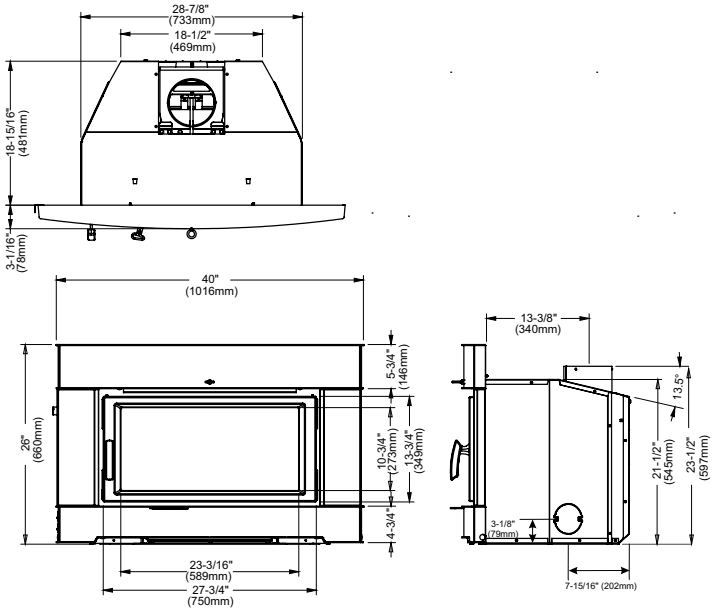
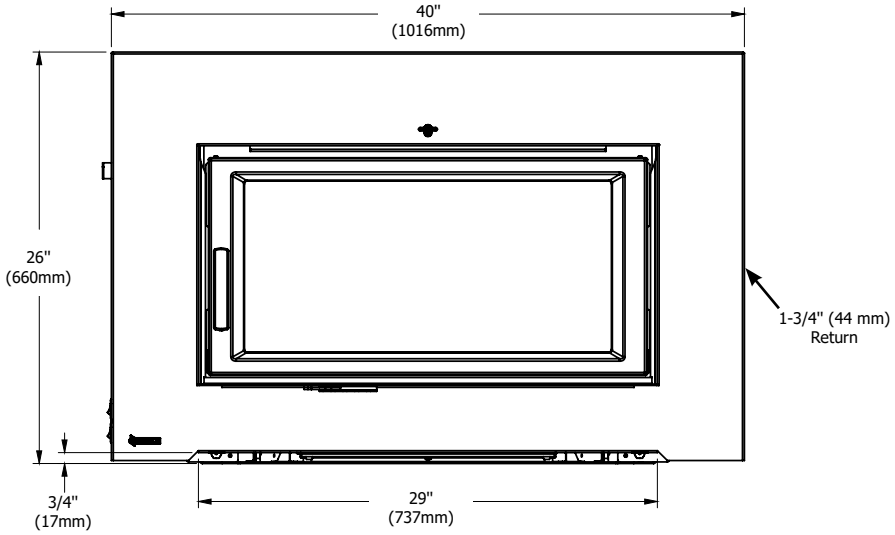
CI2700-1/HI500-1 Pro Series™ Wood Fireplace Insert

Model	Ci2700-1/Hi500-1
Cordwood BTU's	78,000 BTU's
Emissions (grams/hr) EPA Certified	1.1 grams/hr
Efficiency (EPA HHV)	77%
Efficiency (EPA LHV)	83%
Flue Size	6" (152mm)

