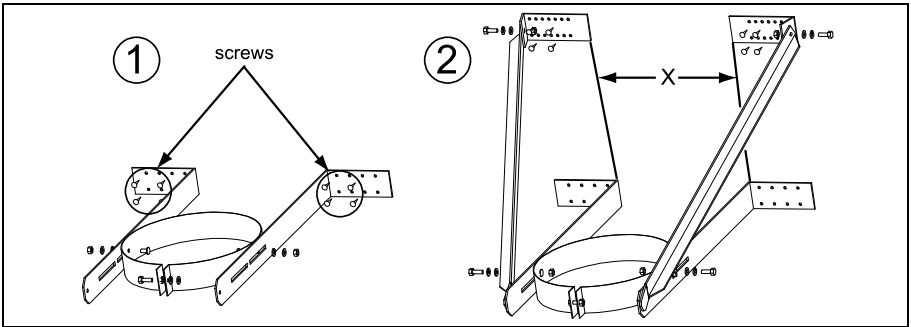
2. The tabs have been designed so that the support can be pushed up through the square framed opening from the bottom and then rotated 1/4 turn so that the tabs sit on top of the framing - the round trim collar is large enough to cover the square hole. Once all four tabs are sitting on the framing it must be nailed or screwed in place. This can be accomplished either from the top through the holes in the tabs, or through all four sides of the support using a minimum #8 x 1 1/2" screws.

To complete the installation follow the remaining steps in the Excel installation instructions.

EXTENDED WALL SUPPORT (EWSE)

1. Assemble the universal support collar on the chimney section as shown on page 14 & 15 of the Excel installation instructions.
2. Attach the horizontal braces to the universal support collar as show in the diagram below. Place the support collar at the desired distance from the wall using the slots on the horizontal braces. The braces are attached to the two elevator bolts that protrude from the sides of the support collar.

Continue the installation in accordance with the instruction manual on page 22, wall support, and replace instructions 6 and 8 on page 23 with the following:



6. The horizontal braces and support flange should be installed on the first vertical chimney section above the Tee. Tighten the universal band locking bolt just enough to hold the wall support in place.

8. Install the support horizontal braces on the external wall by using four #10 x 3" or longer screws. Attach the diagonal braces and the wall brackets to the horizontal braces. Install the brackets on the external wall using #10 x 3" or longer screws. As mentioned previously, ensure that the screws are anchored in the structural member and not only to the wall sheeting. If the stud locations do not

line up properly you may wish to use a wall channel (see instructions page 24). The wall support brackets are slotted to allow them to adjust in and out. Adjust the brackets so that the chimney is a minimum of 2" from combustible material and parallel with the wall. Tighten the Wall Support collar around the chimney, then secure it using 3 metal screws.

| Chimney diameter | Maximum height that can be supported |
|------------------|--------------------------------------|
| 5" Ø | 23' |
| 6" Ø | 20' |
| 7" Ø | 17' |
| 8" Ø | 16' |

(continue the installation in accordance with the instruction manual at the page 22 & 23)

LIMITED LIFETIME WARRANTY ICC EXCEL RESIDENTIAL CHIMNEY

ICC warrants its EXCEL stainless steel chimney lengths to be free from functional failure due to defects in material or workmanship for as long as the original consumer owns the chimney system. This warranty provides for replacement of any chimney lengths which fail as a result of normal use on a residential fireplace, wood burning stove, furnace or boiler and includes replacement of any lengths damaged as a result of a chimney fire. (Note: Chimney fires are dangerous and preventable, we strongly encourage you to have your chimney cleaned regularly). This warranty does not cover damage caused to the building by chimney fires or misuse of the product.

No claims under this warranty will be honoured unless ICC is notified of the potential claim and is given the opportunity to have one of its agents examine the chimney prior to replacement.

ICC will only be responsible for repair or replacement of any chimney lengths found to be defective under this warranty. In no event shall ICC be responsible for any incidental or consequential damage caused by defects in the EXCEL chimney system.

During the first ten years of the warranty ICC will provide replacement chimney lengths at no charge. During the balance of the warranty ICC will provide replacement chimney lengths at 50% of the current retail price at the time of the warranty claim.

ICC will not be responsible for labour of any kind required in the removal or replacement of an EXCEL system replaced under this warranty.

This chimney is designed to vent residential heating oil, untreated wood, low sulphur coal, and natural or LP gas. It is designed to operate at a continuous temperature of 650°C or less. It is not designed to vent condensing oil or gas appliances. This warranty is void if the chimney is used in an application for which it is not designed.

The EXCEL system must be installed according to the Installation Instructions included with every system at the time of purchase. If you do not have a set of installation instructions they are available free upon request. This warranty is void if the chimney is not installed according to the installation instructions.

This warranty may not be extended or modified by our agents or representatives. This warranty is in lieu of all other express warranties or guarantees, of any kind.

Notes