

# EXCEL ULTRABlack FS 6" Clearance Connector 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 CONNECTOR BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

## Allowable Flue Gas Temperatures

Maximum Continuous	1200°F	650°C
Brief Forced Firing	1700°F	925°C
Tested To	2100°F	1150°C

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

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

Always follow the wood burning stove manufacturer's installation instructions. On some close clearance stoves the heat generated by the stove *independent of the connector system* is sufficient to require additional clearance. Certain applications, such as mobile homes, sometimes require clearances greater than 6 inches.

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

ULTRABlack has been tested and listed by  
Warnock Hersey - Intertek Testing Services.  
Listing # 192-5094



ICC  
INDUSTRIAL CHIMNEY COMPANY INC.  
400 J-F KENNEDY, ST. JEROME  
QUEBEC, CANADA, J7Y 4B7  
Tel: (450) 565-6336 fax: (450) 565-6519

UBII\_2006-04

## 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 and connector. 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 UL, CSA, WH and ULC). 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 connector 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 connector 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° 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.
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, chimney connector 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 chimney connector have been inspected by a qualified chimney sweep or Fire Department Inspector.

## INSTALLATION NOTES

- Check the label. We manufacture two versions of ULTRABlack connector. One requires four inches of clearance to combustible materials and the other requires six inches. These instructions are for ULTRABlack FS, which requires six inches of clearance. Check the label on one of the straight lengths (the labels on the tees and elbows are different) to make sure it looks like the one on page 8, and is printed with white letters on a black background. If the label is marked with a 4" clearance (printed in yellow letters on a black background) you must obtain ULTRABlack HP installation instructions from your dealer.
- This connector is used to connect a solid, liquid or gas fuel-fired appliance to a pre-fabricated metal or masonry chimney.
- This connector is intended for use with cooking, heating and other low-heat appliances.
- A chimney venting a fireplace, a wood burning stove, or an incinerator shall not vent any other appliance.
- The minimum clearance between the connector and combustible materials is 6 inches.
- Always follow the wood burning stove manufacturer's installation instructions. On some stoves the heat generated by the stove independent of the connector system is sufficient to require additional clearance. Certain applications, such as mobile homes, sometimes require clearances greater than 6 inches.
- Do not enclose this connector.
- This connector is not a chimney. It must not pass through floors, attics, closets, walls or ceilings.
- If you plan to install the connector into a masonry chimney you should have the chimney checked by a qualified chimney sweep. Masonry chimneys should only be used if they are in good condition.
- Although there is no limitation on the total length of ULTRABlack which may be installed in single system we recommend a maximum of 15 feet.

We recommend that the maximum overall length of ULTRABlack not exceed 20'. It is important to insure that all sections are solidly fastened together and supported as required.

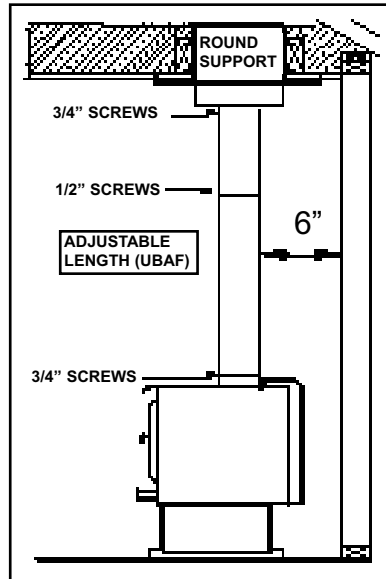
## STRAIGHT UP INSTALLATION

For most straight up installations the only part required is an adjustable length (UBA). The UBA adjusts to allow any overall length from 40" to 68".

The UBA is packed in two pieces.  
To assemble:

- Place both sections on the floor with the black crimped ends up.
- Pick up the section with the yellow label and slide it over the other section.

