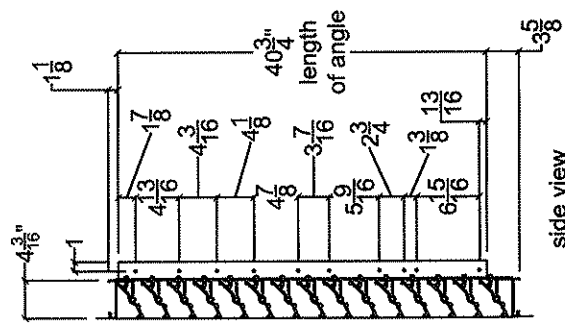
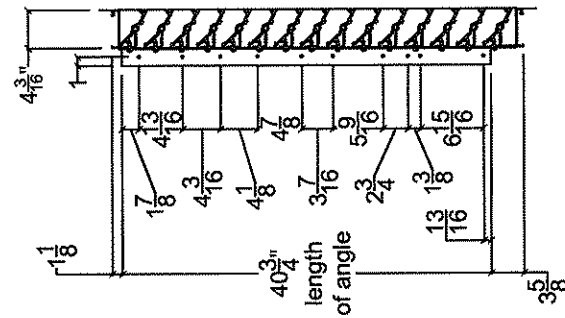
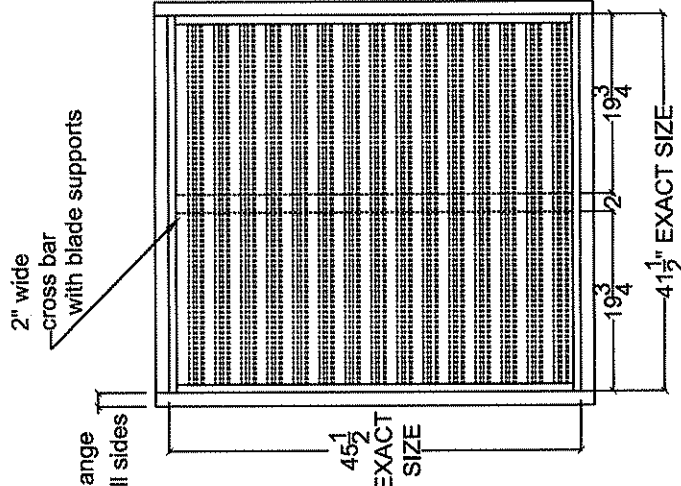


**Bard Model No. OLG-35-4H, Dark Bronze, 4" Deep Hurricane Louver**

1"x2" vertical mounting angle (both sides)



