



**USER MANUAL /  
MANUAL D'UTILISATION**

**Q-Tee II USA**

**Q-Tee II C USA**



## FIRE ENVIRONMENTALLY FRIENDLY!

5 Eco-friendly advices for sensible heating

- common sense both environmentally and economically.

1. Effective lighting. Use small pieces of wood (fir tree) and a suitable fire lighter, for example paraffined wood wool/sawdust. Open the air damper, so plenty of air is fed to the stove and the gases from the heated wood can burn rapidly.
2. Light the fire with only little wood at a time - this gives the best combustion. Remember plenty of air for every time new wood is added.
3. When the flames are diminished, adjust the air damper so that the air supply is reduced.
4. When only glowing embers remain, air flow can be reduced further, so heating demand is just covered. With a lower air supply the charcoal will burn slower and the heat loss through the chimney is reduced.
5. Use only dry wood - ie. wood with a humidity of 15 to 20%.

### RECYCLING:

The oven is wrapped in packaging that is recyclable. This must be disposed of according to national rules regarding the disposal of waste.

The glass can not be reused.

The glass should be discarded along with the residual waste from ceramics and porcelain.

Pyrex glass has a higher melting temperature and therefore can not be reused.

If discarded you make an important positive contribution to the environment.

Q-Tee II USA  
Q-Tee II C USA

OMNI report no. : #0138WS016S

Revision : 7  
Date (DMY) : 12-01-2017

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## Introduction

Congratulations on the purchase of your new RAIS woodburning stove.

A RAIS woodburning stove is more than just a source of heat, it is a symbol of the emphasis you put on decorating your home with superiorly designed high-quality products.

**PLEASE READ THIS ENTIRE MANUAL BEFORE YOU INSTALL AND USE YOUR NEW RAIS STOVE. FAILURE TO FOLLOW INSTRUCTIONS MAY RESULT IN PROPERTY DAMAGE, BODILY INJURY, OR EVEN DEATH. SAVE THIS MANUAL AND KEEP IT HANDY FOR EASY REFERRAL.**

**“DO NOT INSTALL IN A MOBILE HOME”**

**“WARNING: Do not overfire. If the stovetop or chimney connector pipe glow red, you are overfiring”.**

**“Warning: Do not use other, than the specified original Rais components!”**

### Safety and environmental testing

The Stove have been tested by OMNI-Test Laboratories, Inc. 13327 NE Airport Way, Portland, OR 97230 USA and are listed to UL 1482-2011 and ULC S627-00. It is also EPA certified..

For future reference, please write down the production number of your RAIS wood-burning stove here. The number must be stated in all inquiries or complaints concerning this product.

## Warranty

We offer a five-year warranty on your RAIS stove. The warranty covers any defects in materials or workmanship. However, it does not cover damage from misuse or neglect, and the glass, gaskets and firebricks are not covered either. Warranties are void if the unit is used to burn any materials other than wood or not operated in accordance with this owner's manual

|                        |                       |
|------------------------|-----------------------|
| RAIS A/S               |                       |
| Industrivej 20, Vangen |                       |
| 9900 Frederikshavn     |                       |
| <input type="radio"/>  | <input type="radio"/> |
| Prod.nr.               | <input type="text"/>  |

Distributor:

Date:

**U.S. ENVIRONMENTAL PROTECTION AGENCY** Certified to comply with 2020 particulate emission standards using crib wood. 0.9 g/hr, Method 28R

This wood heater needs periodic inspection and repair for proper operation. It is against federal regulations to operate this wood heater in a manner inconsistent with operating instructions in this manual.

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

Specifications:

|   | RAIS Q-Tee II USA                                  | Rais Q-Tee II C USA                                |
|---|--|--|
| Weight of Stove<br>Weight of stove with socket                                      | 275 lbs (125 kg)<br>324 lbs (147 kg)               | 308 lbs (140 kg)<br>381 lbs (173 kg)               |
| Stove exterior: Width/depth/height (inches)   | 22.9 / 16.1 / 23.5                                 | 26 / 18,9 / 23,8                                   |
| Firebox interior Width/depth/height (inches)  | 17.5 / 10.9 / 10.4                                 | 17.5 / 10.9 / 10.4                                 |
| Heating capacity at -20°C/-4°F  | App. 100 m² / 1100 Square Feet                     | App. 100 m² / 1100 Square Feet                     |
| Recommended amount of wood when fueling (kg) wood: 2-3 logs of wood of app. 25-33cm | 1,8(kg) / 4(lbs)                                   | 1,8(kg) / 4(lbs)                                   |
| Intermittent operation:   | Refuelling should be undertaken within 60 minutes. | Refuelling should be undertaken within 60 minutes. |
| Flue gas mass flow:   | 5,2 grams per second                               | 5,2 grams per second                               |
| Flue gas temperature:   | 263°C / 505°F                                      | 263°C / 505°F                                      |
| Single wall connector stove pipe:   | 6" (15 cm)   | 6" (15 cm)   |
| Chimney pipe - class A, UL-103 HT:  | 6" (15 cm)   | 6" (15 cm)   |
| Optimal thermal output :  | 22 kBTU (6,5kW)                                    | 22 kBTU (6,5kW)                                    |
| Min./Max. output (kW):  | 10 - 27 kBTU (3 - 8kW)                             | 10 - 27 kBTU (3 - 8kW)                             |
| Minimum stove draft pressure at above output:                                       | 0.048"WC (12 Pa)                                   | 0.048"WC (12 Pa)                                   |
| Tested EPA emission particulate rate:   | 0.9 g/hr   | 0.9 g/hr   |

## Convection

All RAIS stoves are convection stoves, which means that the sides of the stove never get too hot. Convection works by pulling cold air into the system at the base of the stove and up through the convection duct that is located along the combustion chamber of the stove. The heated air is released from the top of the stove, creating rapid air circulation in the room.

## Glass and replacement of glass.

All RAIS stoves supplied with Robax® glass in the door. Robax® glass is a ceramic glass type suitable for stoves. The glass is installed from RAIS as an integral part of the door and stove.

Inspect the glass for cracks prior to the first fire.

Abuse may cause damage to the glass and door.  
Do not strike the door or glass nor slam the door  
Do not build the fire close to the glass or opening.

Do not use the stove if the glass is broken - contact your local authorized dealer.

In case of broken glass during use of stove - let the stove slowly burn the remaining firewood under supervision. Do not close the chimney baffle if installed. Contact your local authorized dealer

The glass is supplied as an integral part of the door for spare part. The Robax® glass may only be replaced by genuine spare parts from RAIS. Do not use substitute material. Replacement of the glass as separate component is only for authorized personnel.

## Chimney

RAIS stoves must be installed using a Class A UL 103 HT approved factory-built chimney system or a code-approved masonry chimney with a flue liner. In Canada, the appliance must be connected to a factory-built chimney conforming to CAN/ULC-S629.

The chimney pipe must be 6" in diameter.

