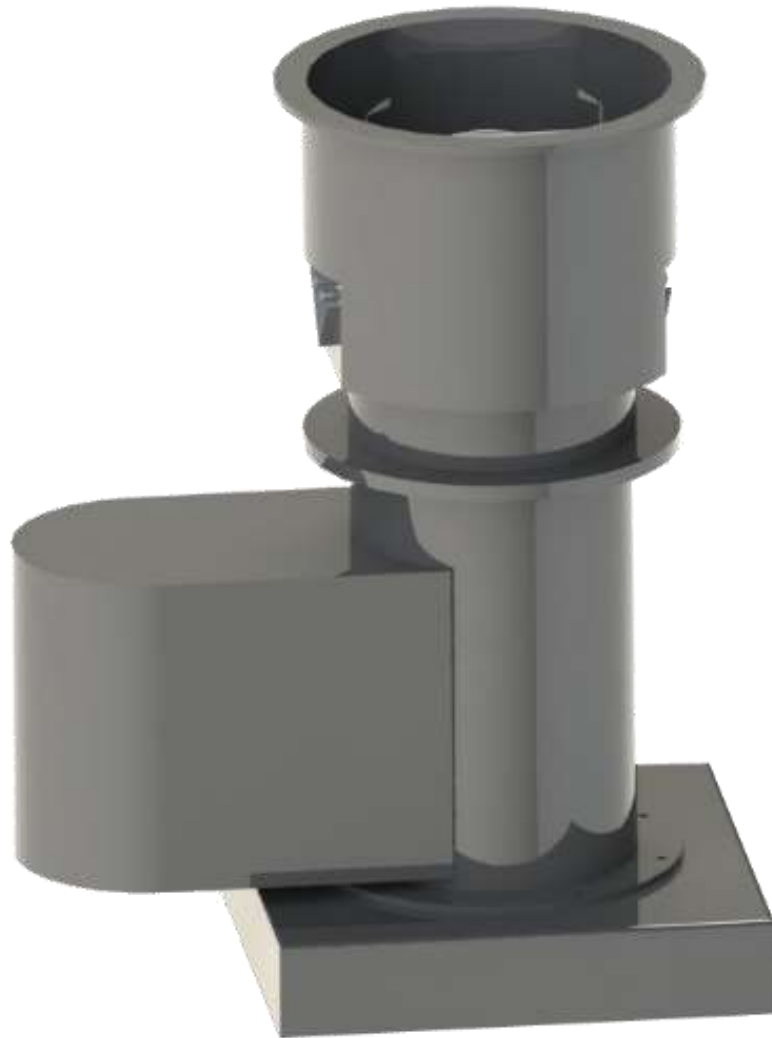


Fiberglass Upblast Fan

Fiberglass Ventilation



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FRP UB Upblast Ventilator - Product Details

STANDARD FEATURES

- Size/Diameter
 - Belt: 14" – 72"
 - Direct: 14" – 60"
- CFM Range:
 - Belt: 2,130 – 91,000
 - Direct: 1,750 – 66,400
- Construction: Fiberglass, Hetron 99P[®] polyester resin, Class 1 flame spread of ≤25 w/UV inhibitor.
- Fan Housing: Fiberglass with flanged ends.
- Stack Cap: Fiberglass construction.
- Curb Cap: Fiberglass construction, integrally formed to fan housing.
- Fan Propeller: Air foil shaped fiberglass reinforced blades attached to a fiberglass hub.
- Automatic Damper: Fiberglass, butterfly type.
- Drive Tube: Fiberglass, including bearing mounts. Sealed with polypropylene shaft seal.
- Bearings: Heavy duty, cast iron, pillow block w/ regreaseable fittings
- Shaft: 304 stainless steel
- Severe duty motors are standard on direct drive units with the motor in the airstream.
- Motor Mount: Fiberglass construction, adjustable for belt tensioning
- Lube Lines: Polypropylene, extended from bearings to the exterior of the unit
- Motor Cover: Fiberglass