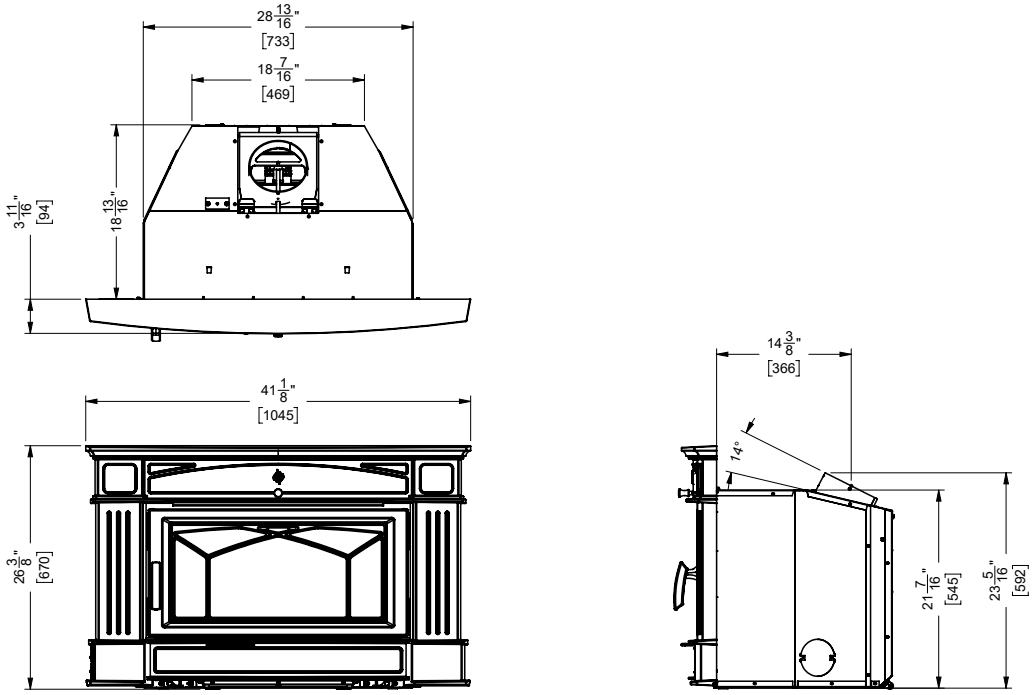
DIMENSIONS - CONTEMPORARY FACEPLATE - CI2700-1



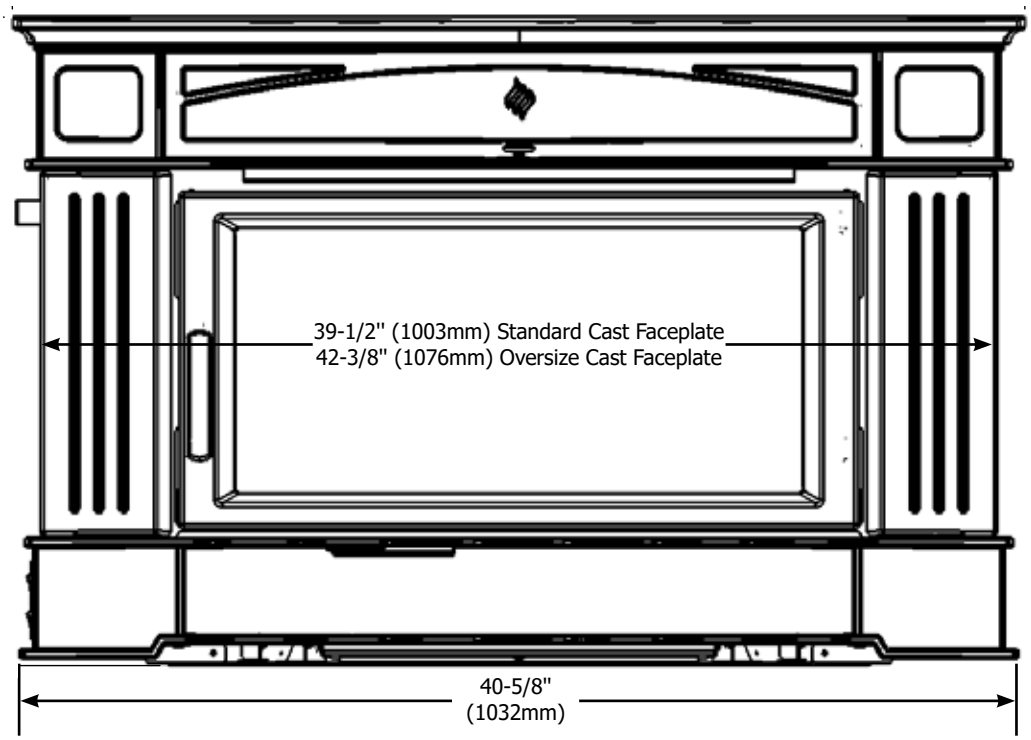
DIMENSIONS - LOW PROFILE FACEPLATE - CI2700-1



