

WLE-251 Wind-Driven Rain Louver

Application

FLOWTECH's WLE-251 Wind-Driven Rain Louver is specially designed for high ability to water-penetration.

The WLE-251 is an **AMCA CERTIFIED LOUVER**, it can effectively block water from penetrating through spaces between blades due to the good design of drainable blade shape, therefore secure the indoor possessions.

Standard Construction

Frame Extruded 6063-T5 aluminum of 1.4 mm thickness
50.8mm x 1.4mm nominal wall thickness

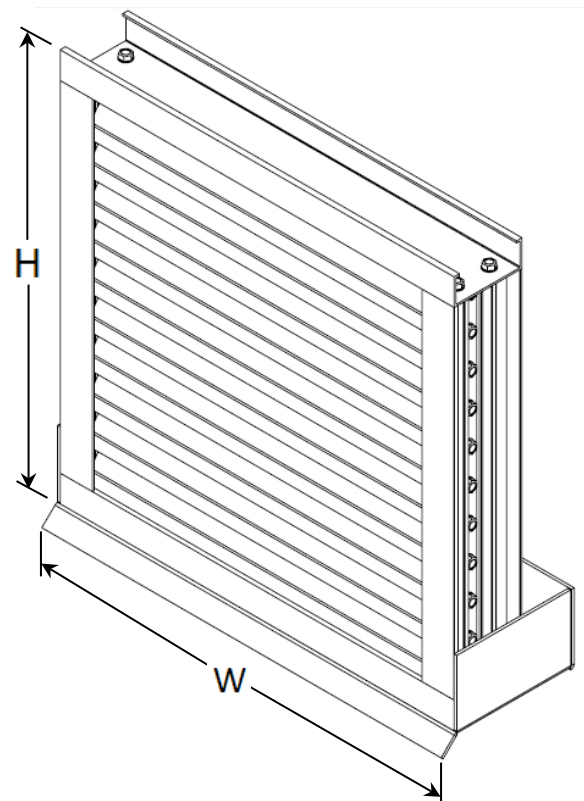
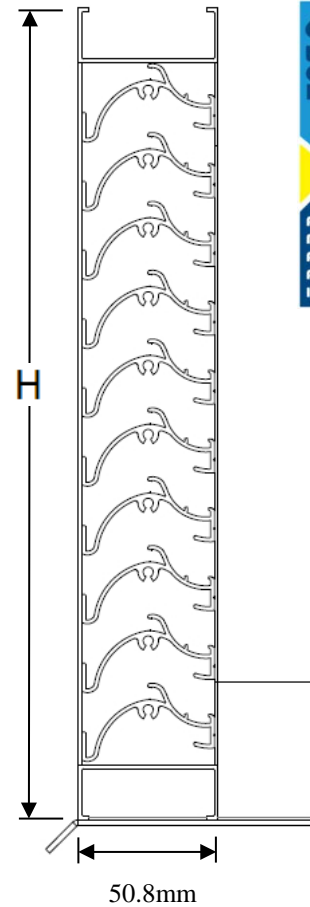
Blade Extruded 6063-T5 of 1.4 mm thickness, positioned on approximately 25mm blade spacing

Minimum Size 6 in.(152 mm) W x 6 in.(152mm) H

Maximum Size 120 in.(3048 mm) W x 90 in.(2286 mm)H
or 90 in.(2286 mm) W x 120 in.(3048 mm)H

Options

- A variety of bird and insect screens
- Filter rack
- Flanged Frame
- A variety of surface finish
- Sill pan