OPTIONAL FEATURES

- Isolated Design: Motor is directly connected to the fan wheel but is completely sealed from the airstream in a ventilated housing.
- Special Resins: Resins suited to a particular environment may be substituted. Carbon impregnation is available for explosive applications.
- Hardware / Shaft:
 - 316 stainless steel
 - Monel
- Disconnect Switch: Non-fused, mounted to the exterior of the unit in a NEMA 3R enclosure. Can be factory pre-wired to motor.
- Outlet Guard: 1/2" polyethylene mesh
- Roof Curbs
- Motor: NEMA Design B, heavy duty, industrial continuous duty. Totally enclosed in sealed ball bearings

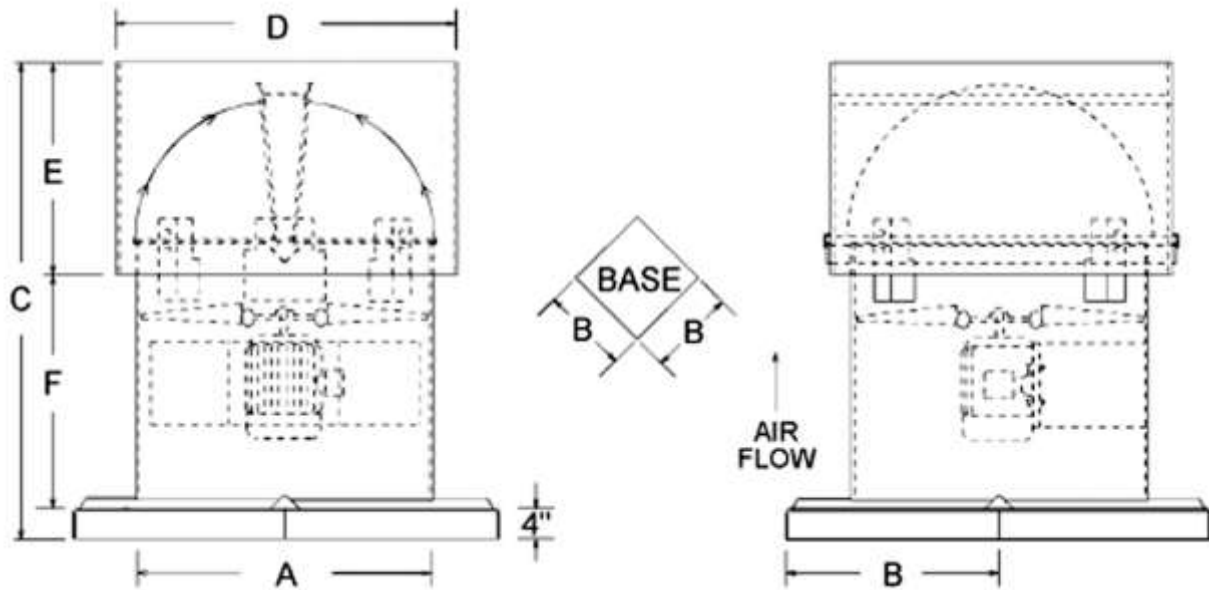
BENEFITS

- Synthetic veil of fan housing provides smooth interior for efficient air flow through the fan housing. Creates an impenetrable surface to most airstream corrosives.
- Entire stack cap can be easily removed for access to the fan wheel.
- Curb caps can be adapted to fit existing curbs.
- Highly efficient, fan propeller with bushing protected by a removable cap for easy maintenance
- Damper automatically swings up to the full open position to permit free passage of exhaust air and fumes. Automatically closes when the fan is turned off.
- Damper rods are FRP encapsulated in fiberglass. Rods rotate in polypropylene bearings.

PRODUCT DESCRIPTION

Moffitt Corporation Upblast Roof Ventilators are designed for standard duty roof mount applications for building exhaust. Fiberglass construction allows this unit to be used in commercial, industrial or institutional applications requiring chemical resistance.

