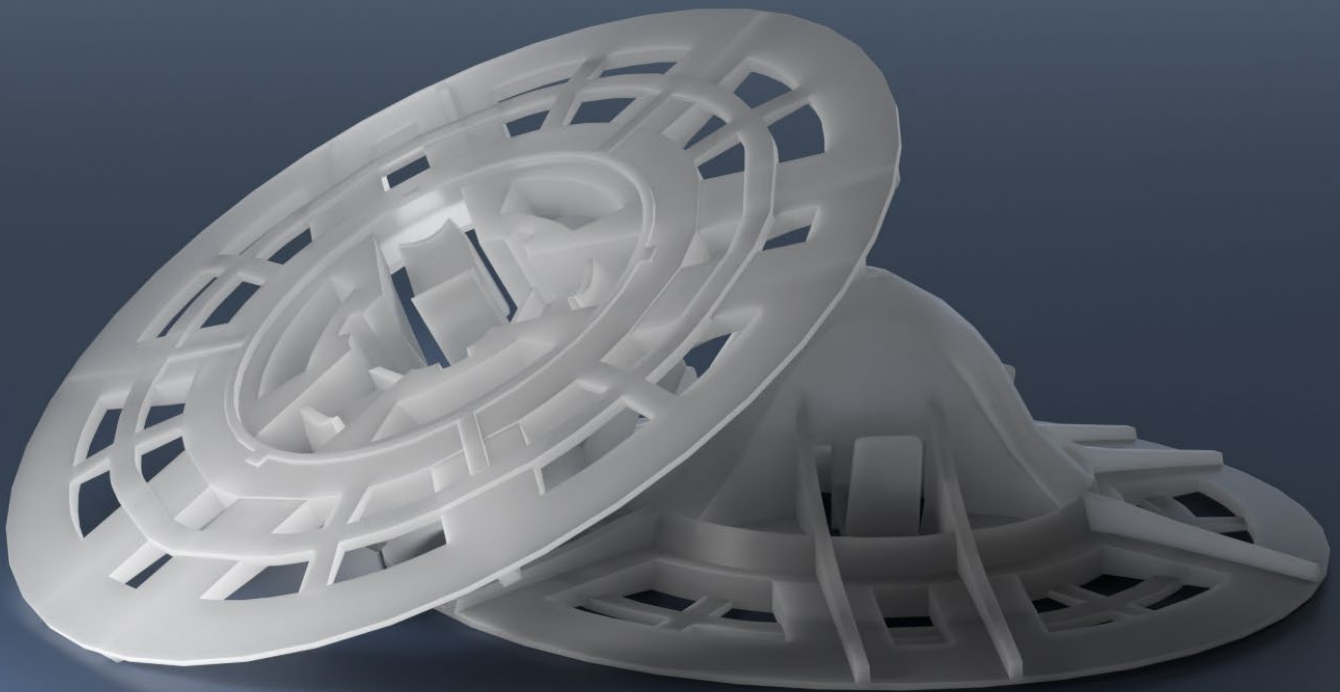




FASTENER SELECTION GUIDE

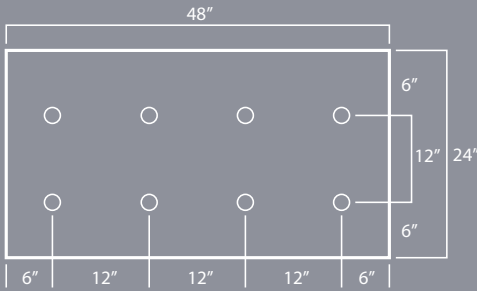


1.800.872.5625 | ORDERS@WIND-LOCK.COM | WWW.WIND-LOCK.COM



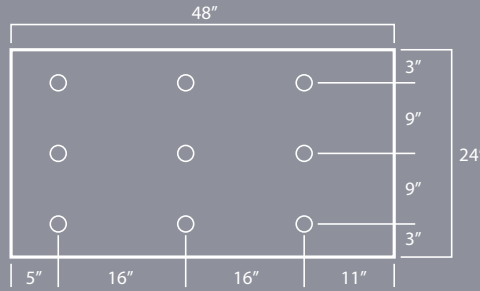
WIND-DEVIL® 2 TECHNICAL DATA

TYPICAL WIND-DEVIL® 2 FASTENING PATTERNS



PATTERN A

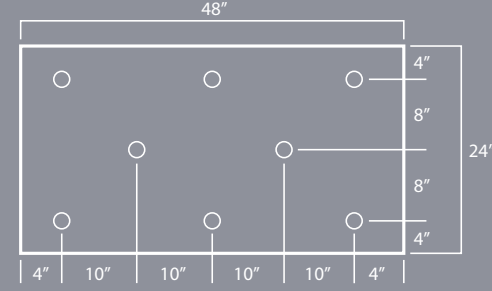
Wood sheathing, masonry and some metal sidings.



PATTERN B

16" O.C. stud fastening pattern.

Note: For pattern "B" stud fastening over non-screwable sheathing, fastener spacing does not exceed 16". O.C. variable not to exceed 11".



PATTERN C

Wood sheathing, masonry and some metal sidings.

WIND-DEVIL® 2 WIND-LEVEL TEST DATA

All measurements shown are ultimate pounds per foot.

EPS THICKNESS	PATTERN A	PATTERN B	PATTERN C
1"	107	88	85
1-1/2"	130	114	103
2"	144	129	124

GENERAL CORROSION DATA - SALT SPRAY (ASTM-B117)

SUMMARY

