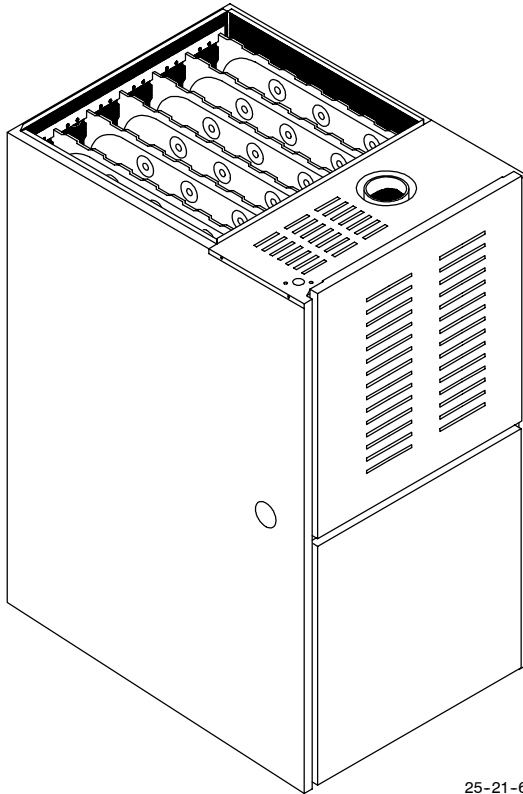


NDF GAS FURNACE

Arcoaire[®]
Air Conditioning & Heating

40" DOWNFLOW NOx



25-21-65

Representative photo only, some models may vary in appearance.

**MANUFACTURED FOR NATURAL GAS
CONVERTIBLE TO (LP) PROPANE GAS**

NOTE: These furnaces are not designed for installation in a corrosive atmosphere, containing Chlorine, Fluorine, or any other damaging chemicals.

WARNING

This furnace is not designed for use inside mobile homes, trailers, or recreational vehicles. Such use could result in property damage, bodily injury, and/or death.

OPERATION

- 80% AFUE.
- Spark to pilot ignition device.
- Induced draft combustion blower.
- Adjustable electronic fan control with low speed continuous fan feature provides maximum comfort.

HEAT EXCHANGER

- Aluminized steel heat exchanger.
- 20 year limited heat exchanger warranty.

VENTING

- Category I venting only in accordance with installation instructions and local codes.

BURNER ASSEMBLY

- In-shot monoport, all low NOx.
- Open burner enclosure.

BLOWER ASSEMBLY

- Multispeed, prelubricated PSC motors, dynamically balanced, resilient mounted to reduce vibration and noise.

WIRING CENTER

- 40VA transformer.
- Color coded wiring.
- Low voltage terminal board.
- Factory provided connections for electronic air cleaner and/or humidifier.
- Dependable electronic fan timer allows precise comfort control.

CABINET

- Prepainted cabinet & doors.
- Fully insulated cabinet.

SAFETY

- Controls monitors system for safety.
- Redundant gas valve.
- High temperature limit control.
- Flue blockage pressure switch.
- Blower door interlock switch.
- Flame roll out switch.

INSTALLATION

- Must be installed as a downflow furnace.
- Compact 40" design.
- Convertible to (LP) Propane Gas.
- 0" clearances on sides and back.
- Twinning kit available to operate two furnaces in tandem.
- California NOx approved.



INTERNATIONAL COMFORT PRODUCTS CORPORATION (USA)
650 HEIL-QUAKER AVE.
LEWISBURG, TENNESSEE 37091

RESIDENTIAL AND COMMERCIAL SYSTEMS • SPLIT SYSTEMS • PACKAGED AIR CONDITIONERS •
COMBINATION GAS / ELECTRIC UNITS • HEAT PUMPS • AIR HANDLERS • MANUFACTURED HOME AIR
CONDITIONERS • GAS, OIL AND ELECTRIC FURNACES