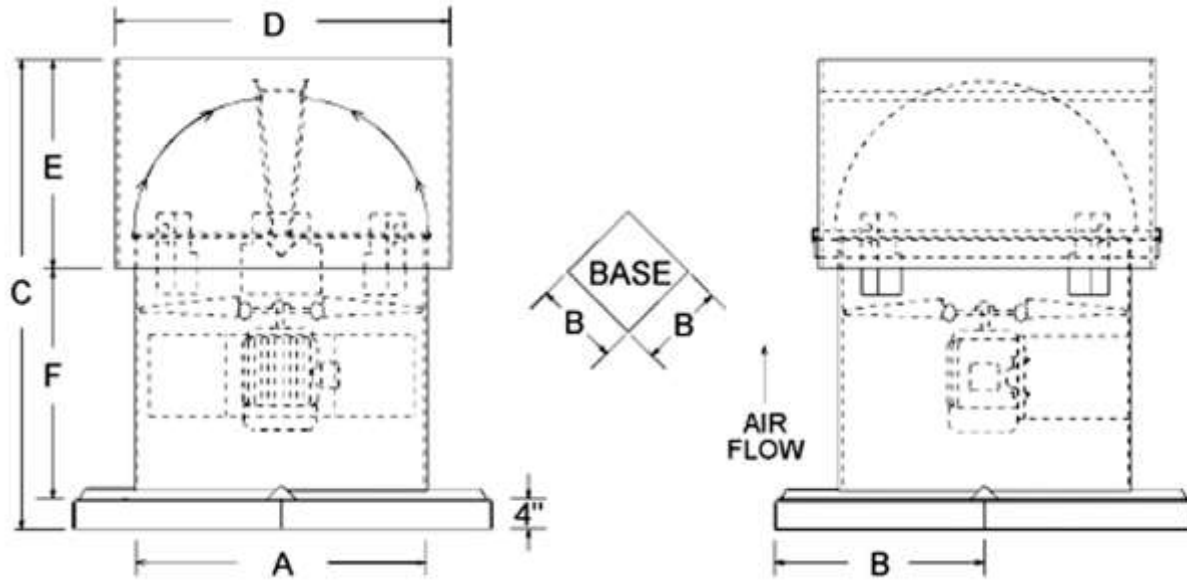
FRP UB-10 Direct Drive - Submittal Data



A PROP DIA.	B	C*	D	E	F*	STACK CAP THICKNESS	HOUSING & CURB THICKNESS	APPROX UNIT WT*
14	24	41	18 1/2	13	24	1/8	3/16	135
16	26	42	20 1/2	14	24			145
18	28	44	22 1/2	14	26			155
20	30	46	24 1/2	16	26			185
24	34	48	28 1/2	18	26			240
28	38	52	32 1/2	20	28			375
30	40	52	34 1/2	20	28			455
32	42	54	36 1/2	22	28			610
36	46	58	40 7/8	24	30			780
42	52	63	49 7/8	29	30			900
48	58	70	56 1/4	32	34	3/16	5/16	610
54	66	75	62 1/4	35	36			780
60	72	78	68 1/4	38	36			900

*Dimensions may vary with horsepower.

FRP UB-20 Direct Drive - Submittal Data



*Dimensions may vary with horsepower.

A PROP DIA.	B	C*	D	E	F*	STACK CAP THICKNESS	HOUSING & CURB THICKNESS	APPROX UNIT WT*	
14	24	41	18 1/2	13	24	1/8	3/16	145	
16	26	42	20 1/2	14	24			165	
18	28	44	22 1/2	14	26			175	
20	30	46	24 1/2	16	26			210	
24	34	48	28 1/2	18	26			275	
28	38	52	32 1/2	20	28		1/4	5/16	420
30	40	52	34 1/2	20	28				515
32	42	54	36 1/2	22	28				690
36	46	58	40 7/8	24	30				870
42	52	63	49 7/8	29	30				1000
48	58	70	56 1/4	32	34	3/16	3/8	1150	
54	66	75	62 1/4	35	36				
60	72	78	68 1/4	38	36				
72	84	84	80 3/8	44	36				

