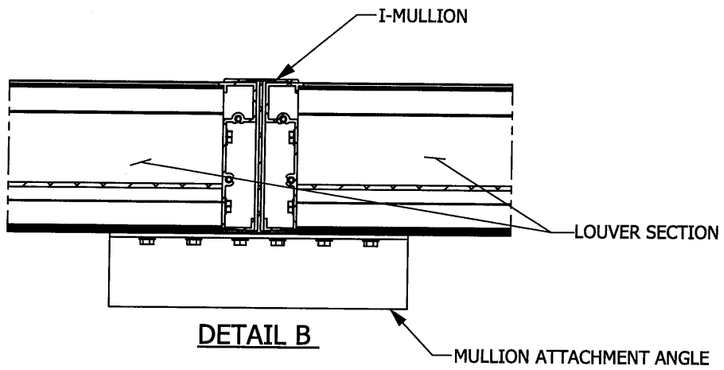
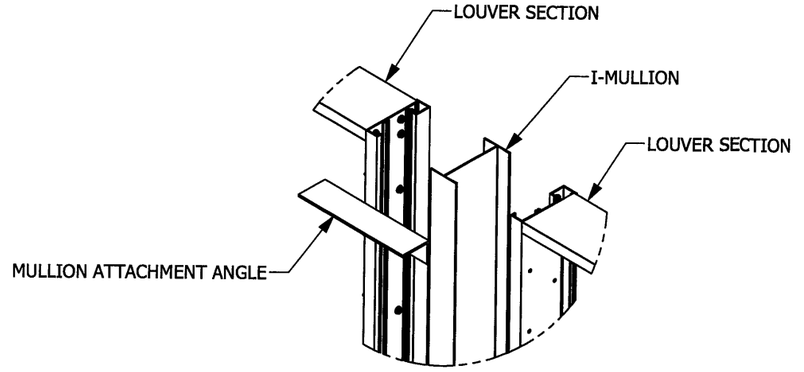
RICE
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: 920.845 1042
Fax: 920.845 1048
www.rice-inc.com

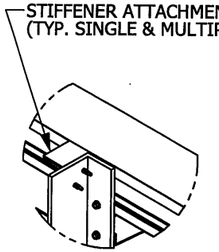
Florida Firm No: F-01000005061
Certificate of Authorization: #9090
L. David Rice
Registration No: 50923



DETAIL B

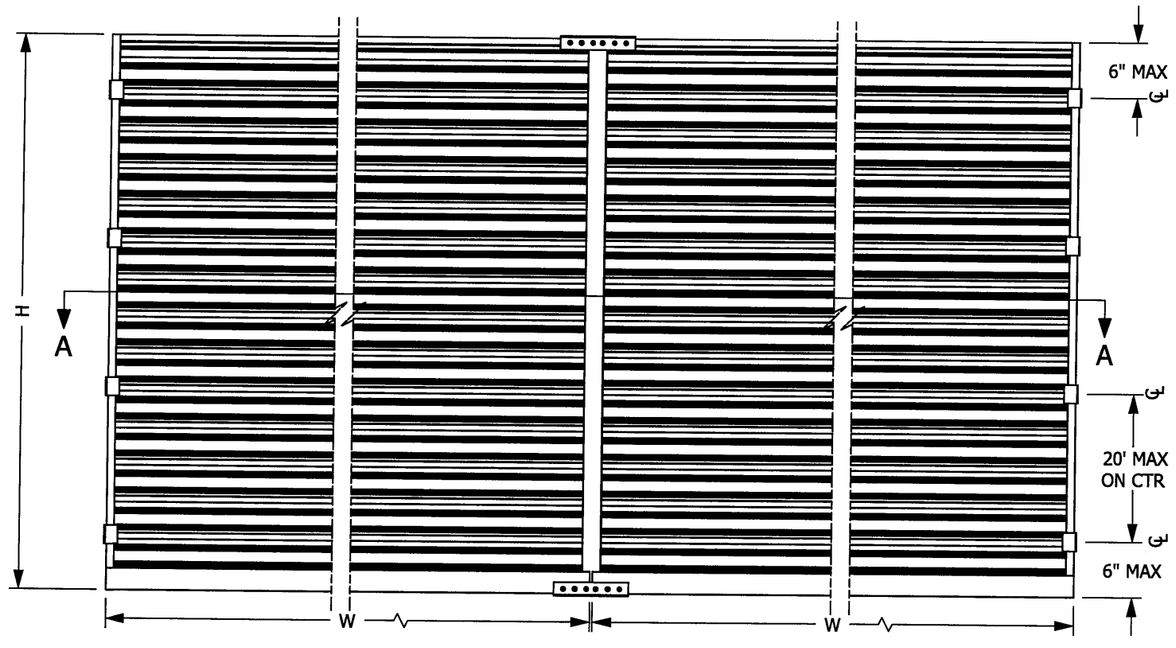


DETAIL B
(EXPLODED ISOMETRIC)

