

Manufactured Home Factory Duct Leakage Testing

Test each floor's duct system to meet industry tightness standard—maximum 4 CFM25 total duct leakage per 100 square feet of conditioned floor.

Materials and Equipment Needed

- Upholstery foam blocks (covered in plastic) size 12"x 5"x 4" to seal floor ducts or cut foam blocks 1" oversize for hole cutouts in floor.
- Foam block (covered in plastic) for furnace plenum hole and crossover take-offs, if not otherwise fully sealed for transit.
- Duct blaster and manometer, either from The Energy Conservatory or Retrotec.
- Adapter jig, fabricated in plant, to allow quick and easy connection of duct blaster to duct system

Note: Test is quickest when done at floor finish before the home moves to wall set.

Testing Set-Up

- Turn on Manometer.
Note: It takes a little time to turn on—you can complete the next two steps while it starts up.
- Block all vents with foam blocks wrapped in plastic bags.
- Block/tape off crossover duct take-off.

Manometer Set-Up

CONNECT HOSES

- Put the hose connected to the input tap on Channel A into duct and set Duct Blaster over unblocked register.
- Connect the hose on the input tab on Channel B to the brass tap on the top of the Duct Blaster fan.



Left (A side): Connect one end of hose to input and the other end inside the duct.

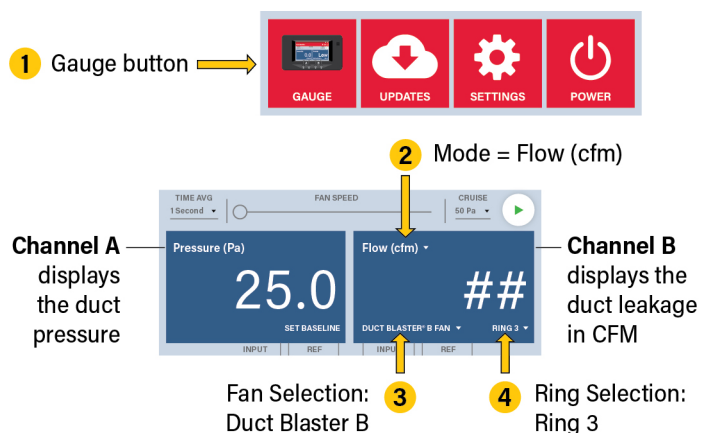
Left (B side): Connect one end of hose to input and the other end to Duct Blaster.



Duct Blaster jig.

SELECT PROPER SETTINGS

- On the DG-1000 gauge, press the Gauge button from the startup screen.
- Press the upper left corner of Channel B and select Flow to set the gauge to display pressure on Channel A and flow on Channel B.
- Press the lower left corner of Channel B and select Duct Blaster B fan.
- Press the lower right corner of Channel B and select Ring 3.



Conduct Pressurization Testing

- Verify your hoses are connected to manometer.
- Turn on duct blaster fan, pressurize ducts to 25pa (Channel A).
- When ducts are at 25pa record duct pressure from Channel A.
- Record the duct leakage in CFM from Channel B on data collection form.
- Turn off duct blaster and turn off manometer.

Minneapolis Duct Blaster (Series B): Flow Conversion Table | Revised January 2007

Flow (CFM)		Flow (CFM)		Flow (CFM)		Flow (CFM)		Flow (CFM)	
Fan Pressure (Pascals)	Ring 3	Fan Pressure (Pascals)	Ring 3	Fan Pressure (Pascals)	Ring 3	Fan Pressure (Pascals)	Ring 3	Fan Pressure (Pascals)	Ring 3
4	12	104	64	204	90	304	110	404	128
6	15	106	64	206	90	306	111	406	128
8	17	108	65	208	91	308	111	408	128
10	19	110	65	210	91	310	111	410	129
12	21	112	66	212	92	312	112	412	129
14	23	114	67	214	92	314	112	414	129
16	24	116	67	216	93	316	113	416	130
18	26	118	68	218	93	318	113	418	130
20	27	120	68	220	93	320	113	420	130
22	29	122	69	222	94	322	114	422	131
24	30	124	70	224	94	324	114	424	131
26	31	126	70	226	95	326	114	426	131
28	32	128	71	228	95	328	115	428	132
30	34	130	71	230	96	330	115	430	132
32	35	132	72	232	96	332	115	432	132
34	36	134	72	234	96	334	116	434	132
36	37	136	73	236	97	336	116	436	133
38	38	138	74	238	97	338	116	438	133
40	39	140	74	240	98	340	117	440	133
42	40	142	75	242	98	342	117	442	134
44	41	144	75	244	99	344	118	444	134
46	42	146	76	246	99	346	118	446	134
48	43	148	76	248	99	348	118	448	135
50	44	150	77	250	100	350	119	450	135
52	45	152	77	252	100	352	119	452	135
54	45	154	78	254	101	354	119	454	136
56	46	156	78	256	101	356	120	456	136
58	47	158	79	258	101	358	120	458	136
60	48	160	79	260	102	360	120	460	136
62	49	162	80	262	102	362	121	462	137
64	50	164	80	264	103	364	121	464	137
66	50	166	81	266	103	366	121	466	137
68	51	168	81	268	103	368	122	468	138
70	52	170	82	270	104	370	122	470	138
72	53	172	82	272	104	372	122	472	138
74	53	174	83	274	105	374	123	474	139
76	54	176	83	276	105	376	123	476	139
78	55	178	84	278	105	378	123	478	139
80	56	180	84	280	106	380	124	480	139
82	56	182	85	282	106	382	124	482	140
84	57	184	85	284	107	384	124	484	140
86	58	186	86	286	107	386	125	486	140
88	58	188	86	288	107	388	125	488	141
90	59	190	87	290	108	390	125	490	141
92	60	192	87	292	108	392	126	492	141
94	60	194	88	294	108	394	126	494	142
96	61	196	88	296	109	396	126	496	142
98	62	198	88	298	109	398	127	498	142
100	62	200	89	300	110	400	127	500	142
102	63	202	89	302	110	402	127		