



HURRICANE PROTECTION

UNIMATE 6.8 SPREAD SHEET

THIS SHEET APPLIES ONLY FOR THE NEW UNIMATE

MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD	MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD
17.449	5	21.17	278.127	87	300.30
23.807	7	27.98	284.485	89	307.11
30.165	9	34.79	290.843	91	313.92
36.523	11	41.60	297.201	93	320.73
42.881	13	48.41	303.559	95	327.53
49.239	15	55.21	309.917	97	334.34
55.597	17	62.02	316.275	99	341.15
61.955	19	68.83	322.633	101	347.96
68.313	21	75.64	328.991	103	354.77
74.671	23	82.45	335.349	105	361.57
81.029	25	89.25	341.707	107	368.38
87.387	27	96.06	348.065	109	375.19
93.745	29	102.87	354.423	111	382.00
100.103	31	109.68	360.781	113	388.81
106.461	33	116.49	367.139	115	395.61
112.819	35	123.29	373.497	117	402.42
119.177	37	130.10	379.855	119	409.23
125.535	39	136.91	386.213	121	416.04
131.893	41	143.72	392.571	123	422.85
138.251	43	150.53	398.929	125	429.65
144.609	45	157.33	405.287	127	436.46
150.967	47	164.14	411.645	129	443.27
157.325	49	170.95	418.003	131	450.08
163.683	51	177.76	424.361	133	456.89
170.041	53	184.57	430.719	135	463.69
176.399	55	191.37	437.077	137	470.50
182.757	57	198.18	443.435	139	477.31
189.115	59	204.99	449.793	141	484.12
195.473	61	211.80	456.151	143	490.93
201.831	63	218.61	462.509	145	497.73
208.189	65	225.41	468.867	147	504.54
214.547	67	232.22	475.225	149	511.35
220.905	69	239.03	481.583	151	518.16
227.263	71	245.84	487.941	153	524.97
233.621	73	252.65	494.299	155	531.77
239.979	75	259.45	500.657	157	538.58
246.337	77	266.26	507.015	159	545.39
252.695	79	273.07	513.373	161	552.20
259.053	81	279.88	519.731	163	559.01
265.411	83	286.69	526.089	165	565.81
271.769	85	293.49			

This is an approximated spread sheet! Number of blades plus two centers equals max spread. Tracks need to be slightly shorter. All shutters should be measured after assembly to verify proper track size. Shutter blades vary according to die life. Blades can range from 6.7 to 6.98 per pair. Spread out over 20 pairs, this can reflect a 5" variance.





HURRICANE PROTECTION

6.8 BOX SPREAD SHEET

THIS SHEET APPLIES ONLY FOR THE BOX CENTERS

Note! Box centers use even number of blades!!!

MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD	MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD
12.096	4	17.37	272.774	86	296.49
18.454	6	24.17	279.132	88	303.30
24.812	8	30.98	285.49	90	310.11
31.17	10	37.79	291.848	92	316.92
37.528	12	44.60	298.206	94	323.73
43.886	14	51.41	304.564	96	330.53
50.244	16	58.21	310.922	98	337.34
56.602	18	65.02	317.28	100	344.15
62.96	20	71.83	323.638	102	350.96
69.318	22	78.64	329.996	104	357.77
75.676	24	85.45	336.354	106	364.57
82.034	26	92.25	342.712	108	371.38
88.392	28	99.06	349.07	110	378.19
94.75	30	105.87	355.428	112	385.00
101.108	32	112.68	361.786	114	391.81
107.466	34	119.49	368.144	116	398.61
113.824	36	126.29	374.502	118	405.42
120.182	38	133.10	380.86	120	412.23
126.54	40	139.91	387.218	122	419.04
132.898	42	146.72	393.576	124	425.85
139.256	44	153.53	399.934	126	432.65
145.614	46	160.33	406.292	128	439.46
151.972	48	167.14	412.65	130	446.27
158.33	50	173.95	419.008	132	453.08
164.688	52	180.76	425.366	134	459.89
171.046	54	187.57	431.724	136	466.69
177.404	56	194.37	438.082	138	473.50
183.762	58	201.18	444.44	140	480.31
190.12	60	207.99	450.798	142	487.12
196.478	62	214.80	457.156	144	493.93
202.836	64	221.61	463.514	146	500.73
209.194	66	228.41	469.872	148	507.54
215.552	68	235.22	476.23	150	514.35
221.91	70	242.03	482.588	152	521.16
228.268	72	248.84	488.946	154	527.97
234.626	74	255.65	495.304	156	534.77
240.984	76	262.45	501.662	158	541.58
247.342	78	269.26	508.02	160	548.39
253.7	80	276.07	514.378	162	555.20
260.058	82	282.88	520.736	164	562.01
266.416	84	289.69			