Parts were placed in the salt spray chamber and checked in 24 hour increments. The first visual change occurred at 1000 hours. At 1000 hours, there was visible white oxidation on the threads and heads of the fasteners. Fasteners remained at this status with the next change occurring at 2000 hours. At 2000 hours, red rust was present on the threads and the heads of the Wind-Lock parts.

To review the full Salt Spray Test Report, visit Wind-lock.com.

PULLOUT STRENGTH DATA ON PAGES 4-5



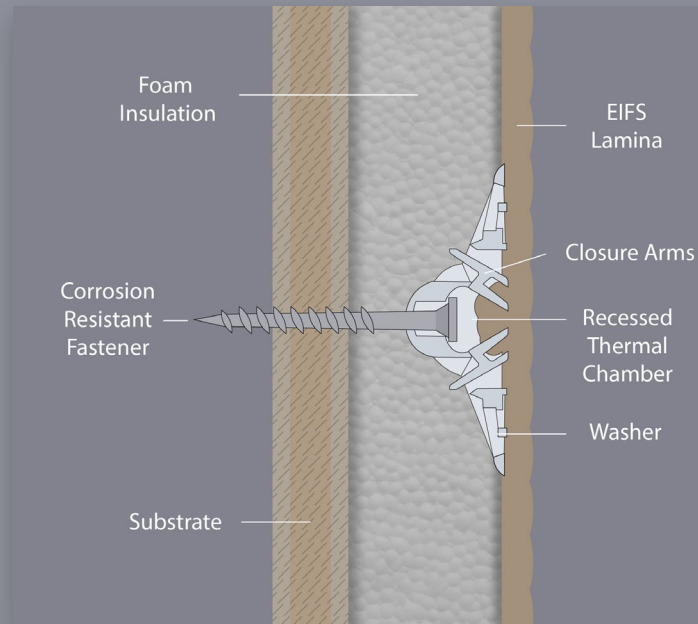
WIND-DEVIL® 2 SIZE SELECTION GUIDE

Insulation Thickness	Wood/Lite Metal Series	Steel Series	Masonry Series
1"	WLMT-1	ST-1	MT-1
1-1/2"	WLMT-2	ST-2	MT-2
2"	WLMT-3	ST-3	MT-3
2-1/2"	WLMT-4	ST-4	MT-4
3"	WLMT-5	ST-5	MT-5
3-1/2"	WLMT-7	ST-6	For virtually any size fastener, contact Wind-lock®!
4"	WLMT-7	ST-7	
4-1/2"	WLMT-7	ST-7	
5"	WLMT-8	ST-8	
5-1/2"	WLMT-8	ST-8	

* Sizes are for direct application into steel and do not take into account the sheathing. For 1/2" and 5/8" sheathing, move fastener selection to next higher size.

