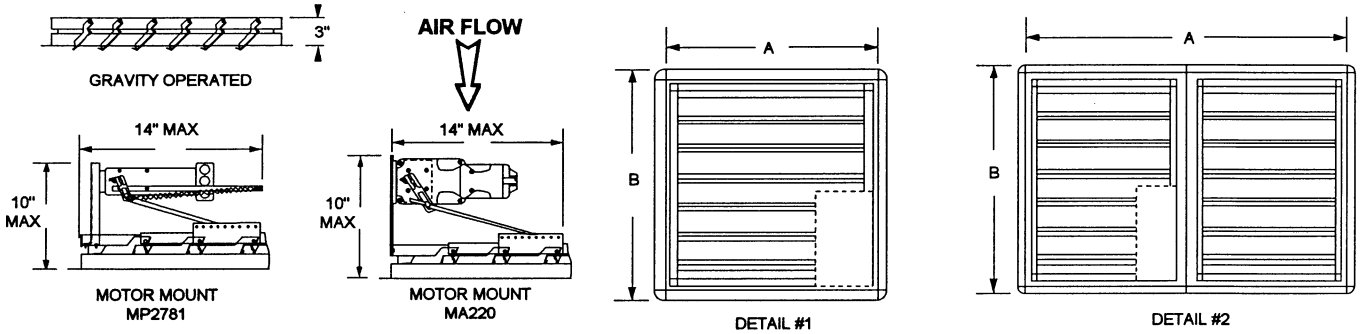
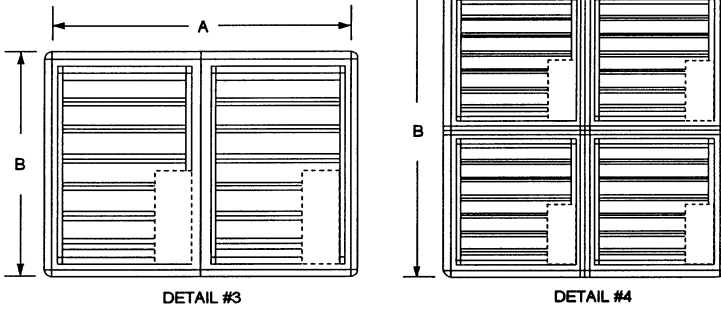


## BACKDRAFT DAMPERS FOR ROOF MOUNTED HOODED SUPPLY FANS SUBMITTAL DATA



**NOTE**

Counter balance weight kits are required on all supply dampers (gravity or motor operated)



**PLAN VIEW (TOP)**

**STANDARD SPECIFICATIONS:**

- Maximum Face Velocity: 3000 fpm.
- Temperature limits: -40°F to 200°F (-40°C to 94°C)
- Minimum Size: 8 x 8
- Size: Single section: 42 x 64 Max W/H  
 Multiple section assembly - Unlimited size.
- Frame: 20 gauge galvanized steel.
- Blades: .025 thk aluminum.  
 HD 28 gauge galvanized steel.
- Seals: Extruded Vinyl mechanically locked into blades.
- Axles: Stainless Steel.
- Linkage: Stainless steel pins, galvanized steel tie bar.
- Finish: Mill.

**NOTES:**

- (1) Do not mount fan less than 12 inches from the shutter.
- (2) Motors available in 24V, 120V, 240V & 440V.
- (3) Dampers shipped in individual cartons.
- (4) Motors and counterbalance kits ship separately.
- (5) Center-pivoted dampers must be used on reversible fans.
- (6) Units for horizontal mounting with air flow down require counter balance kits (for gravity operation).
- (7) Multiple section assemblies may require bracing to support the weight of the assembly and to hold against system pressure.  
**BRACING SUPPLIED BY OTHERS.**
- (8) Multiple section dampers are factory joined (except 72" and larger).

