

# ELM811D

Adjustable Louver Drainable Blade  
Extruded Aluminum



## APPLICATION

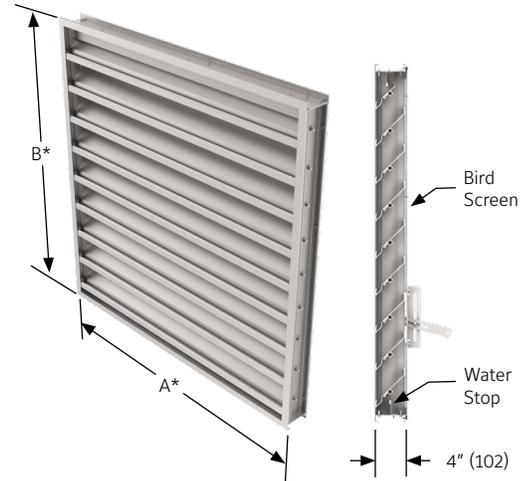
The ELM811D is an adjustable, 4", drainable louver that combines architectural styling with performance. Including high free area, low water penetration and low pressure drop, this louver is ideally suited for air intake and exhaust applications that require tight shutoff.

## STANDARD CONSTRUCTION

<b>Frame</b>	4" (102) deep, 6063T6 extruded aluminum with .080" (2) nominal wall thickness. Downspouts and caulking slots provided.
<b>Blades</b>	4" (102) deep, 6063T6 extruded aluminum with .080" (2) nominal wall thickness. Downspouts and caulking slots provided.
<b>Screen</b>	3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.
<b>Seals</b>	Extruded Santoprene blade seals. Compressible aluminum jamb seals.
<b>Linkage</b>	Concealed in frame.
<b>Bearings</b>	Stainless steel sleeve pressed into frame.
<b>Axles</b>	1/2" (13) plated steel hex.
<b>Actuator</b>	Locking louver quadrant.
<b>Finish</b>	Mill.
<b>Minimum Size</b>	12"w x 12"h (305 x 305).
<b>Approximate Shipping Weight</b>	6 lbs. per sq. ft.
<b>Maximum Factory Assembly Size</b>	Shall not exceed 60" x 96" (1524 x 2438) or 48" x 96" (1219 x 2438)

## FEATURES

- ▶ 37% Free Area
- ▶ High free area, low water penetration and low pressure drop
- ▶ Ideally suited for air intake and exhaust applications that require tight shutoff
- ▶ Combines architectural styling with performance
- ▶ All aluminum construction for low maintenance and high resistance to corrosion
- ▶ Blade and jamb seals provide tight closure



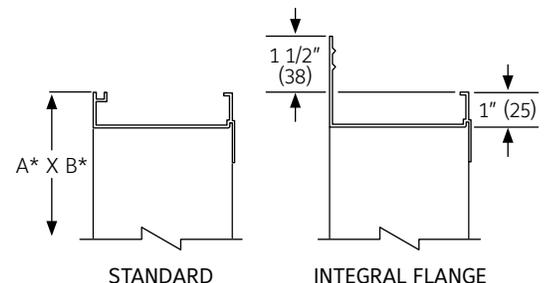
YEAR LIMITED WARRANTY ISO9001 CERTIFIED

## VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- ▶ Extended sill
  - ▶ Hinged frame
  - ▶ Front or rear security bars
  - ▶ Filter racks
  - ▶ Blade edge and jamb seals
  - ▶ A variety of bird and insect screens
  - ▶ Optional finishes available at additional cost. Please see [Paint Finishes and Color Guide](#) and [Finish Type Model Chart](#) for more details. Contact [louversales@ruskin.com](mailto:louversales@ruskin.com) with questions
  - ▶ Manual, electric or pneumatic actuators
- Consult Ruskin for other special requirements.

## FRAME CONSTRUCTION



### NOTES:

- Dimensions in inches, parenthesis ( ) indicate millimeters.
- Units can be furnished actual size or with size deducts.

