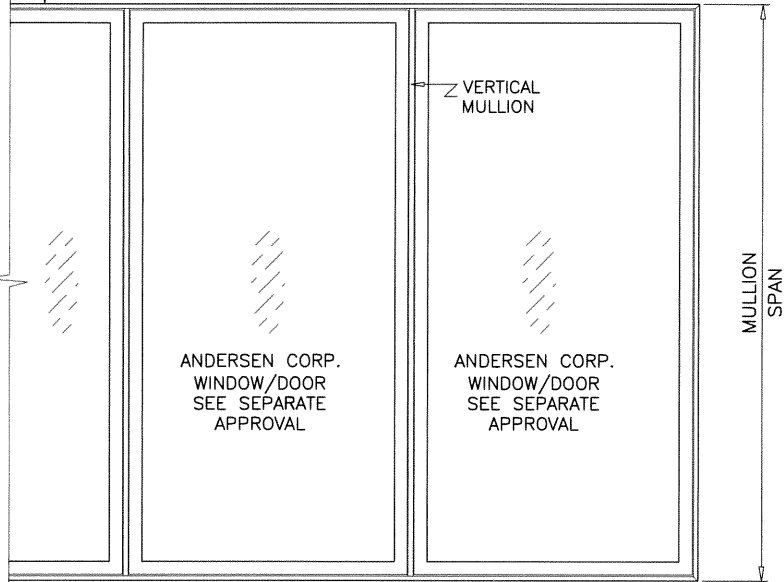
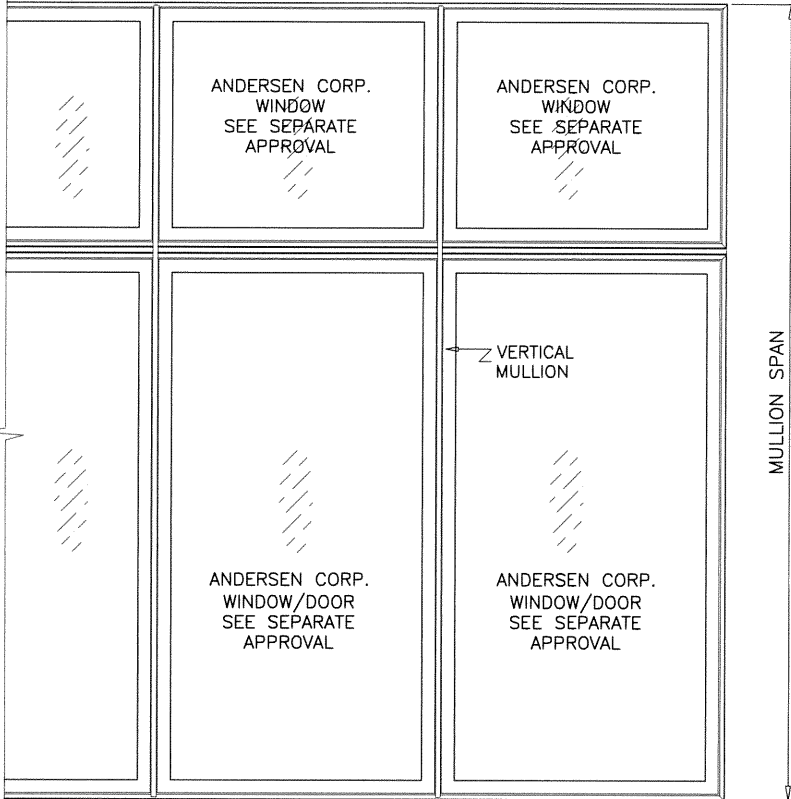


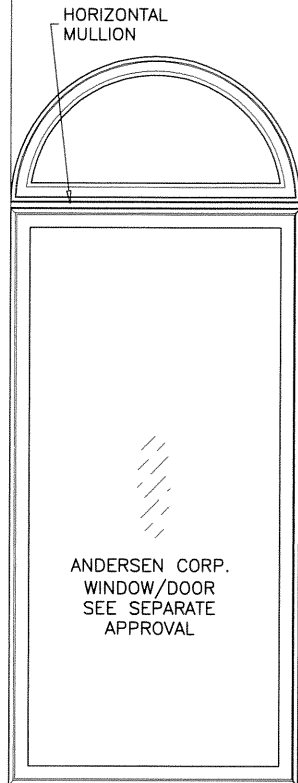
MULTIPLE MODULES
ACCEPTABLE



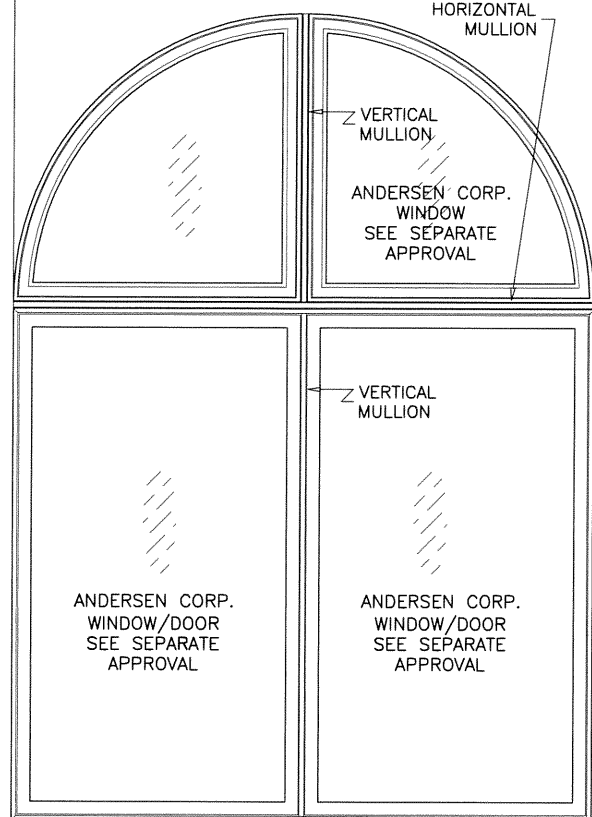
MULTIPLE MODULES
ACCEPTABLE



MULLION SPAN



MULLION SPAN



MULLION SYSTEM IS RATED FOR LARGE & SMALL MISSILE IMPACT.
AND CAN BE USED WITH ALL F.B.C. APPROVED
IMPACT AND NON-IMPACT RESISTANT PRODUCTS.

LAMINATED VENEERED LUMBER (LVL) MULLION SYSTEM WINDOW FRAME MEMBERS INCLUDED IN PROPERTIES

DESIGN LOAD RATING FOR THIS MULLION TO BE AS PER CHARTS
SHOWN ON SHEETS 5 AND 6.

APPROVAL APPLIES TO MULLIONS COMBINATIONS WITH FRAME MEMBERS OF
ANDERSEN CORPORATION WINDOW AND DOORS IN ANY COMBINATIONS
SEE SHEET 2 FOR WINDOW FRAME MEMBER DETAILS.
SEE SHEET 3 FOR DOOR FRAME MEMBER DETAILS.

SEE SEPARATE APPROVAL FOR WINDOW/DOOR ANCHORS AND DESIGN LOAD CAPACITY.

LOWEST VALUE RESULTING FROM MULLION, WINDOW OR DOOR APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY
HURRICANE ZONE (HVHZ).

ALL GLAZING PRODUCTS USED WITH THESE MULLIONS MUST MEET THE
APPLICABLE BUILDING CODE REQUIREMENTS I.E: WIND LOAD, WATER
INFILTRATION, FORCED ENTRY RESISTANCE, SAFEGUARDS ETC.

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER
LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS, EMBEDMENT
TO BASE MATERIAL SHALL BE BEYOND WALL COVERING (STUCCO, TILE ETC.).

