

INDOOR INDIRECT FIRED
VERTICAL MAKEUP AIR UNIT



SOUTHAMPTON INDUSTRIAL

5605 48th Street SE
Calgary, AB, T2C 4X8
Canada
403.930.9299

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INDUSTRIAL

INDOOR INDIRECT FIRED VERTICAL MAKEUP AIR

CERTIFIED
ISO 9001:2015



Southampton Industrial's VTM series of indirect gas fired vertical makeup air units provide the latest tubular heat exchanger technology with application flexibility and a range of design options. The vertical series has been designed to meet performance and serviceability requirements while providing the most compact dimensions available.

STANDARD FEATURES

HEAT EXCHANGER / MANIFOLD

- Up to 110°F temperature rise
- High efficiency (up to 90%)
- Low pressure drop
- Accommodates a wide range of inputs from 75,000 to 400,000 Btuh
- Integral formed dimple tubes, in a variety of tube materials (aluminized steel, 409SS, 439SS, 304SS) with a 10 year warranty on stainless steel tube designs
- Equipped with patented inshot gas burners
- Available for use with natural gas or propane
- Extended life: tubes expand into collector box so welding is eliminated

UNIT CONSTRUCTION

- Indoor construction
- Vertical or horizontal configuration
- 18 gauge galvanized steel casing
- 1 inch casing with 1.5#lb. density insulation
- Welded structural steel or formed channel base

BLOWER / MOTOR

- AMCA rated forward curve blower
- Adjustable V-belt or direct drive ODP motor
- Blower motors mounted on easy-out slide track with vibration absorption

CONTROLS

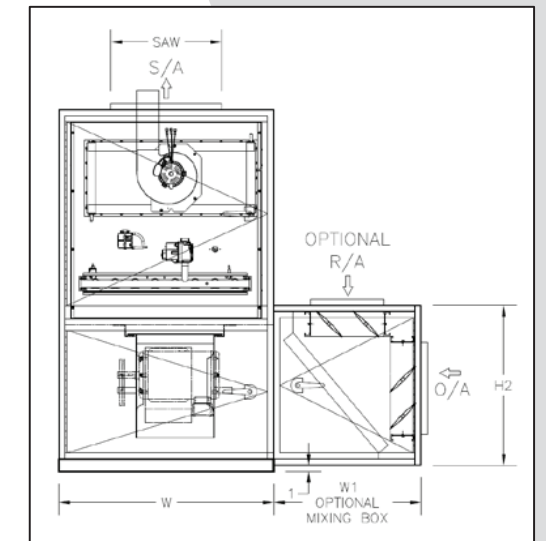
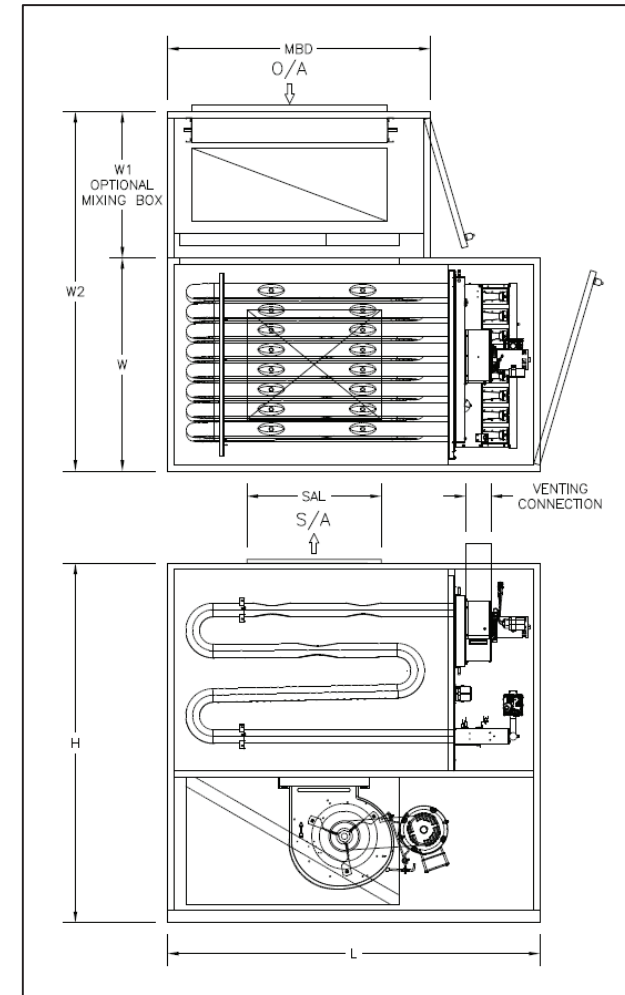
- Direct ignition controls with LED flash fault indicator
- Includes draft inducer, ignition control, gas valve, spark igniter, flame sensor, air switch and flame rollout switches
- High limit safety
- Features lockout with auto reset (30-sec. pre-purge) three ignition trials (60-sec. purge between trials), 60-sec. post purge at end of each operating cycle, and auto reset one hour after lockout
- **SSV** – Single-stage operation with single-stage valve and draft inducer
- **TSD** – Two-stage gas valve with two-speed draft inducer operation (high fire 100%, low fire 55%)
- **MGV** – Full electronic modulation of 20% to 100%. Controls include modulating controller/amplifier with junction box and modulating gas valve
- **MGC** – Full electric modulation 20% to 100%. Constant efficiency throughout the modulation range using gas controls
- **SPL** – Split manifold with 10 to 1 modulation

