Condensing Gas
Hydro-furnace

NPF700 Series Hydro-furnace
Technical Data Sheet

- Certified design according to the latest edition of **ANSI Z21.47 / CSA 2.3** and **Z21.13 / CSA 4.9**
- Certified by **Intertek, AHRI, ASME, SCAQMD** (Rule 1111 for NOx emissions of 14 ng/J or 20 ppm at 3% O2), **24 CFR Part 3280** for Manufactured Homes
- Compatible with **Natural Gas** (NG) and **Propane** (LP)*
  *requires installation of included Field Conversion Kit by qualified installer, servicer, or gas supplier
- **AFUE** Ratings - **97%** (NG/LP)

Upflow	**NPF700-060U3BH / NPF700-080U3BH / NPF700-100U5CH**
Horizontal	**NPF700-060H3BH / NPF700-080H3BH / NPF700-100H5CH**
Downflow	**NPF700-060D3BH / NPF700-080D3BH / NPF700-100D5CH**





- **Variable Capacity Operation** - modulating burner and blower work together to provide an industry leading 15% to 100% firing rate
- **Durable Stainless Steel Combustion Heat Exchanger** - located out of the air stream creates one of the quietest furnaces available on the market
- Compatible with **2" PVC** vent up to 70 ft** and **3" PVC** vent up to 140 ft**
  **with no elbows
- **EZNav™** back-lit Control Panel - Startup and Service Wizards provide intuitive configuration. Diagnostics are streamlined for easy access.
- **Low Voltage Terminal Strip** - contacts for 1-2 stage Thermostats, Humidifier, Dehumidifier, Humidistat, Outdoor Reset, Safety Shutdown input and Alarm output
- **Line Voltage Contacts** - for use with field accessories
- **Outdoor Reset Sensor** - optional accessory that adjusts the furnace operation based on outdoor temperature for maximum comfort and efficiency
- **HIgh Altitude Conversion Kit** - factory supplied for installations up to 10,100 ft.
- **Auto-Water Fill** or manual fill provide installation flexibility
- Cleanable **external condensate trap** (upflow) - left or right convertible
- **ECM variable speed blower motor** - provides quiet, efficient operation
- **Flame Rod & Igniter** - located to provide easy access for maintenance
- **Limited Lifetime Combustion Heat Exchanger Warranty** - 10 year Parts / / 1 year Labor (must be registered as Residential)
- **Commercial Warranty*** ** - 10 years combustion heat exchanger/1 year parts/1 year labor
  *** see Navien Limited Warranty terms

Optional Accessories



Residential Neutralizer
GXXX002212

Residential Replacement Media
GXXX001323



Residential Neutralizer with Pump
GXXX002585

Residential Replacement Media
GXXX002586



Outdoor Sensor & Wire
30012950A



Return Air Box
GXXX002427 (for 60/80k)
GXXX002398 (for 100k)

Publication Date: September 2026

Nomenclature

	MODEL NUMBER NOMENCLATURE									
Example	N	P	F	700	-	100	U	5	C	H
	I	II	III	IV	-	V	VI	VII	VIII	IX

I	**Brand** N = Navien
II	**Product Tier** P = Premium
III	**Product** F = Furnace
IV	**Model Series** 700
V	**Nominal Capacity** 060 = 50,000 Btu/h 080 = 70,000 Btu/h 100 = 100,000 Btu/h
VI	**Orientation** U = Upflow H = Horizontal D = Downflow
VII	**Nominal Cooling Capacity** 3 = 3 Ton 5 = 5 Ton
VIII	**Cabinet Width** B = 17.5" C = 21.0"
IX	**Heating Type** H = Heating

Specifications (Upflow/Downflow)