This is an approximated spread sheet! Number of blades plus two centers equals max spread. Tracks need to be slightly shorter. All shutters should be measured after assembly to verify proper track size. Shutter blades vary according to die life. Blades can range from 6.7 to 6.98 per pair. Spread out over 20 pairs, this can reflect a 5" variance.



HURRICANE PROTECTION

HR BOX CENTER SPREAD SHEET

THIS SHEET APPLIES ONLY FOR THE BOX CENTERS

Note! Box centers use even number of blades!!!

MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD	MAX DAYLIGHT OPENING	NO. OF BLADES	MAX SHUTTER SPREAD
9.724	4	14.99	221.776	86	245.41
14.896	6	20.61	226.948	88	251.03
20.068	8	26.23	232.12	90	256.65
25.24	10	31.85	237.292	92	262.27
30.412	12	37.47	242.464	94	267.89
35.584	14	43.09	247.636	96	273.51
40.756	16	48.71	252.808	98	279.13
45.928	18	54.33	257.98	100	284.75
51.1	20	59.95	263.152	102	290.37
56.272	22	65.57	268.324	104	295.99
61.444	24	71.19	273.496	106	301.61
66.616	26	76.81	278.668	108	307.23
71.788	28	82.43	283.84	110	312.85
76.96	30	88.05	289.012	112	318.47
82.132	32	93.67	294.184	114	324.09
87.304	34	99.29	299.356	116	329.71
92.476	36	104.91	304.528	118	335.33
97.648	38	110.53	309.7	120	340.95
102.82	40	116.15	314.872	122	346.57
107.992	42	121.77	320.044	124	352.19
113.164	44	127.39	325.216	126	357.81
118.336	46	133.01	330.388	128	363.43
123.508	48	138.63	335.56	130	369.05
128.68	50	144.25	340.732	132	374.67
133.852	52	149.87	345.904	134	380.29
139.024	54	155.49	351.076	136	385.91
144.196	56	161.11	356.248	138	391.53
149.368	58	166.73	361.42	140	397.15
154.54	60	172.35	366.592	142	402.77
159.712	62	177.97	371.764	144	408.39
164.884	64	183.59	376.936	146	414.01
170.056	66	189.21	382.108	148	419.63
175.228	68	194.83	387.28	150	425.25
180.4	70	200.45	392.452	152	430.87
185.572	72	206.07	397.624	154	436.49
190.744	74	211.69	402.796	156	442.11
195.916	76	217.31	407.968	158	447.73
201.088	78	222.93	413.14	160	453.35
206.26	80	228.55	418.312	162	458.97
211.432	82	234.17	423.484	164	464.59
216.604	84	239.79			