FRP UB-10 & FRP UB-15 Isolated Direct Drive Performance Data

SIZE	MOTOR HP	FAN RPM	0"	.125"	.25"	.375"	.5"
14	0.17	1725	1750/.16	1610/.16	1450/.16		
	0.25	1725	2070/.22	1920/.22	1720/.22		
	0.33	1725	2380/.29	2210/.29	2000/.29		
	0.5	1725	2650/.34	2470/.34	2220/.34		
	1	3450	3080/.92	30301.92	2970/.92	2910/.92	2840/.92
18	0.5	1750	3710/.47	3370/.48	3090/.50	2750/.51	
	0.75	1750	4180/.62	3890/.63	3550/.64	3150/.65	
	1	1750	4650/.87	4490/.90	4300/.92	4070/.95	3820/.98
	1.5	1750	5550/1.34	5360/1.35	5140/1.37	4880/1.38	4560/1.39
20	0.5	1160	4270/.48	3910/.50	3430/.52		
	0.75	1160	4800/.63	4410/.64	3840/.65		
	1	1160	5180/.80	4840/.83	4400/.83		
	0.75	1750	4800/.66	4510/.68	4180/.70	3810/.72	3420/.73
	1	1750	5540/.93	5240/.95	4830/.97	4470/.98	3970/.98
24	1.5	1750	6030/1.26	5860/1.31	5630/1.34	5440/1.37	5160/1.44
	0.75	1160	6740/.67	6250/.72	5720/.75	4900/.77	
	1	1750	6980/.78	6540/.81	6000/.84	5510/.87	4900/.88
	1.5	1750	8940/1.42	8470/1.45	7950/1.48	7460/1.5	6800/1.51
	2	1750	9980/1.89	9470/1.91	8900/1.93	8440/1.94	7610/1.98
30	3	1750	1145013	11130/2.84	1078013	10470/2.96	10100/3.02
	0.75	870	9670/.75	~01.77	7120/.77		
	1	870	103001.9	91001.86	7680/.86		
	0.75	1160	8900/.65	76801.66	6320/.66		
	1	1160	10900/1.00	9570/1.00	8150/.98		
	1.5	1160	12500/1.51	11100/1.54	9180/1.51		
	2	1160	14100/1.91	13200/1.94	1230012	11400/1.94	10300/1.92
	1.5	1750	10900/1.29	10300/1.35	9600/1.39	8900/1.40	8060/1.39
	2	1750	13400/1.90	12700/1.96	12000/2.01	11300/2.05	10500/2.02
	3	1750	15700/2.76	15000/2.79	14200/2.82	13400/2.81	12600/2.79
36	5	1750	19600/4.84	18700/4.80	17600/4.75	16900/4.78	16000/4.79
	1	870	12320/.87	11150/.95	982011	8180/1.04	
	1.5	870	14930/1.26	13830/1.35	12550/1.43	10830/1.49	
	2	870	1730011/.077	16140/1.85	14800/1.92	12970/1.97	
	3	870	20800/2.74	19300/2.78	17500/2.60	14800/2.79	
	1.5	1160	14900/1.27	13600/1.31	12100/1.37	10200/1.37	748011.4
	2	1160	17600/1.62	16200/1.87	14700/1.90	13000/1.93	10200/1.89
	3	1160	18600/2.25	17800/2.37	16800/2.50	16000/2.60	14900/2.70
	5	1160	24900/4.53	23900/4.58	23000/4.65	22100/4.75	21000/4.82
	3	1750	18900/2.75	17900/2.84	17100/2.92	16200/3.00	15200/3.07
42	5	1750	24100/4.45	23200/4.56	22300/4.63	21500/4.70	20600/4.78
	7.5	1750	28200/6.47	27300/6.55	26500/6.67	25600/6.76	24600/6.75
	1.5	870	14550/1.08	13200/1.17	11770/1.23	10020/1.27	7940/1.32
	2	870	18740/1.60	17340/1.71	15800/1.81	14050/1.87	11750/1.91
	3	870	24300/2.72	22800/2.82	21100/2.90	19300/2.98	16600/3.02
	2	1160	19600/1.83	17800/1.90	16000/1.97	13900/2.98	11500/1.96
	3	1160	24500/2.80	22700/2.87	20800/2.94	18800/3.00	16100/3.00
5	1160	30100/4.58	28200/4.68	26200/4.78	23700/4.89	19900/5.03	
7.5	1160	34100/6.64	33100/6.85	32000/6.97	30700/7.05	29400/7.16	

Note: Moffitt UB10 & UB15 Direct Drive Upblast Fan Propellers have been tested and rated in accordance with AMCA Standard 210 for air performance.