**Rear view**  
Note: Detail for Mounting Angle  
Hole Spacing

**side view**  
Note: Detail for Mounting Angle  
Hole Spacing (angle to substrate)

**side view**  
Note: Detail for Mounting Angle  
Hole Spacing (angle to substrate)

**Note: side mounting angles will ship loose**

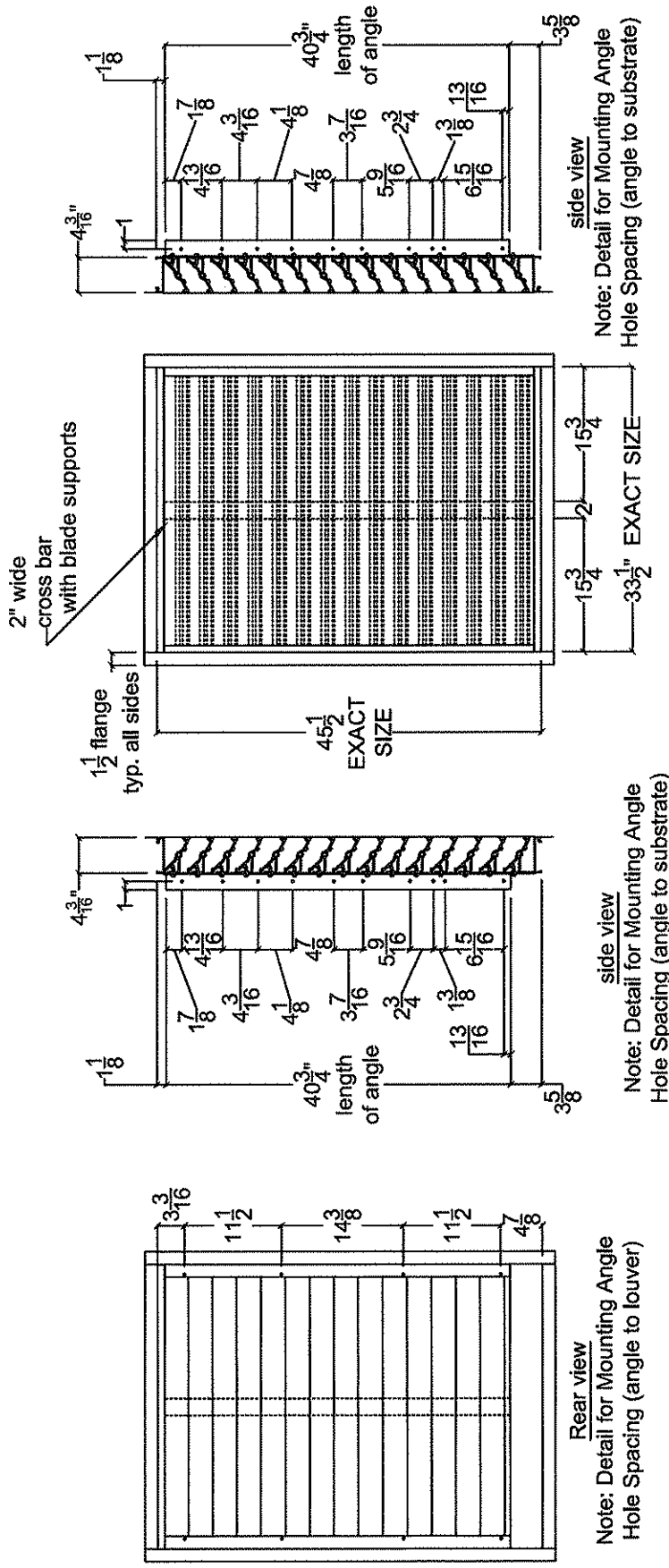
Notes: Cross-bar with blade supports placed as shown above  
All blades are welded in place.

UE
FL-D-4 (Built like Dade County)
drawn by: C. Jackson
date: 1-09-09 (rev. 1) Dwg. FLD4-0034
approved by:



# Bard Model No. OLG-30-4H, Dark Bronze, 4" Deep Hurricane Louver

1"x2" vertical mounting angle (both sides)