Items		NPF700-060U3BH NPF700-060D3BH	NPF700-080U3BH NPF700-080D3BH	NPF700-100U5CH NPF700-100D5CH
Applications		Residential, Light Commercial, Manufactured/Mobile/Modular Homes		
Installation Type		Up/Downflow		
Venting Type		Forced Draft Direct Vent		
Maximum Vent Length	2 in	70 ft		
	3 in	140 ft		
Ignition		Electronic Ignition		
Natural Gas Supply Pressure (from source)		3.5 in–10.5 in WC		
Propane Gas Supply Pressure (from source)		8.0 in–13.0 in WC		
Natural Gas Manifold Pressure		-0.01 to -0.02 in WC		
Propane Gas Manifold Pressure		-0.01 to -0.02 in WC		
Gas Connection Size		½ in NPT		
Water Connection Size		¼ in NPT		
Condensate Drain Size		¾ in NPT		
Materials	Casing	Painted steel with corrosion resistant coating		
	Combustion Heat Exchanger	Stainless Steel		
	Hydronic Heat Exchanger	Copper & Aluminum		
Venting	Exhaust	2 in or 3 in PVC, CPVC, approved polypropylene* / 2 in or 3 in Special Gas Vent Type BH (Class III, A/B/C) /2 in or 3 in Stainless Steel		
	Intake	2 in or 3 in PVC, CPVC, polypropylene / 2 in or 3 in Special Gas Vent Type BH (Class III, A/B/C)/ 2 in or 3 in Stainless Steel, ABS		
	Vent Clearance	0 in to combustibles		
Safety Devices		Flame Rod, Ignition Operation Detector, Water Temperature High Limit Switch, High Limit Sensor for Exhaust Temperature, Vent Installation Detector (VID), Water Level Sensor, Burner High Limit Sensor, Pressure Relief Valve (PRV)		
Dimensions [in (CM)], WxDxH		17.5x31x34.5 (44.5x78.5x87.7)	17.5x31x34.5 (44.5x78.5x87.7)	21x31x34.5 (53.5x78.5x87.7)
Shipping Weight [LB (kg)]		145.0 (65.8)	145.0 (65.8)	167.6 (76.0)
Power Supply		120V AC, 60Hz		
Max Current (A)		10.9	10.9	14.3
CKT BKR Amps (A)		15	15	20
Wire Size (AWG)		14		

Specifications (Horizontal)

Items		NPF700-060H3BH	NPF700-080H3BH	NPF700-100H5CH
Installation Type		Horizontal Left		
Venting Type		Forced Draft Direct Vent		
Maximum Vent Length	2 in	70 ft		
	3in	140 ft		
Ignition		Electronic Ignition		
Natural Gas Supply Pressure (from source)		3.5 in–10.5 in WC		
Propane Gas Supply Pressure (from source)		8.0 in–13.0 in WC		
Natural Gas Manifold Pressure		-0.01 to -0.02 in WC		
Propane Gas Manifold Pressure		-0.01 to -0.02 in WC		
Gas Connection Size		½ in NPT		
Water Connection Size		¼ in NPT		
Condensate Drain Size		¾ in NPT		
Materials	Casing	Corrosion resistant baked on pre-painted steel		
	Combustion Heat Exchanger	Stainless Steel		
	Hydronic Heat Exchanger	Copper & Aluminum		
Venting	Exhaust	2 in or 3 in PVC, CPVC, approved polypropylene* / 2 in or 3 in Special Gas Vent Type BH (Class III, A/B/C) /2 in or 3 in Stainless Steel		
	Intake	2 in or 3 in PVC, CPVC, polypropylene / 2 in or 3 in Special Gas Vent Type BH (Class III, A/B/C)/ 2 in or 3 in Stainless Steel, ABS		
	Vent Clearance	0 in to combustibles		
Safety Devices		Flame Rod, Ignition Operation Detector, Water Temperature High Limit Switch, High Limit Sensor for Exhaust Temperature, Vent Installation Detector (VID), Water Level Sensor, Burner High Limit Sensor, Pressure Relief Valve (PRV)		
Dimensions [in (CM)], WxDxH		34.5x31x17.5 (87.7x78.5x44.5)	34.5x31x17.5 (87.7x78.5x44.5)	34.5x31x21 (87.7x78.5x53.5)
Shipping Weight [LB (kg)]		145.0 (65.8)	145.0 (65.8)	167.6 (76.0)
Power Supply		120V AC, 60Hz		
Max Current (A)		10.9	10.9	14.3
CKT BKR Amps (A)		15	15	20
Wire Size (AWG)		14		