Wind-Driven Rain Performance


76 mm/hr Rainfall & 13 m/s Wind Velocity (3 in/hr Rainfall & 29 mph Wind Velocity)						203 mm/hr Rainfall & 22 m/s Wind Velocity (8 in/hr Rainfall & 50 mph Wind Velocity)					
Core Velocity		Volume Air Flow Rate		Water Penetration		Core Velocity		Volume Air Flow Rate		Water Penetration	
fpm	m/s	CFM	m3/min	Class	Effective	fpm	m/s	CFM	m3/min	Class	Effective
0	0	0	0	A	100	0	0	0.00	0	A	100
98	0.5	1059.44	30	A	100	98	0.5	1059.44	30	A	99.7
197	1	2118.88	60	A	99.8	197	1	2118.88	60	A	99.5
295	1.5	3178.32	90	A	99.1	295	1.5	3178.32	90	A	99
394	2	4237.76	120	B	95.9	394	2	4237.76	120	B	97.1
492	2.5	5297.20	150	C	92.3	492	2.5	5297.20	150	C	93.5
591	3	6356.64	180	C	87.1	591	3	6356.64	180	C	87
689	3.5	7416.08	210	D	73.6	689	3.5	7416.08	210	D	71.4

*WLE-251 Discharge Loss Coefficient Class (Intake) = 4

WLE-251 Discharge Loss Coefficient Class (Exhaust) = 3

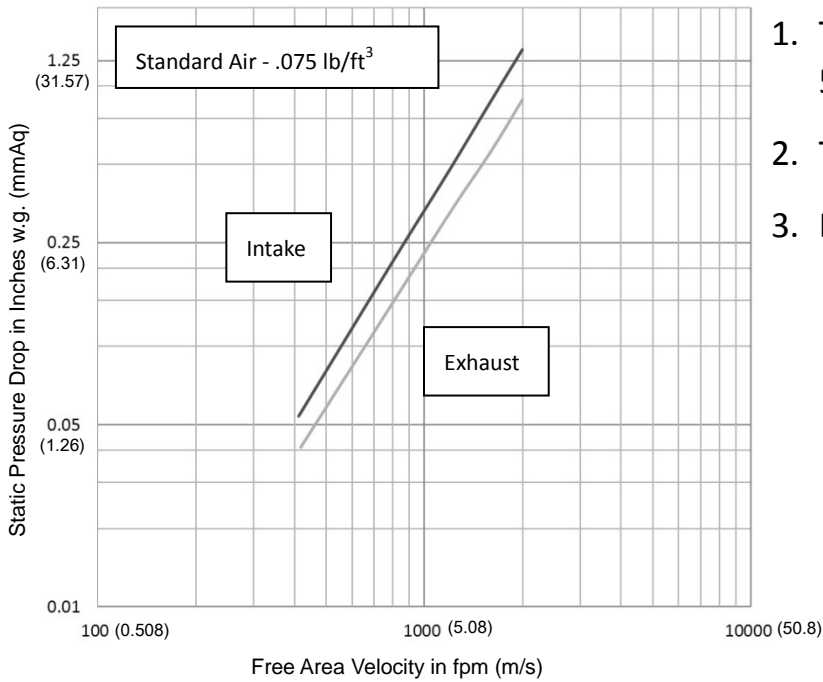
Discharge Loss Coefficient Classifications	
Class	Discharge Loss Coefficient
1	0.4 and Above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and Below

Wind-driven Rain Penetration Classifications	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.80



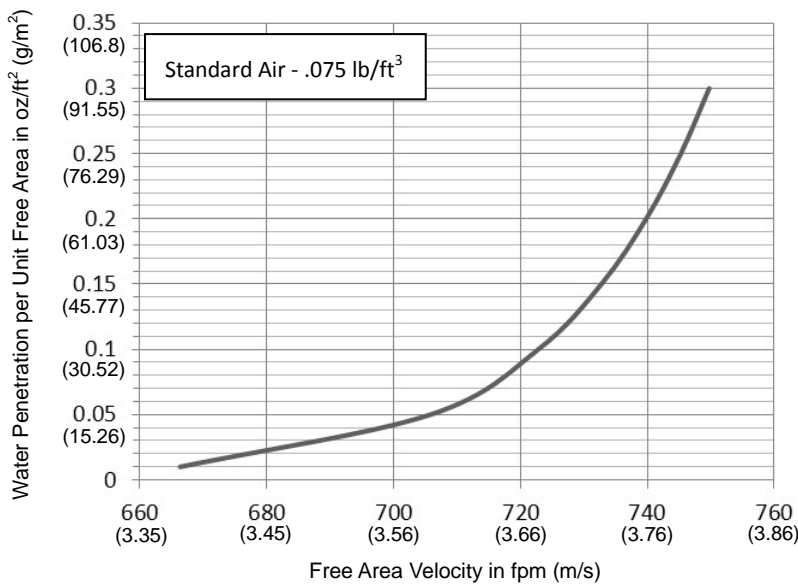
FLOWTECH Co. Ltd. certifies that the WLE-251 shown hereon is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to Water Penetration, Wind-Driven Rain, and Air Performance ratings.