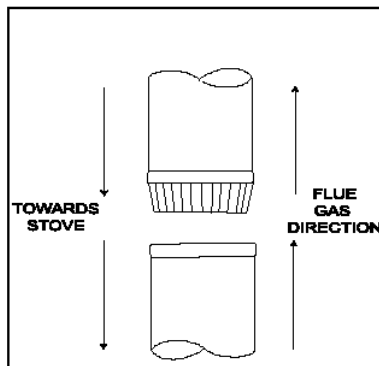
The chimney must extend through the roof at least 3' (1m), and 2' (.6m) above any structure within 10' (3m).

The condition and height of the chimney are very important for optimal use of the stove and we recommend a total minimum height of 10' (3m).

Note the chimney connector pipe should not pass through an attic, roof space, closet, concealed space, floor or ceiling.

Do not connect this stove to a chimney flue or air distribution duct or any system serving another appliance

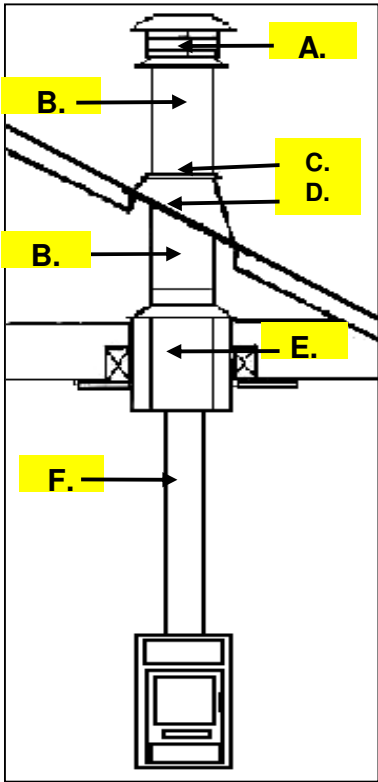
**Chimney Connector**



Each chimney connector or stove pipe section, must be installed to each other with the crimped end toward the stove. This prevents any amount of condensed or liquid creosote from running down the outside of the pipe or the stove top.

Fasten the connector pipe to the flue collar with 3 self tapping/drilling screws through the holes in the flue collar.



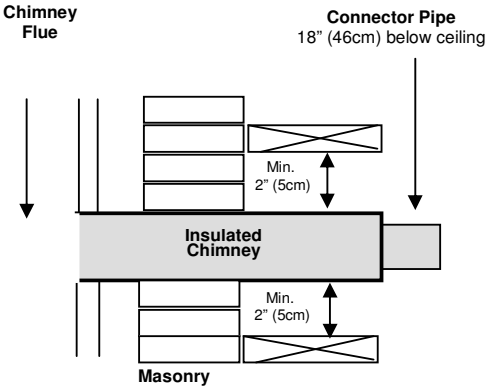


Required Installation Components:

- A. Chimney Cap
- B. Insulated Chimney
- C. Storm Collar
- D. Roof Flashing
- E. Ceiling Support Box or Joist Shield/Firestop Spacer
- F. Chimney Connector

For venting vertically into a Class A chimney, a single wall pipe (at least 24 gauge) may be used in the room where the stove is installed. Refer to the manufacturer's instructions for the connection to the listed chimney. The chimney/stove pipe must not be smaller than 6" (15cm) in diameter.

For venting directly into a masonry chimney or through a thimble, the top of the single wall pipe must be at least 18" (46cm) below a combustible ceiling and must conform to NFPA 211 guidelines and methods. Please see the diagram to the left.



For rear venting or other unlisted configurations, consult the local building codes and follow the NFPA 211 guidelines.

If the stovepipe is fitted with a baffle, it must be manually operated, visibly placed for ease of use, and must not close completely. Consult your chimney expert if you have any questions.

Important note:

Please ensure that there is easy access to the chimney cleanout door.



IF THIS STOVE IS NOT INSTALLED PROPERLY, A HOME FIRE MAY RESULT. TO REDUCE THIS RISK, PLEASE FOLLOW THE DIRECTIONS FOR INSTALLATION CAREFULLY.

## Installation

### Precautions and Specifications

Before installation, remember to consult your local building inspector or fire marshal to determine the need to obtain a permit. Also enquire about restrictions and installation inspection requirements in your area. If utilizing an existing chimney, it is recommended that a professional mason or stove installer do a complete check-up of the chimney, liner, and flue beforehand.

In order for the stove to work and draw properly, sufficient air supply is important. Be especially aware of any mechanical fans (e.g. kitchen or bathroom exhaust systems) that may affect the proper draw.

Do not use grates, andirons, or other fuel support methods. Build fire directly on hearth.

### Installation WITH or WITHOUT pedestal.

An optional pedestal base is available for use with the Q-Tee II USA (838040590 High socket complete) and the Q-Tee II C USA (834051090 )

**Warning:** Floor protection requirements specified in this manual are different depending on whether the appliance is installed with or without the optional base.

### When installed WITHOUT optional base.

The floor protection plate must lie under the stove and extend 24" (61cm) (30" 76cm in Canada) in front of the stove door, 8" (20cm) beyond the sides of the fuel-loading door, and under the pipe and 2" (5cm) beyond each side for back venting. In front of the stove door, an 8" (20cm) floor protection is required beyond the sides of the stove and in the back of the stove (0" in the back for the US). The floor protection needed on the floor when used WITHOUT the base is required to have thermal protection with an R value of 3.19 Btu\*in/Hrs\*ft<sup>2</sup>\*°F (equal to 0.46 w/mk in SI units).

**When installed WITH optional base.**

The floor protection plate must lie under the stove and extend 16" (41cm) (18" (45cm) in Canada) in front of the stove door, 8" (20cm) beyond the sides of the fuel-loading door, and under the pipe and 2" (5cm) beyond each side for back venting. In Canada, an 8" (20cm) floor protection is required beyond the sides of the stove and in the back of the stove (0" in the back for the US). The floor protection needed on the floor when used WITH the optional pedestal base, is not required to have thermal protection (R=0).

Make sure that the floor and the sub-floor of the room in which the stove is installed is designed to carry the extra weight of the stove. The floor protector plate must be made of a non-combustible material.

When deciding where to install your stove, the heat distribution to other rooms should be taken into consideration. Put the stove at a safe distance from combustible materials; see the references at the name tag of the stove.



# Q-Tee II USA

Manufactured by:

**RAIS A/S**  
 ARTES OF FIRE

Industrivej 20, DK-9900 Frederikshavn, Denmark

 Tested to:  
 UL 1482-2011  
 ULC S627-00

 Tested &  
 Listed By

 Portland  
 Oregon USA

 Model: Q-Tee II USA  
 Solid Fuel Room Heater

For Use With Solid Wood Fuel Only

OMNI-Test Laboratories, Inc.

Report No. #0138WS016S

 Model  
 Modèle

 Date of manufacture  
 Date of fabrication

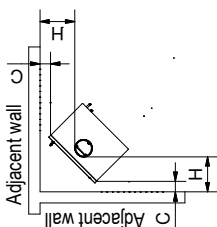
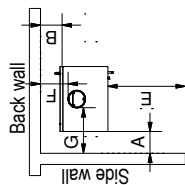
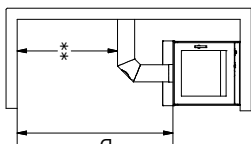
 Month  
 Mois

 Year  
 Année

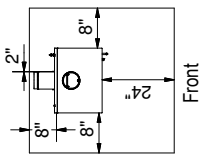
 Serial no.  
 N° de série

 Made in Denmark  
 Fabriqué au Danemark

## Clearances to combustible surfaces


**\*\*Rear/Top vent option**  
 Ceiling


## FLOOR PROTECTOR



Front

See further floor protection requirements at bottom of this label.

