INDOOR AIR QUALITY

HCC

HEALTHY CLIMATE®

MERV 11, MERV 13, MERV 16 Media Air Cleaners for Furnaces and Air Handlers

RESIDENTIAL

PRODUCT SPECIFICATIONS (EHB)

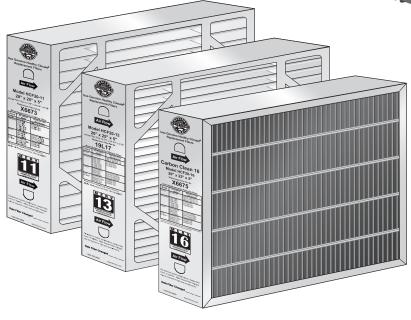




HCC Filter Cabinet (With Filter in Place)

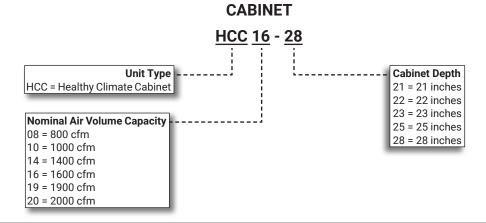


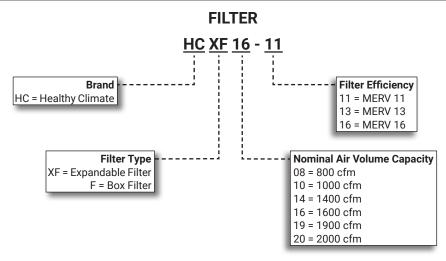
HCXF MERV 11 Expandable Filter Kit HCXF MERV 16 Expandable Filter Kit (MERV 16 Shown)



HCF MERV 11 Filter
HCF MERV 13 Filter
HCF Carbon Clean 16® (MERV 16) Filter

MODEL NUMBER IDENTIFICATION





CONTENTS

Approvals And Warranty
Cabinet And Filter Combinations
Dimensions - Filter Cabinet
Features
Filter Air Resistance
Maintenance Supplies - Order Separately
Match-Ups - Filter Cabinet With Air Handler
Match-Ups - Filter Cabinet With Furnace
Minimum Filter Efficiency
Specifications - Air Handler Models
Specifications - Furnaces Models

APPROVALS AND WARRANTY

APPROVALS

- Filters Minimum Efficiency Reporting Value based on ASHRAE 52.2
- All filters are certified to UL 900 standard for flammability only and Class 2 in accordance with ULC S111

WARRANTY

- HCC cabinet and HCXF reusable filter box
 - · Limited five year limited warranty in residential applications
 - · Limited one year in non-residential applications

NOTE - Filter media is not covered.

NOTE - Refer to Healthy Climate Equipment Limited Warranty certificate included with cabinet for specific details. **HCC Media Air Cleaners** | **Page 2**

FEATURES

APPLICATIONS

NOTE - Cabinet and Filter must be ordered separately.

- · High performance filtration with a narrow 7 in. cabinet
- Pleated filter design allows maximum air flow and filtration efficiency
- Multi-position cabinet is available for installation on the return air opening of warm air furnaces and air handlers
- · Cooling applications up to 5 tons
- Unit can be installed in upflow, downflow or horizontal unit applications
- Silent operation
- Requires no electrical component service
- · Generates no ozone
- Constant blower operation will achieve the best air cleaning results
- · No duct transition needed for most furnace applications
- See Match-Up Table for additional details on page 9

INSTALLATION CONSIDERATIONS

- A 25 in. clearance in front of the air cleaner is required to allow removal of filter media
- Due to the flue location on downflow furnaces, the front of the air cleaner must be installed to the side or rear of the furnace cabinet for filter access
- If installed in a confined space, service clearance may be restricted
- If an atomizing spray type humidifier is also used, it must be installed downstream from the air cleaner
- If a UV germicidal light is used in the system, maintain a minimum distance of 6 ft. from the air cleaner if they are in direct line of sight to one another
- Maintain a minimum of 3 ft. if using a 90° bend or turn in the duct

CABINET

- · Constructed of pre-painted cold rolled steel
- Will withstand 400 lbs. static weight, enough to support the weight of a typical furnace and indoor coil or air handler
- Tool-less access door allows quick and easy replacement of filter media
- Mounts in any position
- Air flow direction through the cabinet can be changed by re-positioning the filter
- · Arrows on filter indicate air flow direction
- Shipped compact and requires minimum field assembly
- · Cabinet panels snap together
- · No tools required