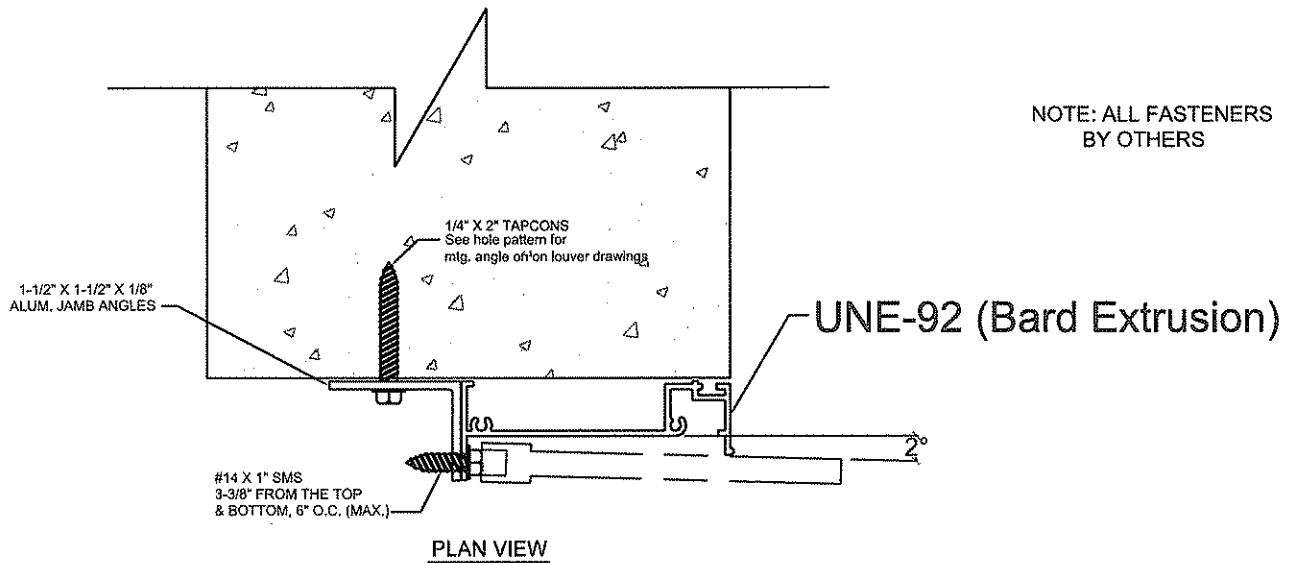


Note: side mounting angles will ship loose

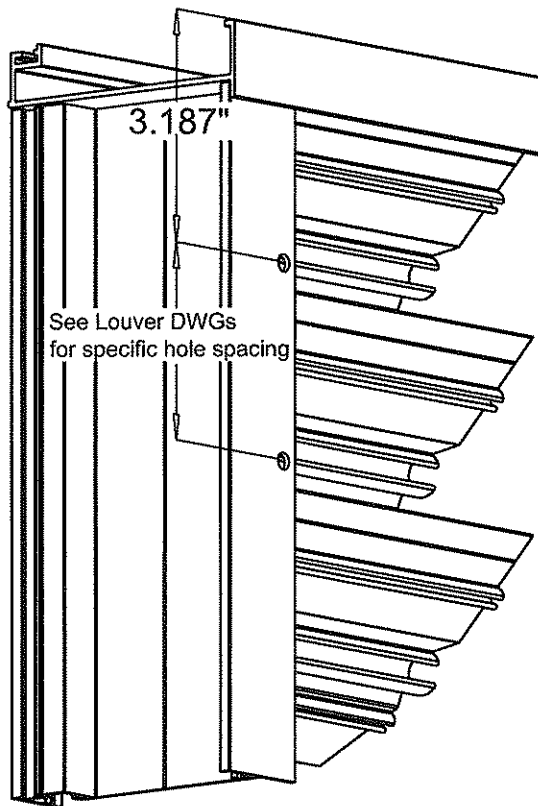
Notes: Cross-bar with blade supports placed as shown above  
All blades are welded in place.

UE
FL-D-4 (Built like Dade County)
drawn by: C. Jackson
date: 1-09-09 (rev.1)
Dwg. FLD4-0034
approved by:

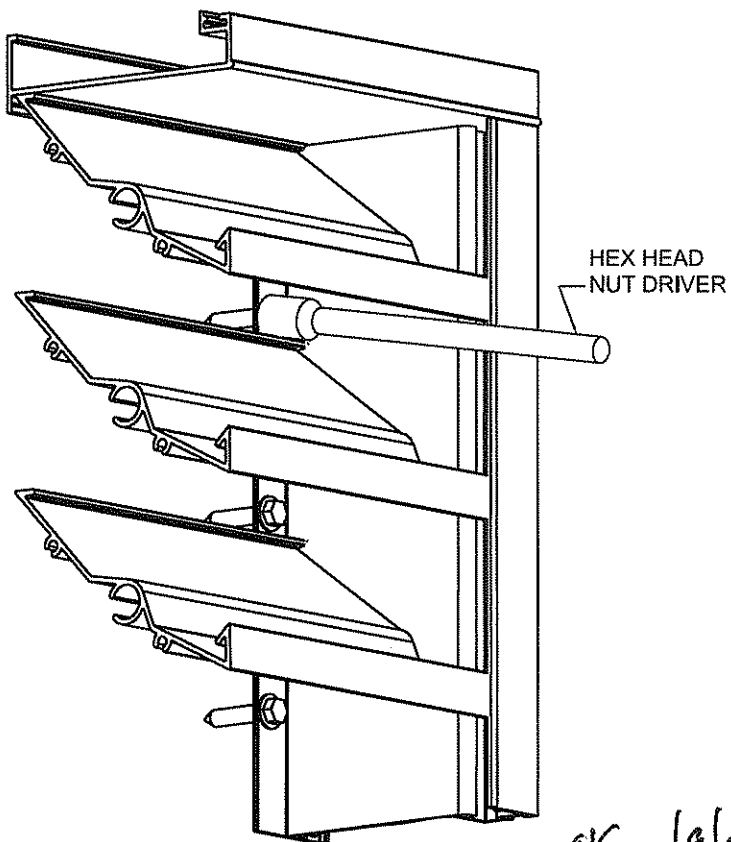




REMOVABLE FROM FRONT OF LOUVER



ISOMETRIC VIEW  
REAR OF LOUVER



ISOMETRIC VIEW  
FACE OF LOUVER

OK 1/9/09  
DH Bandulfg

FL-D-4 JAMB MOUNTING  
BIRDSCREEN AND/OR INSECT SCREEN ARE OPTIONAL  
DRAWN BY: C. Jackson  
DATE: 1-9-08





(ENGINEERS)  
**SUBMITTAL DATA**

Hurricane Louver w/ drainable blades and jamb gutter downspouts

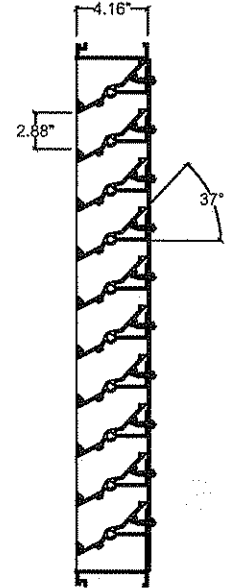
**4" Deep Hurricane Louver**

MIAMI-DADE APPROVED

MIAMI-DADE COUNTY, FLORIDA NOTICE OF ACCEPTANCE #: 08-0902.08 (EXPIRES 01-17-11)  
 FLORIDA BUILDING CODE PRODUCT APPROVAL #: FL3281

**Application and Features**

The Model DCFL-D-4 is a louver designed to protect the outside opening in building exterior walls. It is engineered for use in Dade County and its municipalities as well as other regions that use Dade County codes. These louvers may be used for exhaust or intake air. This model incorporated drainable blades and downspouts jamb gutter design for high performance. Engineers and designers can design with confidence since this product complies with the Miami-Dade County Building Code.



Maximum Design Pressure Rating  
 +150.0, -150.0 psf  
 Large Missile Impact Resistance

**STANDARD CONSTRUCTION:**

**FRAME:**

.125 Extruded Aluminum 4.16" deep.

**BLADES:**

.081 Extruded Aluminum Positioned on a 37° angle on approximately 2.88" centers.

**BIRDSCREEN:**

3/4" X .051 Flattened Aluminum in Removable Frame. Screen is mounted on inside (rear) as looking from exterior of building.

**FINISH:**

mill aluminum (std.)