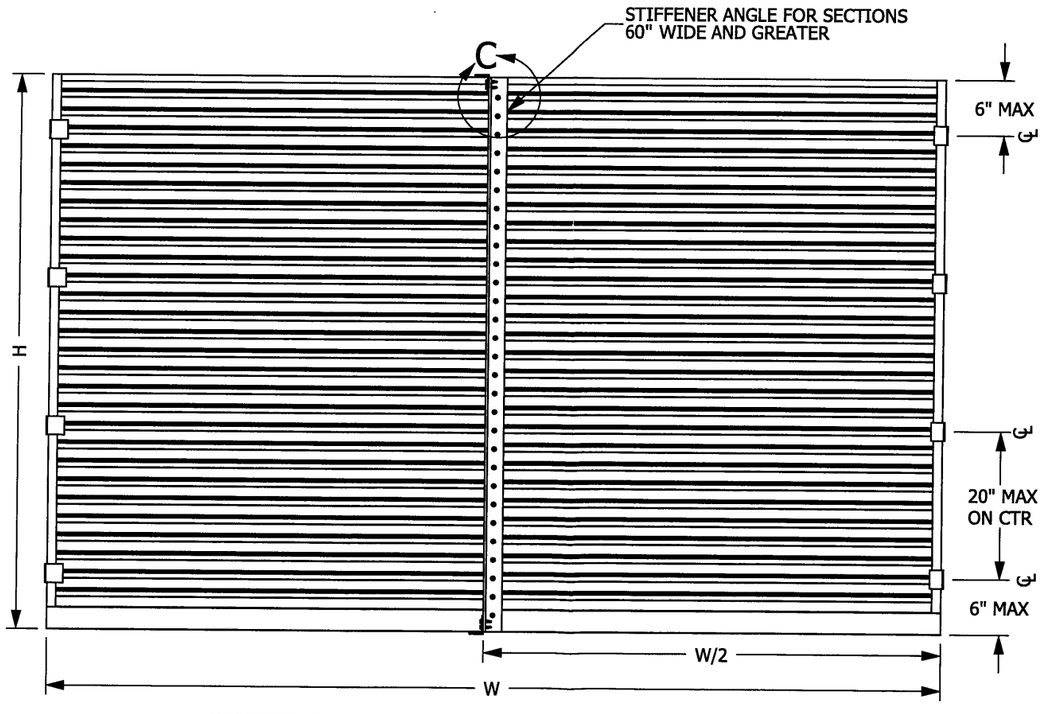


DETAIL C
STIFFENER CLIP ANGLE

SECTION A-A



MULTIPLE SECTION WIDE
INTERIOR ELEVATION
CLIP PLACEMENT



SINGLE SECTION WIDE, INTERIOR ELEVATION
CLIP PLACEMENT

L. DAVID RICE LICENSE No. 50923 STATE OF FLORIDA PROFESSIONAL ENGINEER

APR 0 9 2010

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
X.XX ±0.015
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

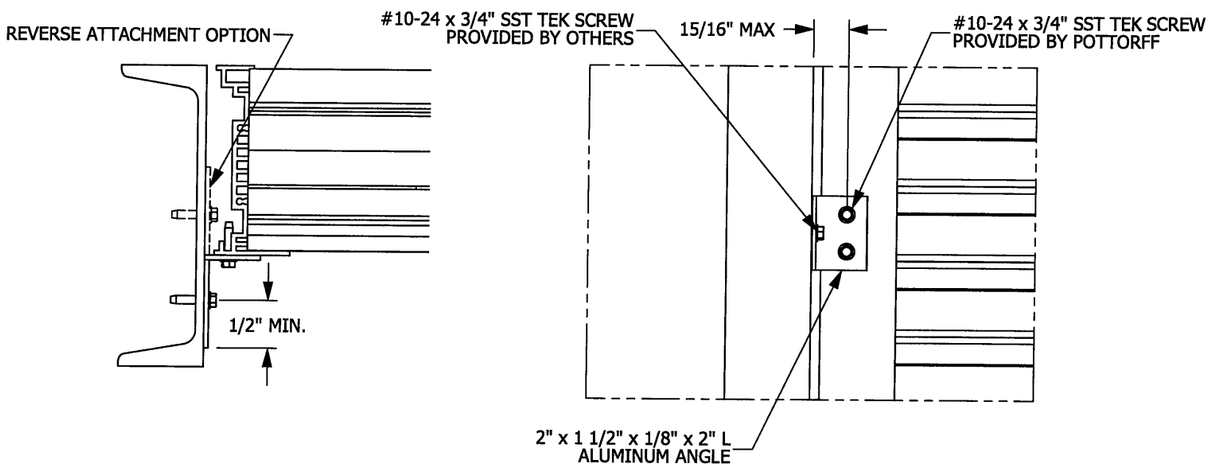
5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
Fax: 817-831-3110

THIRD ANGLE PROJECTION

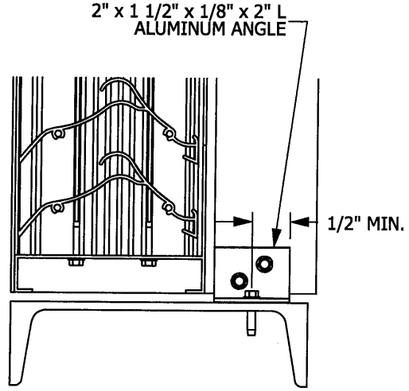
ALL-LITE
ARCHITECTURAL PRODUCTS

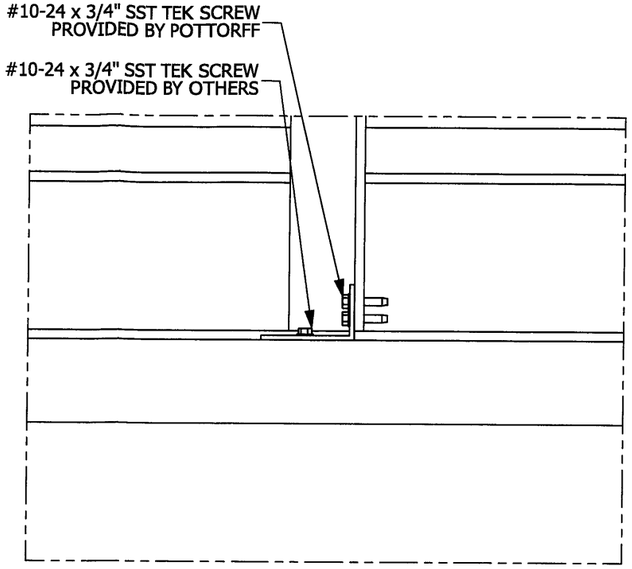
DRAWING DESCR: ATTACHMENT ELEVATION & DETAILS				
PROJECT: FLORIDA BUILDING CODE LOUVERS				
LOCATION:				
CUSTOMER:				
PROJ. MGR:		DRAWN BY: TB		
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 1 of 6	SCALE: NTS			ATTACHMENT