FILTER MEDIA

Carbon Clean 16® (MERV 16) Box Filters

- 50% first-pass reduction of ozone
- · Carbon coated fiber matrix reduces odors
- · Hospital inpatient care/general surgery level filtration
- Removes 99% of airborne dust, dirt and pollen and filters more than 95% of airborne breathable particles
- Removes over 90% of ultra-fine particles down to 0.01 micron, including viruses and bacteria
- Double-wall beverage board frame for rigid construction
- Disposable
- Pleated

MERV 13 Box Filters

- Removes 90% of airborne dust, dirt and pollen and filters more than 85% of airborne breathable particles
- Double-wall beverage board frame for rigid construction
- Disposable
- Pleated

MERV 11 Box Filters

- Removes 85% of airborne dust, dirt, pollen and other contaminants
- Double-wall beverage board frame for rigid construction
- Disposable
- Pleated

Expandable Filter Kits (MERV 16 and MERV 11)

- Same features as MERV 16 and MERV 11 filters above
- All kits consist of an expandable filter media and reusable filter box frame
- Double-wall beverage board filter flaps on filter media and rigid reusable top, bottom and side frame pieces for rigid construction
- Filter kit is shipped compact for field assembly
- Top, bottom and side frame pieces snap together with filter media inside
- · No tools required
- MERV 16 kits include reusable filter spacers

SPECI	IFICATIONS - FURN	NACES MODEL	S	MERV 11	
Cabinet	Model		HCC16-28	HCC20-28	
Filter Mo	odel (Box Filter)		HCF16-11	HCF20-11	
Filter Mo	odel (Expandable Filter Kit	t)	HCXF16-11	HCXF20-11	
¹ MERV (Minimum Efficiency Repo	orting Value) rating	11	11	
Air Flow		Air flow range - cfm	800 - 1600	1400 - 2000	
		Rated air flow - cfm	1600	2000	
Filter	N	ninal Filter size - in.	16 x 25 x 5	20 x 25 x 5	
Data	A	ctual Filter size - in.	15-3/4 x 24-3/4 x 4-3/8	19-3/4 x 24-3/4 x 4-3/8	
	Pressure drop @ rated	Box filter - Initial	0.27	0.27	
	flow - in. w.c.	- Final	0.40	0.40	
	Expa	ındable filter - Initial	0.30	0.27	
		- Final	0.40	0.40	
	² Filter estimated s	ervice life (months)	Up to 12	2 months	
Shipping	g weight - Ibs.	Cabinet	17	18	
MAIN	TENANCE SUPPLIE	S - ORDER SE	PARATELY		
Replacer	ment Box Filter		X6670	X6673	
Replacer	nent Expandable Filter (frar	ne and media)	X8303	X8304	
Replacer	nent Expandable Filter (me	dia only)	X8309	X8310	

¹ Rated at 492 feet per minute

² Different factors will influence the frequency of replacement of filter media, such as: the number of people in the home, activities, lifestyle, number of pets, and size of home.

SPECI	IFICATIONS - FURI	NACE MODELS		MERV 13
Cabinet	Model		HCC16-28	HCC20-28
Filter Model (Box Filter)			HCF16-13	HCF20-13
¹ MERV (Minimum Efficiency Repo	orting Value) rating	13	13
Air Flow		Air flow range - cfm	800 - 1600	1400 - 2000
		Rated air flow - cfm	1600	2000
Filter	Noi	minal Filter size - in.	16 x 25 x 5	20 x 25 x 5
Data	Α	ctual Filter size - in.	15-3/4 x 24-3/4 x 4-3/8	19-3/4 x 24-3/4 x 4-3/8
	Pressure drop @ rated	Box filter - Initial	0.26	0.26
	flow - in. w.c.	- Final	0.40	0.40
	² Filter estimated s	service life (months)	Up to 12	? months
Shipping weight - lbs. Cabinet			17	18
MAIN	TENANCE SUPPLIE	S - ORDER SE	PARATELY	
Replacer	ment Box Filter		19L16	19L17

¹ Rated at 492 feet per minute

² Different factors will influence the frequency of replacement of filter media, such as: the number of people in the home, activities, lifestyle, number of pets, and size of home.