WHY WIND-DEVIL® 2 IS THE BEST!

- Comprehensive witness testing
- Over 20 years of proven performance
- EIFS industry approved
- Significant negative wind-load resistance
- Recessed thermal chamber helps prevent thermal bridging
- Patented closure arms allow for easy "backing out"
- Installation of the Wind-Devil® 2 compresses the foam under the washer, forming a "gasket" around the fastener. This gasketing action diverts moisture from the fastener.





SCREW PULLOUT STRENGTH DATA

TESTING MATERIALS & INFO

MATERIALS

- UWLM-1 - UWLM-7 Fasteners
- UZWLM-1 - UZWLM-7 Fasteners
- UZW-1 - UZW-5 Fasteners
- US-1 - US-6 Fasteners
- 2x4 Wood Substrate
- 25, 22, 20 Ga Lite Metal
- 20, 16, 14, 12 Ga Steel

TESTING EQUIPMENT

- Lloyd Instruments Tensile testing Machine
- Dewalt Screw Gun

TEST METHOD

Testing Per T-0750 - Ran at 0.5 in/min

RESULTS



UWLM
WOOD/LITE METAL FASTENER
SCREWS

UWLM-1				UWLM-2			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	426.45	103.75	349.19	1	655.01	199.5	160.89
2	418.24	136.82	349.85	2	497.67	177.95	144
3	418.91	117.7	154.46	3	692.74	178.48	188.71
4	484.39	114.87	338.96	4	640.13	182.5	202.55
5	351.43	125.01	341.61	5	668.04	139.31	187.86
6	414.92	116.38	344.84	6	650.84	153.39	232.76
7	463.84	134.3	327.11	7	836.72	190.21	203.7
8	405.71	123.97	335.04	8	654.27	206.87	191.84
9	460.52	167.85	360.16	9	628.47	209.7	204.65
10	458.69	122.14	365.52	10	700.42	184.12	221.09
Average	430.31	126.28	326.67	Average	662.43	182.20	193.81
Std. Dev	36.22	16.54	58.40	Std. Dev	78.63	21.06	24.87

UWLM-3				UWLM-4			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	797.33	191.23	358.88	1	1079.6	189.18	350.24
2	698.69	172.61	352.81	2	2060.3	187.4	354.17
3	766.86	189.63	350.21	3	1080	194.16	352.28
4	923.94	164.18	373.53	4	938.53	185.5	377.1
5	825.16	182.08	363.53	5	686.12	189.86	380.97
6	850.73	185.15	368.48	6	1029.9	179.01	366.85
7	814.76	181.28	365.16	7	1061.9	183.54	366.16
8	684.82	194.55	348.77	8	1060.6	187.89	360.84
9	798.85	179.21	349.42	9	1021.1	196.82	365.5
10	822.69	194.03	362.15	10	1065	180.36	351.72
Average	798.38	183.40	359.29	Average	1108.31	187.37	362.58
Std. Dev	66.27	9.22	8.25	Std. Dev	336.90	5.31	10.19

UWLM-5				UWLM-7			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	919.19	185.46	381.57	1	1099.1	195.02	389.79
2	864.32	196.82	392.04	2	1435.4	198.8	394.64
3	857.18	197.21	374.46	3	1183.5	186.37	381.58
4	905.15	172.76	375.76	4	1045.9	197.48	377.53
5	962.77	186.92	392.08	5	1086.6	203.02	399.47
6	939.93	187.94	695.67	6	1092.4	200.43	394.27
7	811.76	173.83	369.27	7	1048.3	192.52	376.16
8	835.08	225.87	370.07	8	1295.1	202.33	373.48
9	833.1	174.52	368.82	9	1500.9	194.09	333.42
10	720.33	182.47	334.64	10	1121	192.15	382.65
Average	864.88	188.38	405.44	Average	1190.82	196.22	380.30
Std. Dev	67.42	14.99	97.94	Std. Dev	155.58	4.93	17.70