Heating Capacity and Efficiency

Items		NPF700-060U3BH NPF700-060H3BH NPF700-060D3BH	NPF700-080U3BH NPF700-080H3BH NPF700-080D3BH	NPF700-100U5CH NPF700-100H5CH NPF700-100D5CH
Installation Type		Upflow/Horizontal (Left)/Downflow		
Heating (Gas input) Natural/Propane Gas [BTU/H]	Max Heat	60,000	80,000	100,000
	Min Heat	9,000	11,000	14,000
AFUE(%)		97	97	97
Certiÿed Temperature Rise Range [°F(°C)]	Max Heat	45–75 (25–42)		
	Min Heat	5–35 (3–19)	10–40 (6–22)	10–40 (6–22)
Burner Control		Modulating		

Airfow Capacity and Blower Data

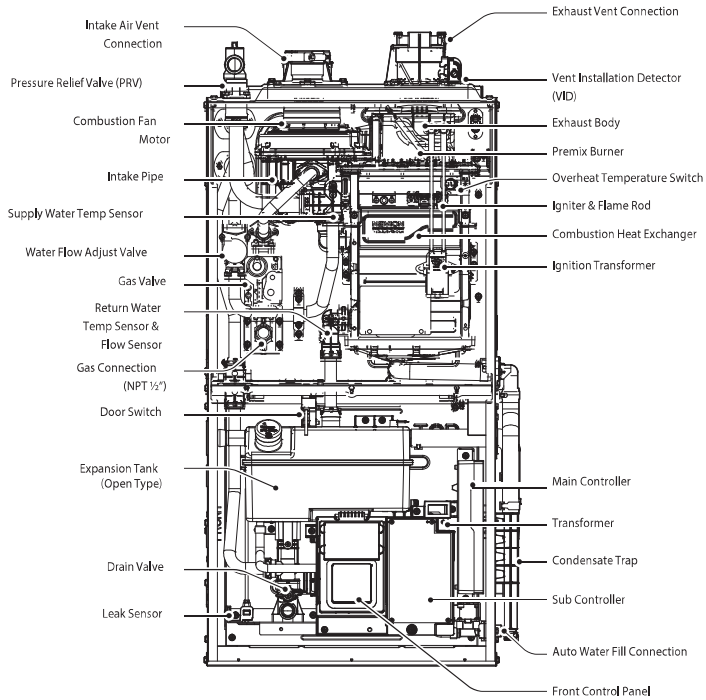
Items		NPF700-060U3BH NPF700-060H3BH NPF700-060D3BH	NPF700-080U3BH NPF700-080H3BH NPF700-080D3BH	NPF700-100U5CH NPF700-100H5CH NPF700-100D5CH
Installation Type		Upflow/Horizontal (Left)/Downflow		
External Static Pressure (in.W.C)	Heating	0.1–1.0		
	Cooling			
Air° ow Delivery Range [CFM] (Rated ESP)	Max Heat	720–1,200	950–1,400	1,200–2,000
	Min Heat	400	400	500
	Cooling	1,200	1,200	2,000
Nominal Cooling Capacity (TON)	@400CFM	1.5–3.0	1.5–3.0	2.0–5.0
	@350CFM	1.5–3.5	1.5–3.5	2.0–5.5
Circulator Blower	DxW (in)	12x10	12x10	12x12
	Horsepower	1/2	1/2	1
	Motor Full Load Amps	7.6	7.6	11
	Motor Speed & Type	Variable, Electronically Commutated (ECM)		

Airflow Delivery (CFM)