SPECI	FICATIONS - FURN	NACE MODELS		MERV 16	
Cabinet	Model		HCC16-28	HCC20-28	
Filter Mo	del (Box Filter)		HCF16-16	HCF20-16	
Filter Mo	del (Expandable Filter Ki	t)	HCXF16-16	HCXF20-16	
¹ MERV (Minimum Efficiency Repo	orting Value) rating	16	16	
Air Flow		Air flow range - cfm	800 - 1600	1400 - 2000	
		Rated air flow - cfm	1600	2000	
Filter	Nor	ninal Filter size - in.	16 x 25 x 5	20 x 25 x 5	
Data	A	ctual Filter size - in.	15-3/4 x 24-3/4 x 4-3/8	19-3/4 x 24-3/4 x 4-3/8	
	Pressure drop @ rated	Box filter - Initial	0.31	0.31	
	flow - in. w.c.	- Final	0.40	0.40	
	Expa	andable filter - Initial	0.31	0.31	
		- Final	0.40	0.40	
	² Filter estimated s	ervice life (months)	Up to 12	? months	
Shipping	y weight - lbs.	Cabinet	17	18	
MAIN	TENANCE SUPPLIE	S - ORDER SE	PARATELY		
Replacen	nent Box Filter		X6672	X6675	
Replacen	nent Expandable Filter (fran	me and media)	X8306	X8307	
Replacen	nent Expandable Filter (me	dia only)	X8312	X8313	

¹ Rated at 492 feet per minute

² Different factors will influence the frequency of replacement of filter media, such as: the number of people in the home, activities, lifestyle, number of pets, and size of home.

SPECI	FICATIONS - A	IR HANDLER MO	DELS				MERV 11
Cabinet	Model		HCC08-21	HCC10-22	HCC14-23	HCC19-22	HCC19-25
Filter Mo	del (Box Filter)		HCF14-11	HCF10-11	HCF14-11	HCF19-11	HCF19-11
Filter Mo	del (Expandable Filte	er Kit)	HCXF14-11	N/A	HCXF14-11	N/A	N/A
¹ MERV (Minimum Efficiency I	Reporting Value) rating	11	11	11	11	11
Air Flow		Air flow range - cfm	800 - 1400	800 - 1000	800 - 1400	800 - 1850	800 - 1850
		Rated air flow - cfm	800	1000	1400	1850	1850
Filter		Nominal Filter size - in.	20 x 20 x 5	17 x 21 x 5	20 x 20 x 5	20 x 22 x 5	20 x 22 x 5
Data		Actual Filter size - in.		16-15/16 x 20 5/8 x 4-3/8	20 x 19-3/4 x 4-3/8	19-15/16 x 21-5/8 x 4-3/8	19-15/16 x 21-5/8 x 4-3/8
-	Pressure drop @ rated	ed Box filter - Initial	0.19	0.12	0.25	0.23	0.23
	flow - in. w.c.	- Final	0.40	0.40	0.40	0.40	0.40
		Expandable filter - Initial		N/A	0.27	N/A	N/A
		- Final	0.40	N/A	0.40	N/A	N/A
	² Filter estima	ted service life (months)		Į	Jp to 12 months	S	
Shipping	y weight - lbs.	Cabinet	13	14	15	15	15
MAIN	TENANCE SUPP	LIES - ORDER SE	PARATELY			,	,
Replacen	nent Box Filter		X0585	25Z85	X0585	26Z89	26Z89
Replacen	nent Expandable Filter	(frame and media)	X8305	N/A	X8305	N/A	N/A
Replacen	ment Expandable Filter	(media only)	X8311	N/A	X8311	N/A	N/A

¹ Rated at 492 feet per minute

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SPECI	FICATIONS - AIR H	DELS	MERV 13		
Cabinet I	Model		HCC14-23		
Filter Mo	del (Box Filter)		HCF14-13		
¹ MERV (Minimum Efficiency Repo	rting Value) rating	13		
Air Flow	,	Air flow range - cfm	800 - 1400		
	F	Rated air flow - cfm	1400		
Filter	Non	ninal Filter size - in.	20 x 20 x 5		
Data	Ad	ctual Filter size - in.	20 x 19-3/4 x 4-3/8		
	Pressure drop @ rated	Box filter - Initial	0.21		
	flow - in. w.c.	- Final	0.40		
	² Filter estimated s	ervice life (months)	Up to 12 months		
Shipping	weight - Ibs.	Cabinet	15		
MAIN	TENANCE SUPPLIE	S - ORDER SE	PARATELY		
Replacen	nent Box Filter		19L14		

