



*AIR TERMINALS*

## Bypass / Relief Terminals

### Application

- Energy saving low pressure, variable air volume temperature control
- Use with constant volume fan systems (no fan inlet or pressure controls)
- Pressure dependent flow control – inlet balancing damper upstream from air terminal controls maximum flow rate.
- VAV flow to the space to meet demand - excess or relief air is returned directly into the ceiling plenum.
- Control strategies using pneumatic,

### Product Features

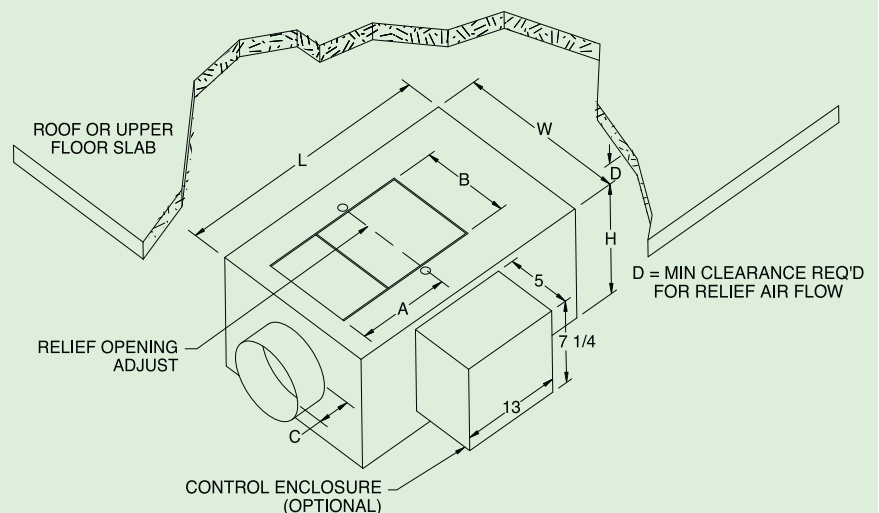
- Single VAV primary air damper proportions the total flow into the box to either the space or ceiling
- Round and rectangular inlet sizes
- Relief adjustment damper located on top of casing for field balancing to maintain a constant total flow to the unit from maximum bypass to zero bypass
- A balancing damper (not provided with the KME terminal) is required upstream to adjust the design maximum flow rate
- 0.8mm (22 gauge) thick steel casing lined with 25mm thick thermal-acoustical glass fiber insulation (NFPA 90A & UL 181)
- Easy to install and service

### Options & Accessories

- Electric duct heater (installed downstream of KME terminal)
- Steel control enclosure, screw attached cover.
- Insulation options: 25mm Fabric Cloth Liner
- Unit mounting brackets (field installed)
- Electric, electronic analog control systems



Model	Inlet Size		Air Flow (Max.)		Dimensions (mm)							
	#	mm	Inches	CMH	CFM	A	B	C	D	L	W	H
5A	125	5	272	160	241	190	102	100	610	254	241	
6A	150	6	510	300	241	190	102	100	610	254	241	
7A	175	7	713	420	241	190	102	100	610	254	241	
8A	200	8	849	500	241	190	102	114	610	254	241	
8B	200	8	1087	640	240	260	102	114	610	330	241	
10C	250	10	1529	900	240	260	102	100	686	508	292	
12D	300	12	2378	1400	240	260	102	100	686	508	343	
14E	300 x 300	12 x 12	3058	1800	246	356	102	127	762	610	343	
16E	400 x 300	16 x 12	4077	2400	246	356	102	152	762	610	343	
18F	450 x 300	18 x 14	5351	3150	290	450	102	178	825	610	394	



### Product Selection Check List

- Select Unit size based on desired performance characteristics.
- Select inlet size based on design Airflow requirements.
- Select Control Requirement.

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### Air Terminal Casing Treatments

KMC's complete line of casing treatments and insulation systems provide performance solutions to meet any design requirement. We only use insulating materials that meet industry standard classifications for fire, erosion, water vapor sorption, and microbiological resistance.