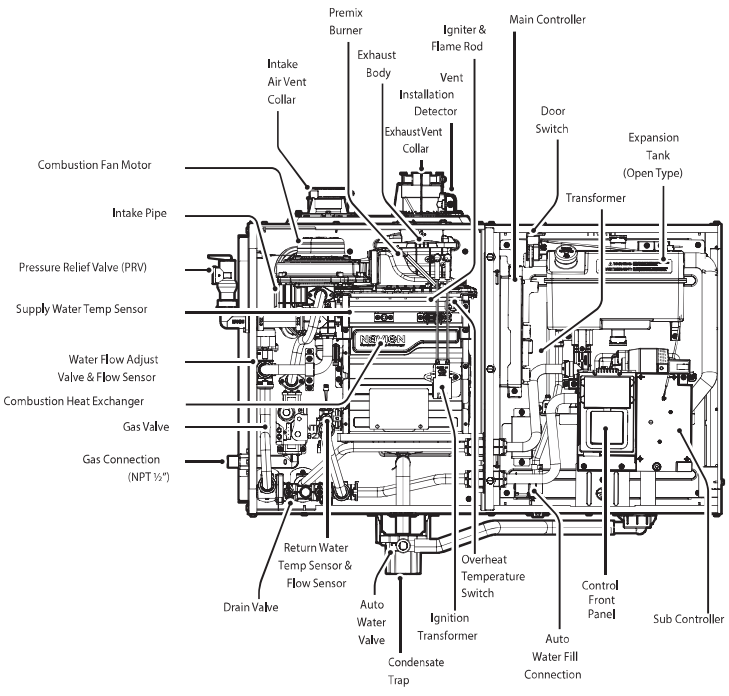
FLOW	Input Btu/h	Setting	External Static Pressure									
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
Upflow / Horizontal	60,000	450	391	412	425	423	423	428	425	396	395	376
		900	869	880	861	872	891	888	908	884	861	879
		1200	1155	1159	1170	1189	1180	1210	1193	1189	1190	1177
	80,000	450	391	412	425	423	423	428	425	396	395	376
		900	869	880	861	872	891	888	908	884	861	879
		1200	1155	1159	1170	1189	1180	1210	1193	1189	1190	1177
		1400	1392	1387	1372	1406	1404	1387	1365	1356	1341	1262
	100,000	500	590	560	520	530	540	545	550	540	520	525
		1000	1040	1025	1030	1020	1010	1030	1035	1030	1030	1020
		1500	-	1575	1550	1520	1520	1530	1500	1540	1550	1560
		2000	-	-	2010	2020	2025	2020	2010	2020	2040	2025
Downflow	60,000	450	383	432	443	435	443	460	450	445	440	440
		900	879	894	886	909	916	924	911	915	921	936
		1200	1220	1173	1184	1205	1200	1213	1217	1203	1230	1225
	80,000	450	383	432	443	435	443	460	450	445	440	440
		900	879	894	886	909	916	924	911	915	921	936
		1200	1220	1173	1184	1205	1200	1213	1217	1203	1230	1225
		1400	1440	1390	1386	1395	1390	1390	1375	1340	1293	1250
	100,000	500	495	470	460	500	500	530	530	500	550	550
		1000	1040	1045	1045	1040	1050	1030	1025	1010	980	1000
		1500	-	1510	1520	1485	1480	1500	1475	1470	1440	1460
		2000	-	-	2040	2050	2030	2020	2050	2020	1980	2000

Components

NPF700-060U3BH / 080U3BH / 100U5CH (Upflow)

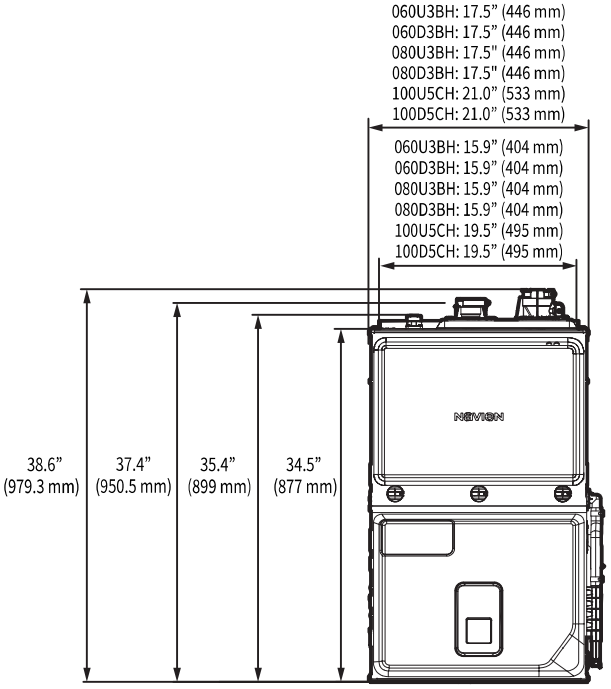


NPF700-060H3BH / 080H3BH / 100H5CH (Horizontal)