DIMENSIONS - STANDARD CAST FACEPLATE AND OFFSET FLUE COLLAR - HI500-1

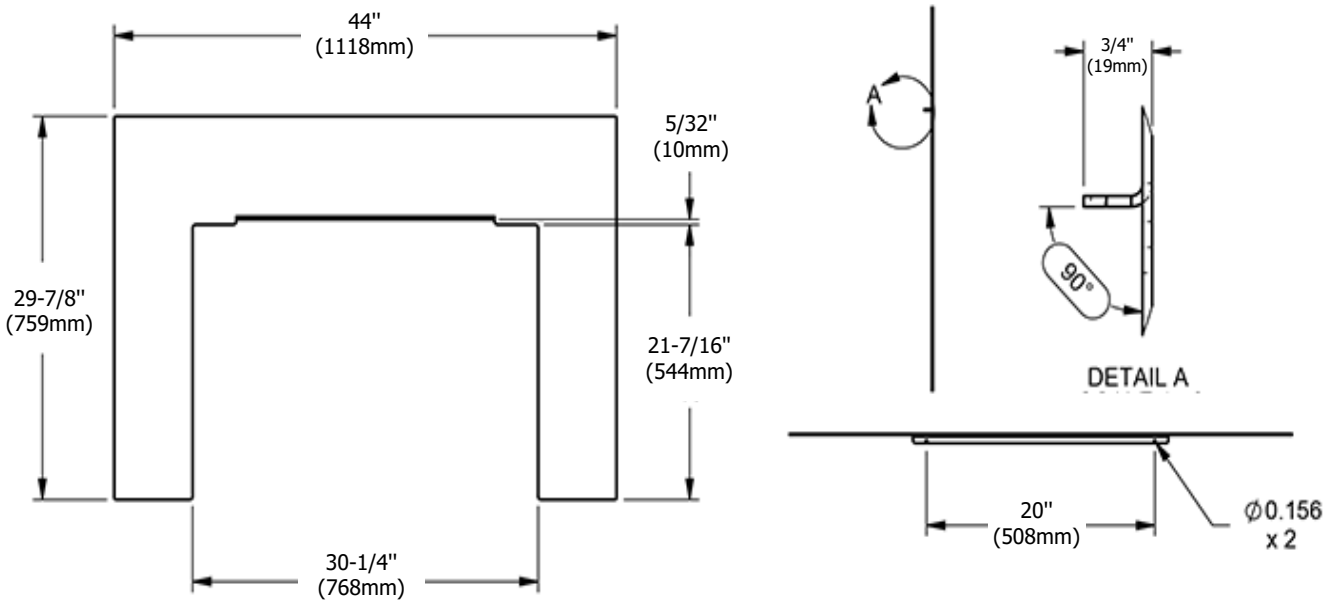


DIMENSIONS - STANDARD CAST FACEPLATE - HI500-1

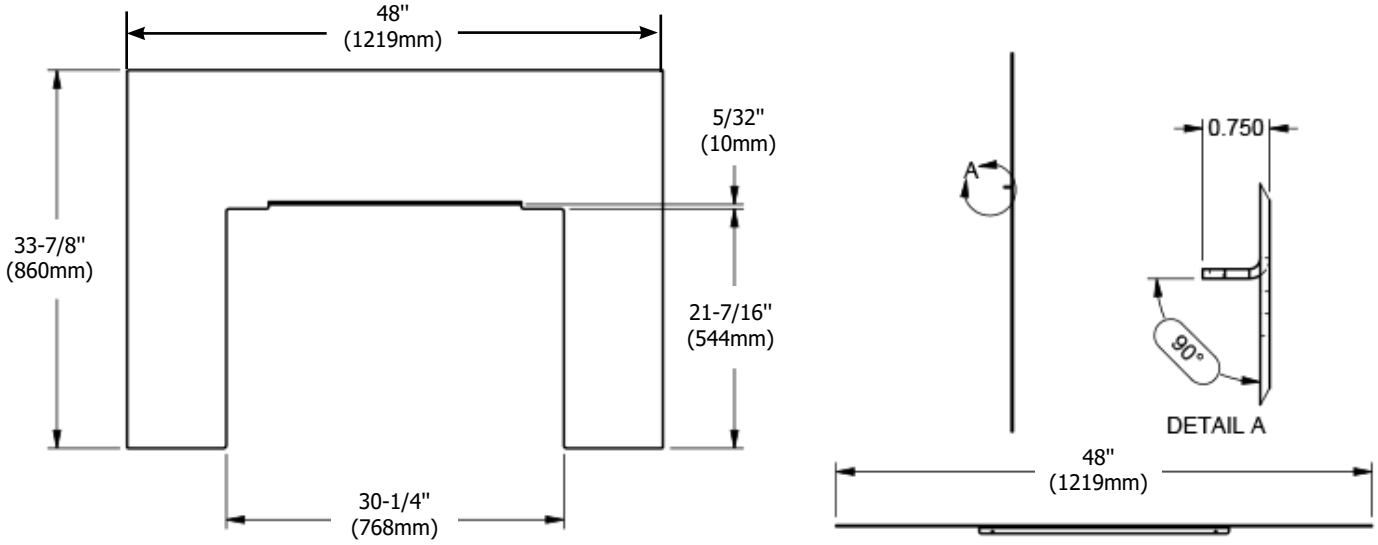


Standard Cast Faceplate shown above
Oversized Cast Faceplate Dimensions: 44" W x 31" H

DIMENSIONS - STANDARD BACKING PLATE



DIMENSIONS - OVERSIZED BACKING PLATE



MASONRY FIREPLACE CLEARANCES

The minimum required clearances to combustible materials when installed into a masonry fireplace are listed below.

Unit	Adjacent Side Wall (to Side of Door) A	Mantle ** (to Top of Door) B	Top Facing (to Top of Door) C	Side Facing (to Side of Door) D	Minimum Hearth Extension* E	Minimum Hearth Side Extension (to side of door)* F	Base of Unit to Top of Door (Reference Dimension only) G	Width of Door (Reference Dimension Only) H
Ci2700-1/ Hi500-1	12-3/16" (310mm)	21-5/8" (549mm)	14" (356mm)	7-3/8" (187mm)	US 16" (406mm) Canada 18" (450mm)	8" (200mm)	19-1/4" (489mm)	27-3/4" (750 mm)
Measurements A,B,C,D are from top/side of door								

Side and Top facing is a maximum of 1.5" (38mm) thick.

If top/side facing trim protrudes more than 1-1/2"(38 mm) follow mantle (B)** & adjacent side wall (A) for proper clearances.