\Cadsvr\tr Tom\LOUVERS\Florida Building Code Louvers\

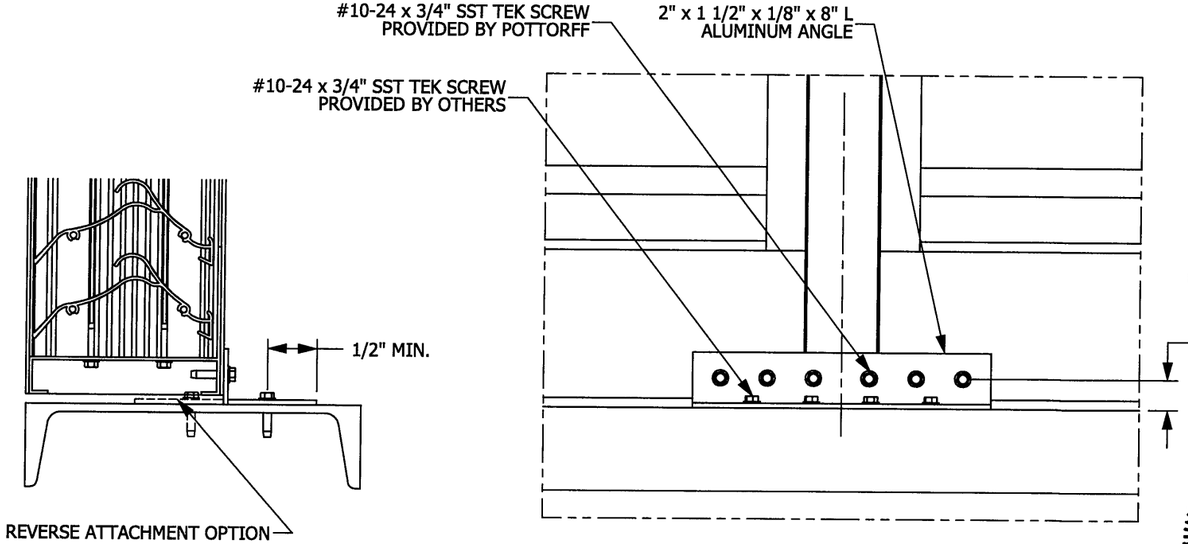


JAMB ATTACHMENT DETAILS
STEEL CONDITION





STIFFENER ATTACHMENT DETAILS
STEEL CONDITION



MULLION ATTACHMENT DETAILS
STEEL CONDITION

RICE
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Certificate of Authorization: #9090
L. David Rice
Registration No: 50923

APR 0 9 2010

L. DAVID RICE LICENSE No. 50923 STATE OF FLORIDA PROFESSIONAL ENGINEER

INSTALLATION NOTES:
1) DRAWING INCLUDES INSTALLATION DETAILS TO ATTAIN MAXIMUM DESIGN PRESSURES FOR LOUVER PER CHARTS ON DRAWING 6

2) IT IS ASSUMED THAT THE LOUVER SYSTEMS DO NOT SUPPORT ANY LOADS TRANSFERRED FROM THE BUILDING.

3) IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.

4) INSTALLER TO PROVIDE GASKET MATERIAL BETWEEN DISSIMILAR MATERIALS IN ORDER TO PROTECT FROM CORROSION.

5) CRITICAL EQUIPMENT TO BE PROTECTED FROM MOISTURE INGRESS.

6) OTHER BUILDING CONDITIONS THAN THOSE DENOTED CAN BE UTILIZED IF ANALYZED AND APPROVED BY A PROFFESSIONAL ENGINEER.

7) MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAIL ON THIS DRAWING AND A SUITABLE STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

8) ALL STEEL SUBSTRATE SHALL BE 18 GA STUD EQUIVALENT OR STRONGER.

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
X.XX ±0.015
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
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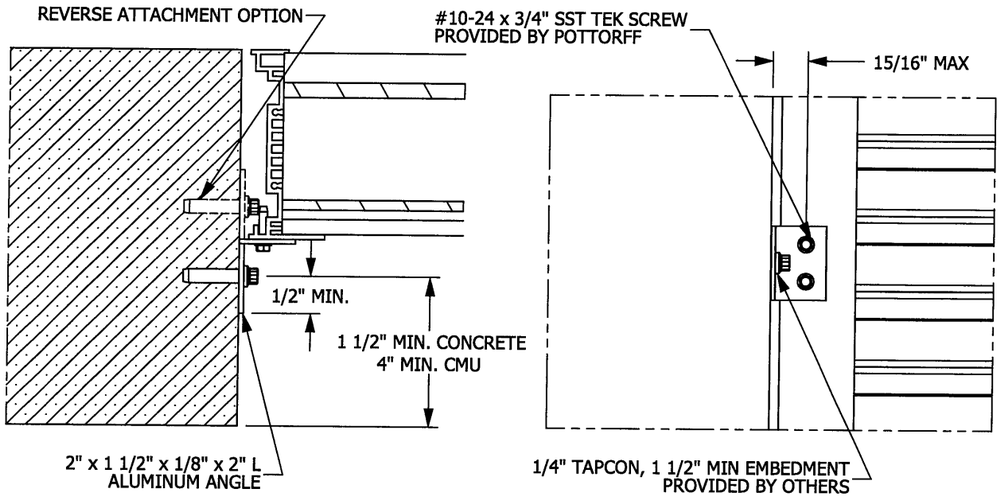
THIRD ANGLE PROJECTION