Dimensions

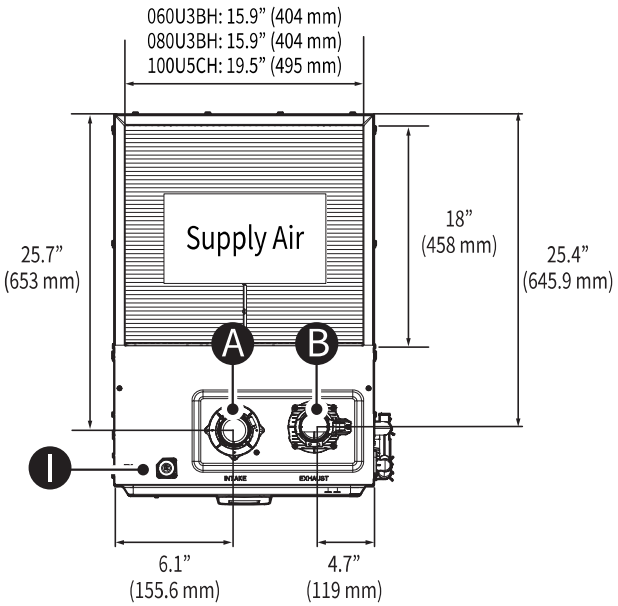
NPF700-060U3BH / 080U3BH / 100U5CH / 060D3BH / 080D3BH / 100D5CH



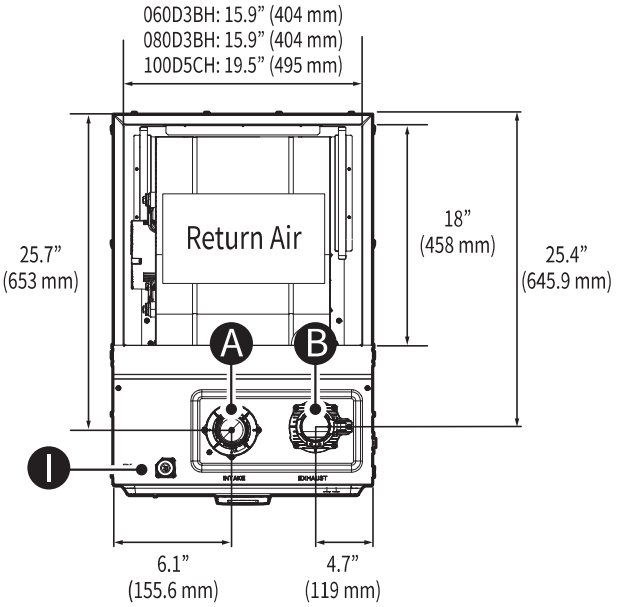
[Front View]

	Description	Diameter
A	Air intake	2 in
B	Exhaust gas vent	2 in
C	Gas connection	1.8 in (NPT ½")
D	Condensate drain	¾ in (Ø19 mm)
E	Overflow connection	1.8 in (Ø44.5 mm)
F	Electrical connection low voltage	0.9 in (Ø22.2 mm)
G	Electrical connection line voltage	0.9 in (Ø22.2 mm)
H	Water supply connection	NPT ¼"

[Connections Size]