¹ Rated at 492 feet per minute

SPECI	FICATIONS -	AIR HANDLER MO	DELS				MERV 16
Cabinet	Model		HCC08-21	HCC10-22	HCC14-23	HCC19-22	HCC19-25
Filter Mo	odel (Box Filter)		HCF14-16	HCF10-16	HCF14-16	HCF19-16	HCF19-16
Filter Mo	del (Expandable Fi	Iter Kit)	HCXF14-16	N/A	HCXF14-16	N/A	N/A
¹ MERV ((Minimum Efficiency	y Reporting Value) rating	16	16	16	16	16
Air Flow		Air flow range - cfm	800 - 1400	800 - 1000	800 - 1400	800 - 1900	800 - 1900
		Rated air flow - cfm	800	1000	1400	1850	1850
Filter		Nominal Filter size - in.	20 x 20 x 5	17 x 21 x 5	20 x 20 x 5	20 x 22 x 5	20 x 22 x 5
Data		Actual Filter size - in.	20 x 19-3/4 x 4-3/8	16-15/16 x 20 5/8 x 4-3/8	20 x 19-3/4 x 4-3/8	19-15/16 x 21-5/8 x 4-3/8	19-15/16 x 21-5/8 x 4-3/8
	Pressure drop @ rated	ated Box filter - Initial	0.19	0.19	0.29	0.32	0.32
	flow - in. w.c.	- Final	0.40	0.40	0.40	0.40	0.40
		Expandable filter - Initial	0.27	N/A	0.29	N/A	N/A
		- Final	0.40	N/A	0.40	N/A	N/A
	² Filter estim	nated service life (months)		l	Jp to 12 months	3	
Shipping	g weight - lbs.	Cabinet	13	14	15	15	15
MAIN	TENANCE SUP	PLIES - ORDER SE	PARATELY				
Replacer	ment Box Filter		X7935	26Z88	X7935	26 Z 91	26 Z 91
Replacer	nent Expandable Filt	er (frame and media)	X8308	N/A	X8308	N/A	N/A
Replacer	ment Expandable Filt	er (media only)	X8314	N/A	X8314	N/A	N/A

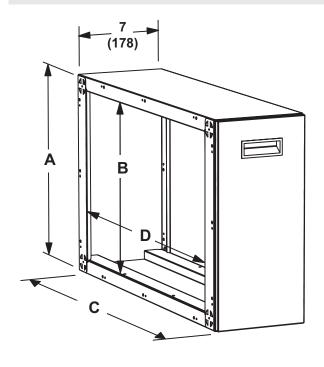
¹ Rated at 492 feet per minute

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MERV Rating	Cabinet Model	Cabinet Depth (front to back)		Filter Model	Filter Type	Cfm
		in.	mm		туре	
FURNACE MIODE	LS					
11	HCC16-28	28	711	HCF16-11	Box	1600
11	HCC16-28	28	711	HCXF16-11	Expandable	1600
11	HCC20-28	28	711	HCF20-11	Box	2000
11	HCC20-28	28	711	HCXF20-11	Expandable	2000
13	HCC16-28	28	711	HCF16-13	Box	1600
13	HCC20-28	28	711	HCF20-13	Box	2000
16	HCC16-28	28	711	HCF16-16	Box	1600
16	HCC16-28	28	711	HCXF16-16	Expandable	1600
16	HCC20-28	28	711	HCF20-16	Вох	2000
16	HCC20-28	28	711	HCXF20-16	Expandable	2000
AIR HANDLER MC	DELS					
11	HCC08-21	21	524	HCF14-11	Вох	800
11	HCC08-21	21	524	HCXF14-11	Expandable	800
11	HCC10-22	22	559	HCF10-11	Box	1000
11	HCC14-23	23	584	HCF14-11	Box	1400
11	HCC14-23	23	584	HCXF14-11	Expandable	1400
11	HCC19-22	22	559	HCF19-11	Вох	1900
11	HCC19-25	25	625	HCF19-11	Вох	1900
13	HCC14-23	23	584	HCF14-13	Вох	1400
16	HCC08-21	21	524	HCF14-16	Вох	800
16	HCC08-21	21	524	HCXF14-16	Expandable	800
16	HCC10-22	22	559	HCF10-16	Вох	1000
16	HCC14-23	23	584	HCF14-16	Вох	1400
16	HCC14-23	23	584	HCXF14-16	Expandable	1400
16	HCC19-22	22	559	HCF19-16	Box	1900
16	HCC19-25	25	625	HCF19-16	Box	1900