 Floor protection for  
 Canada: 30" (76 cm)  
 from unit to front of floor protector.

 Floor protector must be under the pipe and 2"  
 (5cm) beyond each side for back venting.

### MINIMUM CLEARANCE

|                             | Rear Vent     | Front Vent                |
|-----------------------------|---------------|---------------------------|
|                             | With Pedestal | With Pedestal No pedestal |
| A: SIDE WALL TO UNIT        | 14"/356mm     | 14"/356mm                 |
| B: BACK WALL TO UNIT        | 12"/305mm     | 15"/381mm                 |
| C: CORNER WALL TO UNIT      | 11"/280mm     | 13"/331mm                 |
| D: CEILING HEIGHT           | 45"/1143mm    | 45"/1143mm                |
| E: FRONT WALL / FURNISHING: | 36"/915mm     | 36"/915mm                 |
| F: Back Wall to Pipe        | 15"/381mm     | N/A                       |
| G: Side Wall to Pipe        | 22.5"/572mm   | 23.5"/597mm               |
| H: Corner Wall to Pipe      | 20"/508mm     | 22"/559mm                 |

Do not store wood logs or combustible materials underneath the room heater

Ne pas stocker les journaux de bois ou des matériaux combustibles sous le radiateur de la chambre

 U.S. ENVIRONMENTAL PROTECTION AGENCY Certified to comply  
 with 2020 particulate emission standards using crib wood. 0.9  
 g/hr, Method 28R

### FLOOR PROTECTION:

Floor protection requirements are dependent upon whether the optional High Socket

Base, Rais part number 838040590 is used;

Floor protection must be non-combustible material extending beneath the stove,

and to the front and sides from door opening and to the rear as indicated.


 The floor protection needed on the floor when used WITHOUT the base is required to have  
 thermal protection with an R value of 3.19 Btu/inHs ft2°F (equal to 0.46 w/mk in SI units).  
 with the base, the floor protection is not required to have thermal protection (R=0)

Replace glass with only Rais authorized dealer supplied ceramic glass

\*\* Non testé - NFPA Guidelines au USA, CAN/CSA B365-M91 au Canada

 La protection de sol doit être au moins de 3/8 inch matériel non combustible placé sous le foyer  
 s'étendant vers l'avant, les côtés les ouvertures et l'arrière comme indiqué.

\*\* Not Tested - NFPA Guidelines in USA, CAN/CSA B365-M91 in Canada

|   |   |
|---|---|
| <p><b>TO PREVENT HOUSE FIRES</b></p> <p>Contact local Building or Fire officials about restrictions and installation inspection in your area.</p> <p>Install and use only in accordance with manufacturer's installation and operating instructions and local codes.</p> <p>In absence of any local codes, installation must meet minimum requirements of NFPA 211 in USA, and B365 in Canada.</p> <p>Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling.</p> <p>Inspect and clean chimney system frequently in accordance with manufacturer's instruction.</p> <p>Do not connect this stove to a chimney flue serving another appliance.</p> <p>Do not use grate or elevate fire.</p> <p>Build wood fire directly on hearth.</p> <p>Flue connector pipe must be 6 inch diameter, minimum single wall 24 msg black or 25 msg blued steel.</p> <p>Chimney must be factory built 6" diameter Class "A" 103 HT, or masonry.</p> <p><b>TO PREVENT CREOSOTE FIRES</b></p> <p>Inspect and clean chimney frequently - Under certain conditions of use, creosote buildup may occur rapidly.</p> <p>Do not use other fuels than Fire wood.</p> <p><b>CAUTION:</b> Fully open combustion air control before opening the fuel feed door.</p> <p><b>CAUTION:</b> Only operate the wood heater with the doors closed.</p> | <p><b>POUR EVITER LES INCENDIES DOMESTIQUES</b></p> <p>Contactez les Autorités des Bâtiments et des pompiers concernant les restrictions et inspections d'installation dans votre région.</p> <p>Installez et utilisez cet appareil uniquement en respectant les instructions d'installation et d'utilisation du fabricant.</p> <p>Respectez aussi les réglementations locales.</p> <p>En l'absence de réglementations locales, l'installation doit respecter les normes minimums de NFPA 211 aux USA et B365 au Canada.</p> <p>Référez-vous aux instructions du fabricant et règlement locaux concernant les précautions nécessaires à prendre pour le passage de la cheminée à travers une paroi ou un plafond combustible.</p> <p>Inspectez et nettoyez le système de cheminée fréquemment selon les instructions du fabricant.</p> <p>Ne connectez pas ce poêle à un conduit de cheminée utilisée par un autre appareil.</p> <p>N'utilisez pas de grille et ne faites pas monter le feu.</p> <p>Établissez le feu de bois directement dans l'âtre.</p> <p>Le tuyau de connexion au conduit doit avoir un diamètre de 6 inch, minimum simple conduit 24 msg acier noir ou 25 msg acier bleu.</p> <p>La cheminée doit être une fabrication de 6" de diamètre Class "A" 103 HT, ou en maçonnerie.</p> <p><b>POUR EVITER LES FEUX DE CREOSOTE</b></p> <p>Inspectez et nettoyez la cheminée régulièrement - Sous certaines condition d'emploi, la creosote peut s'accumuler rapidement.</p> <p>Ne pas utiliser d'autres combustibles que le bois.</p> <p><b>AVIS:</b> Ouvrez complètement le contrôle d'air de combustion avant d'ouvrir la porte du foyer.</p> <p><b>AVIS:</b> Seulement se servir du poêle portes fermées.</p> |
| <div></div> <p><b>CAUTION:</b><br/><b>HOT WHILE IN OPERATION-DO NOT TOUCH</b><br/><b>KEEP CHILDREN AND CLOTHING AWAY-</b><br/><b>CONTACT MAY CAUSE SKIN BURNS.</b><br/><b>SEE NAMEPLATE AND INSTRUCTIONS.</b><br/><b>KEEP FURNISHINGS AND OTHER COMBUSTIBLE</b><br/><b>MATERIALS A CONSIDERABLE DISTANCE AWAY</b><br/><b>FROM THE APPLIANCE.</b></p> <p>Do not overfire - If heater or chimney connector glows, you are overfiring.</p>  | <p><b>ATTENTION:</b><br/><b>CHAUD PENDANT LE FONCTIONNEMENT - NE</b><br/><b>PAS TOUCHER ECARTEZ LES ENFANTS ET</b><br/><b>LES VETEMENTS- LE CONTACT PEU CAUSER</b><br/><b>DES BRULURES. CONSULTEZ LA PLAQUE ET</b><br/><b>LES INSTRUCTIONS. TENIR LES MEUBLES ET</b><br/><b>AUTRES MATIERES COMBUSTIBLES A</b><br/><b>GRANDE DISTANCE DE L'APPAREIL.</b></p> <p>Évitez de surchauffer-si le feu ou la cheminée rougeoit, vous surchauffez.</p>  |
| <p>DO NOT REMOVE THIS LABEL / NE PAS ENLEVER CETTE ÉTIQUETTE</p>  |   |

## Q-Tee II USA

### Clearance to combustible walls

To find out whether the wall by which the stove is to be placed is combustible or not, please contact your architect or the local building authorities.