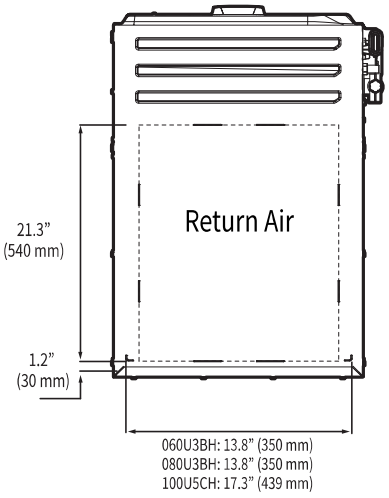
[Top View - Upflow]



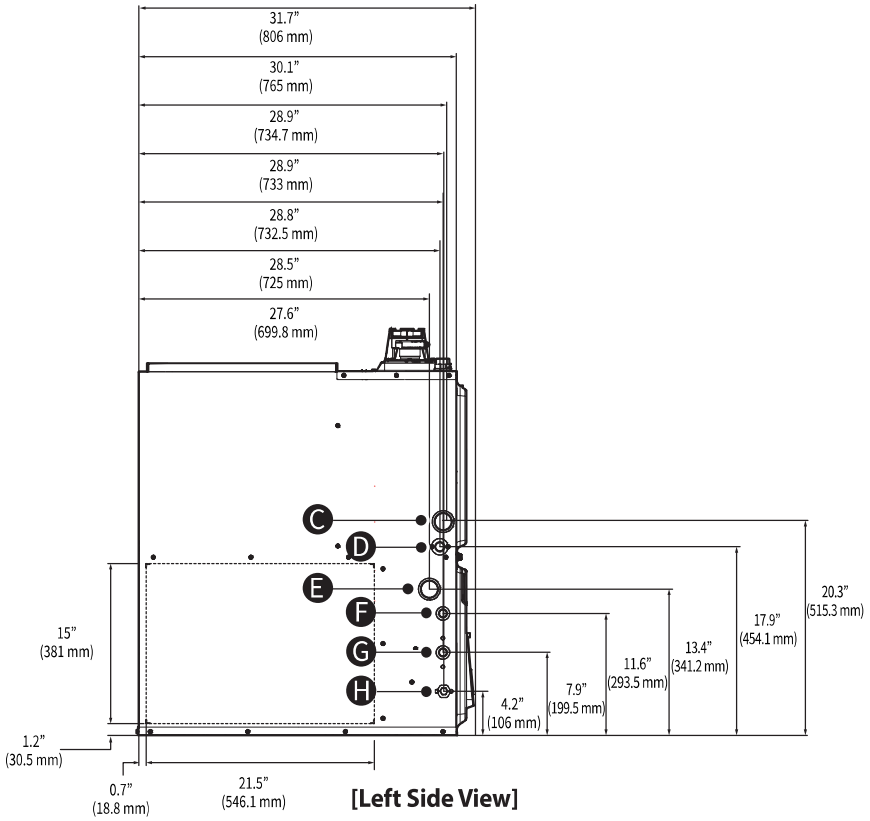
[Top View - Downflow]

Dimensions

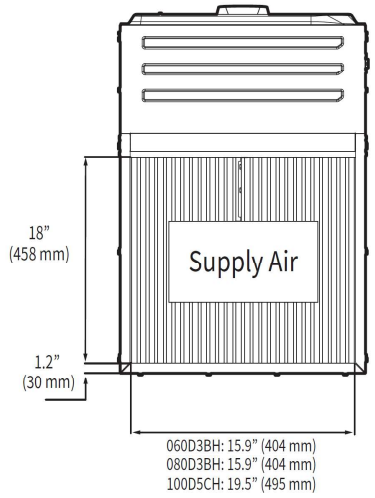
NPF700-060U3BH / 080U3BH / 100U5CH / 060D3BH / 080D3BH / 100D5CH