ANCHORING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS
ARE NOT PART OF THIS APPROVAL.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE FLORIDA BUILDING CODE.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION
IN ACCORDANCE WITH SECTION 1710.8.3 OF FLORIDA BUILDING CODE.
LABELING TO COMPLY WITH SECTION 1710.8.2.

TYPICAL MULLION ARRANGEMENT

INDEX OF DRAWING	
SHEET NO.	DESCRIPTION
1	GENERAL NOTES
2	WINDOW FRAME DETAILS
3	DOOR FRAME DETAILS
4	MULLION DETAILS
5	CHART FOR 4-9/16" & 6-9/16" MULLIONS WITHOUT HORIZONTALS
6	CHART FOR 4-9/16" & 6-9/16" MULLIONS WITH HORIZONTALS
7 THRU 10	DETAILS SHOWS VERTICAL AND HORIZONTAL MULLION CONNECTION WITH FRAME MEMBERS.
11	HORIZ./VERT. MULLION CONNECTION DETAILS WITH BRACKET
12	HORIZ./VERT. MULLION CONNECTION DETAILS WITH GUSSET PLATE
13	VERT. MULLION CONNECTION DETAIL TO HORIZ. MULLION

INSTRUCTIONS:

USE DRAWING AS FOLLOWS.

1. DETERMINE THE PRESSURE (LOAD) REQUIREMENTS FOR THE INSTALLATION USING ASCE 7 FOR THE OPENING.
2. DEPENDING ON THE 'TYPICAL MULLION ARRANGEMENT' ON SHEET 1, SELECT THE MULLION SPAN, TRIBUTARY WIDTH (W) AND MULLION SIZE 4-9/16" OR 6-9/16".
3. DEPENDING ON THE WINDOWS ARRANGEMENT AND SIZE OF MULLION, USING SHEETS 7 TO 10, SELECT THE GROUP NUMBER.
4. USING SHEETS 5 AND 6 DETERMINE THE DESIGN PRESSURE RATING, THE MULLION SELECTED MUST MEET OR EXCEED THE PRESSURE (LOAD) REQUIRED IN STEP 1.
5. USING SHEETS 7, 8, 9 AND 10 DETERMINE THE WINDOW TO MULLION ANCHOR.
6. USING SHEETS 11 AND 12, DETERMINE THE MULLION TO SUBSTRATE ANCHORS.
7. USING SHEET 13, DETERMINE MULLION TO MULLION ANCHORS.

A- THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

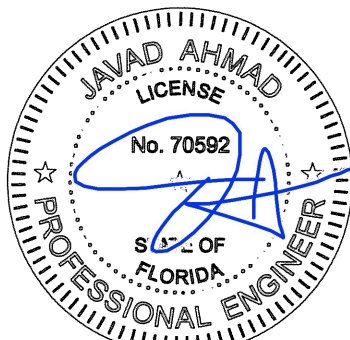
B- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.

C- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

D- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

E- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.

FL #17720



LAMINATED VENEERED LUMBER MULLION SYSTEM

ANDERSEN CORPORATION

100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)



revisions:
no date by description

date: 04-28-15

scale: 3/8"=1'-0"

dr. by: HAMID

chk. by:

drawing no.

M15-01

sheet 1 of 13

AL-FAROOQ CORPORATION

ENGINEERS & PRODUCT DEVELOPMENT

1235 S.W. 87 AVE

MIAMI, FLORIDA 33174

TEL. (305) 264-8100

FAX. (305) 262-6978

MULLION/M15-01AC

CASEMENT
FRAME HEAD/SILL
30835
WOOD

TILT-WASH DOUBLE HUNG
FRAME HEAD
WOOD

WOODWRIGHT DOUBLE HUNG
FRAME HEAD/JAMB
WOOD

SPECIALITY DIRECT SET (CTC & CTQC)
FRAME SILL
27230
WOOD

CASEMENT
FRAME JAMB
30838
WOOD

TILT-WASH DOUBLE HUNG
FRAME JAMB
WOOD

TILT-WASH FIXED
FRAME HEAD/SILL/JAMB
WOOD

WOODWRIGHT FIXED
FRAME HEAD/SILL/JAMB
WOOD

SPECIALITY DIRECT SET (CTN)
FRAME SILL
27122
WOOD

PSNL
FRAME HEAD/SILL/JAMB
WOOD

CASEMENT PICTURE
FRAME HEAD/SILL/JAMB
WOOD

FLEXIFRAME FIXED
FRAME HEAD/SILL/JAMB
WOOD

SPECIALITY DIRECT SET (ET)
FRAME SILL
53103
WOOD

CASEMENT PICTURE (P)
FRAME HEAD/SILL/JAMB
30394
WOOD

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM

ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

AW
ANDERSEN

revisions:	no	date	by	description

date: 04-28-15

scale: 1/2" = 1"

dr. by: HAMID

chk. by:

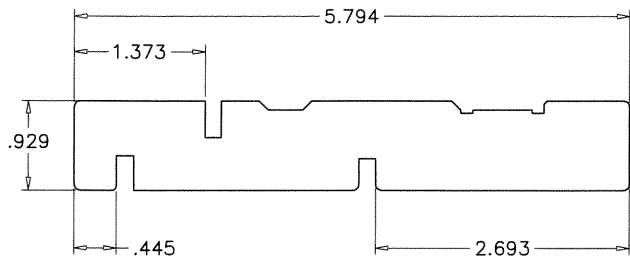
drawing no.

M15-01

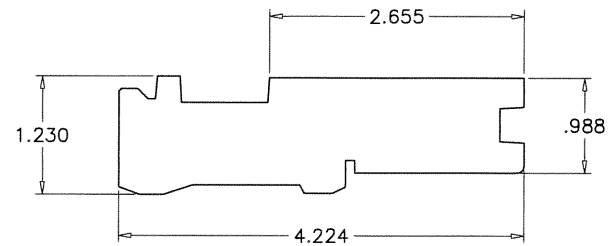
sheet 2 of 13

FL #17720

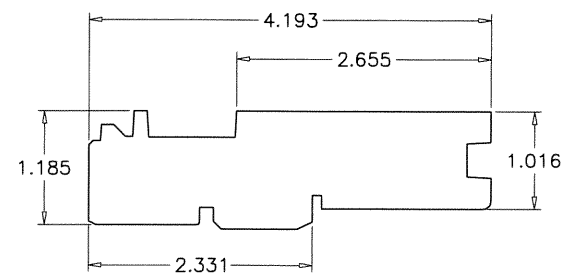
Date & Time: 05/01/15 16:18



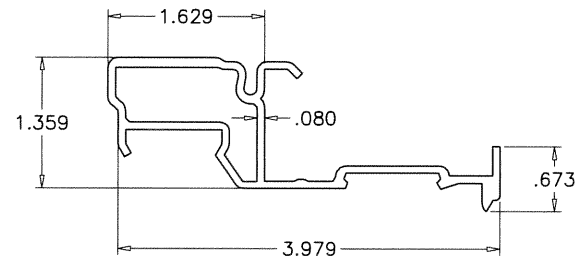
FWG
GLIDING DOOR FRAME HEAD
-
WOOD



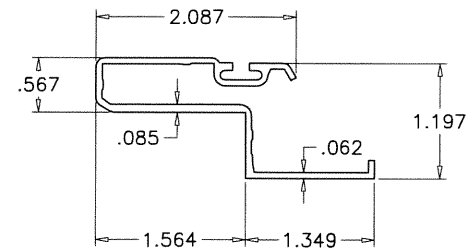
FWH
HINGED DOOR HEAD/JAMB (OPERATING/STATIONARY)
52253
WOOD