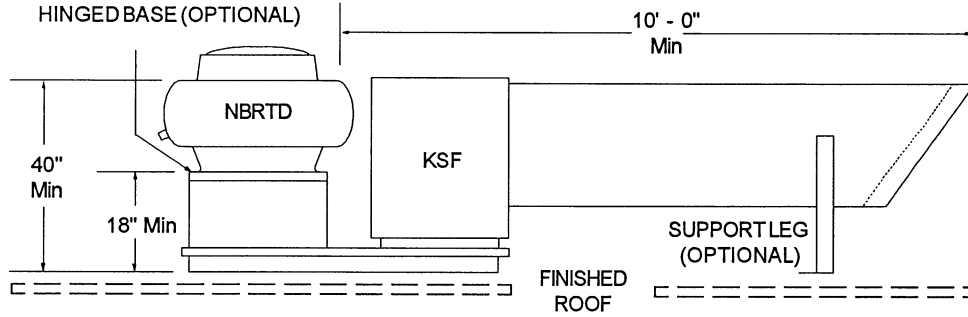
**CAUTION:** Motor kits are not suitable for use in explosive or flammable areas or airflows.

Fan Size	CENTRIFUGAL ROOF FANS				PROP ROOF FANS		ARS A SQ	MOTOR TYPE		PANELS (Detail)	
	LSF, CSF & KSF		RCX II		HRSB, HRSBF, HRSD, HRSDF	A Sq size		B Sq OD flange	Type		Qty
	A Sq size	B Sq OD flange	A Sq size	B Sq OD flange							
6 or 8	-	-	8	10 1/2	-	-	-	MP2781	1	1	
9	16	18 1/2	-	-	-	-	-	MP2781	1	1	
10	20	22 1/2	8	10 1/2	-	-	14	MP2781	1	1	
12	20	22 1/2	15	17 1/2	-	-	18	MP2781	1	1	
15	24	26 1/2	15	17 1/2	-	-	-	MP2781	1	1	
16	-	-	-	-	-	-	22	MP2781	1	1	
18	27	29 1/2	21	23 1/2	-	-	-	MP2781	1	1	
20	42	44 1/2	21	23 1/2	-	-	26	MP2781	1	1	
24/26	-	-	27	29 1/2	26	28 1/2	-	MP2781	1	1	
30/33	-	-	34	36 1/2	32	34 1/2	-	MP2781	1	1	
36	-	-	34	36 1/2	38	40 1/2	-	MP2781	1	1	
42	-	-	-	-	44	46 1/2	-	MA220	1	2	
48	-	-	-	-	50	52 1/2	-	MA220	1	2	
54	-	-	-	-	56	58 1/2	-	MA220	1	2	
60	-	-	-	-	62	65 1/2	-	MA220	1	2	
72	-	-	-	-	76	78 1/2	-	MP2781	4	4	

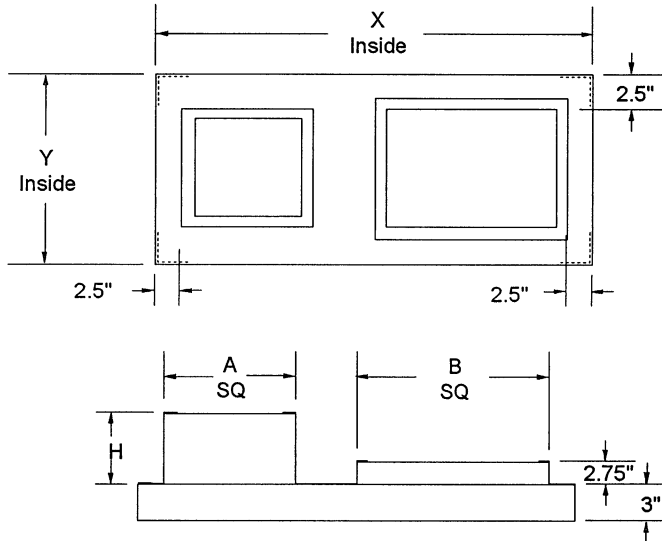
Heavy Duty Dampers required on all units with 7 1/2HP motors and above

ACCESSORY ITEMS					1	2	3	4	5	ACCESSORY ITEMS					1	2	3	4	5
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 Customer: \_\_\_\_\_ Approved: \_\_\_\_\_  
 Location: \_\_\_\_\_



## EXHAUST & SUPPLY COMMON CURB Cap Adapter Submittal For Models NBRTD & KSF



### TYPICAL INSTALLATION

NFPA96 requires a 10 foot minimum distance between the exhaust fan and supply fan intake. The intake extension (optional) provides this clearance. Also required are hinged curb caps (optional) on the exhaust fan and some areas require a vented curb extension.