441 31 2603 01
5/2001

FURNACE SPECIFICATIONS DOWNFLOW

Model Number	NATURAL GAS	NDF050B12	NDF075B12	NDF075F16	NDF100F14	NDF100F20	NDF125J20
INPUT (btuh)		50,000	75,000	75,000	100,000	100,000	125,000
HTG. CAP. (btuh)		40,000	61,000	61,000	81,000	81,000	102,000
AFUE % (ICS)		80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
CSE		73.0%	73.0%	73.0%	73.0%	73.0%	73.0%
NOx (Ng/J)		37	37	37	37	37	37
TEMP. RISE (°F) / (°C)		30 - 60 / 17-33	40 - 70 / 22-39	40 - 70 / 22-39	50 - 80 / 28-44	35 - 65 / 19-36	45 - 75 / 25-42
VOLTS/PH/Hz		115/60/1	115/60/1	115/60/1	115/60/1	115/60/1	115/60/1
F.L.A.		5.3	5.3	5.3	7.5	11.3	12.0
TRANSFORMER (V.A.)		40	40	40	40	40	40
GAS PIPE SIZE (IN.)		1/2	1/2	1/2	1/2	1/2	1/2
CATEGORY I VENT SIZE		3"	4"	4"	4"	4"	5"
COOLING CAP.		3.0 TON	3.0 TON	4.0 TON	3.5 TON	5.0 TON	5.0 TON
FILTER SIZE (IN.) (2 required)		16 x 18 x 1	16 x 18 x 1	16 x 18 x 1	16 x 18 x 1	16 x 18 x 1	16 x 18 x 1
FILTER SIZE (mm) (2 required)		406 x 457.2 x 25.4	406 x 457.2 x 25.4	406 x 457.2 x 25.4	406 x 457.2 x 25.4	406 x 457.2 x 25.4	406 x 457.2 x 25.4
SHIPPING WT. (LBS.) / (KGS)		127 / 57.1	129 / 58.5	129 / 58.5	157 / 71.2	159 / 72.1	177 / 79.6
DIMENSIONS HEIGHT (in.) / (M)		40 / 1.02	40 / 1.02	40 / 1.02	40 / 1.02	40 / 1.02	40 / 1.02
WIDTH X DEPTH (in.)		15 1/2 x 28 1/2	15 1/2 x 28 1/2	19 1/8 x 28 1/2	19 1/8 x 28 1/2	19 1/8 x 28 1/2	22 3/4 x 28 1/2
WIDTH X DEPTH (mm)		393.7 x 723.9	393.7 x 723.9	393.7 x 723.9	485.8 x 723.9	485.8 x 723.9	577.8 x 723.9

BLOWER PERFORMANCE

Model Number	NATURAL GAS	NDF050B12	NDF075B12	NDF075F16	NDF100F14	NDF100F20	NDF125J20
BLOWER TYPE AND SIZE		10 x 8	10 x 8	10 x 8	10 x 10	11 x 10	11 x 10
MOTOR H.P. (TYPE)		1/3	1/3	1/3	1/3	1/2	3/4
MOTOR SPEEDS		4	4	3	4	4	4

