

ZERO AIR CONTROL SYSTEMS - US TESTING

PASCALS (Pa)	WIND VELOCITY (MPH)	PRESSURE (INCHES WATER)	PRESSURE (POS/NEG)	PRODUCT TESTED				LEAKAGE RATE (CFM/LFC)	LEAKAGE RATE (CMH/LMC)
				SYSTEM #	FRAME SEAL	THRESHOLD	DROPSEAL		
76 Pa	25 mph	0.31 inches	Negative	Z-1	475	565	365	0.02 CFM/LFC	0.11 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	A	328	565	361	0.03 CFM/LFC	0.17 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	B	770	565	361	0.04 CFM/LFC	0.22 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-5	475	None	365	0.05 CFM/LFC	0.28 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	D	328	164	154	0.07 CFM/LFC	0.39 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-2	370	565	365	0.07 CFM/LFC	0.39 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-3	770	565	365	0.09 CFM/LFC	0.50 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-4	328/119WB	565	365	0.12 CFM/LFC	0.67 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	E	328	164	361	0.17 CFM/LFC	0.96 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	F	318	564	351	0.25 CFM/LFC	1.41 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	SM-11	8144/8770	None	355	0.27 CFM/LFC	1.52 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	G	312	565	351	0.35 CFM/LFC	1.97 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-6	370	None	365	0.47 CFM/LFC	2.62 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	H	870	565	361	0.50 CFM/LFC	2.82 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-7	770	None	365	0.55 CFM/LFC	3.06 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-8	328	None	365	0.59 CFM/LFC	3.29 CMH/LMC
76 Pa	25 mph	0.31 inches	Negative	Z-9	98	None	365	0.98 CFM/LFC	5.46 CMH/LMC
76 Pa	25 mph	0.31 inches	Positive	K	None	None	None	11.36 CFM/LFC	63.28 CMH/LMC
100 Pa	28 mph	0.40 inches	Negative	ZSS-1	188S	Taped	None	0.09 CFM/LFC	0.49 CMH/LMC
100 Pa	28 mph	0.40 inches	Negative	ZSS-2	488S	Taped	None	0.09 CFM/LFC	0.49 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-12	475	565	365	0.04 CFM/LFC	0.22 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-14	328	565	361	0.06 CFM/LFC	0.33 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-15	475	655	365	0.07 CFM/LFC	0.39 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-16	770	565	361	0.07 CFM/LFC	0.39 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-17	370	565	365	0.08 CFM/LFC	0.45 CMH/LMC
150 Pa	35 mph	0.60 inches	Positive	SM-18	328	164	361	0.25 CFM/LFC	1.41 CMH/LMC
306 Pa	50 mph	1.23 inches	Positive	SM-19	328	565	361	0.09 CFM/LFC	0.50 CMH/LMC
306 Pa	50 mph	1.23 inches	Positive	SM-20	770	565	361	0.11 CFM/LFC	0.62 CMH/LMC
306 Pa	50 mph	1.23 inches	Positive	Z-2	370	565	365	0.16 CFM/LFC	0.90 CMH/LMC
306 Pa	50 mph	1.23 inches	Positive	SM-21	328	164	361	0.38 CFM/LFC	2.15 CMH/LMC
306 Pa	50 mph	1.23 inches	Positive	SM-22	8144/8770	None	355	0.64 CFM/LFC	3.62 CMH/LMC
688 Pa	75 mph	2.76 inches	Positive	SM-23	8144/8770	None	355	1.39 CFM/LFC	7.85 CMH/LMC
1223 Pa	100 mph	4.91 inches	Positive	SM-24	475/119WB	564	321	0.50 CFM/LFC	2.82 CMH/LMC

CFM/LFC = Cubic Feet per Minute / Linear Foot of frame Crack
 CMH/LMC = Cubic Metres per Hour / Linear Metre of frame Crack

To calculate the air leakage through a door first measure the frame crack. For example, a single door 2 metres high x 1 metre wide would have a frame crack of 6 metres. Then multiply the CMH/LMC figure (in the far right hand column of the table above) by 6. This gives you the total air leakage for that doorset for each system.

Where a threshold is shown as 'None', a flat threshold can be used as needed providing it has no sealing features e.g. 654A, 655A or 544A, 545A etc.

As can be seen from the table above, System Z-1 (in bold) performs the best (i.e. the lowest leakage rate) at 76 Pa under negative pressure. This system is illustrated diagrammatically to the right. It should be noted that seals with identical gaskets are interchangeable. Therefore 870AA frame seal can be used in place of 475AA as it offers more adjustment although it has the same gasket. Likewise 564A threshold can be used in place of 565A as it is lower and does not present a trip hazard.

Seals in Set Z-1:

- 475AA** Frame seal for head & jambs (stock sizes 914mm, 1219mm, 2134mm)
- 870AA** Frame seal for head & jambs (stock sizes 914mm, 1219mm, 2134mm)
- 365AA** Dropseal 762 & 914mm for door bottom (other sizes available to suit door width)
- 565A** Threshold for floor (stock sizes 914mm, 1219mm, 1829mm)
- 564A** Threshold for floor (stock sizes 914mm, 1219mm, 1829mm)

Other products in the table are shown on pages 4-23.