Air Performance



1. Tested in accordance with ANSI/AMCA 500-L, Figure 5.5
2. Test sample size is 48 in. x 48 in.
3. Data are based on exhaust performance.

Water Penetration



1. Tested in accordance with ANSI/AMCA 500-L, Figure 5.6
2. Test sample size is 48 in. x 48 in.
3. The beginning point of water penetration is 666 fpm (3.38 m/s).
4. Test Duration 15 min.



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Free Area Chart (sq. m.)

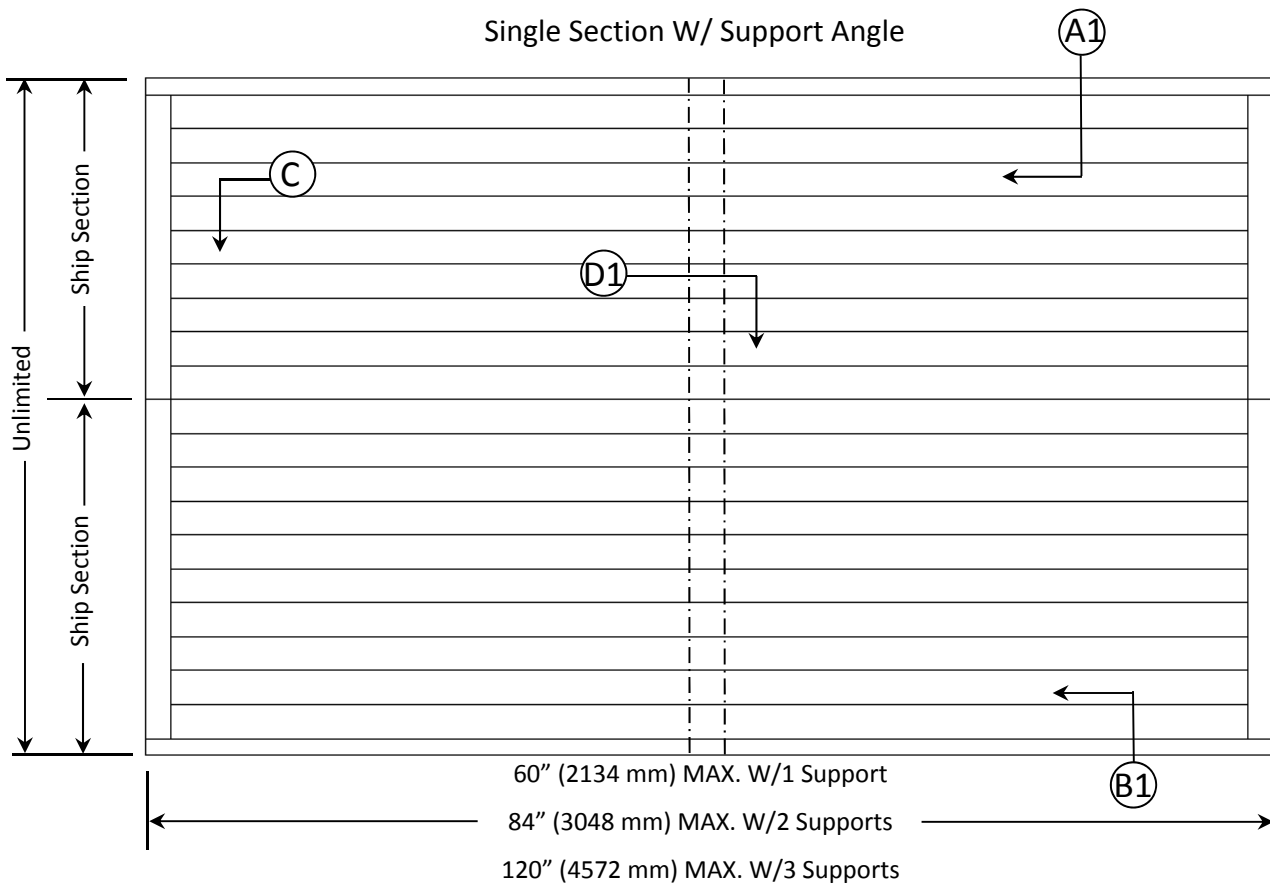
Height (m)	Width (m)												
	0.457	0.508	0.610	0.762	0.914	1.067	1.219	1.524	1.829	2.134	2.438	2.743	3.048
0.457	0.075	0.084	0.102	0.130	0.158	0.186	0.213	0.269	0.324	0.380	0.435	0.491	0.546
0.508	0.085	0.095	0.116	0.148	0.180	0.211	0.243	0.306	0.369	0.432	0.496	0.559	0.622
0.610	0.105	0.119	0.145	0.184	0.223	0.263	0.302	0.380	0.459	0.538	0.616	0.695	0.773