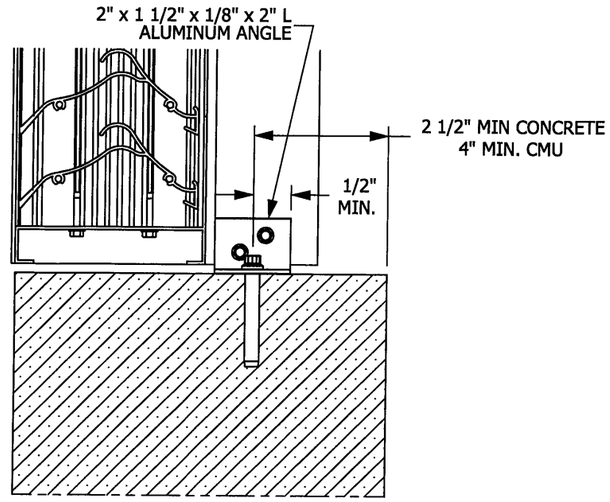
ALL-LITE
ARCHITECTURAL PRODUCTS

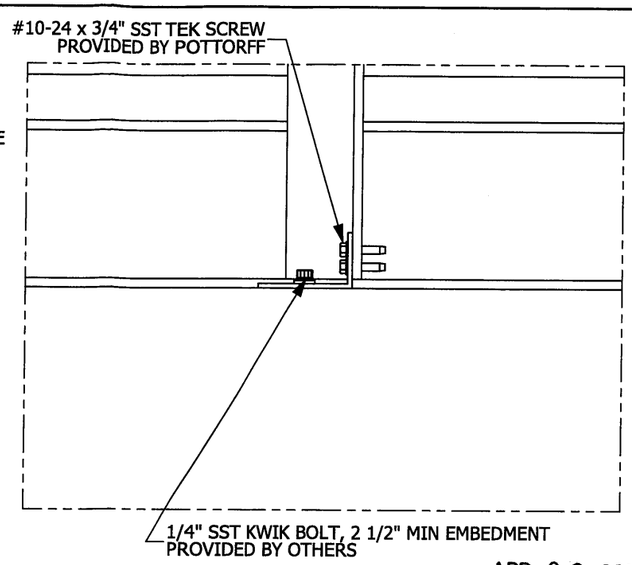
DRAWING DESCR: STEEL ATTACHMENT DETAILS				
PROJECT: FLORIDA BUILDING CODE LOUVERS				
LOCATION:				
CUSTOMER:				
PROJ. MGR:		DRAWN BY: TB		
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER
SHEET: 2 of 6	SCALE: NTS			STEEL CONDITION

\\Cadsvr\tr Tom\LOUVERS\Florida Building Code Louvers\



JAMB ATTACHMENT DETAIL
MASONRY CONDITION (SHEAR CONNECTION)

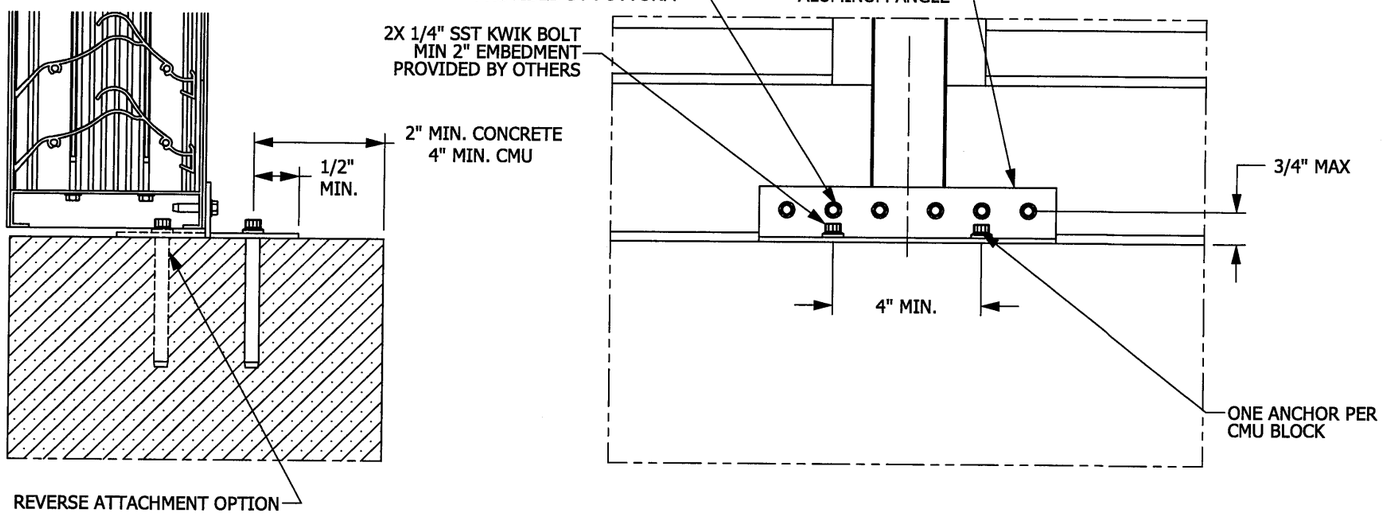




STIFFENER ATTACHMENT DETAIL
MASONRY CONDITION (SHEAR CONNECTION)

APR 0 9 2010

L. DAVID RICE
LICENSE
No. 50923
STATE OF
FLORIDA
PROFESSIONAL ENGINEER



MULLION ATTACHMENT DETAIL
MASONRY CONDITION (SHEAR CONNECTION)

INSTALLATION NOTES:

1) DRAWING INCLUDES INSTALLATION DETAILS TO ATTAIN MAXIMUM DESIGN PRESSURES FOR LOUVER PER CHARTS ON DRAWING 6

2) IT IS ASSUMED THAT THE LOUVER SYSTEMS DO NOT SUPPORT ANY LOADS TRANSFERRED FROM THE BUILDING.

3) IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.

4) INSTALLER TO PROVIDE GASKET MATERIAL BETWEEN DISSIMILAR MATERIALS IN ORDER TO PROTECT FROM CORROSION.

5) CRITICAL EQUIPMENT TO BE PROTECTED FROM MOISTURE INGRESS.

6) OTHER BUILDING CONDITIONS THAN THOSE DENOTED CAN BE UTILIZED IF ANALYZED AND APPROVED BY A PROFFESSIONAL ENGINEER.

7) MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAIL ON THIS DRAWING AND A SUITABLE STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

8) ALL CONCRETE SUBSTRATE SHALL BE BE 2000 PSI OR STRONGER.

9) ALL CMU SUBSTRATE SHALL BE ASTM C90 TYPE 2 FILLED WITH f'm=1500 PSI GROUT

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Certificate of Authorization: #9080
L. David Rice
Registration No: 50923

\\Cadsvr\tr Tom\LOUVERS\Florida Building Code Louvers\

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
X.XX ±0.015
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

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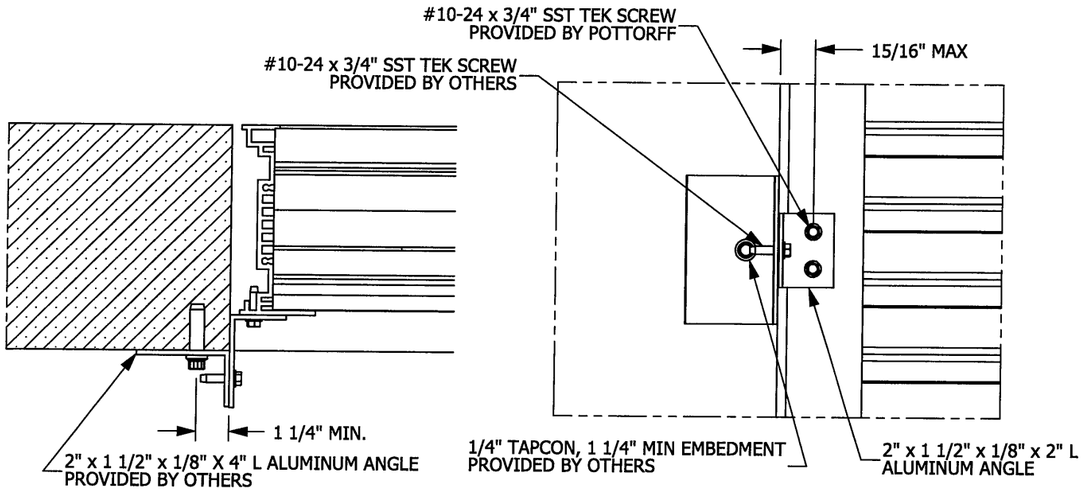
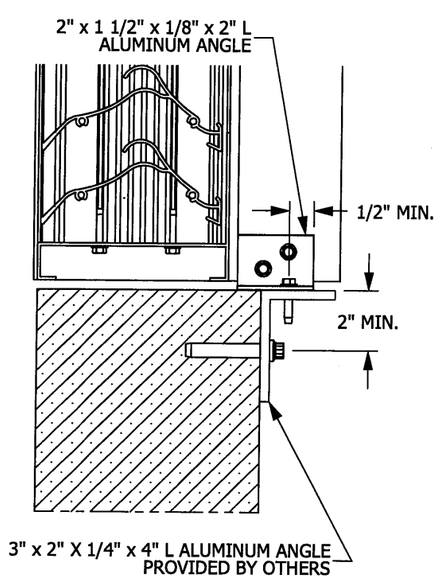
THIRD ANGLE PROJECTION

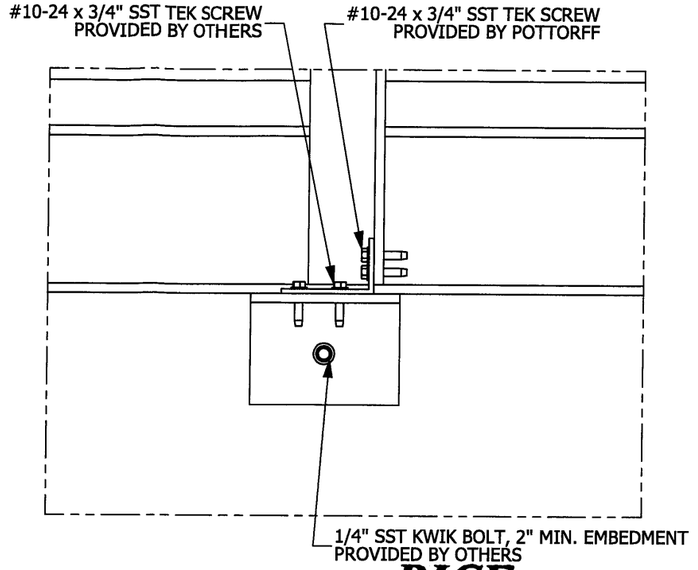
ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: MASONRY ATTACHMENT DETAILS			
PROJECT: FLORIDA BUILDING CODE LOUVERS			
LOCATION:			
CUSTOMER:			
PROJ. MGR:		DRAWN BY: TB	
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER / P.O. NUMBER	DRAWING NUMBER MASONRY COND. (SHEAR)
SHEET: 3 of 6	SCALE: NTS		