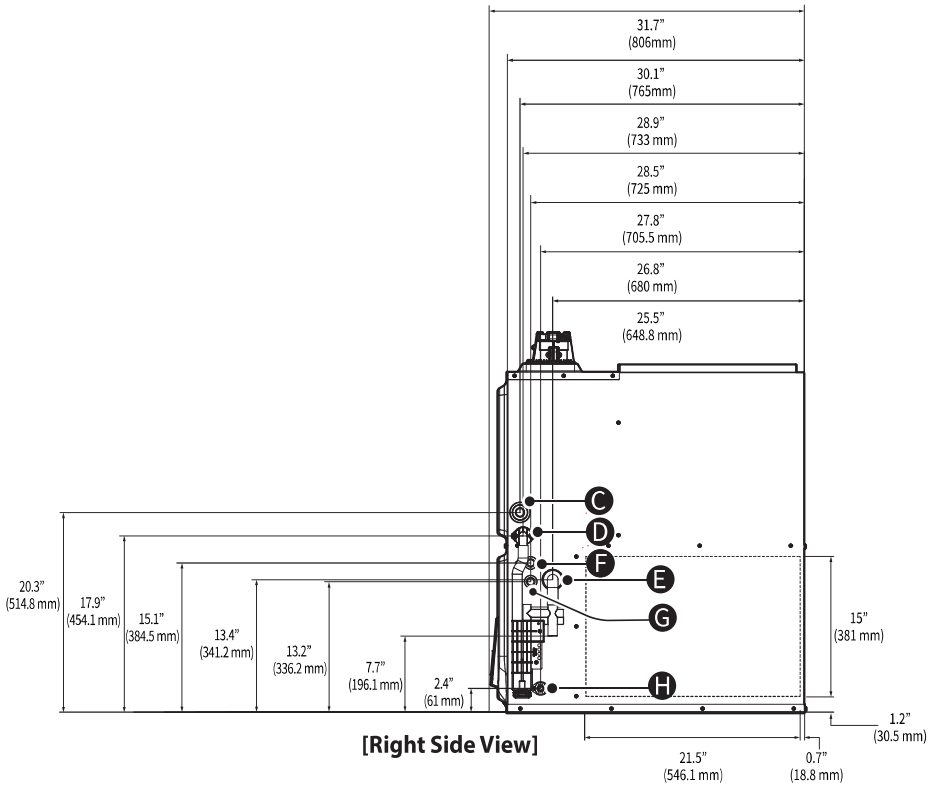
[Bottom View - Upflow]



[Left Side View]



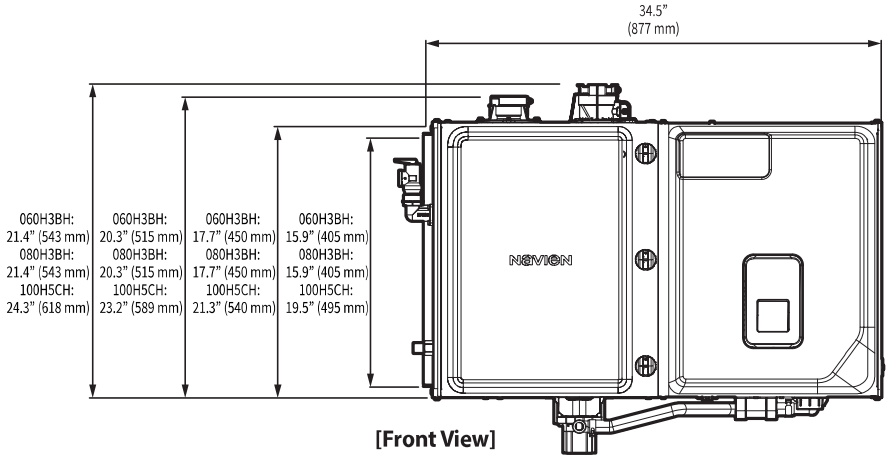
[Bottom View - Downflow]



[Right Side View]

Dimensions

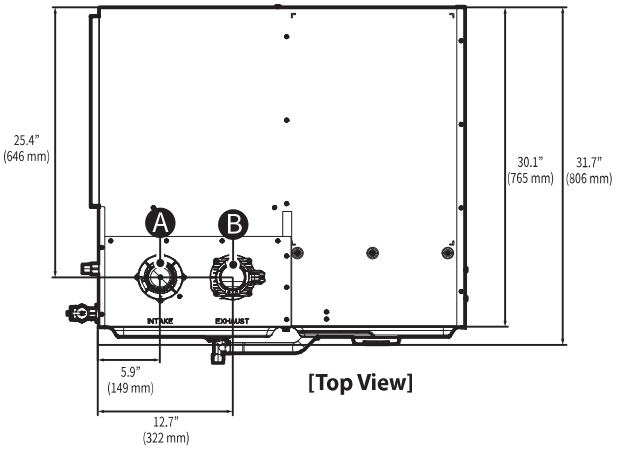
NPF700-060H3BH / NPF700-080H3BH / NPF700-100H5CH