0.762	0.136	0.153	0.187	0.238	0.289	0.340	0.390	0.492	0.594	0.695	0.797	0.898	1.000
0.914	0.167	0.188	0.230	0.292	0.354	0.417	0.479	0.604	0.728	0.853	0.977	1.102	1.227
1.067	0.198	0.223	0.272	0.346	0.420	0.494	0.567	0.715	0.863	1.010	1.158	1.306	1.453
1.219	0.229	0.258	0.315	0.400	0.485	0.571	0.656	0.827	0.997	1.168	1.339	1.510	1.680
1.524	0.291	0.327	0.399	0.508	0.616	0.725	0.833	1.050	1.267	1.483	1.700	1.917	2.134
1.829	0.353	0.397	0.484	0.616	0.747	0.879	1.010	1.273	1.536	1.799	2.062	2.324	2.587
2.134	0.415	0.466	0.569	0.724	0.878	1.033	1.187	1.496	1.805	2.114	2.423	2.732	3.041
2.438	0.477	0.536	0.654	0.832	1.009	1.187	1.364	1.719	2.074	2.429	2.784	3.139	3.494
2.743	0.539	0.605	0.739	0.940	1.140	1.341	1.541	1.942	2.344	2.745	3.146	3.547	3.948
3.048	0.600	0.675	0.824	1.048	1.271	1.495	1.718	2.166	2.613	3.060	3.507	3.954	4.402