If the floor is combustible, the stove must be placed on a non-combustible plate such as steel, glass or stone. See pages 9 and 16 for additional information concerning floor protection.

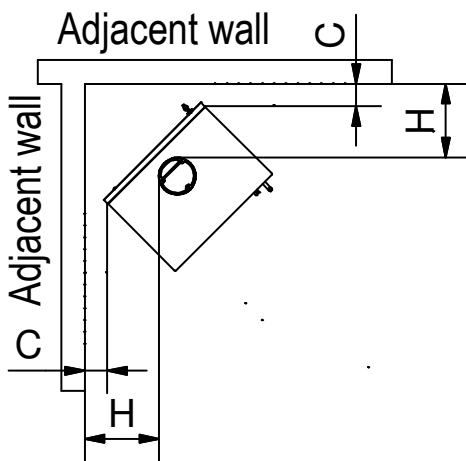
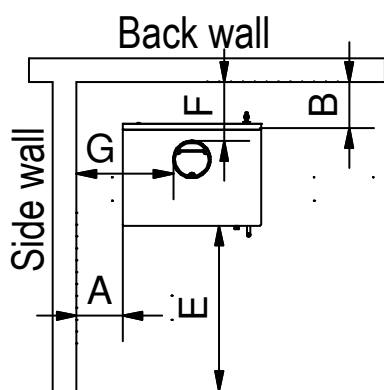
It may be possible to reduce clearances to combustible walls using the methods detailed in NFPA 211. Seek guidance and permission in your locality as permits or inspections may be required.

Clearances may only be reduced by means approved by regulatory authority

### Minimum Rear vent Clearance

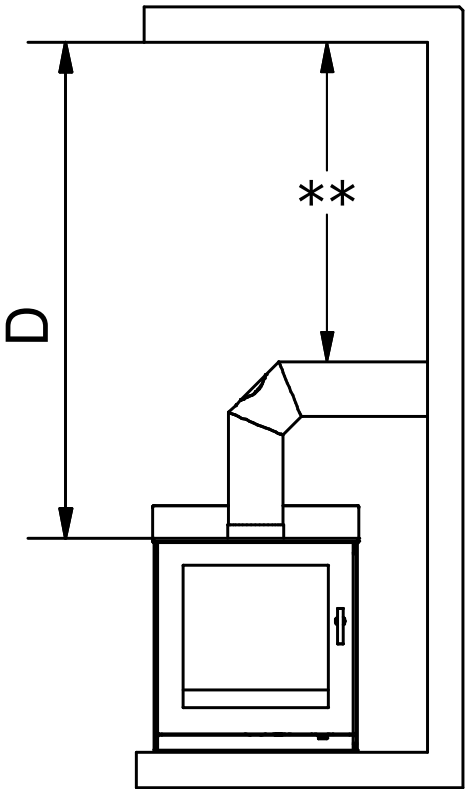
(\* 838040590 High socket complete)

|                            | With Pedestal | Rear vent<br>With Pedestal* | No Pedestal |
|----------------------------|---------------|-----------------------------|-------------|
| A: Side Wall to Unit       | 14"/356mm     | 14"/356mm                   | 15"/381mm   |
| B: Back Wall to Unit       | 12"/305mm     | 12"/305mm                   | 15"/381mm   |
| C: Corner Wall to Unit     | 11"/280mm     | N/A                         | 13"/331mm   |
| D: Ceiling Height          | 45"/1143mm    | 45"/1143mm                  | 45"/1143mm  |
| E: Front Wall / Furnishing | 36"/915mm     | 36"/915mm                   | 36"/915mm   |
| F: Back Wall to Pipe       | 15"/381mm     | N/A                         | 18"/458mm   |
| G: Side Wall to Pipe       | 22,5"/572mm   | 22,5"/572mm                 | 23,5"/597mm |
| H Corner Wall to Pipe      | 20"/508mm     | N/A                         | 22"/559mm   |



# \*\*Rear/Top vent option Ceiling

\*\*:  
Please refer to NFPA guidelines in  
USA and CAN/CSA B365-M91 in  
Canada.





## Clearance to non-combustible wall

We recommend a minimum clearance to non-combustible material of at least 2" (50 mm) so that cleaning is easy. The cleaning door of the chimney should be accessible at all times.

Clearances may only be reduced by means approved by the regulatory authority.

## Floor protection

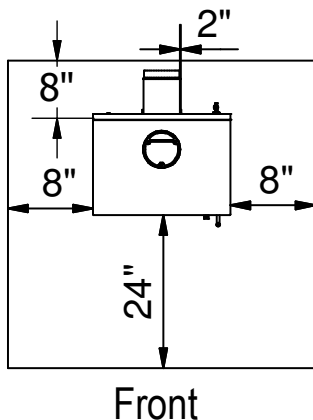
Floor protection must be non-combustible material extending beneath the stove, and to the front and sides from door opening and to rear as indicated.

The size of the floor protection is dependent, of installation with or without pedestal. and is different in US compared to Canada. See User Manual pages 9 & 10 for more information.

## Thermal Floor Protection

Stove without pedestal placed on combustible material must have thermal protection with an  $R = 3.19$  or greater under the appliance and extending 24" in front of unit.

### FLOOR PROTECTOR



La protection de sol doit être au moins de 3/8 inch matériel non combustible placé sous le foyer s'étendant vers l'avant, les côtés les ouvertures et l'arrière comme indiqué.

## Q-Tee II C

### Clearance to combustible walls

To find out whether the wall by which the stove is to be placed is combustible or not, please contact your architect or the local building authorities.

If the floor is combustible, the stove must be placed on a non-combustible plate such as steel, glass or stone. See pages 9 and 16 for additional information concerning floor protection.

It may be possible to reduce clearances to combustible walls using the methods detailed in NFPA 211. Seek guidance and permission in your locality as permits or inspections may be required.