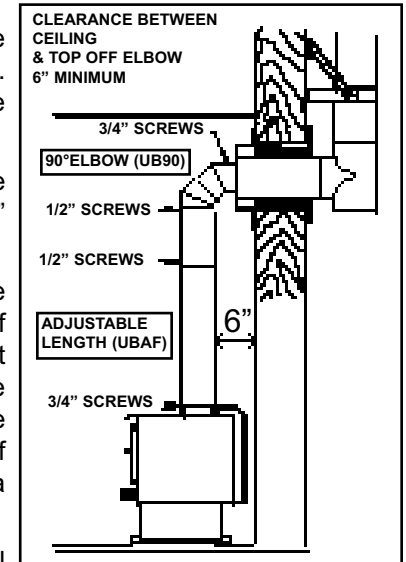
1. Set the adjustable length so that the bottom sits over the flue collar of the stove, in most cases the outer casing will rest on the stove top. Screw through the outer casing into the flue collar with three 3/4" metal screws. The black screws provided are self drilling and will not normally need a pilot hole for steel stove collars.
2. Slide the top portion of the connector up over the chimney pipe adaptor until it fits flush with the bottom of the finish support.
3. Screw the connector to the stove pipe adaptor with the three 3/4" metal screws provided.
4. Fasten the two sections of the adjustable length together using the 1/2" metal screws provided.
5. If you require additional height you may add lengths above or below the adjustable length. If you add lengths above the adjustable length remove the ring covering the crimped end of the top portion of the adjustable length. Slide the ring over the crimped end of the last length you install (just below the chimney support).



## 90° ELBOW INSTALLATION

For most 90° elbow installations you will only require an elbow (UB90) and an adjustable length (UBAF). If the height from the top of the stove to the top of the elbow is less than 48 inches you will require a short length plus a slip section (UBSF) for the vertical section of connector instead of the UBAF.

1. Assemble the adjustable length (see instruction for straight up installation). Slide the trim ring from the adjustable length over the 90° elbow top end.
2. Screw the 90° elbow to the adjustable length using the 1/2" metal screws provided.
3. Set the adjustable length so that the bottom end fits over the flue collar of the stove. Screw through the heat shield of the connector into the flue collar with the 3/4" metal screws. The black screws provided are self drilling and will not normally need a pilot hole for steel stove collars.
4. Extend the adjustable length up until the 90° elbow reaches the chimney flue extension. Screw the elbow to the flue extension using the 3/4" metal screws provided.
5. Screw the two sections of the adjustable length together using the 1/2" metal screws provided.



## MASONRY CHIMNEYS

To install the masonry adaptor:

1. Cut the adaptor to length so that it fits flush with the inside of the masonry flue. The crimped end must protrude past the trim collar in to the room.
2. The trim collar fits on the length between the crimp and the bead. Do not install the masonry adaptor without the trim collar. Screw the trim collar to the wall using screws and masonry anchors. Screw the 90° elbow to the crimped end with the 3/4" screws provided.

## DAMPER INSTALLATION (UBD)

The damper (UBD) allows you to control the air drawn through your chimney. As such, it controls your stove's combustion. When the handle is in the horizontal position, the damper is closed, creating a restriction in the chimney as far as combustion gases are concerned, and reducing the combustion process inside the stove. (In the close position, the damper is still 20% open so as not to completely block the chimney).

Conversely, when the handle is in the vertical position, the damper is wide open. The flow of combustion gases is no longer restricted within the chimney and a better combustion occurs within the stove.

### Rules to follow

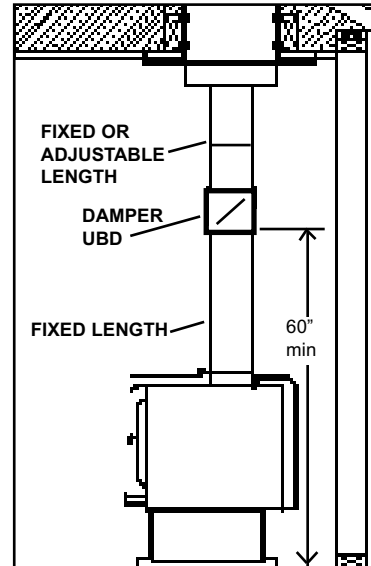
- \* The damper must be installed on the vertical sidewall of the chimney and never on the horizontal sidewall when the installation involves a 90° elbow.
- \* The damper must be installed high enough so that small children can't reach the handle. (At least 60" high minimum.)

### Installation

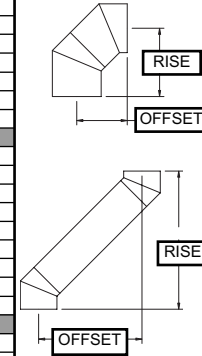
The UBD damper is installed as a normal UB section.