FRP UB-10 Direct & FRP UB-15 Isolated Direct Drive Performance Data cont.

SIZE	MOTOR HP	FAN RPM	0"	.125"	.25"	.375"	.5"
48	2	870	19500/1.82	17000/1.83	14300/1.83	11300/1.83	8100/1.90
	3	870	24600/2.67	21700/2.68	18500/2.68	15000/2.72	11600/2.79
	5	870	31700/4.78	30000/4.89	28300/4.98	26500/5.05	24500/5.09
	7.5	870	38800/7.23	34000/7.31	35100/7.37	33000/7.43	30600/7.49
	3	1160	20500/2.64	18500/2.72	16500/2.73	14900/2.74	12600/3.73
	5	1160	30500/4.96	28100/4.98	86100/4.97	23900/5.00	21400/4.98
	7.5	1160	37600/7.32	35500/7.37	33300/7.47	30600/7.53	27900/7.60
	10	1160	40100/9.52	38900/9.70	37500/9.87	36300/10	35100/10.15
54	3	690	30700/2.74	27900/2.87	24400/2.96	20400/2.95	
	5	690	40400/4.57	37900/4.75	35000/4.85	30800/4.80	
	5	870	40700/4.89	37400/4.92	33800/4.90	28400/4.65	
	7.5	870	47400/7.23	43900/7.23	40500/7.34	35300/7.33	
	10	1160	52900/9.82	50700/9.92	48100/9.95	45400/9.95	42600/9.92
	5	690	43000/4.19	40100/4.41	37000/4.67	33600/4.82	29300/4.82
	7.5	690	51800/6.20	48700/6.44	45500/6.67	42200/6.85	38200/6.90
60	5	870	46000/4.87	42500/4.87	38700/4.85	34300/4.84	28500/4.61
	7.5	870	55800/7.35	52100/7.29	48200/7.17	43400/7.08	38200/6.94
	10	870	61800/9.82	57800/9.75	53600/9.63	48500/9.54	42500/9.46
	15	870	66400/12.20	62200/12.10	57700/12.00	52500/11.08	45400/11.7

ALTERNATE CAPACITY SELECTIONS: The above capacities were selected from arrangements that are most efficient and economical for general mill building ventilation. If higher static pressures are required for ducted applications, see Performance Data for the Tube axial Fans.