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HURRICANE PROTECTION

HIRISE ACCORDION SPREAD SHEET

NO. OF BLADES	STACK SIZE	OPENING SIZE	MAX SPREAD	NO. OF BLADES	STACK SIZE	OPENING SIZE	MAX SPREAD
2	4.22	5.275	9.495	84	23.49	216.425	239.915
4	4.69	10.425	15.115	86	23.96	221.575	245.535
6	5.16	15.575	20.735	88	24.43	226.725	251.155
8	5.63	20.725	26.355	90	24.9	231.875	256.775
10	6.1	25.875	31.975	92	25.37	237.025	262.395
12	6.57	31.025	37.595	94	25.84	242.175	268.015
14	7.04	36.175	43.215	96	26.31	247.325	273.635
16	7.51	41.325	48.835	98	26.78	252.475	279.255
18	7.98	46.475	54.455	100	27.25	257.625	284.875
20	8.45	51.625	60.075	102	27.72	262.775	290.495
22	8.92	56.775	65.695	104	28.19	267.925	296.115
24	9.39	61.925	71.315	106	28.66	273.075	301.735
26	9.86	67.075	76.935	108	29.13	278.225	307.355
28	10.33	72.225	82.555	110	29.6	283.375	312.975
30	10.8	77.375	88.175	112	30.07	288.525	318.595
32	11.27	82.525	93.795	114	30.54	293.675	324.215
34	11.74	87.675	99.415	116	31.01	298.825	329.835
36	12.21	92.825	105.035	118	31.48	303.975	335.455
38	12.68	97.975	110.655	120	31.95	309.125	341.075
40	13.15	103.125	116.275	122	32.42	314.275	346.695
42	13.62	108.275	121.895	124	32.89	319.425	352.315
44	14.09	113.425	127.515	126	33.36	324.575	357.935
46	14.56	118.575	133.135	128	33.83	329.725	363.555
48	15.03	123.725	138.755	130	34.3	334.875	369.175
50	15.5	128.875	144.375	132	34.77	340.025	374.795
52	15.97	134.025	149.995	134	35.24	345.175	380.415
54	16.44	139.175	155.615	136	35.71	350.325	386.035
56	16.91	144.325	161.235	138	36.18	355.475	391.655
58	17.38	149.475	166.855	140	36.65	360.625	397.275
60	17.85	154.625	172.475	142	37.12	365.775	402.895
62	18.32	159.775	178.095	144	37.59	370.925	408.515
64	18.79	164.925	183.715	146	38.06	376.075	414.135
66	19.26	170.075	189.335	148	38.53	381.225	419.755
68	19.73	175.225	194.955	150	39	386.375	425.375
70	20.2	180.375	200.575	152	39.47	391.525	430.995
72	20.67	185.525	206.195	154	39.94	396.675	436.615
74	21.14	190.675	211.815	156	40.41	401.825	442.235
76	21.61	195.825	217.435	158	40.88	406.975	447.855
78	22.08	200.975	223.055	160	41.35	412.125	453.475
80	22.55	206.125	228.675	162	41.82	417.275	459.095
82	23.02	211.275	234.295	164	42.29	422.425	464.715

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HURRICANE PROTECTION

HIRISE ACCORDION SPREAD SHEET

NO. OF BLADES	STACK SIZE	OPENING SIZE	MAX SPREAD	NO. OF BLADES	STACK SIZE	OPENING SIZE	MAX SPREAD
166	42.76	427.575	470.335	248	62.03	638.725	700.755
168	43.23	432.725	475.955	250	62.5	643.875	706.375
170	43.7	437.875	481.575	252	62.97	649.025	711.995
172	44.17	443.025	487.195	254	63.44	654.175	717.615
174	44.64	448.175	492.815	256	63.91	659.325	723.235
176	45.11	453.325	498.435	258	64.38	664.475	728.855
178	45.58	458.475	504.055	260	64.85	669.625	734.475
180	46.05	463.625	509.675	262	65.32	674.775	740.095
182	46.52	468.775	515.295	264	65.79	679.925	745.715
184	46.99	473.925	520.915	266	66.26	685.075	751.335
186	47.46	479.075	526.535	268	66.73	690.225	756.955
188	47.93	484.225	532.155	270	67.2	695.375	762.575
190	48.4	489.375	537.775	272	67.67	700.525	768.195
192	48.87	494.525	543.395	274	68.14	705.675	773.815
194	49.34	499.675	549.015	276	68.61	710.825	779.435
196	49.81	504.825	554.635	278	69.08	715.975	785.055
198	50.28	509.975	560.255	280	69.55	721.125	790.675
200	50.75	515.125	565.875	280	69.55	721.125	790.675
202	51.22	520.275	571.495	284	70.49	731.425	801.915
204	51.69	525.425	577.115	286	70.96	736.575	807.535
206	52.16	530.575	582.735	288	71.43	741.725	813.155
208	52.63	535.725	588.355	290	71.9	746.875	818.775
210	53.1	540.875	593.975	292	72.37	752.025	824.395
212	53.57	546.025	599.595				
214	54.04	551.175	605.215				
216	54.51	556.325	610.835				
218	54.98	561.475	616.455				
220	55.45	566.625	622.075				
222	55.92	571.775	627.695				
224	56.39	576.925	633.315				
226	56.86	582.075	638.935				
228	57.33	587.225	644.555				
230	57.8	592.375	650.175				
232	58.27	597.525	655.795				
234	58.74	602.675	661.415				
236	59.21	607.825	667.035				
238	59.68	612.975	672.655				
240	60.15	618.125	678.275				
242	60.62	623.275	683.895				
244	61.09	628.425	689.515				
246	61.56	633.575	695.135				

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