Clearances may only be reduced by means approved by regulatory authority

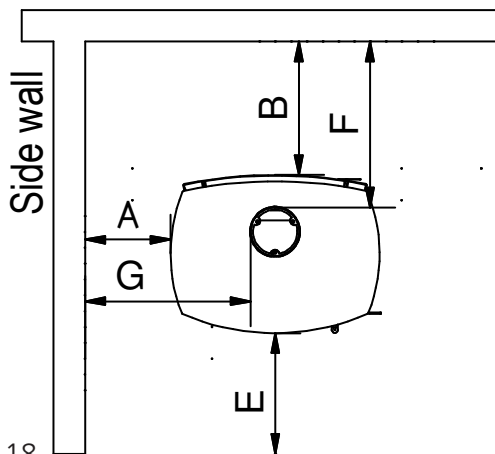
### Minimum Rear vent Clearance

(\* 838040590 High socket complete)

|                            | With Pedestal | Rear vent<br>With Pedestal* | No Pedestal |
|----------------------------|---------------|-----------------------------|-------------|
| A: Side Wall to Unit       | 14"/356mm     | 14"/356mm                   | 15"/381mm   |
| B: Back Wall to Unit       | 12"/305mm     | 12"/305mm                   | 15"/381mm   |
| C: Corner Wall to Unit     | 13.5"/343mm   | N/A                         | 15.5"/394mm |
| D: Ceiling Height          | 45"/1143mm    | 45"/1143mm                  | 45"/1143mm  |
| E: Front Wall / Furnishing | 36"/915mm     | 36"/915mm                   | 36"/915mm   |
| F: Back Wall to Pipe       | 17"/432mm     | N/A                         | 20"/508mm   |
| G: Side Wall to Pipe       | 24"/610mm     | 24"/610mm                   | 25"/635mm   |
| H Corner Wall to Pipe      | 22.5"/572mm   | N/A                         | 24.5"/622mm |

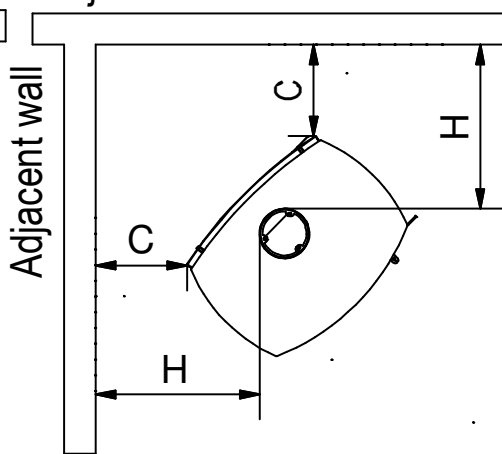
### Parallel to Wall.

#### Back wall



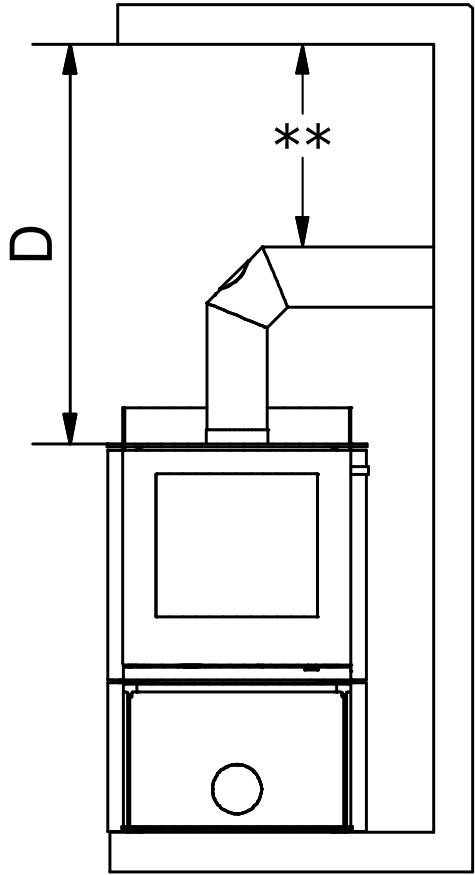
### 45° to Wall

#### Adjacent wall



# \*\*Rear/Top vent option Ceiling

\*\*:  
Please refer to NFPA guidelines in  
USA and CAN/CSA B365-M91 in  
Canada.



## Clearance to non-combustible wall

We recommend a minimum clearance to non-combustible material of at least 2" (50 mm) so that cleaning is easy. The cleaning door of the chimney should be accessible at all times.

Clearances may only be reduced by means approved by the regulatory authority.

## Floor protection

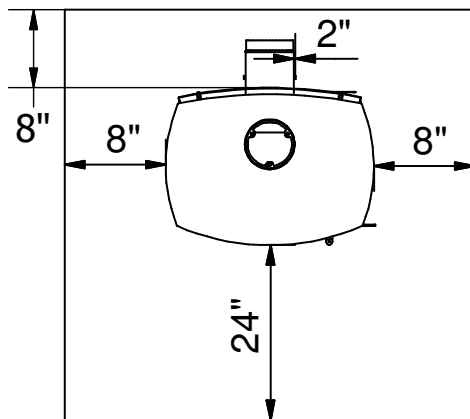
Floor protection must be non-combustible material extending beneath the stove, and to the front and sides from door opening and to rear as indicated.

The size of the floor protection is dependent, of installation with or without pedestal. and is different in US compared to Canada. See User Manual pages 9 & 10 for more information.

## Thermal Floor Protection

Stove without pedestal placed on combustible material must have thermal protection with an R = 3.19 or greater under the appliance and extending 24" in front of unit.

### FLOOR PROTECTOR



Firewood

Only burn wood that has been seasoned for at least one full year (two years is better). If the wood has not been seasoned or dried, energy will be lost in evaporating the water held in the wood. Furthermore, condensation or creosote might occur in the stove and pipe when damp wood is burnt.

Freshly cut wood contains approx. 60-70% water and is completely unsuited for burning.

Log size should be about 2" (5 cm) less than the width of the firebox

**NEVER** BURN TRASH (PLASTIC AND OTHER TYPES OF ARTIFICIAL MATERIALS EMIT HARMFUL GASES), DRIFTWOOD, TREATED OR PAINTED WOOD, ARTIFICIAL LOGS OR NON-SEASONED WOOD.  
**NEVER** BURN FUELS OTHER THAN SPECIFIED!  
BURNING CHARCOAL FOR EXAMPLE, CONTAINS THE RISK OF GENERATING CARBON MONOXIDE HAZARDS

All types of wood heat equally per pound; however, the density of wood is not the same as is shown in the table below, where the combustible value of wood dried for two years with a moisture of 15-20% is taken into account. See table to the left.

Drying and storage

Wood to be used for burning in a stove should be dried for two years to ensure optimal burning.

Here are some storage tips:

- Cut and split the wood before storing.
- Keep the woodpile in a dry sunny place, protected from the rain. Do not cover the pile with plastic, because that prevents the wood from drying properly.
- Stack the wood with enough space between the rows to ensure good air circulation.
- Bring the logs inside the house two-three days prior to use.

| Wood type     | Dry wood<br>kg/m³ | In comparison<br>to beech |
|---------------|-------------------|---------------------------|
| Beech and oak | 580               | 100 %                     |
| Ash           | 570               | 98 %                      |
| Maple         | 540               | 93 %                      |
| Birch         | 510               | 88 %                      |
| Mountain pine | 480               | 83 %                      |
| Fir           | 390               | 67 %                      |
| Poplar        | 380               | 65 %                      |

DO NOT STORE SOLID FUEL WITHIN SPACE HEATER INSTALLATION CLEARANCES OR WITHIN THE SPACE REQUIRED FOR CHARGING AND ASH REMOVAL.