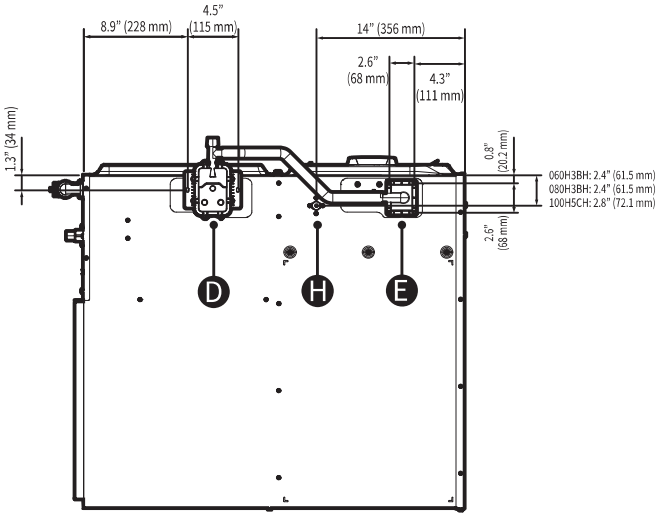
[Front View]

	Description	Diameter
A	Air intake	2 in
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H	Water supply connection	NPT ¼"

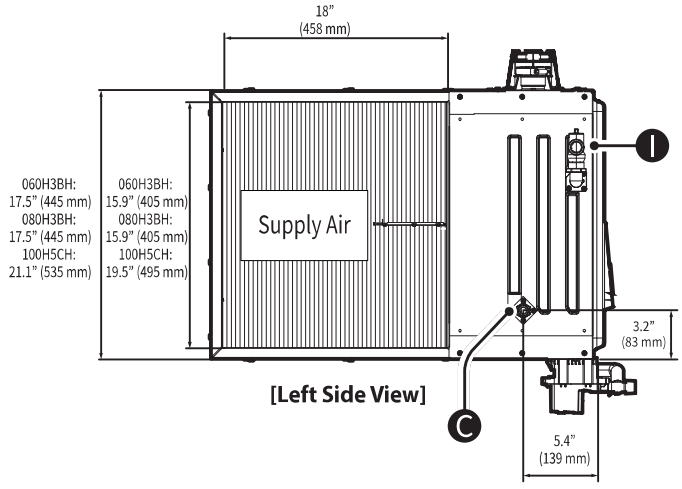
[Connection Sizes]



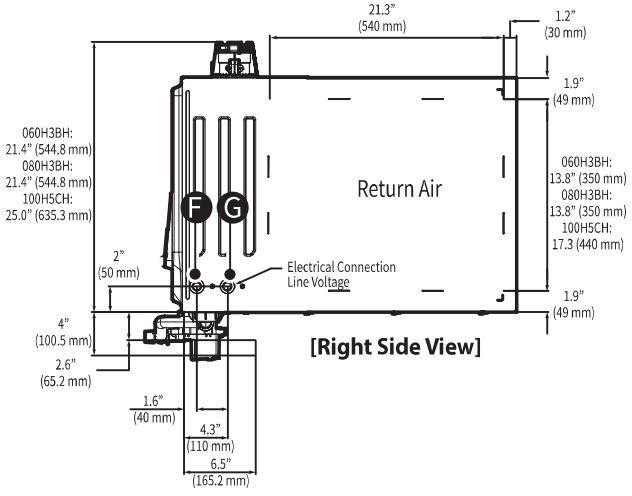
[Top View]



[Bottom View]



[Left Side View]



[Right Side View]