### NFPA96 ALTERNATE INSTALLATION

Where space limitations absolutely prevent a 10 foot separation from the air intake, a vertical separation may be permitted with the exhaust outlet being a minimum of 3 feet above any air intake located within 10 feet horizontally. **IMPORTANT:** Always check with the authority having jurisdiction to verify local codes and requirements.

### COMMON CURB AND ADAPTOR

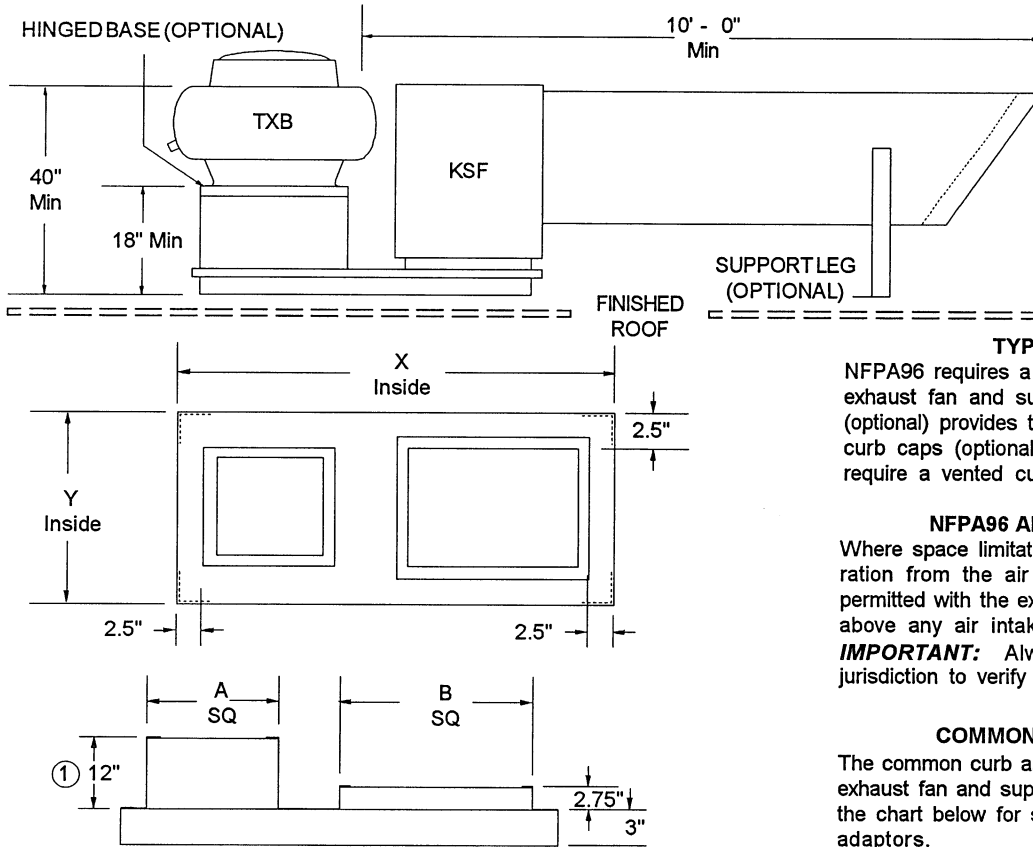
The common curb and adaptor allows for mounting both the exhaust fan and supply fans onto one roof opening. Follow the chart below for sizing and ordering common curbs and adaptors.