AIRFLOW DATA

Model Number	NATURAL GAS	NDF050B12	NDF075B12	NDF075F16	NDF100F14	NDF100F20	NDF125J20
.10 ESP IN. W.C.	LOW	675	675	1512	778	1305	1333
	MEDIUM LOW	859	859	-	984	1495	1573
	MEDIUM	-	-	1669	-	-	-
	MEDIUM HIGH	1015	1015	-	1263	1805	1840
	HIGH	1394	1394	1840	1576	2141	2148
.20 ESP IN. W.C.	LOW	662	662	1460	786	1258	1294
	MEDIUM LOW	846	846	-	1003	1457	1544
	MEDIUM	-	-	1610	-	-	-
	MEDIUM HIGH	999	999	-	1249	1743	1816
	HIGH	1342	1342	1780	1532	2064	2093
.30 ESP IN. W.C.	LOW	651	651	1402	790	1241	1266
	MEDIUM LOW	819	819	-	1003	1424	1500
	MEDIUM	-	-	1559	-	-	-
	MEDIUM HIGH	977	977	-	1244	1698	1776
	HIGH	1289	1289	1711	1489	1981	2041
.40 ESP IN. W.C.	LOW	736	736	1360	788	1227	1240
	MEDIUM LOW	795	795	-	1001	1383	1467
	MEDIUM	-	-	1499	-	-	-
	MEDIUM HIGH	952	952	-	1215	1636	1726
	HIGH	1227	1227	1640	1432	1902	1981
.50 ESP IN. W.C.	LOW	608	608	1291	781	1178	1175
	MEDIUM LOW	765	765	-	982	1343	1419
	MEDIUM	-	-	1439	-	-	-
	MEDIUM HIGH	914	914	-	1186	1563	1665
	HIGH	1163	1163	1572	1371	1818	1906
.60 ESP IN. W.C.	LOW	564	564	1230	765	1103	1141
	MEDIUM LOW	735	735	-	962	1279	1357
	MEDIUM	-	-	1360	-	-	-
	MEDIUM HIGH	870	870	-	1146	1491	1607
	HIGH	1086	1086	1480	1308	1740	1828
.70 ESP IN. W.C.	LOW	514	514	1171	743	1029	1054
	MEDIUM LOW	685	685	-	923	1185	1308
	MEDIUM	-	-	1277	-	-	-
	MEDIUM HIGH	818	818	-	1094	1390	1538
	HIGH	1002	1002	1391	1229	1644	1751

NOTE: Filter supplied in unit allow 600 fpm velocity air flow. See installation instructions.

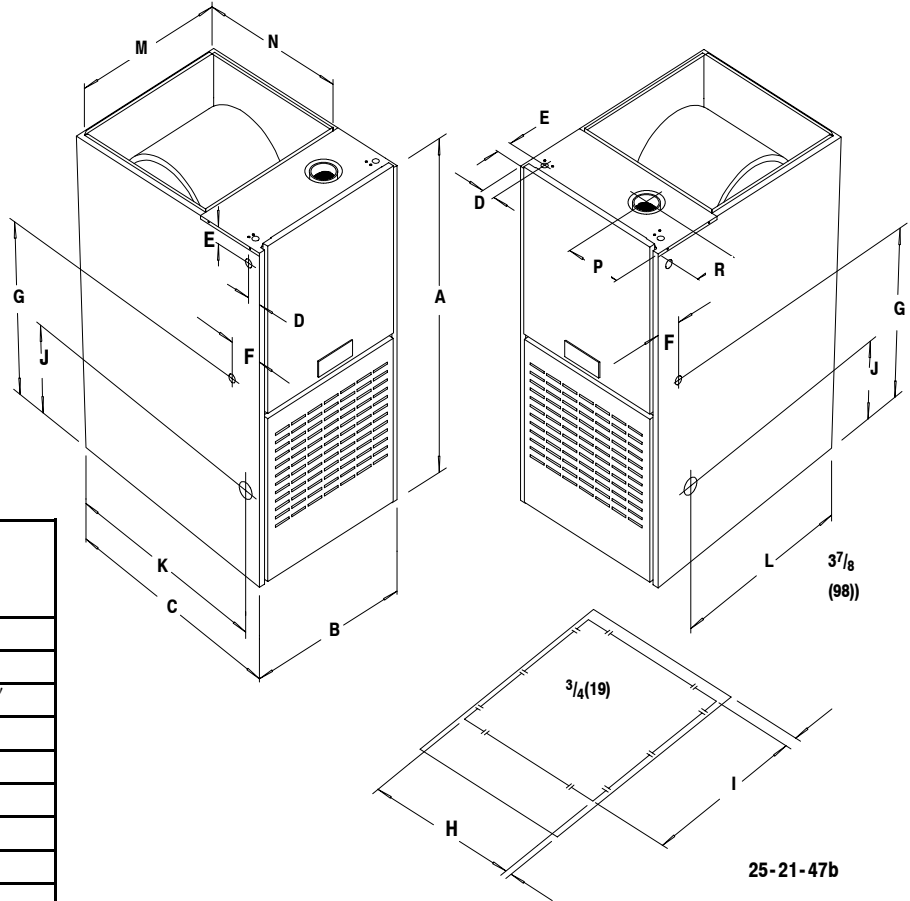
NOTE: Air flow data without filters.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