1. Install the fixed section so that the lower extremity lightly sits on the stove's vent pipe. Screw to the vent pipe using three 1/2" metal screws. The black screws supplied with the kit are self-piercing. No guiding holes in the vent pipe should be required.
2. Using the screws supplied, install the damper on this section with the solder joint at the back, ensuring that the handle is located to the right of the chimney.
3. Complete the chimney installation by following the instructions on either a vertical chimney or a chimney with a 90° elbow, if one is incorporated.

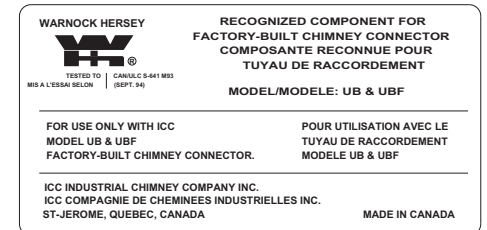
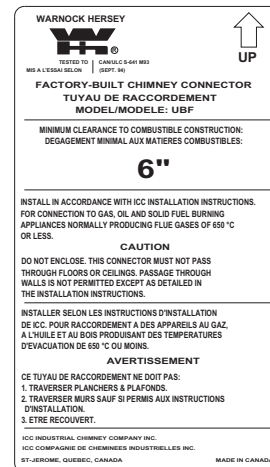
Note: Plan in advance the fixed and adjustable measurements that you will require.



UB OFFSET TABLE- Use this table if you are not installing an adjustable length between the elbows.					
LENGTH BETWEEN ELBOWS	45° ELBOWS		90° ELBOWS	OFFSET	RISE
	RISE	OFFSET			
6" Ø			6" Ø	5 1/2	4 1/2
NO LENGTH	8 1/4	3 1/2	7" Ø	6 1/4	5
5" LENGTH	11	6 1/4	8" Ø	6 3/4	5 1/2
6" slip LENGTH	11	6 1/4			
12" LENGTH	16	11 1/4			
18" LENGTH	20 1/4	15 1/2			
24" LENGTH	24 1/2	19 3/4			
36" LENGTH	33	28 1/4			
UBAF min	36 1/2	31 3/4			
UBAF max	56 1/4	51 1/2			
7" Ø					
NO LENGTH	9	3 3/4			
5" LENGTH	11 3/4	6 1/2			
6" slip LENGTH	11 3/4	6 1/2			
12" LENGTH	16 3/4	11 1/2			
18" LENGTH	21	15 3/4			
24" LENGTH	25 1/4	20			
36" LENGTH	33 3/4	28 1/2			
UBAF min	37 1/4	32			
UBAF max	57	51 3/4			
8" Ø					
NO LENGTH	9 3/4	4			
5" LENGTH	12 1/2	7			
6" slip LENGTH	12 1/2	7			
12" LENGTH	17 1/2	11 3/4			
18" LENGTH	21 3/4	16			
24" LENGTH	26	20 1/4			
36" LENGTH	34 1/2	28 3/4			
UBAF min	38	32 1/4			
UBAF max	57 3/4	52 1/4			