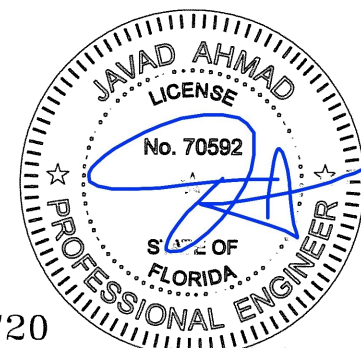
FWO
OUTSWING DOOR HEAD/JAMB (OPERATING/STATIONARY)
57019
WOOD



FWH
HINGED HEAD/JAMB COVER (OPERATING/STATIONARY)
52225
FIBERGLASS



FWO
OUTSWING HEAD/JAMB COVER (OPERATING/STATIONARY)
57031
FIBERGLASS



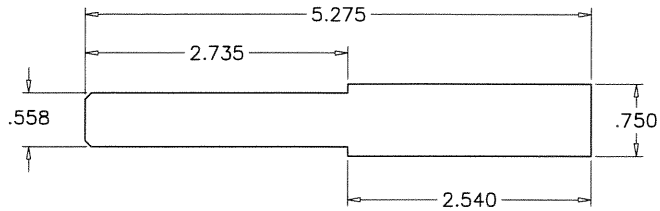
FL #17720

Date & Time: 05/01/15 16:18

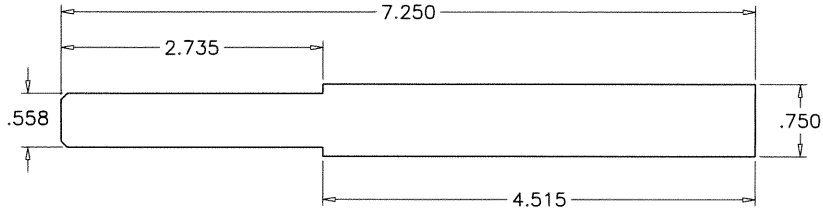
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

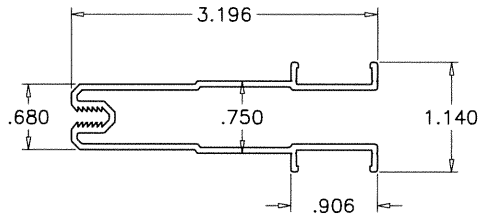

revisions:	
no	date
by	description
date:	04-28-15
scale:	1/2" = 1"
dr. by:	HAMID
chk. by:	
drawing no.	M15-01
sheet	3 of 13



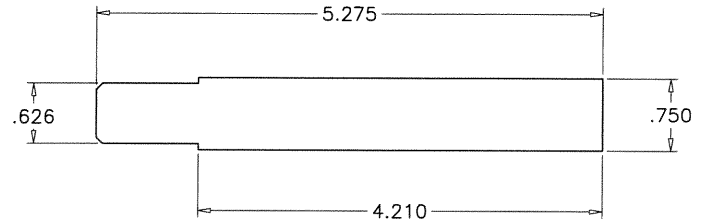
4-9/16" MULLION
-
LAMINATED VENEERED LUMBER



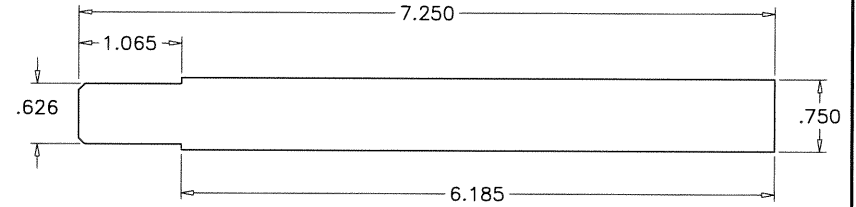
6-9/16" MULLION
-
LAMINATED VENEERED LUMBER



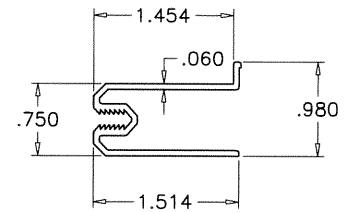
MULLION COVER
-
ALUMINUM



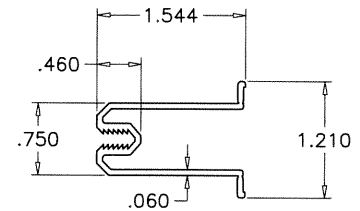
4-9/16" MULLION
29353
LAMINATED VENEERED LUMBER



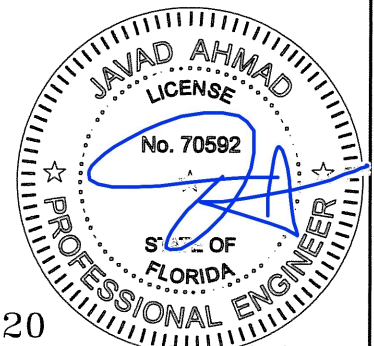
6-9/16" MULLION
29434
LAMINATED VENEERED LUMBER



MULLION COVER
29351
ALUMINUM



MULLION COVER
29351
ALUMINUM



FL #17720

Date & Time: 05/01/15 16:18

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

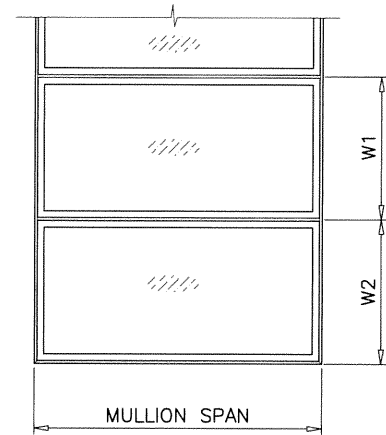
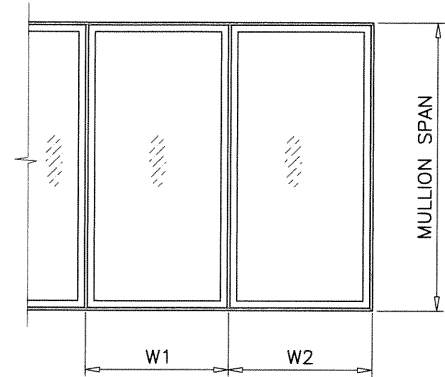
LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)
AW