## Adjusting the combustion air

All RAIS stoves are equipped with an easy-to-use handle for adjusting the air control. For the various positions of the control please see the following illustrations. To ensure proper combustion process it is very important to supply the correct quantity of air at the right time and place. The adjustment range made from factory may not be altered for increasing firing for any reason.

Primary air is defined as combustion air for burning the mass of wood and stimulates production of volatile gases.

Secondary air is used to burn off the gases at high temperatures (above 1,000°F/540°C) and to keep the glass free of soot. The secondary air is let through the air control beneath the combustion chamber and is heated through the side channels, which is then directed to the glass. The warm air runs along the glass, keeping it free of soot.

At the very back of the combustion chamber there is a tertiary channel at the top that helps to combust the remaining gases.

When positioning the air control between Pos. 1 and 2 optimum utilization of the energy contents of the wood is obtained, because of sufficient oxygen for combustion. When the flames burn bright and yellow, the control has been adjusted correctly. Finding the correct position takes some trial and error, but is easy to find.

Never close the air control completely when using the stove. A typical error is to close the control too soon, because the heat gets too intense. This results in the appearance of a dark cloud of smoke from the chimney and that means the energy value of the wood is not being used properly.

It is important for proper control of the fire that the instructions in the manual are followed and the stove door normally is kept closed. It is also necessary to keep the seals in a good condition.





**REMEMBER THE STOVE IS HOT WHILE IN OPERATION, SO KEEP CHILDREN, CLOTHING, AND FURNITURE AWAY. CONTACT WITH A STOVE WHEN BURNING MAY CAUSE SKIN BURNS.**

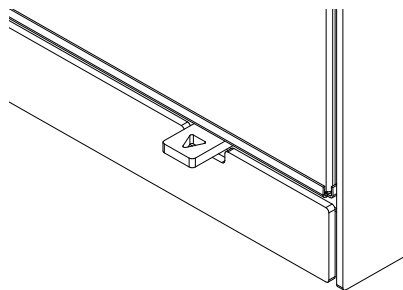
**Warning: Do not fire the stove with the door open!**

## Using the stove

Only use wood as fuel as described in the firewood section of this manual.

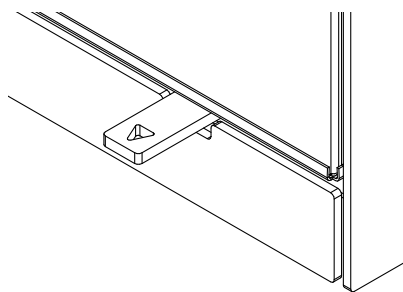
## Adjusting the air control

There are three different positions for air control:



Position 1:

The damper is almost closed meaning that there is a minimal air intake.

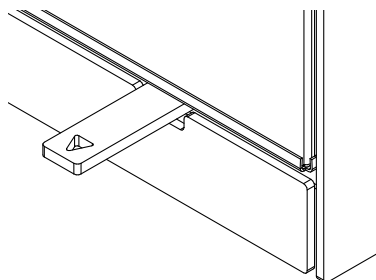


Position 2:

Pull the handle out to the first stop. This position provides full secondary air intake.

In the event of ordinary combustion the handle is to be adjusted to the interval between pos. 1 and 2.

When the flames are clear and yellow, the damper has been adjusted correctly resulting in slow/optimal combustion.



Position 3:

Pull the handle all the way out. The damper is fully open and provides full primary and secondary air intake. This position is for the kindling phase and is not used in connection with normal operation.

## Carbon monoxide detectors

Normal activity of loading fuel could result in emissions of smoke. It might be necessary to move carbon monoxide detectors, if they are triggered during normal useage of the stove.

## Control

If the ashes are white and the combustion chamber walls not covered with soot, the air adjustment has been correct and the wood sufficiently dry.

## First Fire

Your new RAIS should be broken into gently for top performance and to prevent paint damage, cracks in the firebrick, and excessive wear and tear. Start with a small fire (never overload the firebox) to allow the materials to get accustomed to the higher temperatures, and then gradually increase the intensity. Use up to a maximum of two logs.

For the first few fires you may detect a strange smell that comes from heat treating the paint and materials. This is normal and will soon disappear. Just ensure there is plenty of fresh air in the room. Furthermore, during the initial heating up and cooling down, the metal may emanate some clicking sounds due to being exposed to the large differences in temperature. This is normal as well.

For wood to burn properly, the right amount of air has to be supplied at the right time and place.

## Cold handle



The stove is supplied with a loose “cold” handle cover, which enables you to operate the handle without the use of a glove. Please note that one must always be very careful when touching any other part of the stove while it is still hot.

The loose cold handle cover is placed over the door handle.

when not in use, place the cold handle cover in its resting position on the magnetic holder supplied with the stove.

## Lighting and Stoking



To light the stove, use alcohol briquettes or similar, as well as approx. 2 kg of firewood, split into kindling sticks. Set the air damper to the fully open position.

Be carefull not to place the firewood too close to the opening and glass.



### TIPS before firing up:

Open a door or window close to the wood burning stove.

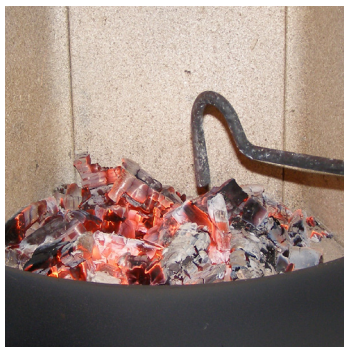
If there is wind in the stove coming from the chimney, it is advisable to place a curled-up piece of newspaper between the upper baffle plate and the chimney, set the paper on fire, and wait until you hear a “rumbling” noise in the chimney. This means that there definitely is a draught in the chimney and you avoid smoke in the room.



Light the fire and shut the door, leaving an open gap of approx. 10-15 mm.



When the flames are clear - after approx. 5-10 min.  
- close the door.



After approx. 10-20 min. - when you have a good  
bed of glowing embers - add 2-3 pieces of wood.

Be carefull not to place the firewood too close to  
the opening and glass.

Leave the door ajar until the fire has caught on  
properly - close the door.



After approx. 5 min. - or when the flames are clear  
and stable - close the damper gradually.

It is recommendable to have a layer of ash of ap-  
prox.  
20 mm, as it has an insulating effect.



**Note!**  
During operation the  
door should always  
remain shut.



## Fuel caution

DO NOT BURN GARBAGE OR FLAMMABLE FLUIDS SUCH AS GASOLINE, NAPHTHA, OR ENGINE OIL(plastic and other artificial materials emit harmful gases), driftwood, treated wood, artificial logs, or non-seasoned wood.

DO NOT USE CHEMICALS OR FLUIDS TO START THE FIRE

Never use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, naphtha, engine oil, or similar liquids to start or freshen up a fire in your RAIS stove. Keep all such liquids well away from the stove while it is in use.

## Care and maintenance

You should have your chimney, stove and connector pipe checked once every two months during the heating season or at least once a year by a professional chimney sweep and cleaned as needed.

When cleaning the stove carefully inspect the seals for damage. The seals should be in good conditions and without damage.

When cleaning, checking or repairing, the stove must be cold.