MODEL NUMBER IDENTIFICATION GUIDE

MODEL NUMBER	N	D	F	0 5 0	B	12	G
PRODUCT GROUP N = Gas							MARKETING REVISION
FUEL C = Downflow / Horizontal D = Downflow H = Horizontal	N = Upflow/Horizontal U = Upflow						NOMINAL AIR FLOW (Cfm) 8 = 800 12 = 1200 14 = 1400 16 = 1600 18 = 1800 20 = 2000
SERIES E = Enclosed Burners	F = Open burners						WIDTH B = 15 ¹ / ₂ F = 19 ¹ / ₈ J = 22 ³ / ₄ N = 26 ³ / ₈
							NOMINAL INPUT MBTUH

UNIT DIMENSIONS



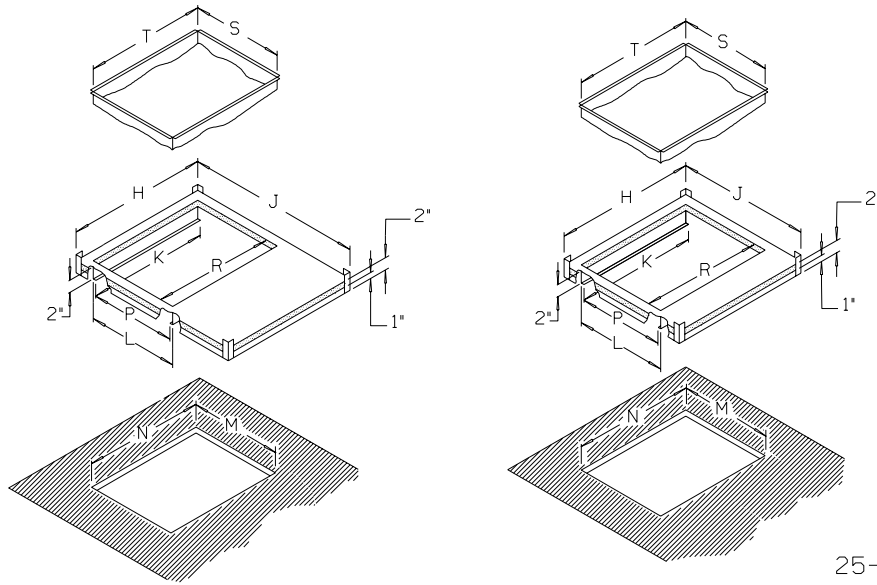
MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS FOR ALL UNITS

REAR	0
FRONT	3"
For Service	30"
ALL SIDES OF SUPPLY PLENUM	1"
SIDES	0
VENT	
Single Wall Vent	6"
Type B-1 Double Wall Vent	1"
TOP OF FURNACE	6"

Unit Dimensions	Cabinet			Electrical Connections								Supply		Gas Connections		
				Top		Left Side		Low Voltage								
	A	B	C	D	E	D	E	Right		Left		H	I	J	K	L
								(F)	(G)	(F)	(G)					
050 & 075B12	40	15 ¹ / ₂	28 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	1 ⁵ / ₈	1 ¹ / ₂	3 ¹⁵ / ₁₆	25 ³ / ₄	3 ¹³ / ₁₆	24 ³ / ₄	14	16 ⁵ / ₈	9 ¹ / ₂	26 ¹ / ₁₆	23 ⁷ / ₈
075F16	40	19 ¹ / ₈	28 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	1 ⁵ / ₈	1 ¹ / ₂	3 ¹⁵ / ₁₆	17 ⁵ / ₈	3 ¹³ / ₁₆	24 ³ / ₄	17 ⁵ / ₈	16 ⁵ / ₈	9 ¹ / ₂	26 ¹ / ₁₆	23 ⁷ / ₈
100F14 & F20	40	19 ¹ / ₈	28 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	1 ⁵ / ₈	1 ¹ / ₂	3 ¹⁵ / ₁₆	17 ⁵ / ₈	3 ¹³ / ₁₆	25 ³ / ₄	17 ⁵ / ₈	16 ⁵ / ₈	9 ¹ / ₂	26 ¹ / ₁₆	23 ⁷ / ₈
125J20	40	22 ³ / ₄	28 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	1 ⁵ / ₈	1 ¹ / ₂	3 ¹⁵ / ₁₆	21 ¹ / ₄	3 ¹³ / ₁₆	25 ³ / ₄	21 ¹ / ₄	16 ⁵ / ₈	9 ¹ / ₂	26 ¹ / ₁₆	23 ⁷ / ₈

