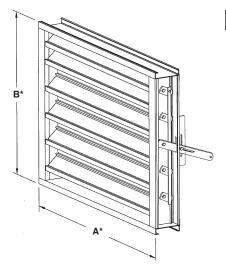




WebREPS 800-810-3280

# 445RDHBD DRAINABLE COMBINATION LOUVER

**EXTRUDED ALUMINUM** 



#### STANDARD CONSTRUCTION

#### **FRAME**

4" (102) deep, 6063T5 extruded aluminum with .081" (2.1) nominal wall thickness. Downspouts and caulking surfaces provid-

#### **BLADES**

Front stationary drainable blades -6063T5 extruded aluminum with .060" (1.5) nominal wall thickness, positioned at 45° angle and spaced approximately 47/16" (113) center to center.

Rear adjustable blades - 6063T5 extruded aluminum, .125" (3.2) nominal wall thickness for operating section widths through 48" (1219) .

#### **SCREEN**

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.

#### **SEALS**

Extruded vinyl blade edge seals on rear adjustable blades and flexible, compressible aluminum jamb seals.

#### LINKAGE

Concealed.

#### **BEARINGS**

Stainless steel sleeve pressed into frame.

1/2" (13) plated steel hex.

### **ACTUATOR**

Locking louver quadrant.

### **FINISH**

Mill

### **MINIMUM SIZE**

12"w x 12"h (305 x 305).

# **APPROXIMATE SHIPPING WEIGHT**

6 lbs./ft.2 (29.3 kg per m2).

#### **MAXIMUM FACTORY ASSEMBLY SIZE**

Shall be 48"w x 96"h (1219 x 2438).

Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.

#### **FEATURES**

The 445RDHBD offers:

- Published performance ratings based on testing in accordance with AMCA Publication 511.
- High free area, low water penetration, and low pressure drop.
- Concealed blade linkage is protected from weather exposure and reduces required installation depth.
- Adjustable rear blades provide desired shut off in the same 4" (102) deep frame normally required by a louver alone.
- Blade and iamb seals provide tight closure.
- A drain gutter in each front stationary blade and downspouts in jambs and mullions drain water from the louver with minimum water cascade from blade to blade.

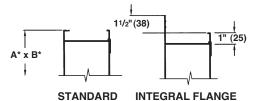
### **VARIATIONS**

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

- Extended sill.
- · Electric or pneumatic actuators.
- · Front or rear security bars.
- · Filter racks.
- · A variety of bird and insect screens.
- · Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Acrodize, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

Consult Reliable for other special requirements.

### FRAME CONSTRUCTION



Dimensions in inches, parenthesis ( ) indicate millimeters.

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Bird Screen

\*Units furnished 1/4" (6) smaller than given opening dimensions.

			` ,		.,				
TAG	QTY.	SIZE		FRAME	VARIATIONS				
		A*-WIDE	B*-HIGH						
	ECT /ENGR. ESENTAT		%ebREPS		LOCATION CONTRACTOR DATE				

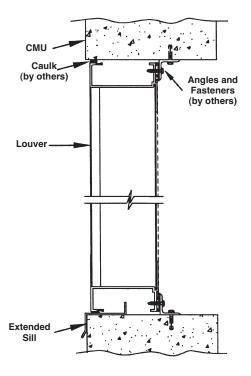
(102)