UZWLM
WOOD/LITE METAL FASTENER
ZINC SCREWS

UZWLM-1				UZWLM-2			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	551.31	177.28	326.99	1	804.47	186.57	406.46
2	528.81	171.6	349.17	2	1119	182.8	361.72
3	591.31	183.09	379.01	3	814.62	181.5	305.46
4	451.01	189.81	352.93	4	848.02	195.33	395.29
5	544.89	173.28	344.87	5	758.41	190.51	404.57
6	715.82	166.82	350.75	6	866.45	194.71	369
7	504.32	197.72	351.08	7	844.44	189.81	385.15
8	646.15	184.93	333.42	8	844.49	196.41	369.65
9	554.92	172.94	335.49	9	755.2	199.25	377.86
10	544.86	180.77	358.41	10	862.04	197.16	369.06
Average	563.34	179.82	348.21	Average	851.71	191.41	374.42
Std. Dev	70.06	8.89	13.90	Std. Dev	96.70	5.87	27.38

UZWLM-3				UZWLM-4			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	896.75	196.39	369	1	831.93	197.53	385.25
2	968.76	194.96	364.34	2	676.69	178.77	404.35
3	1050.4	172.55	369.23	3	875.43	177.39	377.72
4	975.45	194.63	337.74	4	913.83	183.1	378.02
5	881.03	189.79	383.62	5	817.86	174.97	393.7
6	1029.3	187.63	386.22	6	938.62	489.02	361.46
7	743.93	178.73	342.79	7	972.17	192.84	369.9
8	1068.1	190.27	352.25	8	864.32	468.18	338.79
9	864.38	209.32	360.94	9	944.1	195.87	355.79
10	845.25	191.65	404.38	10	765.29	192.68	308.88
Average	932.34	190.59	367.05	Average	860.02	245.04	367.39
Std. Dev	98.26	9.47	19.40	Std. Dev	86.10	117.12	26.48

UZWLM-5				UZWLM-7			
Trials	2x4 Wood	25 Ga	20 Ga	Trials	2x4 Wood	25 Ga	20 Ga
1	1303.1	173.92	363.11	1	856.66	186.01	373.28
2	1331.2	216.26	385.15	2	1046.3	175.54	367.44
3	1305.1	213.19	424.4	3	819.26	196.49	381.39
4	1262.6	193.75	378.42	4	997.7	196.49	380.37
5	1313	206.55	324.58	5	1125.3	202.38	359.33
6	1257.9	194.88	34.04	6	1112.3	205.66	404.86
7	1337.9	199.56	330.05	7	1400.7	191.31	347.97
8	1070.2	183.84	349.66	8	1086.2	184.12	385.54
9	1074.3	218.56	356.09	9	1069.1	208.94	419.1
10	1000	209.29	418.24	10	1127.9	187.81	367.27
Average	1225.53	200.98	336.37	Average	1064.14	193.48	378.66
Std. Dev	120.032	13.82	105.58	Std. Dev	152.20	9.93	19.95



UZW
ECONOMY WOOD FASTENER
ZINC SCREWS

UZW-1		UZW-2		UZW-3		UZW-4		UZW-5	
Trials	2x4 Wood	Trials	2x4 Wood	Trials	2x4 Wood	Trials	2x4 Wood	Trials	2x4 Wood
1	640.12	1	596.72	1	703.63	1	983.41	1	999.26
2	550.79	2	591.18	2	794.42	2	1100.5	2	1027
3	586.58	3	588.84	3	782.96	3	1048	3	1015.3
4	581.48	4	673.29	4	814.84	4	791.16	4	898.56
5	576.6	5	591.2	5	1033.3	5	1027.3	5	1057.4
6	519.1	6	496.5	6	1014.8	6	885.4	6	1283.7
7	452.57	7	739.51	7	947.09	7	872.8	7	1186.3
8	639.99	8	1025.7	8	1064.9	8	724.98	8	1218.7
9	589.33	9	732.67	9	927.67	9	785.08	9	1001.8
10	596.72	10	642.51	10	1035.6	10	658.6	10	1071.3
Average	573.33	Average	667.81	Average	911.92	Average	887.72	Average	1075.93
Std.	52.91	Std.	138.02	Std.	121.96	Std.	140.95	Std.	111.80