Unit Dimensions	Return		Flue	
	M	N	P	R
050 & 075B12	14	18 ¹ / ₂	3 ⁷ / ₈	5 ¹ / ₄
075F16	17 ⁵ / ₈	18 ¹ / ₂	3 ⁷ / ₈	5 ¹ / ₄
100F14 & F20	17 ⁵ / ₈	18 ¹ / ₂	5 ⁵ / ₁₆	5 ¹ / ₄
125J20	21 ¹ / ₄	18 ¹ / ₂	7 ¹ / ₂	5 ¹ / ₄

SUBBASE DIMENSIONS



25-20-36

Use for	Subbase Model Number	H	J	K	L	M	N	P	R	S	T
Furnace	NAHH001SB (8G01010)	15 ¹¹ / ₁₆	28 ³ / ₄	14 ⁹ / ₁₆	16	16 ¹ / ₄	14 ⁵ / ₈	15	13 ¹ / ₂	15	13 ¹ / ₂
	NAHH002SB (8G01011)	19 ¹ / ₄		18 ³ / ₁₆			18 ¹ / ₄		17 ¹ / ₈		17 ¹ / ₈
	NAHH003SB (8G01012)	23		21 ¹³ / ₁₆			21 ⁷ / ₈		19 ³ / ₄		19 ³ / ₄
Coil Box	NAHH004SB (8G01006)	15 ¹¹ / ₁₆	20 ⁹ / ₁₆	14 ⁹ / ₁₆	16	16 ¹ / ₄	14 ⁵ / ₈	15	13 ¹ / ₂	15	13 ¹ / ₂
	NAHH005SB (8G01007)	19 ¹ / ₂		18 ³ / ₁₆			18 ¹ / ₄		17 ¹ / ₈		17 ¹ / ₈
	NAHH006SB (8G01008)	23		21 ¹³ / ₁₆			21 ⁷ / ₈		19 ³ / ₄		19 ³ / ₄

ALL DIMENSIONS IN INCHES

ACCESSORIES

Model Number	Natural Gas To LP Kit	LP High Alt. Kit	Twinning Kit	High Alt. Natural Gas Kit	LP To Natural Gas Kit	LP Low Pressure Kit
NDF050/75B12	NAHL002LP or 1160991*	1160992*	NAHA003WK	1160993*	NAHF002NG 1009510*	1009522*
NDF075F16,100F14/20						
NDF125J20						

* Order Part # From AMO Service Parts

COMBUSTIBLE FLOOR SUBBASES FOR CASSED COIL APPLICATION

Model Number	Use With
NAHH004SB 8G01006	Subbase Furnace w/15 ¹ / ₂ "cased coil
NAHH005SB 8G01007	Subbase Furnace w/19 ¹ / ₄ "cased coil
NAHH006SB 8G01008	Subbase Furnace w/22 ³ / ₄ "cased coil

COMBUSTIBLE FLOOR SUBBASES FOR FURNACE ONLY APPLICATION

Model Number	Use With
NAHH001SB (8G01010)	NDF050/75B12
NAHH002SB (8G01011)	NDF075F16,100F14/20
NAHH003SB (8G01012)	NDF125J20