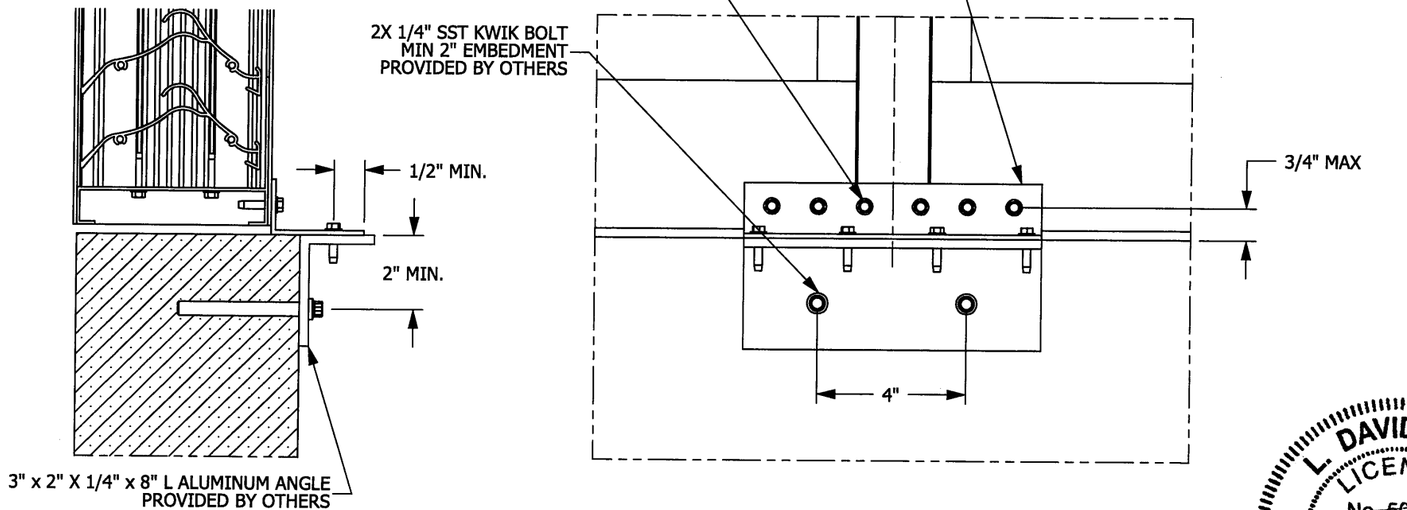


JAMB ATTACHMENT DETAIL
MASONRY CONDITION (TENSION CONNECTION)





STIFFENER ATTACHMENT DETAIL
MASONRY CONDITION (TENSION CONNECTION)



MULLION ATTACHMENT DETAIL
MASONRY CONDITION (TENSION CONNECTION)

RICE
ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: 920.845 1042
Fax: 920.845 1048
www.rice-inc.com

Florida Firm No F-01000005061
Certificate of Authorization #9090
L David Rice
Registration No 50923

INSTALLATION NOTES:

1) DRAWING INCLUDES INSTALLATION DETAILS TO ATTAIN MAXIMUM DESIGN PRESSURES FOR LOUVER PER CHARTS ON DRAWING 6

2) IT IS ASSUMED THAT THE LOUVER SYSTEMS DO NOT SUPPORT ANY LOADS TRANSFERRED FROM THE BUILDING.

3) IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.

4) INSTALLER TO PROVIDE GASKET MATERIAL BETWEEN DISSIMILAR MATERIALS IN ORDER TO PROTECT FROM CORROSION.

5) CRITICAL EQUIPMENT TO BE PROTECTED FROM MOISTURE INGRESS.

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7) MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAIL ON THIS DRAWING AND A SUITABLE STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

8) ALL CONCRETE SUBSTRATE SHALL BE BE 2000 PSI OR STRONGER.

APR 0 9 2010

L. DAVID RICE LICENSE No. 50923 STATE OF FLORIDA PROFESSIONAL ENGINEER

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
X.XX ±0.015
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
Fax: 817-831-3110

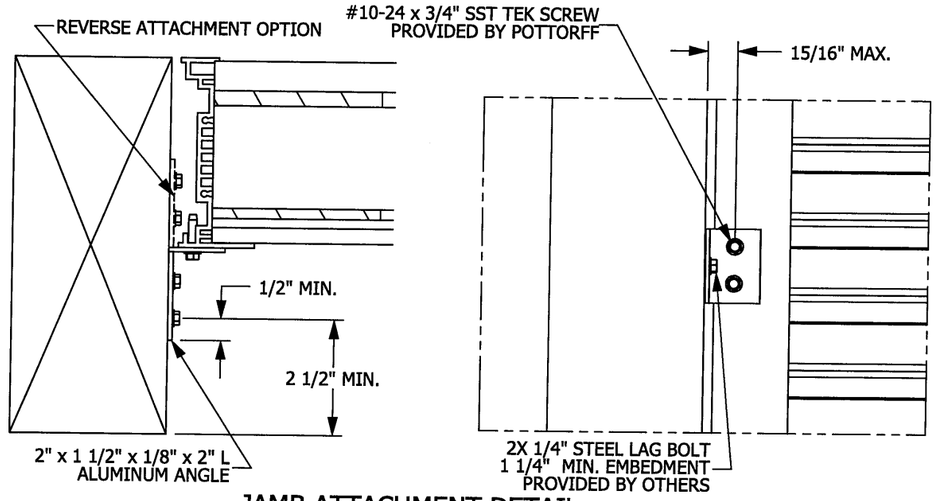
THIRD ANGLE PROJECTION

ALL-LITE
ARCHITECTURAL PRODUCTS

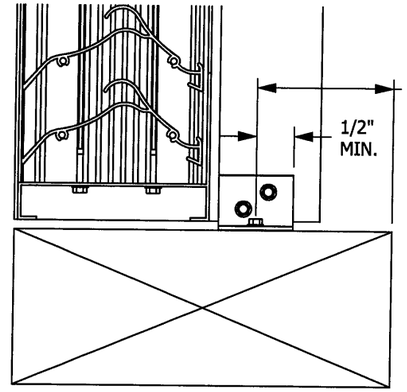
DRAWING DESCR: MASONRY ATTACHMENT DETAILS				
PROJECT: FLORIDA BUILDING CODE LOUVERS				
LOCATION:				
CUSTOMER:				
PROJ. MGR:		DRAWN BY: TB		
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER	P.O. NUMBER	DRAWING NUMBER MASONRY COND. (TENSION)
SHEET: 4 of 6	SCALE: NTS			