FRP UB-20 Belt Drive Performance Data

SIZE	MOTOR HP	FAN RPM	0"	.125"	.25"	.375"	.5"
14	0.25	1770	2130/.24	1990/.24	1800/.24	1530/.24	
	0.33	1980	2420/.33	2300/.33	2150/.33	1970/.33	1710/.33
	0.5	2240	2760/.48	2660/1.48	2540/.48	2410/.43	2250/.48
	0.75	2580	3200/.74	3120/.74	3030/.74	2930/.74	2810/.74
18	0.33	1200	3060/.29	2750/.31	2330/.32		
	0.5	1380	3350/.45	3050/.48	2660/.49	2010/.5	
	0.75	1580	4170/.65	3980/.67	3750/.69	3470/.72	3140/.74
	1	1750	4650/.87	4490/.90	4300/.92	4070/.95	3820/.98
20	0.5	1150	4070/.43	3730/.45	3280/.48	2650/.49	
	0.75	1320	4750/.64	4480/.67	4150/.70	3750/.72	3220/.73
	1	1460	5300/.86	5070/.89	4800/.92	4480/.95	4100/.98
	1.5	1690	6200/1.33	6000/1.36	5800/1.39	5560/1.42	5290/1.46
24	0.5	900	5770/.46	5000/.48			
	0.75	1040	6870/.70	6260/.73	5520/.74		
	1	1140	7630/.91	7100/.94	6500/.97	5680/.98	
	1.5	1310	8900/1.38	8460/1.41	7970/1.45	7420/1.48	6790/1.49
	2	1440	9860/1.82	9470/1.86	9050/1.90	8580/1.94	8070/1.96
30	3	1660	11470/2.78	11140/2.82	10800/2.86	10420/2.90	10020/2.95
	1	900	10700/.96	9590/.96	8280/.95		
	1.5	1025	12500/1.4	11500/1.42	10500/1.41	9300/1.40	
	2	1135	14000/1.89	13200/1.92	12300/1.92	11300/1.92	10200/1.9
	3	1300	16200/2.82	15600/2.87	14800/2.89	14000/2.88	13100/2.88
	5	1510	18600/4.57	18100/4.68	17700/4.79	17200/4.86	16500/4.92
36	7.5	1740	21500/6.94	21100/7.06	20700/7.21	20300/7.33	19900/7.42
	1	665	13500/.92	11500/.96			
	1.5	760	15800/1.36	14400/1.42	12200/1.48		
	2	835	17600/1.8	16400/1.85	14700/1.89	12300/1.96	
	3	950	20400/2.63	19300/2.69	18100/2.77	16500/2.80	14500/2.88
	5	1150	25200/4.64	24200/4.7	23300/4.78	22400/4.88	21200/4.94
42	7.5	1320	29100/7	28300/7.06	27500/7.14	26700/7.23	25900/7.34
	1.5	640	18700/1.35	16200/1.41	12300/1.45		
	2	700	20900/1.76	18700/1.82	15900/1.89		
	3	810	24800/2.69	23000/2.77	20920/2.65	16500/2.93	14700/2.92
	5	960	29700/4.42	28400/4.55	26900/4.62	25200/4.72	23300/4.83
	7.5	1120	35000/6.96	34000/7.12	32800/7.25	31500/7.33	30100/7.44
48	2	540	23500/1.94	18700/1.99			
	3	615	27600/2.65	24700/2.9	20400/2.93		
	5	730	33600/4.74	31400/4.8	28800/4.86	25200/4.93	
	7.5	840	39300/7.2	37400/7.27	35300/7.34	33100/7.41	30100/7.51
	10	920	43300/9.45	41700/9.52	39900/9.59	37900/9.67	35800/9.75
54	3	520	34200/2.90	30100/2.94			
	5	615	41700/4.78	38600/4.83	34600/4.83		
	7.5	705	48600/7.19	46000/7.23	43200/7.3	39400/7.27	
	10	775	53900/9.54	51600/9.59	49100/9.64	46300/9.71	42700/9.63
60	5	530	47500/4.77	43200/4.81	37500/4.81		
	7.5	610	55800/7.24	52400/7.33	48100/7.35	43000/7.34	
	10	665	61400/9.37	58300/9.46	54800/9.50	50600/9.54	45600/9.50
	15	765	71500/14.20	68800/14.30	66100/14.40	62900/14.50	59300/14.50
72	10	610	65500/9.47	60800/9.58	56500/9.87	51600/9.92	45500/9.78
	15	700	76600/13.9	72400/14.1	68500/14.3	64800/14.7	60700/14.7
	20	765	84500/18.4	80600/18.7	76800/16.8	73500/19.2	69900/19.5
	25	820	91000/22.50	87400/23	84000/23.2	80600/23.40	77000/23.75

Note: Moffitt UB10 & UB15 Direct Drive Upblast Fan Propellers have been tested and rated in accordance with AMCA Standard 210 for air performance

FRP UB-10 Direct Drive Guide Specification

1.1. DESCRIPTION

Furnish and Install Fiberglass Upblast Fans and accessories as indicated on drawings.

1.2. QUALITY ASSURANCE

MOFFITT (Jacksonville, FL, 1 800-474-3267) FRP Products establish the standard of quality required. Manufacturer and erector shall demonstrate a minimum of five (5) years of related industry experience.

1.3. SUBSTITUTIONS

No substitutions will be considered unless written request for approval has been submitted by the bidder and has been received by the designer at least ten (10) days prior to bid date. Any proposed substitutions should meet the standards set by the specification.