Core Area Chart (sq. m.)

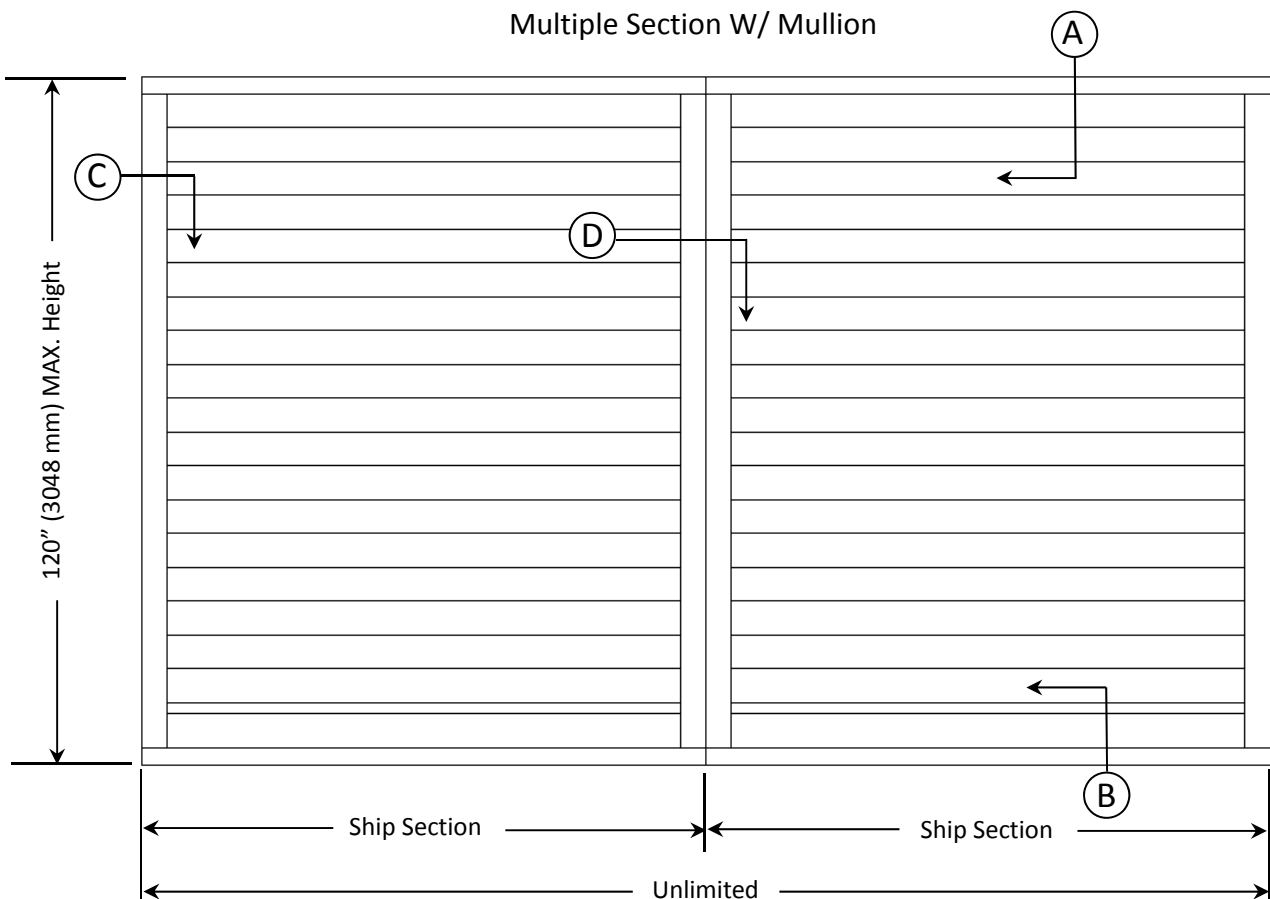
Height (m)	Width (m)												
	0.457	0.508	0.610	0.762	0.914	1.067	1.219	1.524	1.829	2.134	2.438	2.743	3.048
0.457	0.171	0.192	0.234	0.298	0.361	0.425	0.489	0.616	0.743	0.870	0.997	1.124	1.252
0.508	0.192	0.215	0.263	0.334	0.405	0.477	0.548	0.691	0.833	0.976	1.119	1.261	1.404
0.610	0.233	0.262	0.320	0.407	0.494	0.580	0.667	0.841	1.014	1.188	1.362	1.535	1.709
0.762	0.295	0.332	0.405	0.516	0.626	0.736	0.846	1.066	1.286	1.506	1.726	1.946	2.166
0.914	0.358	0.402	0.491	0.624	0.758	0.891	1.024	1.291	1.557	1.824	2.090	2.357	2.623
1.067	0.420	0.472	0.577	0.733	0.890	1.046	1.203	1.516	1.829	2.141	2.454	2.767	3.080
1.219	0.483	0.542	0.662	0.842	1.022	1.201	1.381	1.740	2.100	2.459	2.819	3.178	3.538
1.524	0.607	0.683	0.833	1.060	1.286	1.512	1.738	2.190	2.643	3.095	3.547	4.000	4.452
1.829	0.732	0.823	1.005	1.277	1.550	1.822	2.095	2.640	3.185	3.731	4.276	4.821	5.366
2.134	0.857	0.963	1.176	1.495	1.814	2.133	2.452	3.090	3.728	4.366	5.005	5.643	6.281
2.438	0.981	1.103	1.347	1.712	2.078	2.443	2.809	3.540	4.271	5.002	5.733	6.464	7.195
2.743	1.106	1.243	1.518	1.930	2.342	2.754	3.166	3.990	4.814	5.638	6.462	7.286	8.110
3.048	1.231	1.384	1.689	2.148	2.606	3.065	3.523	4.440	5.357	6.273	7.190	8.107	9.024

