

Thermoclick 40mm							Wind load resistance Pascals									
Thermoclick 40mm				Air tight		Water Leak	1/200			1/100			1/50			Failure
Subject	Height mm	Span (mm)	# of Supports	Pressure (Pa)	Vacuum (Pa)	Pressure (Pa)	Deflection mm	Positive Pressure	Negative Pressure	Deflection mm	Positive Pressure	Negative Pressure	Deflection mm	Positive Pressure	Negative Pressure	Negative Pressure
A	3600	1800	3	Pass	Pass	Pass	9	346	340	18	635	635	36	1364	1327	2230
B	2800	1400	3	Pass	Pass	Pass	7	611	539	14	1263	1050	28	2565	2121	2700
C	4400	2200	3	300	300	600	11	231	219	22	445	393	44	901	821	2192

Thermoclick 40mm							Wind load resistance PSI									
Thermoclick 40mm				Air tight		Water Leak	1/200			1/100			1/50			Failure
Subject	Height in	Span (in)	# of Supports	Pressure (psi)	Vacuum (psi)	Pressure (psi)	Deflection in	Positive Pressure	Negative Pressure	Deflection in	Positive Pressure	Negative Pressure	Deflection in	Positive Pressure	Negative Pressure	Negative Pressure
A	141.73	70.9	3	Pass	Pass	Pass	0.35	0.050	0.049	0.71	0.092	0.092	1.42	0.198	0.192	0.323
B	110.24	55.1	3	Pass	Pass	Pass	0.28	0.089	0.078	0.55	0.183	0.152	1.10	0.372	0.308	0.392
C	173.23	86.6	3	300	300	600	0.43	0.034	0.032	0.87	0.065	0.057	1.73	0.131	0.119	0.318

Thermoclick 40mm							Wind load resistance equivalent speed MPH									
Thermoclick 40mm				Air tight		Water Leak	1/200			1/100			1/50			Failure
Subject	Height in	Span (in)	# of Supports	Pressure (psi)	Vacuum (psi)	Pressure (psi)	Deflection in	Positive Pressure	Negative Pressure	Deflection in	Positive Pressure	Negative Pressure	Deflection in	Positive Pressure	Negative Pressure	Negative Pressure
A	141.73	70.9	3	Pass	Pass	Pass	0.35	52.98	0.100	0.71	71.77	71.77	1.42	105.19	0.392	0.659
B	110.24	55.1	3	Pass	Pass	Pass	0.28	70.40	0.159	0.55	101.22	92.29	1.10	144.25	0.308	0.392
C	173.23	86.6	3	300	300	600	0.43	43.29	0.065	0.87	60.08	56.46	1.73	85.49	0.119	0.318

**Conversion factors**

1 in	25.4mm
1 kPa	0.1450 psi
1 Pa	1 N/m <sup>2</sup>
1 m/s	2.23 mi/h

**Wind speed conversion formula**

$p = Kv^2$

p=Dynamic Wind Pressure in N/m<sup>2</sup>

K= 1/2 of the fluid density. In this case for air (ISA)= 1.225 kg/m<sup>3</sup>, therefore K= 0.613 kg/m<sup>3</sup>

v=Wind speed in m/s

Thermoclick 50mm				Air tight		Water Leak	Wind load resistance Pascals									
							1/200			1/100			1/50			Failure
Subject	Height mm	Span (mm)	# of Supports	Pressure (Pa)	Vacuum (Pa)	Pressure (Pa)	Deflection mm	Positive Pressure	Negative Pressure	Deflection mm	Positive Pressure	Negative Pressure	Deflection mm	Positive Pressure	Negative Pressure	Negative Pressure
A	1874	1800	2	Pass	Pass	Pass	9	290	289	18	632	586	36	1204	1156	5050
B	2274	2200	2	Pass	Pass	Pass	11	204	192	22	385	370	44	745	724	3036
C	2474	2400	2	Pass	Pass	Pass	12	195	183	24	355	329	48	655	641	2624
D	2574	2500	2	Pass	Pass	Pass	13	159	167	25	304	303	50	603	580	2409
E	3674	1800	3	Pass	Pass	Pass	9	500	483	18	967	940	36	2163	-	1405

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A	73.78	70.9	2	Pass	Pass	Pass	0.35	0.042	0.042	0.71	0.092	0.085	1.42	0.175	0.168	0.732
B	89.53	86.6	2	Pass	Pass	Pass	0.43	0.030	0.028	0.87	0.056	0.054	1.73	0.108	0.105	0.440
C	97.40	94.5	2	Pass	Pass	Pass	0.47	0.028	0.027	0.94	0.051	0.048	1.89	0.095	0.093	0.381
D	101.34	98.4	2	Pass	Pass	Pass	0.49	0.023	0.024	0.98	0.044	0.044	1.97	0.087	0.084	0.349
E	144.65	70.9	3	Pass	Pass	Pass	0.35	0.073	0.070	0.71	0.140	0.136	1.42	0.314	-	0.204

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A	73.78	70.9	2	Pass	Pass	Pass	0.35	48.50	0.085	0.71	71.60	68.95	1.42	98.83	96.84	202.40
B	89.53	86.6	2	Pass	Pass	Pass	0.43	40.68	0.057	0.87	55.89	54.79	1.73	77.74	76.64	156.94
C	97.40	94.5	2	Pass	Pass	Pass	0.47	39.77	0.054	0.94	53.66	51.66	1.89	72.89	72.11	145.90
D	101.34	98.4	2	Pass	Pass	Pass	0.49	35.91	0.049	0.98	49.66	49.58	1.97	69.94	68.59	139.80
E	144.65	70.9	3	Pass	Pass	Pass	0.35	63.69	0.143	0.71	88.57	87.32	1.42	132.47	-	106.76

**Conversion factors**

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$p = Kv^2$

p=Dynamic Wind Pressure in N/m<sup>2</sup>

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