#### 25mm Foil Laminated Fiberglass Insulation

**Features:**

- High R-value & impervious foil facing with aluminum taped edges
- Isolates glass fibers from the air stream
- R Value: 32m.K/W @ 25° C
- Density: 48kg/m<sup>3</sup>



#### 25mm Matte Face- Black Cloth Under Insulation.

**Features:**

- High R-value & Matte face with black cloth Liner.
- Isolates glass fibers from the air stream
- R Value: 32m.K/W @ 25° C
- Density: 48kg/m<sup>3</sup>



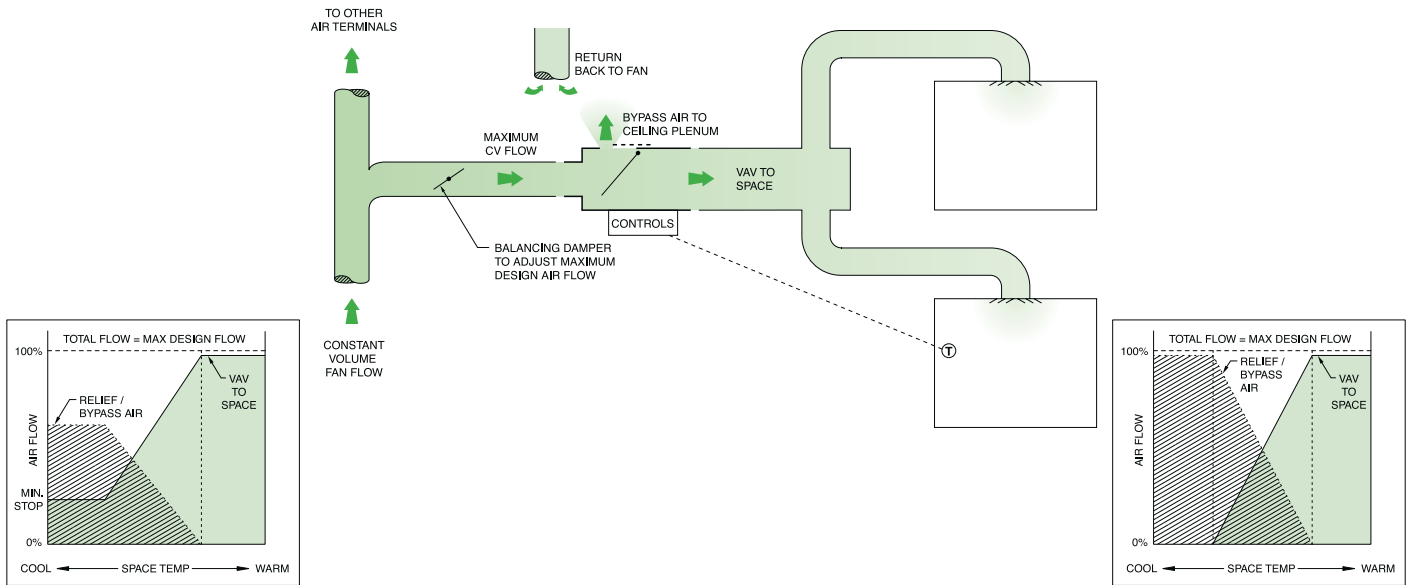
#### Fiber-Less Insulation

**Features:**

- Closed cell insulation – no glass fibers
- 12/25mm Elastomeric Engineered Foam Insulation
- R Value: 22 m.K/W @ 20° C
- Density: 140-180 kg/m<sup>3</sup>



**Bypass / Relief Terminals**



**Table 01: NC Values**

SIZE INLET	CMH	CFM	MIN ΔPs	NUMBER OUTLETS	ROOM NC
5A (5")	136	80	.01	1	-
	204	120	.01	1	-
	272	160	.02	1	20
6A (6")	204	120	.01	1	-
	357	210	.03	1	22
	510	300	.05	1	30
7A (7")	306	180	.02	2	-
	510	300	.01	2	21
	713	420	.04	2	29
8A (8")	408	240	.07	2	-
	629	370	.02	2	23
	849	500	.04	2	31
8B (8")	680	400	.08	2	20
	883	520	.03	2	25
	1087	640	.05	2	33
10C (10")	1019	600	.08	3	21
	1274	750	.04	3	26
	1529	900	.06	3	33
12D (12")	1359	800	.09	4	24
	1869	1100	.07	4	29
	2378	1400	.14	4	36
14E (12x12)	2039	1200	.11	5	26
	2548	1500	.17	5	31
	3058	1800	.25	5	37
16E (16x12)	2718	1600	.12	6	27
	3398	2000	.19	6	32
	4077	2400	.27	6	38
18F (18x14)	3567	2100	.14	7	28
	4417	2600	.21	7	33
	5351	3150	.31	7	39

**Notes**

1. All sound data are measured in accordance with industry standard ARI-88o
2. NC is sound pressure level based on 10dB room absorption for Lw re: 10-12 watts and number of outlets shown