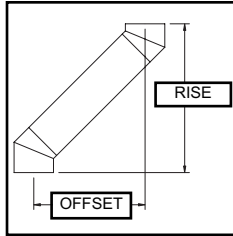


UB OFFSET TABLE- Use this table when an adjustable length (UBS) is installed between the elbows.		
LENGTH BETWEEN ELBOWS	45° ELBOWS	
	RISE	OFFSET
6" Ø		
NO LENGTH + UB6SF	11 3/4 - 11 3/4	7 - 7
5" LENGTH + UB6SF	12 3/4 - 15 1/4	8 - 10 1/2
5" LENGTH + UB12SF	12 3/4 - 20 1/4	8 - 15 1/2
12" LENGTH + UB12SF	18 3/4 - 26 1/2	14 - 21 3/4
18" LENGTH + UB12SF	24 - 31 3/4	24 - 31 3/4
24" LENGTH + UB18SF	29 1/4 - 42	24 1/2 - 37 1/4
UBAF min + UB6SF	44 - 46 1/4	39 1/4 - 41 1/2
UBAF min + UB18SF	44 - 56 3/4	39 1/4 - 52
UBAF max + UB18SF	68 1/4 - 81	63 1/2 - 76 1/4
36+36+12 + UB18SF	79 1/2 - 92 1/4	74 3/4 - 87 1/2
36+36+24 + UB18SF	89 3/4 - 102 3/4	85 - 98
36+36+36 + UB18SF	100 1/4 - 113	92 1/2 - 108 1/4
7" Ø		
NO LENGTH + UB6SF	12 1/2 - 12 1/2	7 1/4 - 7 1/4
5" LENGTH + UB6SF	13 1/2 - 16	8 1/4 - 10 3/4
5" LENGTH + UB12SF	13 1/2 - 21	8 1/4 - 15 3/4
12" LENGTH + UB12SF	19 1/2 - 27 1/4	14 1/4 - 22
18" LENGTH + UB12SF	24 3/4 - 32 1/2	19 1/2 - 27 1/4
24" LENGTH + UB18SF	30 - 42 3/4	24 3/4 - 37 1/2
UBAF min + UB6SF	44 3/4 - 47	39 1/2 - 41 3/4
UBAF min + UB18SF	44 3/4 - 57 1/2	39 1/2 - 52 1/4
UBAF max + UB18SF	69 - 81 3/4	63 3/4 - 76 1/2
36+36+12 + UB18SF	80 1/4 - 93	75 - 87 3/4
36+36+24 + UB18SF	90 1/2 - 103 1/2	85 1/4 - 98 1/4
36+36+36 + UB18SF	101 - 113 3/4	95 3/4 - 108 1/2
8" Ø		
NO LENGTH + UB6SF	13 1/4 - 13 1/4	7 1/2 - 7 1/2
5" LENGTH + UB6SF	14 1/4 - 16 1/2	8 1/2 - 11
5" LENGTH + UB12SF	14 1/4 - 21 3/4	8 1/2 - 16 1/4
12" LENGTH + UB12SF	20 1/4 - 27 3/4	14 3/4 - 22 1/4
18" LENGTH + UB12SF	25 1/2 - 33	19 3/4 - 27 1/2
24" LENGTH + UB18SF	30 3/4 - 43 1/2	25 - 37 3/4
UBAF min + UB6SF	45 1/2 - 47 3/4	39 3/4 - 42 1/4
UBAF min + UB18SF	45 1/2 - 58 1/4	39 3/4 - 52 1/2
UBAF max + UB18SF	69 3/4 - 82 1/2	64 - 76 3/4
36+36+12 + UB18SF	81 - 93 3/4	75 1/4 - 88
36+36+24 + UB18SF	91 1/4 - 104	85 3/4 - 98 1/2
36+36+36 + UB18SF	101 3/4 - 114 1/2	96 - 108 3/4



Black label with white printing. This label appears on all other component parts including tees and elbows.

Black label with white printing appears on all straight lengths



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

LENGTH BETWEEN OFFSETS	30° ELBOWS	
	RISE	OFFSET
6" Ø		
NO LENGTH	7 1/4	2
5" LENGTH	10 1/2	4
6" SLIP LENGTH	10 1/2	4
12" LENGTH	16 3/4	7 1/2
18" LENGTH	21 3/4	10 1/2
24" LENGTH	27	13 1/2
36" LENGTH	37 1/2	19 1/2
UBAF min	41 3/4	22
UBAF MAX	66	36
7" Ø		
NO LENGTH	7 3/4	2
5" LENGTH	11	4
6" SLIP LENGTH	11	4
12" LENGTH	17 1/4	7 1/2
18" LENGTH	22 1/4	10 1/2
24" LENGTH	27 1/2	13 1/2
36" LENGTH	38	19 1/2
UBAF min	42 1/4	22
UBAF MAX	66 1/2	36
8" Ø		
NO LENGTH	8 1/4	2 1/4
5" LENGTH	11 3/4	4 1/4
6" SLIP LENGTH	11 3/4	4 1/4
12" LENGTH	17 3/4	7 3/4
18" LENGTH	23	10 3/4
24" LENGTH	28 1/4	13 3/4
36" LENGTH	38 1/2	19 3/4
UBAF min	43	21 1/4
UBAF MAX	67 1/4	36 1/4