## PERFORMANCE DATA

AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

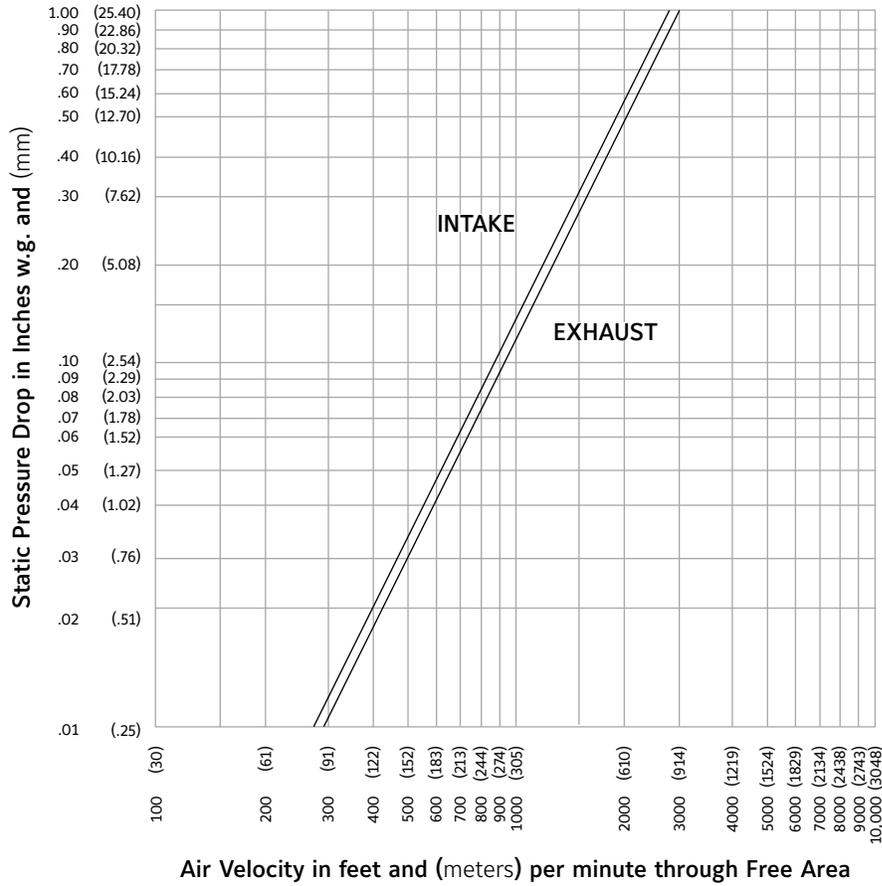
## FREE AREA GUIDE

Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of ELM811D.