Varies

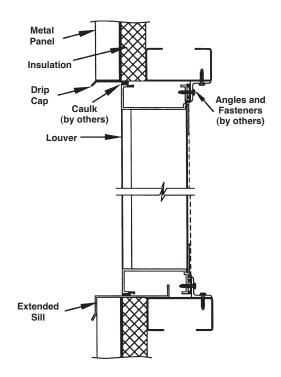


# **TYPICAL INSTALLATION DETAILS**

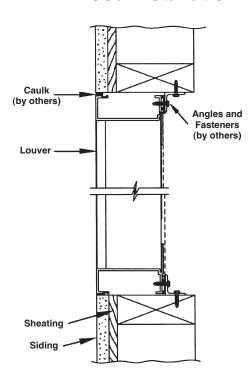
# **Masonry Wall**



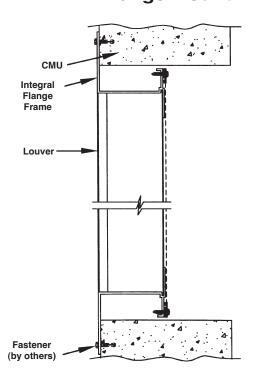
# **Metal Panel Wall**



# **Wood Installation**



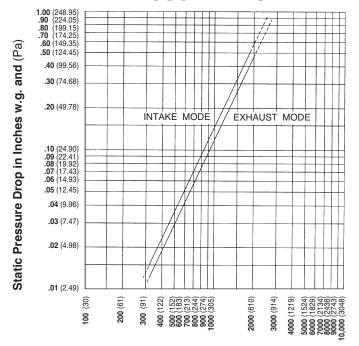
# **Flange Mount**



<sup>\*</sup>Accessories at additional cost.



### PRESSURE DROP



Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area

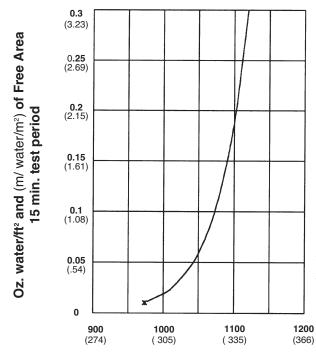
### **PERFORMANCE DATA**

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 carry-over, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

### WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is 846 fpm (258 m/min).



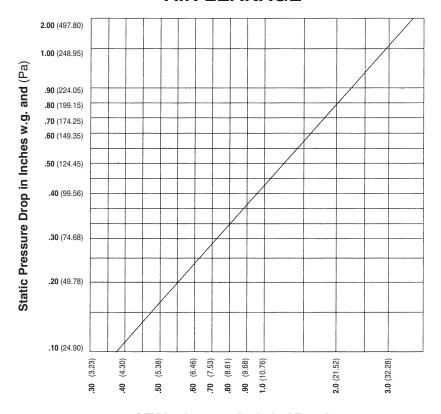
Free Area Velocity in feet and (meters) per minute Standard air .075 lb/ft³



Reliable Products certifies that the 445RDHBD Louvers shown herein are 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 air performance ratings and water penetration ratings only.



## **AIR LEAKAGE**



CFM Leakage per ft.2 (m2) of Free Area

# **FREE AREA GUIDE**

Free Area Guide shows free area in ft² and m² for various sizes of 445RDHBD.