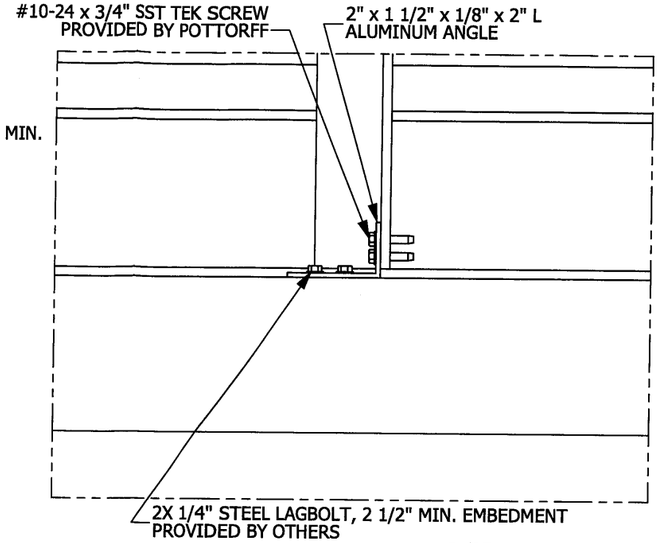
\Tom\LOUVERS\Florida Building Code Louvers\

\\Cadsvr\tr

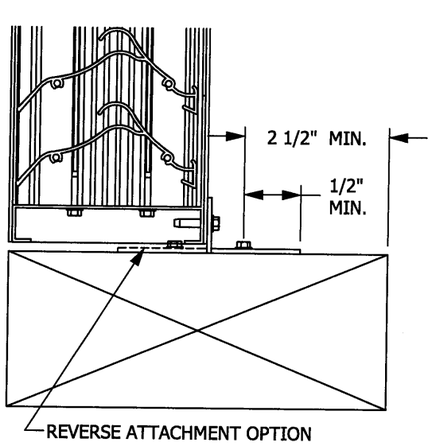


JAMB ATTACHMENT DETAIL
WOOD BLOCK CONDITION





STIFFENER ATTACHMENT DETAIL
WOOD BLOCK CONDITION



MULLION ATTACHMENT DETAIL
WOOD BLOCK CONDITION

RICE ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
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L. David Rice
Registration No: 50923

INSTALLATION NOTES:

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3) IT IS ASSUMED THAT THE BUILDING CONDITIONS ARE ADEQUATELY DESIGNED TO SUPPORT LOADS IMPARTED BY THE LOUVER SYSTEM.

4) INSTALLER TO PROVIDE GASKET MATERIAL BETWEEN DISSIMILAR MATERIALS IN ORDER TO PROTECT FROM CORROSION.

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7) MULTI-SECTION WIDE AND HIGH LOUVER SYSTEMS ARE ALLOWABLE PROVIDED THE INDIVIDUAL SECTIONS ARE SUPPORTED PER THE DETAIL ON THIS DRAWING AND A SUITABLE STRUCTURE IS ANALYZED AND APPROVED BY A PROFESSIONAL ENGINEER.

8) ALL WOOD SUBSTRATE SHALL BE G=0.42 DENSITY OR BETTER.

APR 0 9 2010

L. DAVID RICE LICENSE No. 50923 STATE OF FLORIDA PROFESSIONAL ENGINEER

UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
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X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

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15% OF MATERIAL THICKNESS

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THIRD ANGLE PROJECTION

ALL-LITE
ARCHITECTURAL PRODUCTS

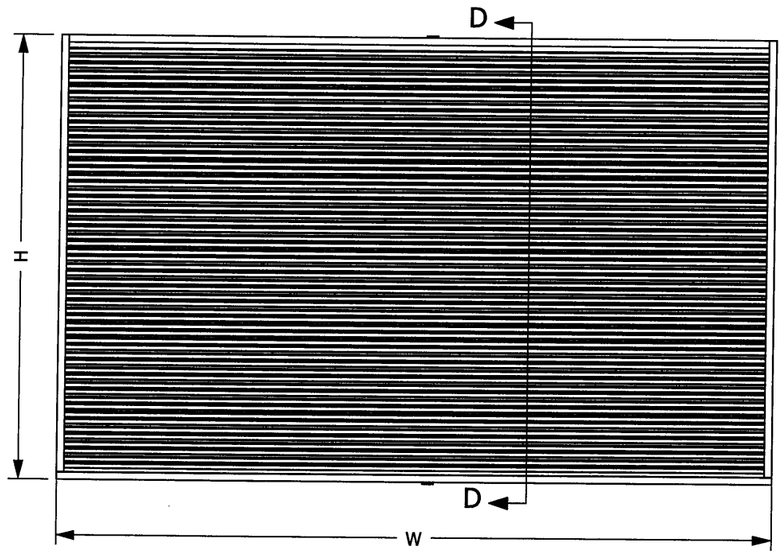
DRAWING DESCR: WOOD ATTACHMENT DETAILS			
PROJECT: FLORIDA BUILDING CODE LOUVERS			
LOCATION:			
CUSTOMER:			
PROJ. MGR:		DRAWN BY: TB	
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER / P.O. NUMBER	DRAWING NUMBER
SHEET: 5 of 6	SCALE: NTS		WOOD CONDITION