* **Side hearth extension for Canada/USA measured from side of door.**

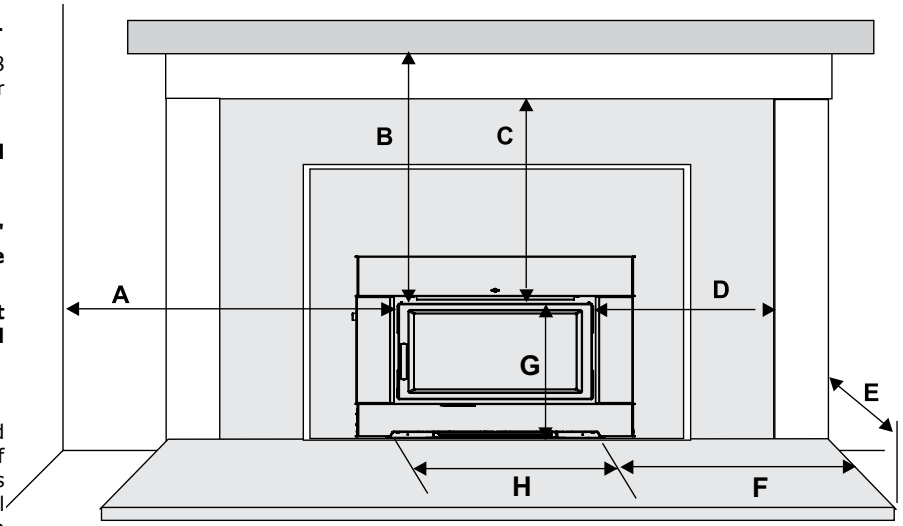
* **Hearth extension to have minimum: R value of 2.13 or greater if the unit is 0-6.5" (0-165mm) (measured from the bottom of the fireplace).**

** **A non-combustible mantel may be installed at a lower height if the framing is made of metal studs covered with a non-combustible board.**

** **Max. mantle depth is 10" (254mm).**

Thermal floor protection is not required if the unit is raised 6.5" (165mm) minimum (measured from the bottom of the stove). However, standard ember floor protection is required. It will need to be a non-combustible material that covers 16" (406 mm) in the US and 18" (450 mm) in Canada to the front of the unit and 8" (200 mm) to the sides.

All floor protection must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.) Any organic materials (i.e. plastics, wood paper products, etc.) are combustible and must not be used. The floor protection specified includes some form of thermal designation similar to R-value (thermal resistance) or k-factor (thermal conductivity).
Floor protector listed to UL1618.



Clearance diagram for Installations

Both Canada/USA
Minimum Hearth Extension for the front (E) is measured from the fuel door opening.
F measurement (minimum hearth side extension) is taken from the side of the door.

HOW TO DETERMINE IF ALTERNATE FLOOR PROTECTION MATERIALS ARE ACCEPTABLE

The specified floor protector should be 3/8" (18mm) thick material with a K - factor of 0.84.

The proposed alternative is 4" (100mm) brick with a C-factor of 1.25 over 1/8" (3mm) mineral board with a K-factor of 0.29.

Step (a):
Use formula above to convert specification to R-value.
R = 1/k x T = 1/0.84 x .75 = 0.893.

Step (b):
Calculate R of proposed system.
4" brick of C = 1.25, therefore
Rbrick = 1/C = 1/1.25 = 0.80
1/8" mineral board of k = 0.29, therefore
Rmin.bd. = 1/0.29 x 0.125 = 0.431
Total R = Rbrick + Rmineral board =
0.8 + 0.431 = 1.231.

Step (c):
Compare proposed system R of 1.231 to specified R of 0.893. Since proposed system R is greater than required, the system is acceptable.

DEFINITIONS

Thermal Conductance:

$$C = \frac{Btu}{(hr)(ft^2)(^oF)} = \frac{W}{(m^{2)})(K)}$$

Thermal Conductivity:

$$k = \frac{(Btu)(inch)}{(hr)(ft^3)(^oF)} = \frac{W}{(m)(K)} = \frac{Btu}{(hr)(ft)(^oF)}$$

Thermal Resistance:

$$R = \frac{(ft^2)(hr)(^oF)}{Btu} = \frac{(m^2)(K)}{W}$$

WOOD INSERT SPECIFICATIONS

Your fireplace opening requires the following minimum sizes:

Height: 21-3/4" (552 mm)
Width: 29" (737 mm)
Depth: 19" (483 mm)