US
WOOD/LITE METAL FASTENER
ZINC SCREWS

US-1					US-2				
Trials	20 Ga	16 Ga	14 Ga	12 Ga	Trials	20 Ga	16 Ga	14 Ga	12 Ga
1	236.96	470.93	732.73	1044	1	252.11	504	802.43	1014.6
2	207.82	527.33	1062.4	912.04	2	226.86	470.65	728.69	804.09
3	231.25	515.99	746.08	1062.4	3	232.68	488.83	778.95	761.82
4	225.29	478.18	790.54	1071.1	4	219.62	491.44	769.3	763.97
5	210.58	471.47	726.31	1036.3	5	243.83	477	807.75	727.3
Average	222.38	492.78	811.61	1025.17	Average	235.02	486.38	777.42	814.36
Std. Dev	11.41	23.99	127.38	57.92	Std. Dev	11.65	11.64	28.24	103.03

US-3					US-4				
Trials	20 Ga	16 Ga	14 Ga	12 Ga	Trials	20 Ga	16 Ga	14 Ga	12 Ga
1	229.05	558.82	711.62	777.66	1	248.96	501.1	787.03	1017.9
2	235.49	535.78	799.38	732.78	2	241.51	517.61	812.63	959.05
3	258.21	518.34	685.74	735.38	3	223.71	534.05	786.73	1032.2
4	241.08	536.07	738.59	651.79	4	178.5	547.95	774.64	970.44
5	235.73	512.48	724.97	822.18	5	238.2	480.13	808.65	1031.17
Average	239.91	532.30	732.06	743.96	Average	226.18	516.17	793.94	1002.15
Std. Dev	9.91	16.23	37.92	56.48	Std. Dev	25.21	23.91	14.41	31.17

US-45					US-5				
Trials	20 Ga	16 Ga	14 Ga	12 Ga	Trials	20 Ga	16 Ga	14 Ga	12 Ga
1	241.76	528.77	815.68	971.38	1	256.42	615.64	866.13	1302.9
2	256.36	484.93	765.66	984.17	2	272.27	538.47	881.38	1362.5
3	220.85	551.24	795.16	935.03	3	254.28	595.07	861.11	1370.4
4	242.17	529.03	768.84	1083.3	4	226.36	550.83	896.5	1359.8
5	223.8	542.93	874.17	891.29	5	219.02	566.11	865.62	1451.7
Average	236.99	527.38	803.90	973.03	Average	245.67	573.22	874.15	1369.46
Std. Dev	13.11	22.88	39.61	63.89	Std. Dev	19.90	28.41	13.11	47.62

US-6				
Trials	20 Ga	16 Ga	14 Ga	12 Ga
1	219.65	502.66	873.23	1207.2
2	201.91	538.84	827.06	1304
3	239.71	533.3	866.5	1265.8
4	249.3	528.05	821.34	1057.6
5	200.41	523.58	840.39	1296.1
Average	222.20	525.29	845.70	1226.14
Std. Dev	19.67	12.41	20.78	90.88

OBSERVATIONS & CONCLUSION

The values expressed herein are ultimate strength values, which were the result of laboratory testing. Appropriate safety factors should always be utilized in design and other possible failure modes should be considered. For this test, 5-10 parts are typically used to find the average pull out.

Want to Sign Up for Emails, Have a Question or Just Need Assistance?
Go To www.wind-lock.com/contact-us-now
Or
Give Us a Call at 1.800.872.5625