MODEL		PARTNUMBER COMMON CURB	ROOF CURB OD	PARTNUMBER CURB CAP ADAPTOR	CURB CAP ADAPTOR X x Y OD	HEIGHT H (1)	CURB CAP OPENING	
NBRT	KSF						Exhaust Fan Outlet A Sq.	Supply Fan Outlet B Sq.
14	9	2302.JC 14 X 9	53 1/4 X 27 1/2	2302.JA 14 X 9	54 1/2 X 29	19	19 3/4	23 3/4
18	10	2302.JC 18 X 10	61 X 31 3/4	2302.JA 18 X 10	62 1/2 X 32 3/4	18	23 3/4	27 3/4
18	12	2302.JC 18 X 12	65 X 35 1/4	3202.JA 18 X 12	66 1/2 X 36 3/4	14	23 3/4	31 3/4
24	12 or 15	2302.JC 24 X 12/15	73 X 35 3/4	2302.JA 24 X 12/15	74 1/2 X 36 3/4	12	29 3/4	31 3/4
30	12 or 15	2302.JC 30 X 12/15	80 X 35 1/4	2302.JA 30 X 12/15	81 1/2 X 36 3/4	12	35 3/4	31 3/4
30	18	2302.JC 30 X 18	84 X 39 1/4	2302.JA 30 X 18	85 1/2 X 40 3/4	12	35 3/4	35 3/4
30	20	2302.JC 30 X 20	99 X 54 1/4	2302.JA 30 X 20	100 1/2 X 55 3/4	12	35 3/4	50 1/4
36	15	2302.JC 36 X 15	88 X 45 1/4	2302.JA 36 X 15	89 1/2 X 46 3/4	12	41 3/4	31 3/4
36	18	2302.JC 36 X 18	92 X 45 1/4	2302.JA 36 X 18	93 1/2 X 46 3/4	12	41 3/4	35 3/4
36	20	2302.JC 36 X 20	107 X 54 1/4	2302.JA 36 X 20	108 1/2 X 55 3/4	12	41 3/4	50 1/4

(1) Maintains 40" exhaust discharge height when used with a standard 8" high roof curb.

ACCESSORY ITEMS	1	2	3	4	5	ACCESSORY ITEM	1	2	3	4	5
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Customer: _____	Approved: _____
Location: _____	



## EXHAUST & SUPPLY COMMON CURB Cap Adapter Submittal For Models TXB & KSF

### TYPICAL INSTALLATION

NFPA96 requires a 10 foot minimum distance between the exhaust fan and supply fan intake. The intake extension (optional) provides this clearance. Also required are hinged curb caps (optional) on the exhaust fan and some areas require a vented curb extension.

### NFPA96 ALTERNATE INSTALLATION

Where space limitations absolutely prevent a 10 foot separation from the air intake, a vertical separation may be permitted with the exhaust outlet being a minimum of 3 feet above any air intake located within 10 feet horizontally. **IMPORTANT:** Always check with the authority having jurisdiction to verify local codes and requirements.

### COMMON CURB AND ADAPTOR

The common curb and adaptor allows for mounting both the exhaust fan and supply fans onto one roof opening. Follow the chart below for sizing and ordering common curbs and adaptors.

① Maintains 40" exhaust discharge height when used with a standard 8" high roof curb.

MODEL		PARTNUMBER COMMON CURB	ROOF CURB OD	PARTNUMBER CURB CAP ADAPTOR	CURBCAP ADAPTOR X x Y OD	CURB CAP OPENING	
TXB	KSF					Exhaust Fan Outlet A Sq.	Supply Fan Outlet B Sq.
6/8/10	9	2302.BC 10 X 9	55 3/4 X 27 1/2	2302.BA 10 X 9	56 3/4 X 29	16	23 3/4
12	9	2302.BC 12 X 9	59 1/4 X 27 1/2	2302.BA 12 X 9	60 3/4 X 29	23 1/2	23 3/4
15	10	2302.BC 15 X 10	65 X 31 1/4	2302.BA 15 X 10	66 1/2 X 32 3/4	23 1/2	27 3/4
15	12 or 15	2302.BC 15 X 12/15	69 X 35 1/4	2302.BA 15 X 12/15	70 1/4 X 36 3/4	23 1/2	31 3/4
18/20	12 or 15	2302.BC 18 X 12/15	74 1/2 X 35 1/4	2302.BA 18 X 12/15	76 X 36 3/4	29	31 3/4
24	15	2302.BC 24 X 15	82 1/2 X 38 1/2	2302.BA 24 X 15	84 X 40	35	31 3/4
24	18	2302.BC 24 X 18	86 1/2 X 39 1/4	2302.BA 24 X 18	88 X 40 3/4	35	35 3/4
30	18	2302.BC 30 X 18	94 1/2 X 45 3/4	2302.BA 30 X 18	96 X 47 1/4	42	35 3/4
30	20	2302.BC.30 x 20	108 1/2 x 54 1/4	2302.BA 30 X 20	110 X 55 3/4	42	50 1/4
36	20	2302.BC 36 X 20	113 1/2 X 54 1/4	2302.BA 36 X 20	115 X 55 3/4	42	50 1/4

ACCESSORY ITEMS	1	2	3	4	5	ACCESSORY ITEM	1	2	3	4	5
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