Maximum Size and Installation Information

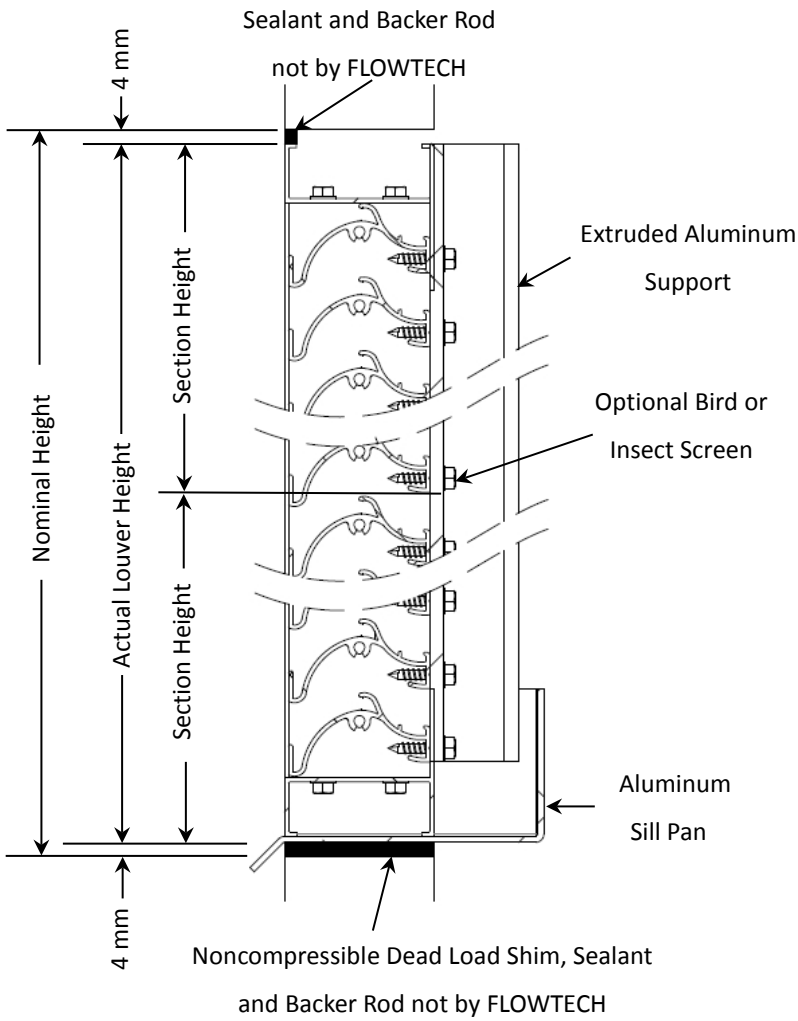
Single Section W/ Support Angle



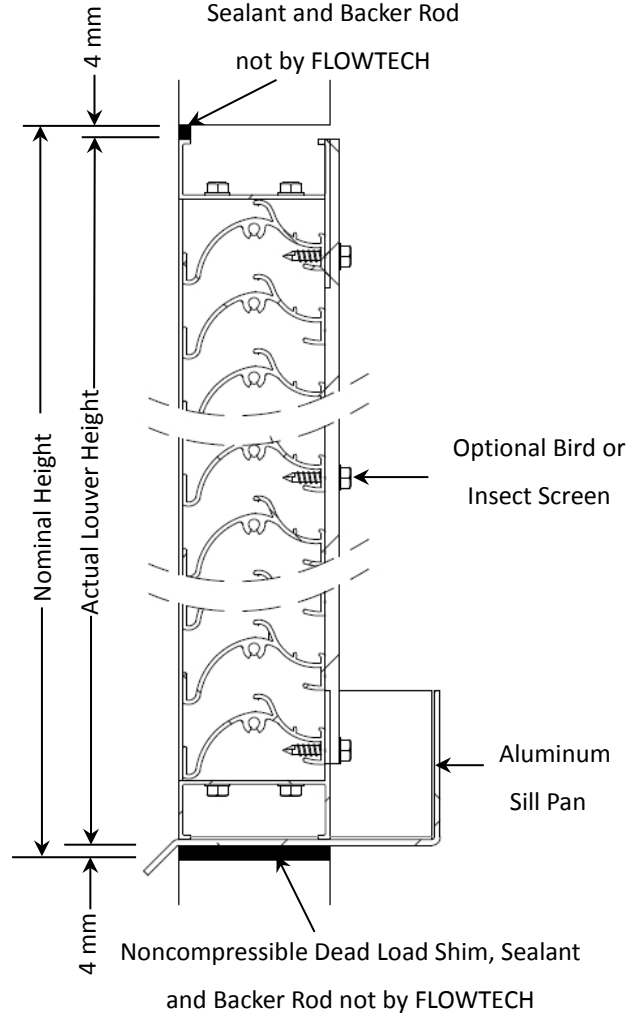
Multiple Section W/ Mullion



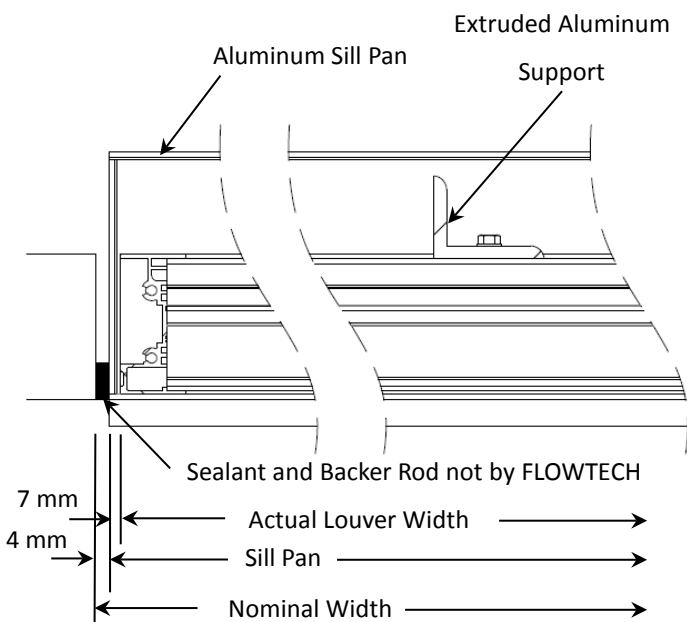