### Width – Inches and Meters

		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
		0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.96	2.13	2.29	2.44
Height – Inches and Meters	<b>12</b>	<b>0.15</b>	<b>0.24</b>	<b>0.33</b>	<b>0.42</b>	<b>0.51</b>	<b>0.60</b>	<b>0.69</b>	<b>0.78</b>	<b>0.87</b>	<b>0.96</b>	<b>1.05</b>	<b>1.14</b>	<b>1.23</b>	<b>1.32</b>	<b>1.41</b>
	0.30	0.01	0.02	0.03	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13
	<b>18</b>	<b>0.37</b>	<b>0.59</b>	<b>0.81</b>	<b>1.03</b>	<b>1.25</b>	<b>1.48</b>	<b>1.70</b>	<b>1.92</b>	<b>2.14</b>	<b>2.37</b>	<b>2.59</b>	<b>2.81</b>	<b>3.03</b>	<b>3.26</b>	<b>3.48</b>
	0.46	0.03	0.05	0.08	0.10	0.11	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.30	0.32
	<b>24</b>	<b>0.58</b>	<b>0.94</b>	<b>1.29</b>	<b>1.65</b>	<b>2.00</b>	<b>2.35</b>	<b>2.71</b>	<b>3.06</b>	<b>3.42</b>	<b>3.77</b>	<b>4.13</b>	<b>4.48</b>	<b>4.83</b>	<b>5.19</b>	<b>5.54</b>
	0.61	0.05	0.09	0.12	0.15	0.19	0.22	0.25	0.28	0.32	0.35	0.38	0.42	0.45	0.48	0.51
	<b>30</b>	<b>0.61</b>	<b>0.97</b>	<b>1.34</b>	<b>1.71</b>	<b>2.08</b>	<b>2.45</b>	<b>2.81</b>	<b>3.18</b>	<b>3.55</b>	<b>3.92</b>	<b>4.29</b>	<b>4.66</b>	<b>5.02</b>	<b>5.39</b>	<b>5.76</b>
	0.76	0.06	0.09	0.12	0.16	0.19	0.23	0.26	0.30	0.33	0.36	0.40	0.43	0.47	0.50	0.54
	<b>36</b>	<b>0.82</b>	<b>1.32</b>	<b>1.82</b>	<b>2.32</b>	<b>2.82</b>	<b>3.32</b>	<b>3.82</b>	<b>4.32</b>	<b>4.82</b>	<b>5.32</b>	<b>5.82</b>	<b>6.32</b>	<b>6.82</b>	<b>7.32</b>	<b>7.82</b>
	0.91	0.08	0.12	0.17	0.22	0.26	0.31	0.35	0.40	0.45	0.49	0.54	0.59	0.63	0.68	0.73
	<b>42</b>	<b>1.04</b>	<b>1.67</b>	<b>2.30</b>	<b>2.94</b>	<b>3.57</b>	<b>4.20</b>	<b>4.83</b>	<b>5.46</b>	<b>6.10</b>	<b>6.73</b>	<b>7.36</b>	<b>7.99</b>	<b>8.62</b>	<b>9.26</b>	<b>9.89</b>
	1.07	0.10	0.16	0.21	0.27	0.33	0.39	0.45	0.51	0.57	0.63	0.68	0.74	0.80	0.86	0.92
	<b>48</b>	<b>1.26</b>	<b>2.02</b>	<b>2.79</b>	<b>3.55</b>	<b>4.31</b>	<b>5.08</b>	<b>5.84</b>	<b>6.61</b>	<b>7.37</b>	<b>8.13</b>	<b>8.90</b>	<b>9.66</b>	<b>10.43</b>	<b>11.19</b>	<b>11.95</b>
	1.22	0.12	0.19	0.26	0.33	0.40	0.47	0.54	0.61	0.68	0.76	0.82	0.89	0.97	1.04	1.11
	<b>54</b>	<b>1.47</b>	<b>2.37</b>	<b>3.27</b>	<b>4.16</b>	<b>5.05</b>	<b>5.95</b>	<b>6.85</b>	<b>7.75</b>	<b>8.64</b>	<b>9.54</b>	<b>10.43</b>	<b>11.33</b>	<b>12.23</b>	<b>13.13</b>	<b>14.02</b>
	1.37	0.14	0.22	0.30	0.37	0.47	0.55	0.64	0.72	0.80	0.89	0.97	1.05	1.14	1.22	1.30
<b>60</b>	<b>1.50</b>	<b>2.41</b>	<b>3.32</b>	<b>4.23</b>	<b>5.14</b>	<b>6.05</b>	<b>6.96</b>	<b>7.87</b>	<b>8.78</b>	<b>9.69</b>	<b>10.60</b>	<b>11.51</b>	<b>12.42</b>	<b>13.33</b>	<b>14.24</b>	
1.52	0.14	0.22	0.31	0.39	0.48	0.56	0.65	0.73	0.82	0.90	0.98	1.07	1.15	1.24	1.32	
<b>66</b>	<b>1.71</b>	<b>2.76</b>	<b>3.80</b>	<b>4.84</b>	<b>5.88</b>	<b>6.92</b>	<b>7.96</b>	<b>9.01</b>	<b>10.05</b>	<b>11.09</b>	<b>12.13</b>	<b>13.17</b>	<b>14.22</b>	<b>15.26</b>	<b>16.30</b>	
1.68	0.16	0.26	0.35	0.45	0.55	0.64	0.74	0.84	0.93	1.03	1.13	1.22	1.32	1.42	1.51	
<b>72</b>	<b>1.93</b>	<b>3.11</b>	<b>4.28</b>	<b>5.45</b>	<b>6.63</b>	<b>7.80</b>	<b>8.97</b>	<b>10.15</b>	<b>11.32</b>	<b>12.50</b>	<b>13.67</b>	<b>14.85</b>	<b>16.02</b>	<b>17.19</b>	<b>18.36</b>	
1.83	0.18	0.29	0.40	0.50	0.62	0.72	0.83	0.94	1.05	1.16	1.27	1.38	1.49	1.60	1.71	
<b>78</b>	<b>2.15</b>	<b>3.45</b>	<b>4.76</b>	<b>6.07</b>	<b>7.37</b>	<b>8.68</b>	<b>9.98</b>	<b>11.29</b>	<b>12.60</b>	<b>13.90</b>	<b>15.21</b>	<b>16.51</b>	<b>17.82</b>	<b>19.12</b>	<b>20.43</b>	
1.96	0.20	0.32	0.44	0.56	0.68	0.81	0.93	1.05	1.17	1.29	1.39	1.53	1.65	1.77	1.90	
<b>84</b>	<b>2.37</b>	<b>3.80</b>	<b>5.24</b>	<b>6.68</b>	<b>8.12</b>	<b>9.55</b>	<b>10.99</b>	<b>12.43</b>	<b>13.87</b>	<b>15.31</b>	<b>16.74</b>	<b>18.18</b>	<b>19.62</b>	<b>21.06</b>	<b>22.49</b>	
2.13	0.22	0.35	0.49	0.62	0.75	0.89	1.02	1.15	1.29	1.42	1.56	1.69	1.82	1.96	2.09	
<b>90</b>	<b>2.39</b>	<b>3.84</b>	<b>5.29</b>	<b>6.74</b>	<b>8.20</b>	<b>9.65</b>	<b>11.10</b>	<b>12.55</b>	<b>14.00</b>	<b>15.45</b>	<b>16.91</b>	<b>18.36</b>	<b>19.81</b>	<b>21.26</b>	<b>22.71</b>	
2.29	0.22	0.36	0.49	0.63	0.76	0.90	1.03	1.16	1.30	1.44	1.57	1.71	1.84	1.98	2.11	
<b>96</b>	<b>2.61</b>	<b>4.19</b>	<b>5.77</b>	<b>7.36</b>	<b>8.94</b>	<b>10.52</b>	<b>12.11</b>	<b>13.69</b>	<b>15.27</b>	<b>16.86</b>	<b>18.44</b>	<b>20.03</b>	<b>21.61</b>	<b>23.19</b>	<b>24.78</b>	
2.44	0.24	0.39	0.53	0.68	0.83	0.98	1.12	1.27	1.42	1.57	1.71	1.86	1.98	2.16	2.30	