1.4. SUBMITTALS

Furnish approval drawings prior to fabrication and erection drawings prior to shipment showing all erection procedures and accessories required for the specified product.

2.1. CONSTRUCTION

2.1.1. Unit shall be constructed of a premium grade polyester or vinylester resin. If required, a Class 1 flame spread of 25 or less is available. Reference to a Corrosion Chart is recommended for highly acidic or caustic environments.

2.1.2. Fan propeller is to be directly mounted to the motor shaft on direct coupled units and rotate inside the venturi. On belted units, the propeller shall rotate inside a venturi on a shaft supported by heavy duty pillow blocks. Fiberglass blades shall have an air foil and helical design attached to an encapsulated hub.

2.1.3. Motor mount shall be of solid fiberglass construction.

2.1.4. All hardware shall be stainless steel.

2.1.5. The fan shall have a capacity of _____ CFM at _____ inch(es) static pressure standard air and equipped with a _____ HP, _____ RPM, motor mounted out of the airstream. It shall be rated for severe duty service and suitable for _____ volt, _____ phase, _____ cycle operation. Electrical connection motor leads are to be extended through conduit to the exterior of the unit to a junction box mounted to the fan housing. A motor with regreasable fittings shall have lubrication lines extended to the exterior of the unit and mounted next to the junction box.

2.2. OPTIONS/ACCESSORIES

Available accessories include: stainless steel mesh guard and the option for explosion proof motor design carbon impregnation with static grounding, disconnect switch mounted and wired, polyethylene mesh outlet guard and fiberglass roof curb.

FRP UB-20 Belt Drive Guide Specification

1.1. DESCRIPTION

Furnish and Install Fiberglass Upblast Fans and accessories as indicated on drawings.

1.2. QUALITY ASSURANCE

MOFFITT (Jacksonville, FL, 1 800-474-3267) FRP Products establish the standard of quality required. Manufacturer and erector shall demonstrate a minimum of five (5) years of related industry experience.

1.3. SUBSTITUTIONS

No substitutions will be considered unless written request for approval has been submitted by the bidder and has been received by the designer at least ten (10) days prior to bid date. Any proposed substitutions should meet the standards set by the specification.

1.4. SUBMITTALS

Furnish approval drawings prior to fabrication and erection drawings prior to shipment showing all erection procedures and accessories required for the specified product.

2.1. CONSTRUCTION

2.1.1. Unit shall be constructed of a premium grade polyester or vinylester resin. If required, a Class 1 flame spread of 25 or less is available. Reference to a Corrosion Chart is recommended for highly acidic or caustic environments.

2.1.2. Fan propeller is to be directly mounted to the motor shaft on direct coupled units and rotate inside the venturi. On belted units, the propeller shall rotate inside a venturi on a shaft supported by heavy duty pillow blocks. Fiberglass blades shall have an air foil and helical design attached to an encapsulated hub.

2.1.3. The fan shall have a capacity of _____CFM at _____inch(es) static pressure standard air and equipped with a _____HP, _____RPM, motor mounted out of the airstream It shall be standard NEMA design, totally enclosed and suitable for _____ volt, _____phase, _____cycle operation.

2.1.4. Bearings, shaft and drive shall be protected from the airstream by a fiberglass drive tube and mounted on fiberglass supports. The bearings shall be self-aligning heavy duty ball or roller type and designed for a minimum average life of 50,000 hours. Polypropylene lubrication lines shall extend to unit exterior and include grease fittings. The fan shaft shall be of stainless steel with a polypropylene shaft seal. Unit shall be equipped with a (fixed, adjustable) v-belt drive selected with a 1.5 service factor.

2.1.5. Motor and drive shall be protected by a fiberglass motor cover. All hardware shall be stainless steel.

2.2. OPTIONS/ACCESSORIES

Available accessories include: stainless steel mesh guard and the option for explosion proof motor design carbon impregnation with static grounding, disconnect switch mounted and wired, polyethylene mesh outlet guard and fiberglass roof curb.