revisions:		by description	
no	date		

date: 04-28-15	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

drawing no.	no.
M15-01	
sheet 4 of 13	

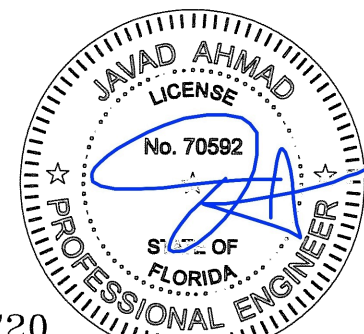
DESIGN LOAD CAPACITY - PSF 4-9/16" MULLION					
WINDOW DIMS. WIDTH (W)MULL SPAN		W/O INTERMEDIATE HORIZONTALS			
		GROUP #1	GROUP #2	GROUP #3	GROUP #4
30"	48"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0
51-3/8"		70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	70.0
60"		70.0	70.0	70.0	70.0
66"		70.0	70.0	70.0	70.0
72"		70.0	70.0	70.0	70.0
30"	54"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0
51-3/8"		70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	70.0
60"		68.0	68.0	68.0	68.0
66"		61.8	61.8	61.8	61.8
72"		56.7	56.7	56.7	56.7
30"	60"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0
51-3/8"		65.0	65.0	65.0	65.0
54"		61.5	61.5	61.5	61.5
60"		55.1	55.1	55.1	55.1
66"		50.1	50.1	50.1	50.1
72"		45.9	45.9	45.9	45.9
30"	66"	70.0	70.0	70.0	70.0
36"		67.4	70.0	70.0	70.0
42"		60.1	68.2	68.2	68.2
48"		55.3	58.6	58.6	58.6
51-3/8"		53.4	54.2	54.2	54.2
54"		51.3	51.3	51.3	51.3
60"		45.7	45.7	45.7	45.7
66"		45.7	45.7	45.7	45.7
30"	72"	65.0	70.0	70.0	70.0
36"		55.6	63.3	69.4	69.4
42"		49.3	56.1	58.1	58.1
48"		44.9	49.8	49.8	49.8
51-3/8"		43.1	46.1	46.1	46.1
54"		41.9	43.6	43.6	43.6
60"		38.7	38.7	38.7	38.7
66"		38.7	38.7	38.7	38.7
30"	78"	54.9	62.5	70.0	70.0
36"		46.8	53.2	59.9	59.9
42"		41.2	46.9	50.1	50.1
48"		37.3	42.5	43.0	43.0
51-3/8"		35.6	39.7	39.7	39.7
54"		34.5	37.5	37.5	37.5
60"		34.5	37.5	37.5	37.5
66"		34.5	37.5	37.5	37.5
30"	84"	47.0	53.5	64.2	64.2
36"		39.9	45.4	52.2	52.2
42"		35.0	39.9	43.7	43.7
48"		31.5	35.9	37.5	37.5
51-3/8"		30.0	34.1	34.6	34.6
54"		30.0	34.1	34.6	34.6
60"		30.0	34.1	34.6	34.6
66"		30.0	34.1	34.6	34.6



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

DESIGN LOAD CAPACITY – PSF 6–9/16” MULLION						
WINDOW DIMS.		W/O INTERMEDIATE HORIZONTALS				
		GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
WIDTH (W)	MULL SPAN					
24”	60”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		70.0	70.0	70.0	70.0	70.0
54”		70.0	70.0	70.0	70.0	70.0
60”		70.0	70.0	70.0	70.0	70.0
66”		64.0	64.0	64.0	64.0	64.0
72”		58.7	58.7	58.7	58.7	58.7
24”	66”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		70.0	70.0	70.0	70.0	70.0
54”		70.0	70.0	70.0	70.0	70.0
60”		64.2	64.2	64.2	64.2	64.2
24”	72”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		69.9	69.9	69.9	69.9	69.9
54”		61.1	61.1	61.1	61.1	61.1
60”		54.3	54.3	54.3	54.3	54.3
24”	78”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		60.3	60.3	60.3	60.3	60.3
54”		52.6	52.6	52.6	52.6	52.6
60”		52.6	52.6	52.6	52.6	52.6
24”	84”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		68.6	70.0	70.0	70.0	70.0
40”		62.7	64.9	64.9	64.9	64.9
42”		60.2	61.3	61.3	61.3	61.3
48”		52.6	52.6	52.6	52.6	52.6
54”		52.6	52.6	52.6	52.6	52.6
60”		52.6	52.6	52.6	52.6	52.6
24”	90”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		59.3	64.4	64.4	64.4	64.4
40”		54.1	57.1	57.1	57.1	57.1
42”		51.9	54.0	54.0	54.0	54.0
48”		46.3	46.3	46.3	46.3	46.3
54”		46.3	46.3	46.3	46.3	46.3
60”		46.3	46.3	46.3	46.3	46.3
24”	96”	70.0	70.0	70.0	70.0	70.0
30”		61.2	70.0	70.0	70.0	70.0
36”		51.8	57.1	57.1	57.1	57.1
40”		47.1	50.6	50.6	50.6	50.6
42”		45.2	47.9	47.9	47.9	47.9
48”		42.2	44.7	44.7	44.7	44.7
54”		42.2	44.7	44.7	44.7	44.7
60”		42.2	44.7	44.7	44.7	44.7

DESIGN LOAD CAPACITY - PSF 6-9/16" MULLION						
WINDOW DIMS.		W/O INTERMEDIATE HORIZONTALS				
		GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
WIDTH (W)	MULL SPAN					
24"	102"	66.9	70.0	70.0	70.0	70.0
30"		54.1	61.9	62.6	62.6	62.6
36"		45.6	51.0	51.0	51.0	51.0
40"		41.5	45.2	45.2	45.2	45.2
42"		39.7	42.8	42.8	42.8	42.8
24"	108"	59.6	68.2	70.0	70.0	70.0
30"		48.1	55.0	56.2	56.2	56.2
36"		40.5	45.8	45.8	45.8	45.8
40"		36.8	40.7	40.7	40.7	40.7



FL #17720

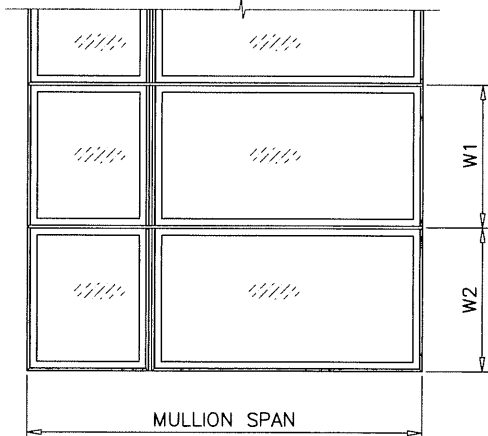
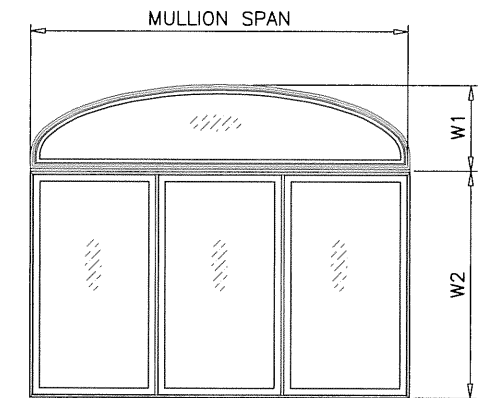
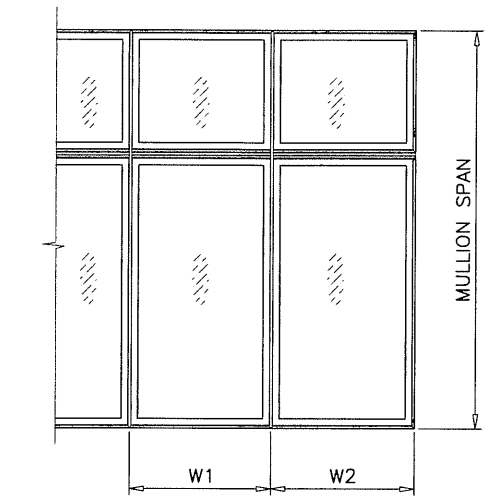
Date & Time: 05/01/15 16:18