(A1) Head Detail



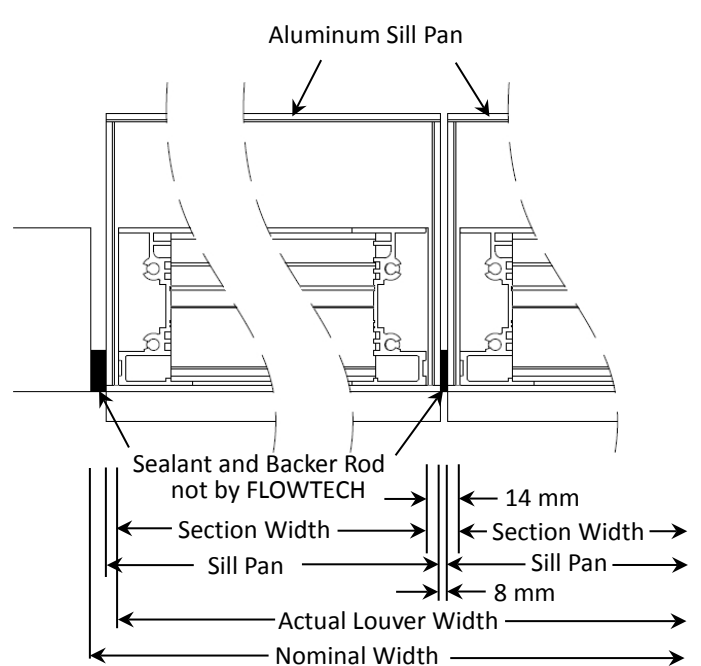
(A) Head Detail



(B1) Sill Detail



(B) Sill Detail



(C) Jamb Detail

(D1) Support Detail

(C) Jamb Detail

(D) Mullion Detail