**UB OFFSET TABLE- Use this table when an adjustable length (UBS) is installed between the elbows.**

LENGTH BETWEEN OFFSETS	30° ELBOWS	
	RISE	OFFSET
6" Ø		
NO LENGTH + UB6SF	10 1/2 - 10 1/2	5 1/2 - 5 1/2
5" LENGTH + UB6SF	11 3/4 - 14	6 1/2 - 9
5" LENGTH + UB12SF	11 3/4 - 19 1/4	6 1/2 - 14 1/4
12" LENGTH + UB12SF	17 3/4 - 25 1/4	12 3/4 - 20 1/4
18" LENGTH + UB12SF	23 - 30 1/2	17 3/4 - 25 1/2
24" LENGTH + UB18SF	28 1/4 - 41	23 - 35 3/4
UBAF min + UB6SF	42 3/4 - 45 1/4	37 3/4 - 40 1/4
UBAF min + UB18SF	42 3/4 - 55 1/2	37 3/4 - 50 1/2
UBAF max + UB18SF	67 - 79 3/4	62 - 74 3/4
36 + 36 + 12 + UB18SF	78 1/4 - 91 1/4	73 1/4 - 86
36 + 36 + 24 + UB18SF	88 3/4 - 101 1/2	83 3/4 - 96 1/2
36 + 36 + 36 + UB18SF	99 1/4 - 112	94 - 106 3/4
7" Ø		
NO LENGTH + UB6SF	11 - 11	5 1/2 - 5 1/2
5" LENGTH + UB6SF	12 1/4 - 14 1/2	6 1/2 - 9
5" LENGTH + UB12SF	12 1/4 - 19 3/4	6 1/2 - 14
12" LENGTH + UB12SF	18 1/4 - 25 3/4	12 1/2 - 20 1/4
18" LENGTH + UB12SF	23 1/2 - 31	17 3/4 - 25 1/2
24" LENGTH + UB18SF	28 3/4 - 41 1/2	23 - 35 3/4
UBAF min + UB6SF	43 1/4 - 45 3/4	37 3/4 - 40
UBAF min + UB18SF	43 1/4 - 56	37 3/4 - 50 1/2
UBAF max + UB18SF	67 1/2 - 80 1/4	62 - 74 3/4
36 + 36 + 12 + UB18SF	78 3/4 - 91 3/4	73 3/4 - 86
36 + 36 + 24 + UB18SF	89 1/4 - 102	83 1/2 - 96 1/2
36 + 36 + 36 + UB18SF	99 3/4 - 112 1/2	94 - 106 3/4
8" Ø		
NO LENGTH + UB6SF	11 3/4 - 11 3/4	5 3/4 - 5 3/4
5" LENGTH + UB6SF	12 3/4 - 15 1/4	6 3/4 - 9 1/4
5" LENGTH + UB12SF	12 3/4 - 20 1/4	6 3/4 - 14 1/4
12" LENGTH + UB12SF	18 3/4 - 26 1/2	12 3/4 - 20 1/2
18" LENGTH + UB12SF	24 - 31 3/4	18 - 25 3/4
24" LENGTH + UB18SF	29 1/4 - 42	23 1/4 - 36
UBAF min + UB6SF	44 - 46 1/4	38 - 40 1/4
UBAF min + UB18SF	44 - 56 3/4	38 - 50 3/4
UBAF max + UB18SF	68 1/4 - 81	62 1/4 - 75
36 + 36 + 12 + UB18SF	79 1/2 - 92 1/4	73 1/2 - 86 1/4
36 + 36 + 24 + UB18SF	89 3/4 - 102 3/4	83 3/4 - 96 3/4
36 + 36 + 36 + UB18SF	100 1/4 - 113	94 1/4 - 107

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).

The block contains two logos. On the left is the NFI (National Fireplace Institute) logo, which features a stylized fireplace and the text 'NFI CERTIFIED'. On the right is the WETT (Wood Energy Technical Training) logo, which features a stylized flame and the text 'Wood Energy Technical Training www.wettinc.ca'.

# LIFETIME WARRANTY

## ULTRABlack Chimney Connector

ICC warrants its ULTRABlack stainless steel chimney connector lengths to be free from functional failure due to defects in material or workmanship for as long as the original consumer owns the connector system. This warranty provides for replacement of any connector lengths which fail as a result of normal use on a residential freestanding fireplace, wood burning stove, furnace or boiler. This warranty does not cover damage caused to the building by chimney fires or misuse of the product.

ICC will only be responsible for repair or replacement of any connector 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 ULTRABlack chimney system.

To obtain service under this warranty the defective connector should be returned to the dealer from whom it was purchased. If you are unable to return the connector to the original dealer contact ICC for the name of the closest dealer who can assist you. ICC will not be responsible for shipping charges related to warranty replacements. ICC will repair or replace any lengths which, upon examination by an authorized agent of ICC, prove to be defective.

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

This connector 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 1200°F or less. This warranty is void if the connector is used in an application for which it is not designed.

The ULTRABlack 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 connector 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.