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

revisions:
no date by description
1 04-28-15 by description
2 05-01-15 by description
3 05-01-15 by description
4 05-01-15 by description
5 05-01-15 by description
6 05-01-15 by description
7 05-01-15 by description
8 05-01-15 by description
9 05-01-15 by description
10 05-01-15 by description
11 05-01-15 by description
12 05-01-15 by description
13 05-01-15 by description
14 05-01-15 by description
15 05-01-15 by description
16 05-01-15 by description
17 05-01-15 by description
18 05-01-15 by description
19 05-01-15 by description
20 05-01-15 by description
21 05-01-15 by description
22 05-01-15 by description
23 05-01-15 by description
24 05-01-15 by description
25 05-01-15 by description
26 05-01-15 by description
27 05-01-15 by description
28 05-01-15 by description
29 05-01-15 by description
30 05-01-15 by description
31 05-01-15 by description
32 05-01-15 by description
33 05-01-15 by description
34 05-01-15 by description
35 05-01-15 by description
36 05-01-15 by description
37 05-01-15 by description
38 05-01-15 by description
39 05-01-15 by description
40 05-01-15 by description
41 05-01-15 by description
42 05-01-15 by description
43 05-01-15 by description
44 05-01-15 by description
45 05-01-15 by description
46 05-01-15 by description
47 05-01-15 by description
48 05-01-15 by description
49 05-01-15 by description
50 05-01-15 by description
51 05-01-15 by description
52 05-01-15 by description
53 05-01-15 by description
54 05-01-15 by description
55 05-01-15 by description
56 05-01-15 by description
57 05-01-15 by description
58 05-01-15 by description
59 05-01-15 by description
60 05-01-15 by description
61 05-01-15 by description
62 05-01-15 by description
63 05-01-15 by description
64 05-01-15 by description
65 05-01-15 by description
66 05-01-15 by description
67 05-01-15 by description
68 05-01-15 by description
69 05-01-15 by description
70 05-01-15 by description
71 05-01-15 by description
72 05-01-15 by description
73 05-01-15 by description
74 05-01-15 by description
75 05-01-15 by description
76 05-01-15 by description
77 05-01-15 by description
78 05-01-15 by description
79 05-01-15 by description
80 05-01-15 by description
81 05-01-15 by description
82 05-01-15 by description
83 05-01-15 by description
84 05-01-15 by description
85 05-01-15 by description
86 05-01-15 by description
87 05-01-15 by description
88 05-01-15 by description
89 05-01-15 by description
90 05-01-15 by description
91 05-01-15 by description
92 05-01-15 by description
93 05-01-15 by description
94 05-01-15 by description
95 05-01-15 by description
96 05-01-15 by description
97 05-01-15 by description
98 05-01-15 by description
99 05-01-15 by description
100 05-01-15 by description
101 05-01-15 by description
102 05-01-15 by description
103 05-01-15 by description
104 05-01-15 by description
105 05-01-15 by description
106 05-01-15 by description
107 05-01-15 by description
108 05-01-15 by description
109 05-01-15 by description
110 05-01-15 by description
111 05-01-15 by description
112 05-01-15 by description
113 05-01-15 by description
114 05-01-15 by description
115 05-01-15 by description
116 05-01-15 by description
117 05-01-15 by description
118 05-01-15 by description
119 05-01-15 by description
120 05-01-15 by description
121 05-01-15 by description
122 05-01-15 by description
123 05-01-15 by description
124 05-01-15 by description
125 05-01-15 by description
126 05-01-15 by description
127 05-01-15 by description
128 05-01-15 by description
129 05-01-15 by description
130 05-01-15 by description
131 05-01-15 by description
132 05-01-15 by description
133 05-01-15 by description
134 05-01-15 by description
135 05-01-15 by description
136 05-01-15 by description
137 05-01-15 by description
138 05-01-15 by description
139 05-01-15 by description
140 05-01-15 by description
141 05-01-15 by description
142 05-01-15 by description
143 05-01-15 by description
144 05-01-15 by description
145 05-01-15 by description
146 05-01-15 by description
147 05-01-15 by description
148 05-01-15 by description
149 05-01-15 by description
150 05-01-15 by description
151 05-01-15 by description
152 05-01-15 by description
153 05-01-15 by description
154 05-01-15 by description
155 05-01-15 by description
156 05-01-15 by description
157 05-01-15 by description
158 05-01-15 by description
159 05-01-15 by description
160 05-01-15 by description
161 05-01-15 by description
162 05-01-15 by description
163 05-01-15 by description
164 05-01-15 by description
165 05-01-15 by description
166 05-01-15 by description
167 05-01-15 by description
168 05-01-15 by description
169 05-01-15 by description
170 05-01-15 by description
171 05-01-15 by description
172 05-01-15 by description
173 05-01-15 by description
174 05-01-15 by description
175 05-01-15 by description
176 05-01-15 by description
177 05-01-15 by description
178 05-01-15 by description
179 05-01-15 by description
180 05-01-15 by description
181 05-01-15 by description
182 05-01-15 by description
183 05-01-15 by description
184 05-01-15 by description
185 05-01-15 by description
186 05-01-15 by description
187 05-01-15 by description
188 05-01-15 by description
189 05-01-15 by description
190 05-01-15 by description
191 05-01-15 by description
192 05-01-15 by description
193 05-01-15 by description
194 05-01-15 by description
195 05-01-15 by description
196 05-01-15 by description
197 05-01-15 by description
198 05-01-15 by description
199 05-01-15 by description
200 05-01-15 by description
201 05-01-15 by description
202 05-01-15 by description
203 05-01-15 by description
204 05-01-15 by description
205 05-01-15 by description
206 05-01-15 by description
207 05-01-15 by description
208 05-01-15 by description
209 05-01-15 by description
210 05-01-15 by description
211 05-01-15 by description
212 05-01-15 by description
213 05-01-15 by description
214 05-01-15 by description
215 05-01-15 by description
216 05-01-15 by description
217 05-01-15 by description
218 05-

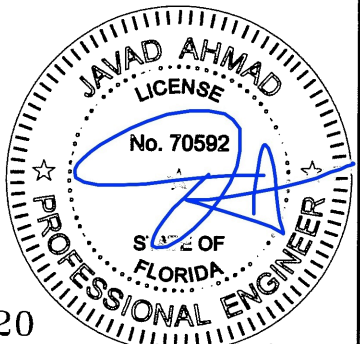
DESIGN LOAD CAPACITY - PSF 4-9/16" MULLION					
WINDOW DIMS. WIDTH (W) MULL SPAN		WITH INTERMEDIATE HORIZONTALS			
		GROUP #1	GROUP #2	GROUP #3	GROUP #4
30"	48"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0
48"		70.0	70.0	70.0	70.0
51-3/8"		70.0	70.0	70.0	70.0
54"		70.0	70.0	70.0	70.0
60"		69.0	70.0	70.0	70.0
66"		62.7	70.0	70.0	70.0
72"		57.5	65.4	70.0	70.0
30"	54"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		70.0	70.0	70.0	70.0
48"		68.1	70.0	70.0	70.0
51-3/8"		63.7	70.0	70.0	70.0
54"		60.6	68.9	70.0	70.0
60"		54.5	62.0	70.0	70.0
66"		49.6	56.4	70.0	70.0
72"		45.4	51.7	64.8	65.2
30"	60"	70.0	70.0	70.0	70.0
36"		70.0	70.0	70.0	70.0
42"		63.1	70.0	70.0	70.0
48"		55.2	62.8	70.0	70.0
51-3/8"		51.6	58.7	70.0	70.0
54"		49.1	55.8	70.0	70.0
60"		44.2	50.3	63.0	70.0
66"		40.1	45.7	57.2	64.0
72"		36.8	41.9	52.5	58.7
30"	66"	70.0	70.0	70.0	70.0
36"		60.8	69.2	70.0	70.0
42"		52.1	59.3	70.0	70.0
48"		45.6	51.9	65.0	70.0
51-3/8"		42.6	48.5	60.8	70.0
54"		40.5	46.2	57.8	67.5
60"		36.5	41.5	52.0	60.7
72"					
30"	72"	61.3	69.8	70.0	70.0
36"		51.1	58.2	70.0	70.0
42"		43.8	49.9	62.5	70.0
48"		38.3	43.6	54.7	63.8
51-3/8"		35.8	40.8	51.1	59.6
54"		34.1	38.8	48.6	56.7
60"		30.7	34.9	43.7	51.0
72"					
30"	78"	52.3	59.5	70.0	70.0
36"		43.5	49.6	62.1	70.0
42"		37.3	42.5	53.2	62.1
48"		32.7	37.2	46.6	54.3
51-3/8"		30.5	34.7	43.5	50.8
54"		29.0	33.0	41.4	48.3
60"					
72"					
30"	84"	45.1	51.3	64.3	70.0
36"		37.5	42.7	53.5	60.6
42"		32.2	36.6	45.9	51.9
48"		28.2	32.1	40.2	45.4
51-3/8"		26.3	29.9	37.5	42.4
60"					
72"					
72"					