DIMENSIONS - FILTER CABINET



FURNACE MODELS

Cabinet	Α		В		С		D	
Model	in.	mm	in.	mm	in.	mm	in.	mm
HCC16-28	17-1/4	438	14-3/4	375	28-1/2	724	24	610
HCC20-28	21	533	18-1/2	470	28-1/2	724	24	610

AIR HANDLER MODELS

Cabinet	Α		В		С		D	
Model	in.	mm	in.	mm	in.	mm	in.	mm
HCC14-23	21-1/4	540	18-3/4	476	23	584	18-1/2	470
HCC08-21	21-1/4	540	18-3/4	476	21-1/8	537	17	432
HCC10-22	18-1/2	470	16	406	22-5/8	575	18-3/8	467
HCC19-22	21-1/2	546	19	483	22-3/4	578	18-1/2	470
HCC19-25	21-1/4	540	18-3/4	476	25-1/8	638	20-7/8	530

FILTER A	FILTER AIR RESISTANCE HCF BOX FILTER									
Air Flow	Pressure drop (in. w.c.)									
(cfm)	HCF10-11	HCF10-16	HCF14-11	¹ HCF14-13	HCF14-16	HCF16-11	¹ HCF16-13	HCF16-16		
800	0.08	0.14	0.07	0.10	0.12	0.07	0.11	0.13		
1000	0.12	0.19	0.10	0.14	0.16	0.10	0.14	0.17		
1200			0.13	0.19	0.21	0.14	0.19	0.21		
1400			0.17	0.23	0.25	0.17	0.24	0.26		
1600						0.22	0.30	0.31		
1800										
2000										

¹ Calculated values based on HCF20-13 ASHRAE Standard 52.2-2017 performance.

FILTER A	IR RESISTANCE				HCF BOX FILTER					
Air Flow		Pressure drop (in. w.c.)								
(cfm)	HCF19-11	HCF19-16	HCF20-11	HCF20-13	HCF20-16					
800	0.06	0.11	0.05	0.08	0.09					
1000	0.09	0.15	0.07	0.11	0.13					
1200	0.12	0.19	0.10	0.14	0.16					
1400	0.16	0.23	0.12	0.17	0.19					
1600	0.19	0.27	0.15	0.21	0.23					
1800	0.23	0.31	0.18	0.25	0.27					
2000			0.21	0.30	0.31					

¹ Calculated values based on HCF20-13 ASHRAE Standard 52.2-2017 performance.

FILTER AIR RESISTANCE				Ī	HCXF EXPANDABLE FILTER		
Air Flow	Pressure drop (in. w.c.)						
(cfm)	HCXF14-11	HCXF14-16	HCXF16-11	HCFX16-16	HCXF20-11	HCXF20-16	
800	0.11	0.14	0.12	0.12	0.06	0.09	
1000	0.15	0.18	0.19	0.16	0.09	0.12	
1200	0.20	0.24	0.22	0.21	0.12	0.15	
1400	0.27	0.29	0.26	0.25	0.15	0.19	
1600			0.30	0.31	0.18	0.23	
1800					0.22	0.27	
2000					0.27	0.31	

MINIMUM FILTER EFFICIENCY							
	MERV	Filter Efficiency (percentage)					
Filter Model No.	Rating	E1 (0.3 to 1.0 microns)	E2 (1.0 to 3.0 microns)	E3 (3.0 to 10.0 microns)			
HCF10-11 HCF14-11 / HCXF14-11 HCF16-11 / HCXF16-11 HCF19-11 HCF20-11 / HCXF20-11	¹ 11	28%	65%	87%			
HCF14-13 HCF16-13 HCF20-13	² 13	54%	86%	99%			
HCF10-16 HCF14-16 / HCXF14-16 HCF16-16 / HCXF16-16 HCF19-16 HCF20-16 / HCXF20-16	¹ 16	95%	99%	100%			

¹ Values are based on lab tests conducted with conditions included in ASHRAE Standard 52.2 2012.

 $^{^{2}}$ Values are based on lab tests conducted with conditions included in ASHRAE Standard 52.2 2017.