CERTIFICATION

- ETL/C-ETL listed, conforms to ANSI Z83.8 & CSA/CGA 2.6

OPTIONAL FEATURES

- Motorized inlet dampers
- Mixing box/return air options
- Filter section
- Hinged access doors
- Disconnect switch
- High gas pressure regulator
- High/low gas pressure switches
- Available in up flow or counter flow configurations
- Variable air flow options including EC motors
- Custom options or configurations available



MODEL	PERFORMANCE DATA							DIMENSIONS (INCHES)									
	AIR FLOW (CFM)	TEMP RISE (°F)	INPUT (MBH)	OUTPUT (MBH)	FAN DRIVE	MOTOR HP	FILTER TYPE	LENGTH (L)	WIDTH (W)	HEIGHT (H)	MIX BOX HEIGHT (H2)	MIX BOX WIDTH (W1)	MIX BOX DEPTH (MBD)	TOTAL WIDTH (W2)	S/A WIDTH (SAW)	S/A LENGTH (SAL)	
VTM 75	505	110	75	60	DIRECT	0.75	FLAT	42	22	59	22	17	22	39	6	12	
	1111	50			DIRECT	0.75	FLAT				22	19	28	41	10	16	
VTM 100	673	110	100	80	DIRECT	0.75	FLAT	42	22	59	22	17	26	39	8	12	
	1481	50			DIRECT	0.75	FLAT				25	23	28	45	12	18	
VTM 125	842	110	125	100	DIRECT	0.75	FLAT	42	25	59	22	19	26	44	10	12	
	1852	50			BELT	1	FLAT				25	21	42	46	15	18	
VTM 150	1010	110	150	120	DIRECT	0.75	FLAT	42	27	59	25	19	28	46	12	12	
	2222	50			BELT	1.5	FLAT				25	21	42	48	16	20	
VTM 175	1178	110	175	140	DIRECT	0.75	FLAT	42	28	59	25	21	28	49	12	14	
	2593	50			BELT	1.5	FLAT				25	23	42	51	18	22	
VTM 200	1347	110	200	160	DIRECT	0.75	FLAT	42	30	59	25	23	28	53	12	16	
	2963	50			BELT	1.5	ANGLED				26	23	42	53	18	24	
VTM 250	1684	110	250	200	BELT	0.75	FLAT	61	30	59	26	21	34	51	14	18	
	3704	50			BELT	3	ANGLED				27	23	54	53	20	28	
VTM 300	2020	110	300	240	BELT	1	FLAT	61	30	59	26	23	34	53	16	18	
	4444	50			BELT	3	ANGLED				27	23	61	53	22	30	
VTM 400	2694	110	400	320	BELT	1.5	ANGLED	61	35	59	26	24	44	59	18	22	
	5926	50			BELT	5	ANGLED				30	29	61	64	26	34	