If the glass has been covered in soot, here is a simple piece of advice:

- Dampen a piece of paper or newspaper, dip it into the cold ashes and rub the soot-covered glass.
- Use another piece of paper to polish the glass.
- A good commercial glass cleaner can also be used.
- Do not use abrasive cleaners.

The outer surfaces can be wiped with a soft, dry rag and if needed a small amount of mild detergent. NEVER scrub the surfaces.

Cleaning the soapstone:

Day-to-day cleaning can be made with a damp rag. If necessary the soapstone can be carefully cleaned with some paint-thinner from the hardware store. For difficult stains that cannot be dissolved by the paint-thinner, lightly sand them.

Cleaning the combustion chamber:

Rake out the ashes and store them in a metal container with a tight-fitting lid until cooled completely before throwing them in the trash can. Other waste shall not be placed in this container.

Remember NEVER to clean all ashes from the combustion chamber. Leave about a 3/4" layer for better combustion.

## **Maintaining the installation.**

Establish a routine for the fuel, wood burner and firing technique. Check daily for creosote build-up until experience shows how often you need to clean to be safe. Be aware that the hotter the fire the less creosote is deposited, and weekly cleaning may be necessary in mild weather even though monthly cleaning may be enough in the coldest months. Contact your local municipal or provincial fire authority for information on how to handle a chimney fire. Have a clearly understood plan to handle a chimney fire.



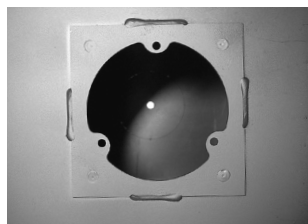
## Cleaning of smoke chicane



Remove the smoke converter plate by tilting it to one side and turning it a little slantwise. Pull out the plate carefully.



Then remove the smoke impediment by lifting it up and moving it forward. Carefully lift out the smoke impediment.



There is now an unblocked view of the smoke discharge. Remove dirt and dust, and mount the parts in reverse order.



## **CREOSOTE**

### **FORMATION AND NEED FOR REMOVAL**

WHEN WOOD IS BURNED SLOWLY, IT PRODUCES TAR AND OTHER ORGANIC VAPORS, WHICH COMBINE WITH EXPELLED MOISTURE TO FORM CREOSOTE. THE CREOSOTE VAPORS 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. THE CHIMNEY AND CHIMNEY CONNECTOR SHOULD BE INSPECTED AT LEAST ONCE EVERY TWO MONTHS DURING THE HEATING SEASON TO DETERMINE IF A CREOSOTE BUILDUP HAS OCCURRED. IF CREOSOTE HAS ACCUMULATED, IT SHOULD BE REMOVED TO REDUCE THE RISK OF A CHIMNEY FIRE.

## **DISPOSAL OF ASHES**

ASHES SHOULD BE PLACED IN A METAL CONTAINER WITH A TIGHTFITTING LID. THE CLOSED CONTAINER OF ASHES SHOULD BE PLACED ON A NONCOMBUSTIBLE FLOOR OR ON THE GROUND, WELL AWAY FROM ALL COMBUSTIBLE MATERIALS, PENDING FINAL DISPOSAL. IF THE ASHES ARE DISPOSED OF BY BURIAL IN SOIL OR OTHERWISE LOCALLY DISPERSED, THEY SHOULD BE RETAINED IN THE CLOSED CONTAINER UNTIL ALL EMBERS HAVE THOROUGHLY COOLED. OTHER WASTE SHALL NOT BE PLACED IN THIS CONTAINER.

The firebox lining is made out of vermiculite slab insulation (skamol), which protects the outer steel plates from overheating. With time small cracks might appear; this is normal. If it breaks however, it must be replaced. Vermiculite is a porous, high-insulated material and must therefore be handled with care.

## Trouble Shooting

Smoke seeping through the door:

- Not enough draft in the chimney (<12 Pa)
- Check if there are any obstructions in the chimney or the wind pipe
- Check whether the kitchen exhaust fan is in use and if so, turn it off and open the window for a short period of time

Soot on the glass:

- The wood is too damp
- Make sure that the stove is sufficiently heated up before closing the door
- The air control has been set too low

The stove burns too quickly:

- Gasket may not be tight, please check and replace if necessary
- Chimney draft maybe too high >22 Pa, if this is the case, please install a damper

The stove is burning too slowly:

- Not sufficient amount of firewood
- Not enough air is getting into the stove
- Blocked chimney
- Leaking chimney
- Leak between chimney and pipe

If the problems continue we recommend contacting your chimney sweep or your local RAIS dealer.

Chimney fire, soot fire or creosote fire:

In case of a fire in the chimney quickly close all doors, dampers, vents and call your local fire department. NEVER use water to extinguish the fire.

## Spare parts Q-Tee II USA

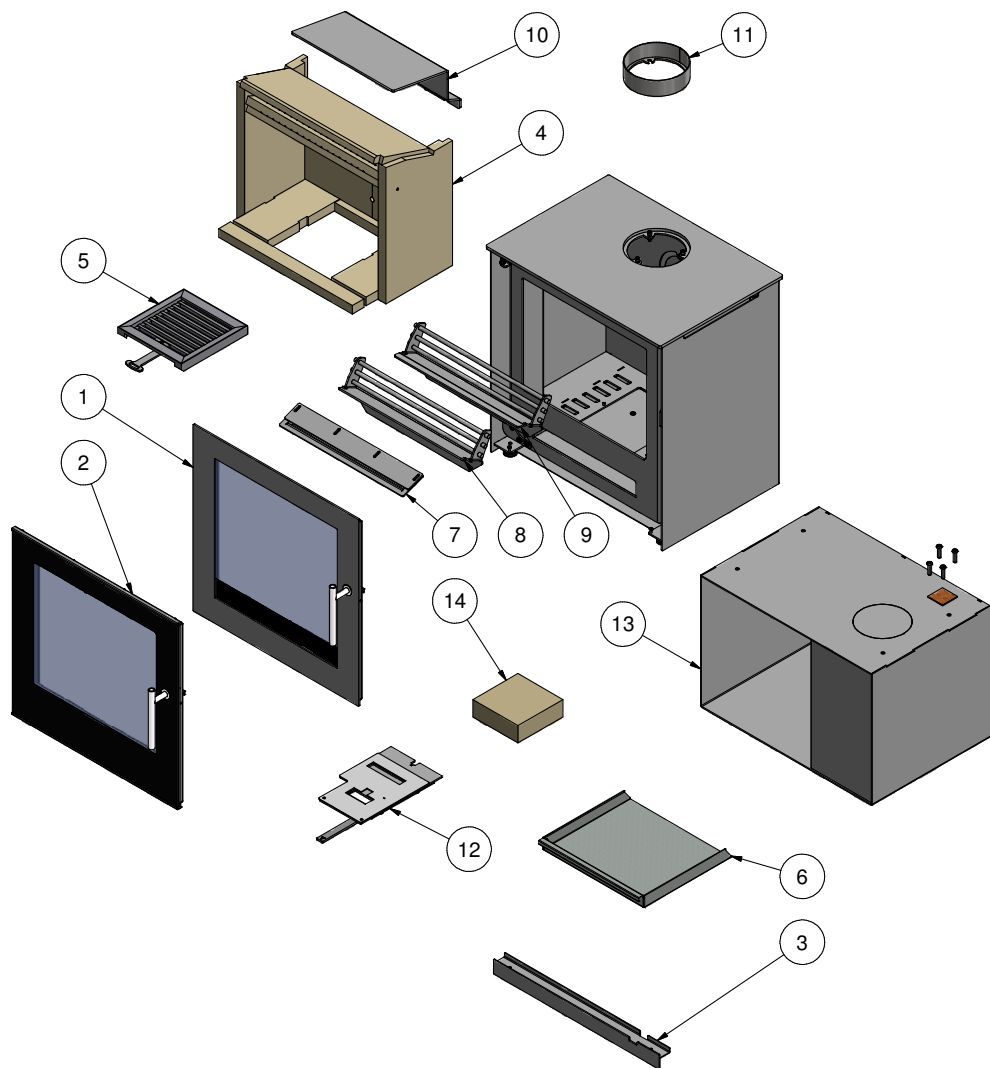
Only use the specified original Rais components!