$$\text{WIDTH (W)} = \frac{W1 + W2}{2}$$

DESIGN LOAD CAPACITY – PSF 6–9/16” MULLION						
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS				
		GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
WIDTH (W)	MULL SPAN					
24”	60”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		70.0	70.0	70.0	70.0	70.0
54”		70.0	70.0	70.0	70.0	70.0
60”		70.0	70.0	70.0	70.0	70.0
66”		64.0	64.0	64.0	64.0	64.0
72”		58.7	—	—	—	—
24”	66”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		70.0	70.0	70.0	70.0	70.0
54”		69.7	70.0	70.0	70.0	70.0
60”		62.7	64.0	64.0	64.0	64.0
24”	72”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		70.0	70.0	70.0	70.0	70.0
42”		70.0	70.0	70.0	70.0	70.0
48”		65.9	70.0	70.0	70.0	70.0
54”		58.6	65.2	65.2	65.2	65.2
60”		52.7	58.7	58.7	—	—
24”	78”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		70.0	70.0	70.0	70.0	70.0
40”		67.4	70.0	70.0	70.0	70.0
42”		64.2	70.0	70.0	70.0	70.0
48”		56.1	64.3	67.7	67.7	67.7
54”		49.9	57.1	60.2	—	—
24”	84”	70.0	70.0	70.0	70.0	70.0
30”		70.0	70.0	70.0	70.0	70.0
36”		64.5	70.0	70.0	70.0	70.0
40”		58.1	66.5	70.0	70.0	70.0
42”		55.3	63.3	69.8	70.0	70.0
48”		48.4	55.4	61.1	62.9	62.9
24”	90”	70.0	70.0	70.0	70.0	70.0
30”		67.5	70.0	70.0	70.0	70.0
36”		56.2	64.4	70.0	70.0	70.0
40”		50.6	57.9	63.8	68.7	68.7
42”		48.2	55.2	60.8	65.4	65.4
48”		42.2	48.3	53.2	57.2	57.2
24”	96”	70.0	70.0	70.0	70.0	70.0
30”		59.3	67.9	70.0	70.0	70.0
36”		49.4	56.6	62.3	67.0	67.1
40”		44.5	50.9	56.1	60.3	60.4
42”		42.4	48.5	53.4	57.5	57.5
45”		39.6	45.3	49.8	53.6	53.6

DESIGN LOAD CAPACITY – PSF 6-9/16” MULLION						
WINDOW DIMS.		WITH INTERMEDIATE HORIZONTALS				
		GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9
WIDTH (W)	MULL SPAN					
24”	102”	65.7	70.0	70.0	70.0	70.0
30”		52.5	60.1	66.3	70.0	70.0
36”		43.8	50.1	55.2	59.4	59.4
40”		39.4	45.1	49.7	53.5	53.5
42”		37.5	42.9	47.3	50.9	50.9
24”	108”	58.6	67.0	70.0	70.0	70.0
30”		46.8	53.6	59.1	62.5	62.5
36”		39.0	44.7	49.3	52.1	52.1
40”		35.1	40.2	44.3	46.9	46.9



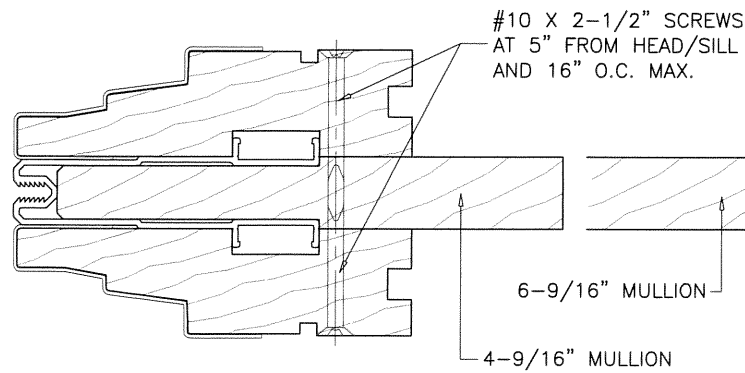
FL #17720

Date & Time: 05/01/15 16:18

af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-9100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

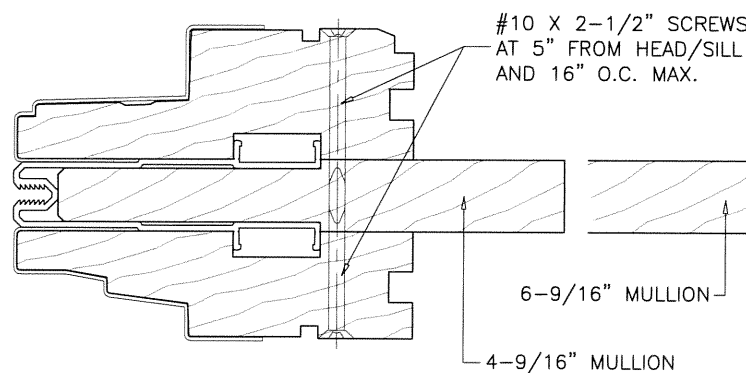
revisions:
no date by description
date: 04-28-15
scale: 1/2" = 1"
dr. by: HAMID
chk. by:
drawing no.
M15-01
sheet 6 of 13



CASEMENT TO CASEMENT
VERTICAL JOIN

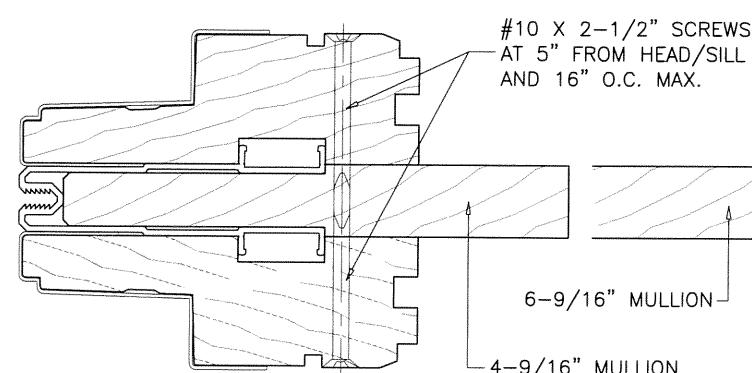
AWNING TO AWNING
HORIZONTAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	7



CASEMENT TO AWNING
VERTICAL OR HORIZONTAL JOIN

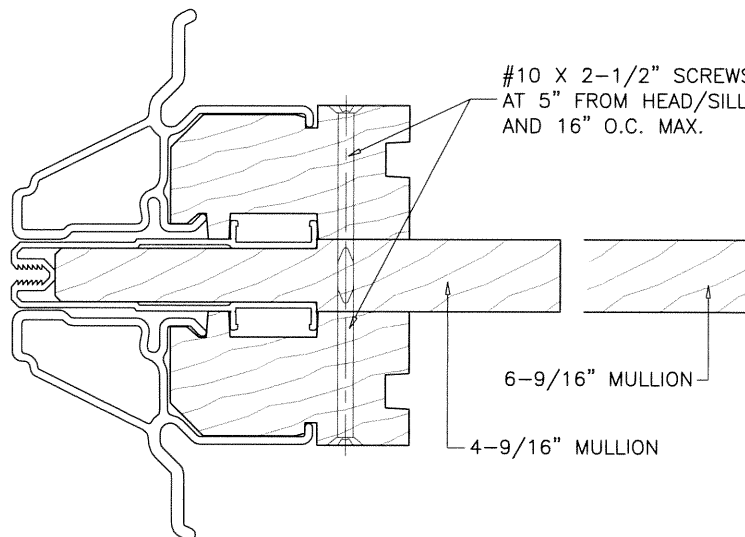
MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	7