MATCH-UPS - FILTER CABINET WITH FURNACE

ALSO SEE ILLUSTRATIONS ON NEXT PAGE FOR ADDITIONAL DETAILS

Furnacea	Filter Cabinet		Commont		
Furnaces	HCC16-28	HCC20-28	Comment		
"A" Width Furnace with Side Return Air	•		No duct transition required.		
"A" Width Furnace with Bottom Return Air	•		28-1/2 x 3 in. side seal strip or duct transition needed.		
"B" Width Furnace with Side Return Air	•		No duct transition required.		
"B" Width Furnace with Bottom Return Air	•		No duct transition required.		
"C" Width Furnace with Side Return Air (up to 4 ton)	•	•	No duct transition required, for high system static application use HCC20-28.		
"C" Width Furnace with Side Return Air (5 ton)		•	Option 1 - No duct transition required, use Return Air Base (98M58). Option 2 - Over-cut top edge of side return opening by 1 in. to make opening 15 x 23 in. (H x W).		
"C" Width Furnace with Bottom Return Air		•	No duct transition required.		
"D" Width Furnace with Side Return Air		•	Option 1 - No duct transition required, use Return Air Base (98M59). Option 2 - Over-cut top edge of side return opening by 1 in. to make opening 15 x 23 in. (H x W).		
"D" Width Furnace with Bottom Return Air		•	28-1/2 x 3 1/2 in. side seal strip or duct transition needed.		

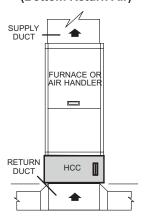
MATCH-UPS - FILTER CABINET WITH AIR HANDLER

ALSO SEE ILLUSTRATIONS ON NEXT PAGE FOR ADDITIONAL DETAILS

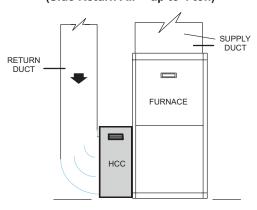
Air Handlers	Filter Cabinet					Comment
Air nandiers	HCC08-21	HCC10-22	HCC14-23	HCC19-22	HCC19-25	
Air Handler (W x D) - 18-1/2 x 22 in. CBK45UH(E/P/V)T-018-024-030		•				No duct transition required.
Air Handler (W x D) - 21-1/2 x 22 in. CBK45UH(E/P/V)T-036-042-048-060				•		No duct transition required.
Air Handler (W x D) - 21-1/4 x 20-5/8 in. CBK47UHET-018 CBK47UHET-024 CBK48MVT-018/024	•					No duct transition required.
Air Handler (W x D) - 21-1/4 x 22-5/8 in. CBK47UHET-030 CBK47UHET-036 CBK48MVT-030-036			•			No duct transition required.
Air Handler (W x D) - 21-1/4 x 24-5/8 in. CBK47UHET-042 CBK47UHET-048 CBK47UHET-060 CBK48MVT-042-048-060					•	No duct transition required.

MATCH-UPS - FILTER CABINET WITH FURNACE / AIR HANDLER

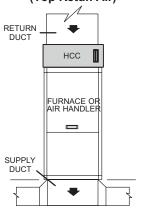
UPFLOW FURNACE/AIR HANDLER (Bottom Return Air)



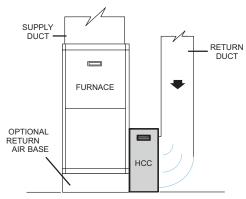
UPFLOW FURNACE (Side Return Air - up to 4 ton)



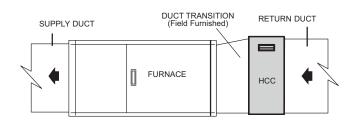
DOWNFLOW FURNACE/AIR HANDLER (Top Retun Air)



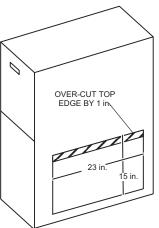
UPFLOW FURNACE (Option 1 - Side Return Air - 5 ton) (With Optional Return Air Base)



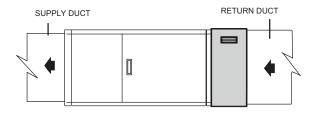
HORIZONTAL FURNACE



UPFLOW FURNACE
(Option 2 - Side Return Air - 5 ton)
(Modified Return Air Opening)



HORIZONTAL AIR HANDLER



REVISIONS		
Sections	Description of Change	
Match-Ups	Updated to reflect new Air Handler models.	



Air Filter Unit
As to flammability only
838H R5277
Class 2 in accordance with ULC S111

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