If spare parts other than those recommended by RAIS are used, the warranty is voided.

All replaceable parts can be bought as spare parts from your RAIS distributor.  
For reference see spare parts drawing Q-Tee II (front of the user manual).

| Pos. | PCS. | Item number. | Description                       |
|------|------|--------------|-----------------------------------|
| 1    | 1    | 8382090      | Steel door                        |
| 2    | 1    | 8381090      | Glass door                        |
| 3    | 1    | 838052490    | Cover Q-Tee II                    |
| 4    | 1    | 8392200      | Fire brick set                    |
| 5    | 1    | 8383800      | Shaking grate                     |
| 6    | 1    | 8384001      | Ash pan                           |
| 7    | 1    | 838121090    | Air guiding plate                 |
| 8    | 1    | 839121190    | Turbo plate (steel door)          |
| 9    | 1    | 839121490    | Turbo plate (glass door)          |
| 10   | 1    | 8381301      | Smoke chicane                     |
| 11   | 1    | 61-110       | Flue collar for USA- England - 6" |
| 12   | 1    | 8380990      | Air damper                        |
| 13   | 1    | 838040590    | High socket complete              |
| 14   | 1    | 8385500      | Seal set                          |

## Spare parts Q-Tee II USA



## Spare parts Q-Tee II C USA

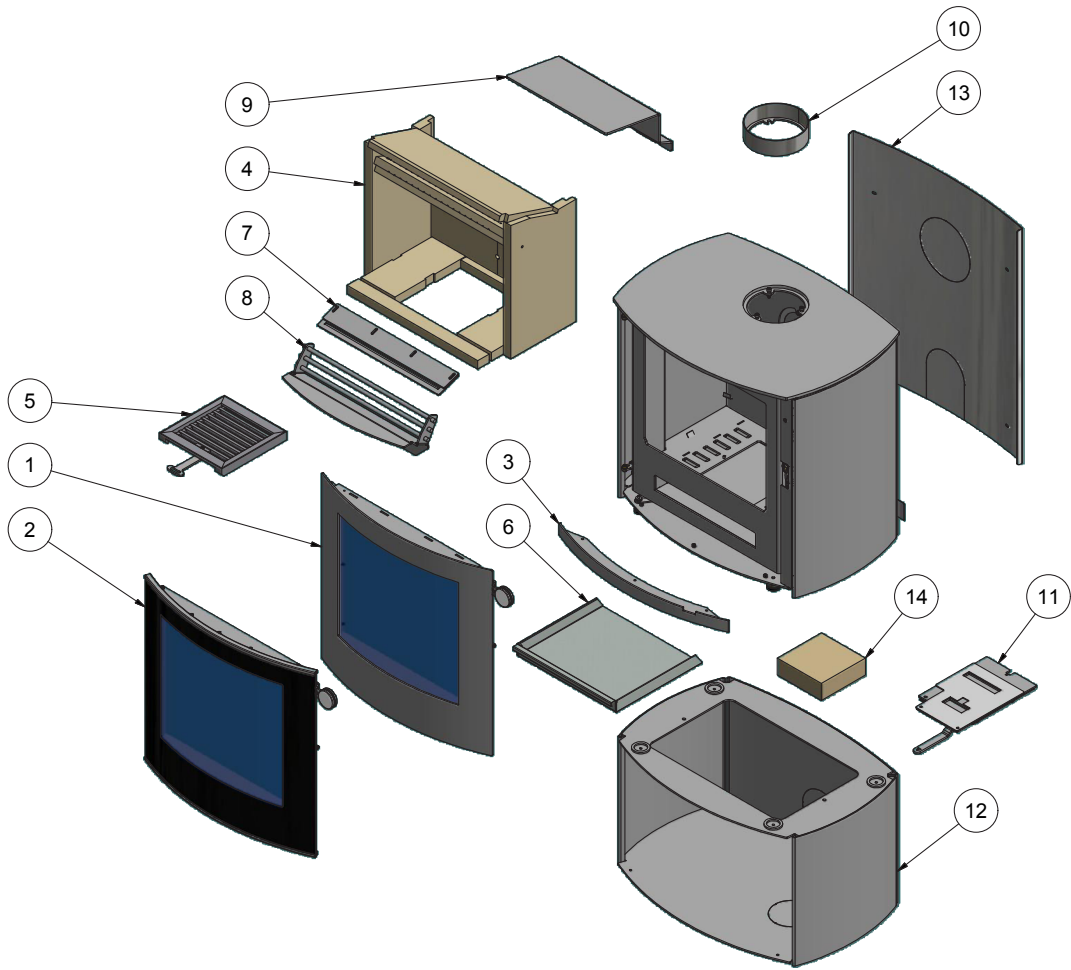
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For reference see spare parts drawing Q-Tee II (front of the user manual).

| Pos. | PCS. | Item number. | Description                       |
|------|------|--------------|-----------------------------------|
| 1    | 1    | 8341190      | Steel door                        |
| 2    | 1    | 8341090      | Glass door                        |
| 3    | 1    | 834040490    | Cover Q-Tee II                    |
| 4    | 1    | 8392200      | Fire brick set                    |
| 5    | 1    | 8383800      | Shaking grate                     |
| 6    | 1    | 8384001      | Ash pan                           |
| 7    | 1    | 838121090    | Air guiding plate                 |
| 8    | 1    | 834121590USA | Turbo plate                       |
| 9    | 1    | 8381301      | Smoke chicane                     |
| 10   | 1    | 61-110       | Flue collar for USA- England - 6" |
| 11   | 1    | 8340990USA   | Air damper                        |
| 12   | 1    | 834040590    | High socket complete              |
| 13   | 1    | 8344101      | Reflector - Curved                |
| 14   | 1    | 8345500      | Seal set                          |

Spare parts Q-Tee II C USA





RAIS A/S  
Industrivej 20  
DK-9900 Frederikshavn  
[www.rais.com](http://www.rais.com)

A thin, solid red line that starts at the bottom left and curves upwards towards the right, ending near the text "THE ORIGINAL".

THE ORIGINAL