\\Cadsvr1\tr Tom\LOUVERS\Florida Building Code Louvers\

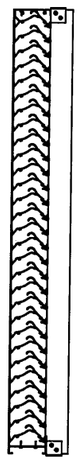
Louver Tributary Height (in.)	ECD-545 LOUVER MODEL - Single Section Width Assemblies - Maximum Allowable Design Pressure - (PSF) Louver Width (in.)																	
	12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
12"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
18"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
24"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
30"	187	125	93	75	62	53	45	36	29	61	56	52	48	45	42	40	37	34	31
36"	187	125	93	75	62	53	45	36	29	42	39	36	33	50	47	43	38	34	31
42"	187	125	93	75	62	53	45	36	29	54	50	46	43	40	37	35	33	32	31
48"	187	125	93	75	62	53	45	36	29	42	38	35	33	31	47	43	38	34	31
54"	187	125	93	75	62	53	45	36	29	33	57	53	49	46	43	40	38	34	31
60"	187	125	93	75	62	53	45	36	29	50	46	43	40	37	35	33	38	34	31
66"	187	125	93	75	62	53	45	36	29	SIZES IN SHADED CELL GET ANGLE STIFFENER									
72"	187	125	93	75	62	53	45	36	29										
78"	187	125	93	75	62	53	45	36	29										
84"	187	125	93	75	62	53	45	36	29										
90"	187	125	93	75	62	53	45	36	29										
96"	187	125	93	75	62	53	45	36	29										
102"	187	125	93	75	62	53	45	36	29										
108"	187	125	93	75	62	53	45	36	29										
114"	187	125	93	75	62	53	45	36	29										
120"	187	125	93	75	62	53	45	36	29										

Louver Tributary Height (in.)	ECD-545 LOUVER MODEL - Multiple Section Assemblies - Maximum Allowable Design Pressure - (PSF) Louver Width (in.)																	
	12"	18"	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
12"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
18"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
24"	187	125	93	75	62	53	45	36	29	68	62	57	53	50	47	43	38	34	31
30"	187	125	93	75	62	53	45	36	29	61	56	52	48	45	42	40	37	34	31
36"	187	125	93	75	62	53	45	36	29	42	39	36	33	50	47	43	38	34	31
42"	187	125	93	75	62	53	45	36	29	54	50	46	43	40	37	35	33	32	31
48"	187	125	93	75	62	53	45	36	29	42	38	35	33	31	47	43	38	34	31
54"	187	125	93	75	62	53	45	36	29	33	57	53	49	46	43	40	38	34	31
60"	187	125	93	75	62	53	45	36	29	50	46	43	40	37	35	33	34	33	31
66"	187	125	93	75	62	53	45	36	29	SIZES IN SHADED CELLS GET ANGLE STIFFENER									
72"	187	125	93	75	62	53	45	36	29										
78"	187	125	93	75	62	53	45	36	29										
84"	187	125	93	75	62	53	45	36	29										
90"	187	125	93	75	62	53	45	36	29										
96"	187	125	93	75	62	53	45	36	29										
102"	182	122	91	73	61	52	45	36	29										
108"	172	115	86	69	57	49	43	36	29										
114"	163	109	82	65	54	47	41	36	29										
120"	155	103	78	62	52	44	39	34	29										

Louver Height (in.)	Stiffener Angle Dimensions (b x a x t) Width (in)								
	66"	72"	78"	84"	90"	96"	102"	108"	114"	120"
12"	2"x1.5"x1/8"								
18"									
24"									
30"									
36"									
42"	2"x2"x1/8"								
48"									
54"									
60"	2" x 2" x 1/4"							3" x 2" x 1/4"	

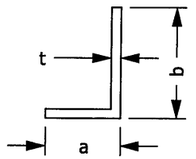


SECTION D-D



I-MULLION, ECD-545
SCALE 1:4

BLADE, ECD-545
SCALE 1:4



STIFFENER, ECD-545
SCALE 1:4

RICE ENGINEERING
105 School Creek Trail
Luxemburg, WI 54217
Phone: 920.845.1042
Fax: 920.845.1048
www.rice-inc.com

Florida Firm No: F-01000005061
Certificate of Authorization: #9090
L. David Rice
Registration No: 50923

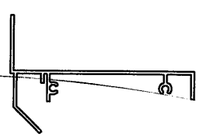
APR 09 2010

L. DAVID RICE LICENSE No. 50923 STATE OF FLORIDA PROFESSIONAL ENGINEER

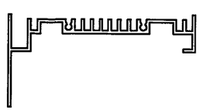
HEAD, ECD-545
SCALE 1:4

JAMB, ECD-545
SCALE 1:4

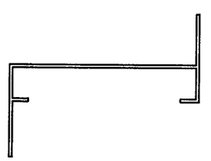
SILL, ECD-545
SCALE 1:4



FLANGED HEAD, ECD-545
SCALE 1:4



FLANGED JAMB, ECD-545
SCALE 1:4



FLANGED SILL, ECD-545
SCALE 1:4

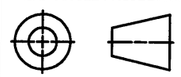
UNLESS OTHERWISE SPECIFIED DIMENSION ARE IN INCHES.

TOLERANCE UNLESS NOTED:
X.X ±0.030
X.XX ±0.015
X.XXX ±0.010
ANGLE ±1°
FRACTION ±1/16

MAX HOLE BREAKOUT:
15% OF MATERIAL THICKNESS

5101 Blue Mound Road
Fort Worth, Texas 76106
Phone: 817-509-2300
Fax: 817-831-3110

THIRD ANGLE PROJECTION



ALL-LITE
ARCHITECTURAL PRODUCTS

DRAWING DESCR: ECD-545, ELEVATION & DETAILS			
PROJECT: FLORIDA BUILDING CODE LOUVERS			
LOCATION:			
CUSTOMER:			
PROJ. MGR:		DRAWN BY: TB	
DATE: 11/24/2009	CHK'D BY:	ORDER NUMBER / P.O. NUMBER	DRAWING NUMBER
SHEET: 6 of 6	SCALE: 1:20		ECD-545

I:\Tom\LOUVERS\Florida Building Code Louvers\