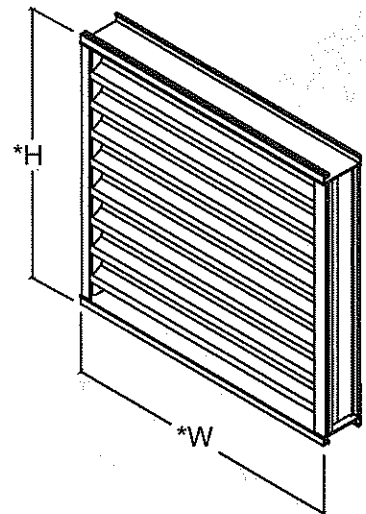
**MINIMUM SIZE:**

12"w x 12"h

**MAXIMUM SIZE:**

72"w x 72"h single section  
 Larger sizes made in multiple sections with vertical mullions.

Product approval in accordance with 2007 edition-Florida Building Code. Design wind loads shall be determined as per section 1619 of the above mentioned code, for basic wind speed of 146 mph and in accordance with ASCE-7-98 Standard



**OPTIONS (at additional cost)**

- Filter Racks
- Insect screen
- Security Bars
- A variety of architectural finishes including:
  - Baked Powder Polyester
  - Baked Powder Fluoropolymer 70%
  - Baked Powder Clear Coat
  - Anodizing: Clear or Integral Color

NOTE: Please specify the following for proper construction of mounting hardware.  
 Wall Thickness \_\_\_\_\_"  
 Design Wind Load \_\_\_\_\_  
 Substrate \_\_\_\_\_  
 (Wood, Steel, Poured Concrete, or Concrete Block)

\*W & H dimensions furnished approximately 1/4" under size.

Job Name:	<input type="checkbox"/> <b>MODEL DCFL-D-4</b>		
Location:			
Architect:	DRAWN BY:	DATE:	REV. DATE:
Engineer:	CLJ	January 2002	November 2008
Contractor:	REV. NO.	APPROVED BY:	DWG. NO.:
	10	BGT	<b>E-9a</b>

**MIAMI-DADE COUNTY HURRICANE STRUCTURAL TEST PERFORMANCE**

SIZE TESTED: 146" w x 72" h

DCBCCD PA 201-94 LARGE MISSILE IMPACT TEST:

MISSILE TYPE	VELOCITY IN FT/SEC (M/SEC)	IMPACTS
9 lb. Southern Yellow Pine 2"x4"x88-1/2" long	50 (15.24)	7

DCBCCD PA 202-94 UNIFORM STATIC AIR PRESSURE TEST:

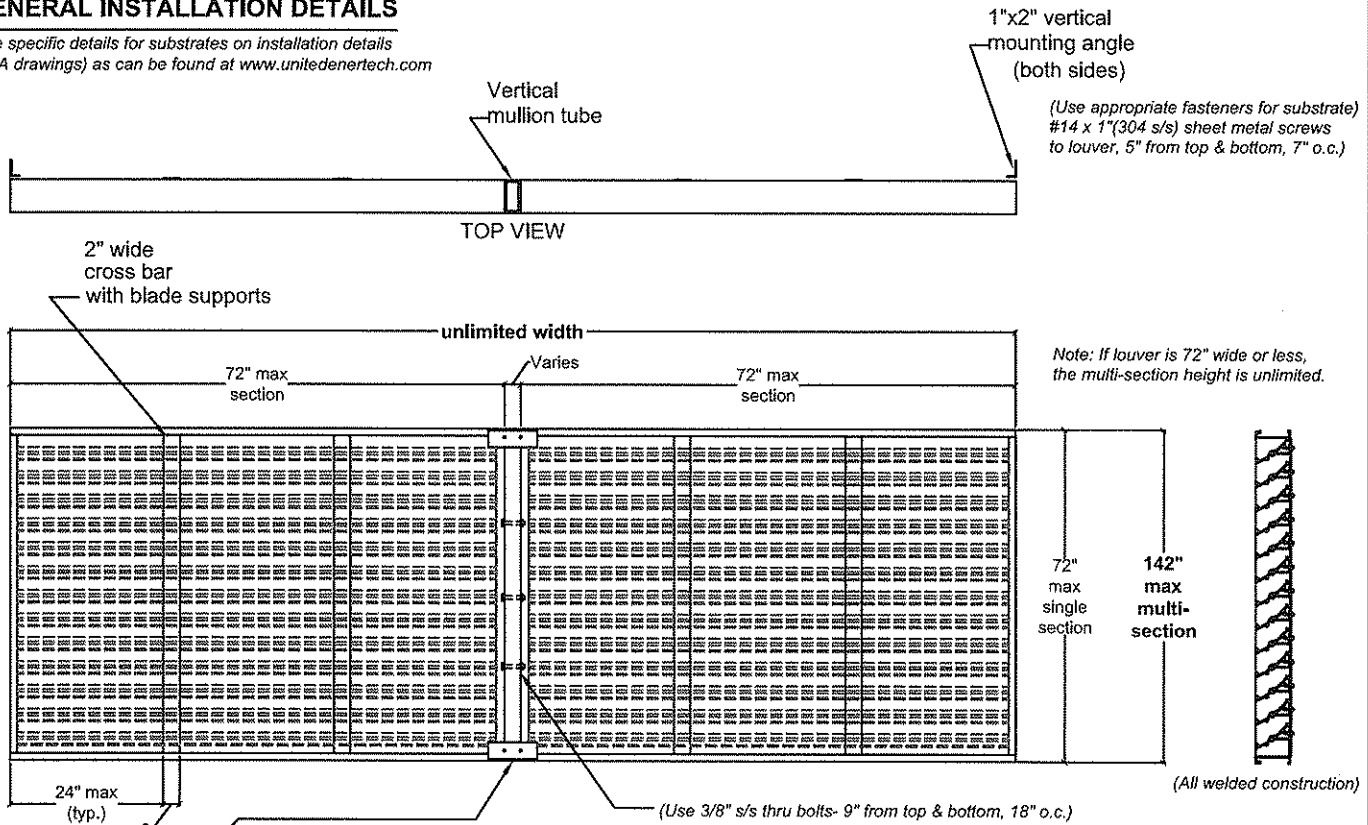
LOAD IN PSF (kPA)	LOAD DURATION	LOUVER RECOVERY
+112.5 (+5.38)	30 seconds	100%
-112.5 (-5.38)	30 seconds	100%
+150 (+7.18)	30 seconds	100%
-150 (-7.18)	30 seconds	100%
+225 (+10.76)	30 seconds	100%
-225 (-10.76)	30 seconds	100%

DCBCCD PA 203-94 FATIGUE LOADING TEST:

CYCLES	LOAD IN PSF (kPA)	LOAD DURATION CYCLE	LOUVER RECOVERY
600	+75 (+3.59)	1 to 3 seconds	100%
600	-75 (-3.59)	1 to 3 seconds	100%
70	+90 (+4.31)	1 to 3 seconds	100%
70	-90 (-4.31)	1 to 3 seconds	100%
1	+195 (+9.33)	1 to 3 seconds	100%
1	-195 (-9.33)	1 to 3 seconds	100%

**GENERAL INSTALLATION DETAILS**

-See specific details for substrates on installation details (NOA drawings) as can be found at [www.unitedenertech.com](http://www.unitedenertech.com)



2" x 4" x 1/4" or 5/16" (8" long) Aluminum angle @ each mullion (head & sill) anchored with fasteners per sheet 1 of installation details (NOA drawings) SEE SPECIFIC TYPE DETAILS FOR SUBSTRATES IN INSTALLATION DETAILS FOR MAXIMUM HEIGHTS.

Notes: Cross-bar with blade supports placed as shown above.

PLEASE NOTE: THIS DRAWING IS FOR GENERAL INFORMATION. REFER TO SPECIFIC SUBSTRATE DESIGN CRITERIA FOR EXACT INSTALLATION DETAILS (NOA #08-0902.08)