Width – Inches and Meters

<b>Height – Inches and</b> Meters		<b>12</b> 0.30	<b>18</b> 0.46	<b>24</b> 0.61	<b>30</b> 0.76	<b>36</b> 0.91	<b>42</b> 1.07	<b>48</b> 1.22
	<b>12</b> 0.30	<b>0.11</b> 0.01	<b>0.18</b> 0.02	<b>0.24</b> 0.02	<b>0.31</b> 0.03	<b>0.38</b> 0.04	<b>0.45</b> 0.04	<b>0.51</b> 0.05
	<b>18</b> 0.46	<b>0.40</b> 0.04	<b>0.64</b> 0.06	<b>0.89</b> 0.08	<b>1.13</b> 0.11	<b>1.38</b> 0.13	<b>1.63</b> 0.15	<b>1.87</b> 0.17
	<b>24</b> 0.61	<b>0.54</b> 0.05	<b>0.87</b> 0.08	<b>1.21</b> 0.11	<b>1.55</b> 0.14	<b>1.88</b> 0.17	<b>2.22</b> 0.21	<b>2.55</b> 0.24
	<b>30</b> 0.76	<b>0.75</b> 0.07	<b>1.22</b> 0.11	<b>1.69</b> 0.16	<b>2.15</b> 0.20	<b>2.62</b> 0.24	<b>3.09</b> 0.29	<b>3.56</b> 0.33
	<b>36</b> 0.91	<b>0.97</b> 0.09	<b>1.57</b> 0.15	<b>2.18</b> .020	<b>2.78</b> 0.26	<b>3.39</b> 0.32	<b>3.99</b> 0.37	<b>4.59</b> 0.43
	<b>42</b> 1.07	<b>1.11</b> 0.10	<b>1.81</b> 0.17	<b>2.50</b> 0.23	<b>3.19</b> 0.30	<b>3.89</b> 0.36	<b>4.58</b> 0.43	<b>5.27</b> 0.49
	<b>48</b> 1.22	<b>1.32</b> 0.12	<b>2.15</b> 0.20	<b>2.98</b> 0.28	<b>3.80</b> 0.35	<b>4.63</b> 0.43	<b>5.45</b> 0.51	<b>6.28</b> 0.58
	<b>54</b> 1.37	<b>1.54</b> 0.14	<b>2.50</b> 0.23	<b>3.47</b> 0.32	<b>4.43</b> 0.41	<b>5.39</b> 0.50	<b>6.35</b> 0.59	<b>7.31</b> 0.68
	<b>60</b> 1.52	<b>1.69</b> 0.16	<b>2.74</b> 0.25	<b>3.79</b> 0.35	<b>4.84</b> 0.45	<b>5.89</b> 0.55	<b>6.94</b> 0.64	<b>7.99</b> 0.74
	<b>66</b> 1.68	<b>1.90</b> 0.18	<b>3.08</b> 0.29	<b>4.26</b> 0.40	<b>5.45</b> 0.51	<b>6.63</b> 0.62	<b>7.81</b> 0.73	<b>9.00</b> 0.84
	<b>72</b> 1.83	<b>2.12</b> 0.20	<b>3.44</b> 0.32	<b>4.76</b> 0.44	<b>6.07</b> 0.56	<b>7.39</b> 0.69	<b>8.71</b> 0.81	<b>10.03</b> 0.93
	<b>78</b> 1.98	<b>2.26</b> 0.21	<b>3.67</b> 0.34	<b>5.08</b> 0.47	<b>6.49</b> 0.60	<b>7.90</b> 0.73	<b>9.30</b> 0.86	<b>10.71</b> 1.00
	<b>84</b> 2.13	<b>2.55</b> 0.24	<b>4.13</b> 0.38	<b>5.72</b> 0.53	<b>7.31</b> 0.68	<b>8.90</b> 0.83	<b>10.48</b> 0.97	<b>12.07</b> 1.12
	<b>90</b> 2.29	<b>2.69</b> 0.25	<b>4.37</b> 0.41	<b>6.04</b> 0.56	<b>7.72</b> 0.72	<b>9.40</b> 0.87	<b>11.08</b> 1.03	<b>12.75</b> 1.18
	<b>96</b> 2.44	<b>2.83</b> 0.26	<b>4.60</b> 0.43	<b>6.37</b> 0.59	<b>8.13</b> 0.76	<b>9.90</b> 0.92	<b>11.67</b> 1.08	<b>13.43</b> 1.25



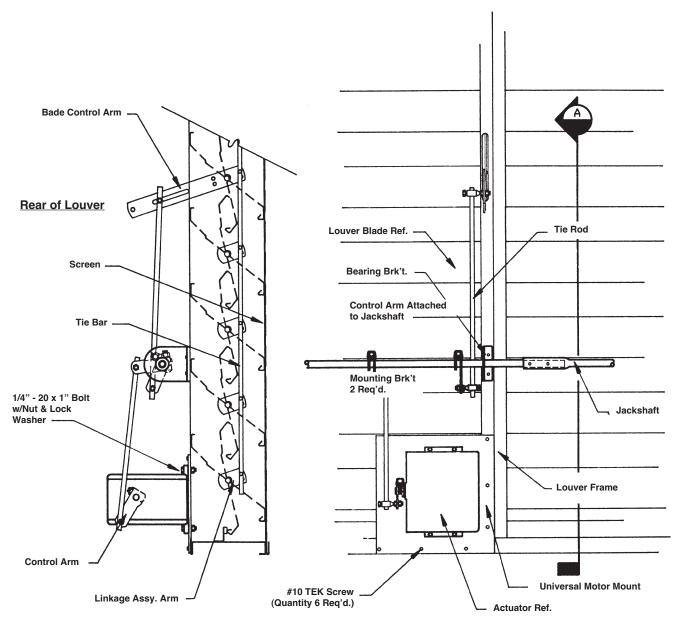


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# **MOVABLE LOUVER DETAILS**

## **ELECTRIC OPERATOR**

(MA418 Actuator shown)





DWG. NO. 60-020685-00A