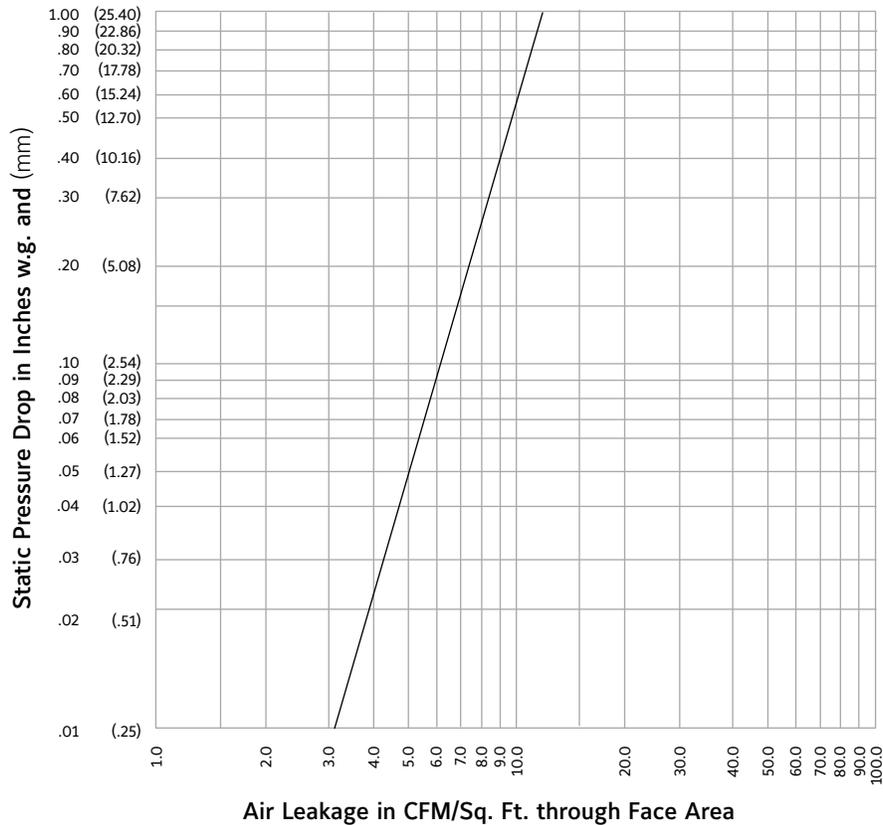
# PRESSURE DROP



Ratings do not include the effect of a bird screen.

## LOUVER LEAKAGE

Test size 48" wide x 48" high (1219 x 1219)



## SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be adjustable type entirely contained within a 4" (102) frame. Louver components (heads, jambs, sills, blades & mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 30 lbs. per sq. ft. (1.44kPa) (equivalent of a 110 mph wind [177 KPH] - specifier may substitute any loading required).

Louvers shall be Ruskin Model ELF811D construction as follows:

Frame: .080" (2) wall thickness.

Blades: .080" (2) wall thickness at 45° angle and spaced approximately 5 " (127) center to center.

Screen: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame.

Finish: Select finish specification from Ruskin Finishes Brochure.

### LINKS TO IMPORTANT DOCUMENTS

#### Document Title

Paint Finishes and Color Guide

Limited Warranty Document



3900 Doctor Greaves Road  
Grandview, MO 64030  
Website: [www.ruskin.com](http://www.ruskin.com)  
Phone: (816) 761-7476