CASEMENT TO CASEMENT
HORIZONTAL JOIN

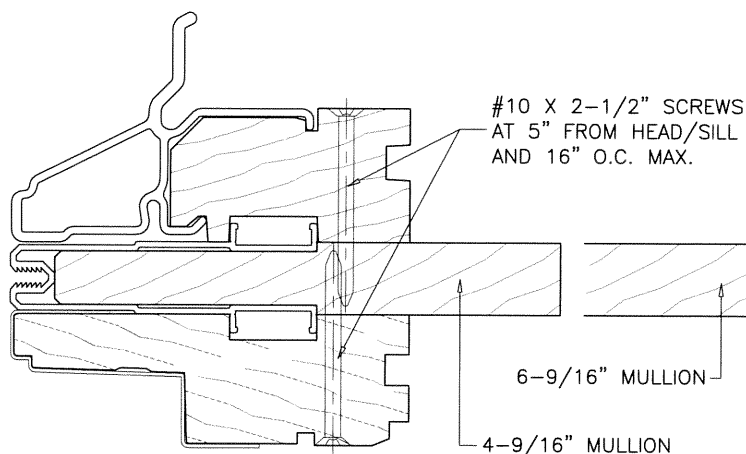
AWNING TO AWNING
VERTICAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	7



FLEXIFRAME TO FLEXIFRAME
VERTICAL OR HORIZONTAL JOIN

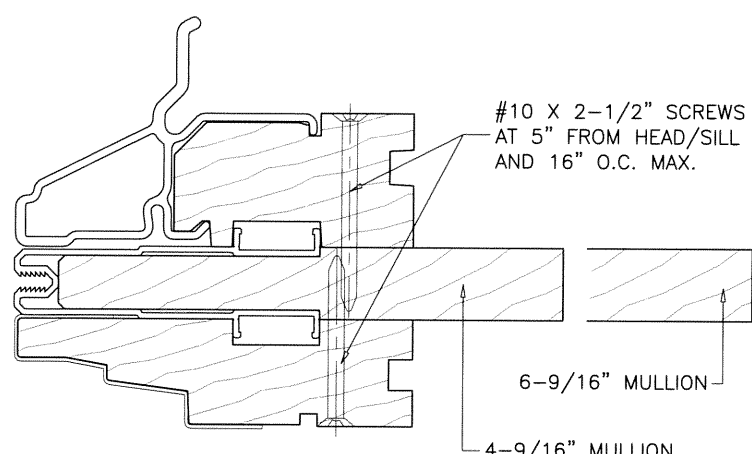
MULLION TYPE	GROUP NO.
4-9/16"	2
6-9/16"	5



CASEMENT TO FLEXIFRAME
HORIZONTAL JOIN

AWNING TO FLEXIFRAME
VERTICAL JOIN

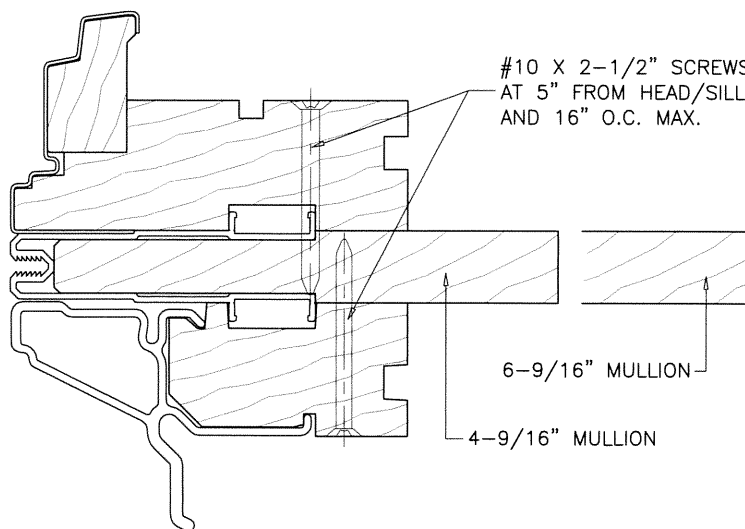
MULLION TYPE	GROUP NO.
4-9/16"	2
6-9/16"	6



CASEMENT TO FLEXIFRAME
VERTICAL JOIN

AWNING TO FLEXIFRAME
HORIZONTAL JOIN

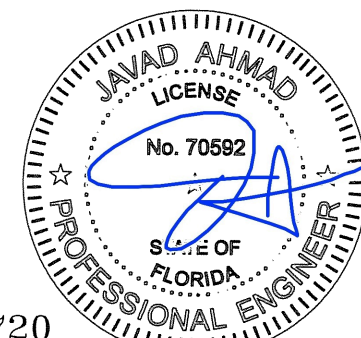
MULLION TYPE	GROUP NO.
4-9/16"	2
6-9/16"	6



FLEXIFRAME TO CIRCLE TOP/QUARTER
VERTICAL OR HORIZONTAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	2
6-9/16"	6

SEE SHEET 9 FOR 'I' VALUES OF VARIOUS GROUPS



FL #17720

Date & Time 05/01/15 16:18

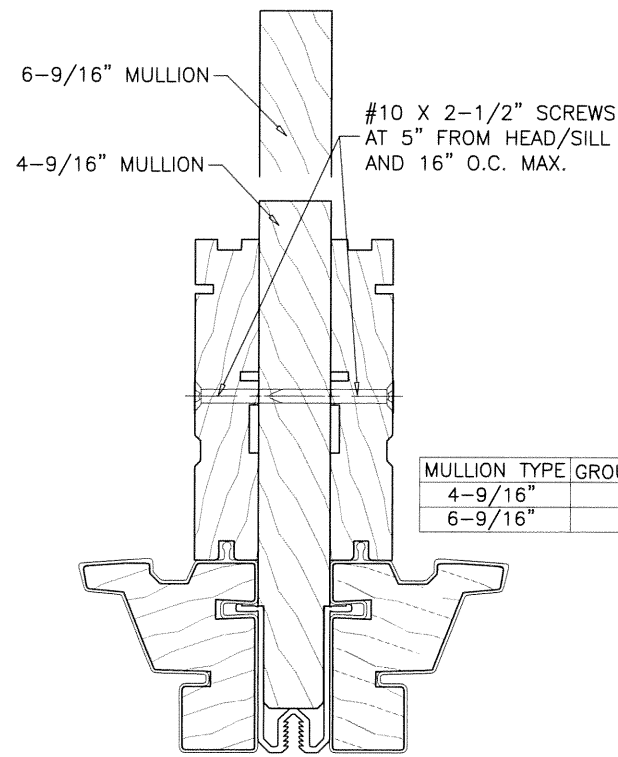
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION M15-01AC

ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)
LAMINATED VENEERED LUMBER MULLION SYSTEM

revisions:	no	date	by	description

date: 04-28-15	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

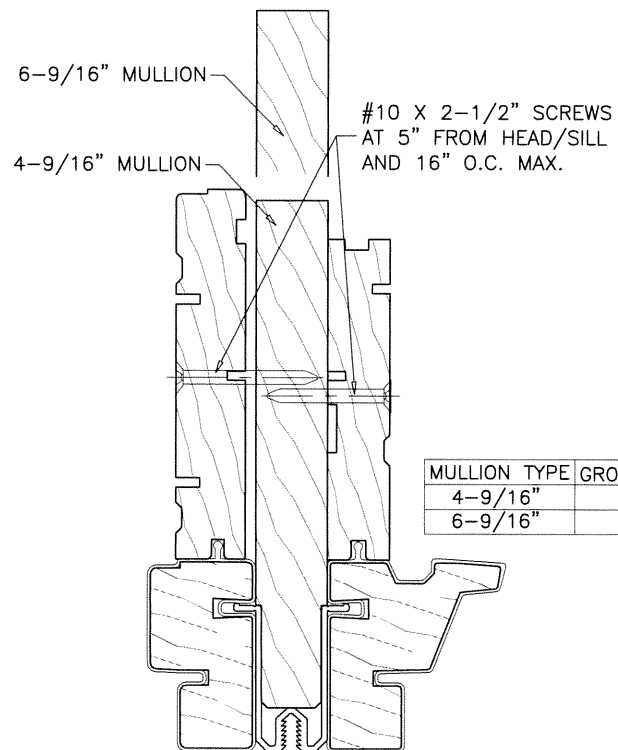
drawing no.	M15-01
sheet	7 of 13



MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	8

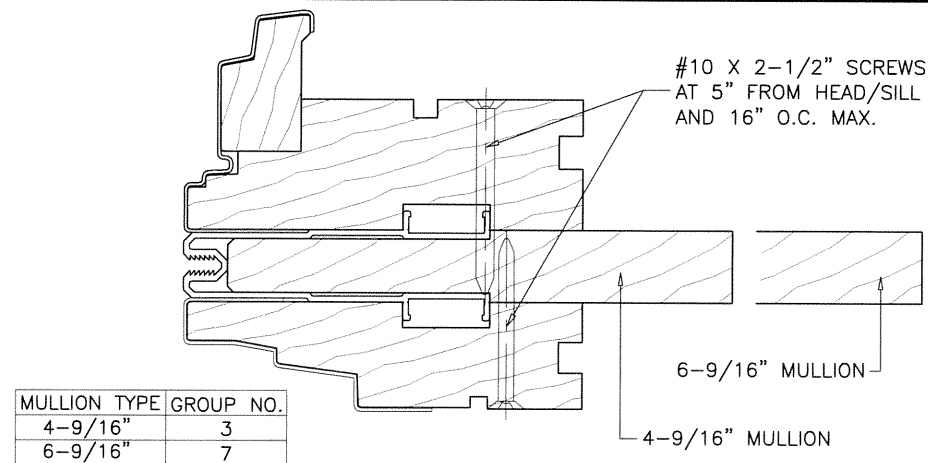
400 TWDH WDW TO 400 TWDH WDW
VERTICAL JOIN

400 TWDH WDW TO 400 TWDH PICTURE WDW
VERTICAL JOIN



MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	8

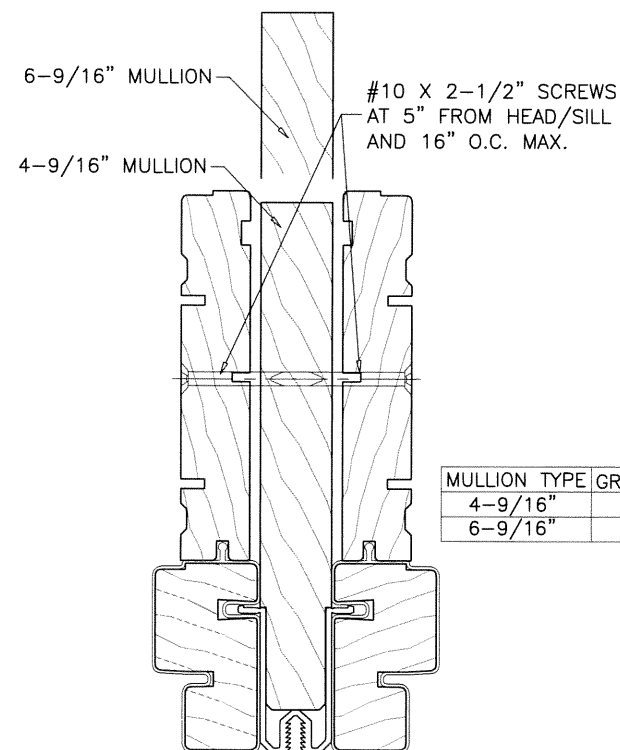
PSNL WDW TO 400 TWDH PICTURE WDW
VERTICAL JOIN



MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	7

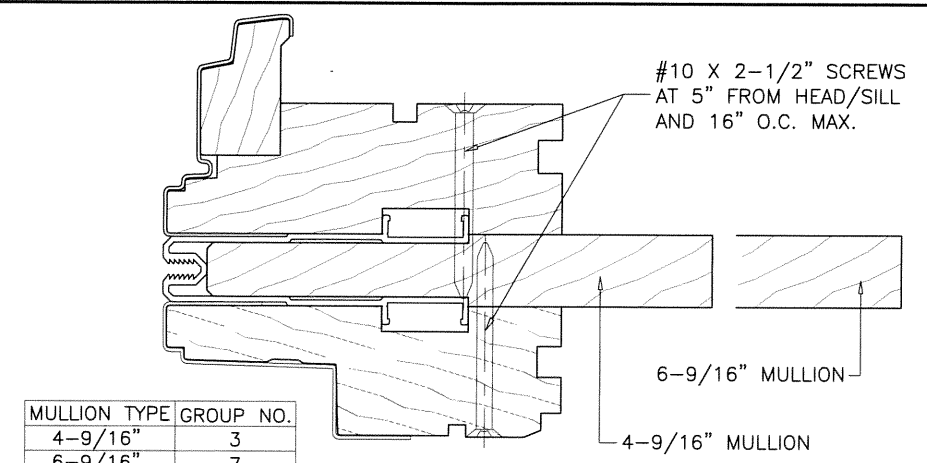
CIRCLE TOP TO AWNING
HORIZONTAL JOIN

SEE SHEET 9 FOR 'I' VALUES OF VARIOUS GROUPS



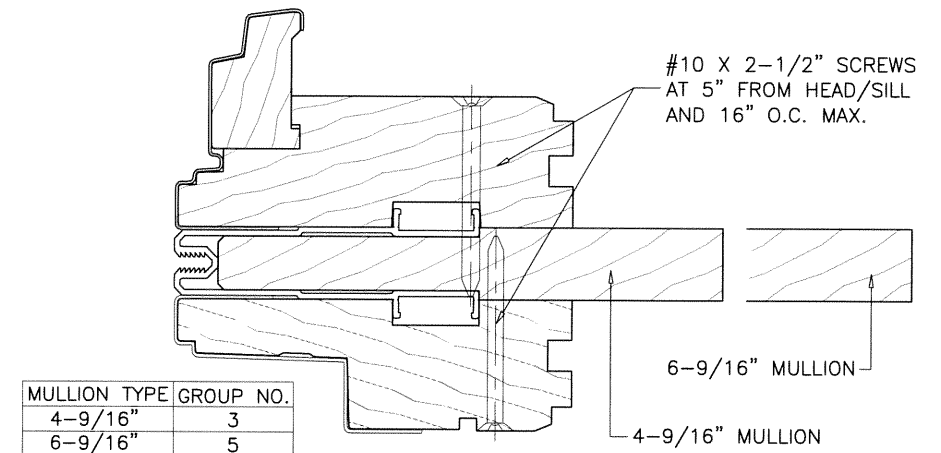
MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	9

PSNL WDW TO PSNL WDW
VERTICAL JOIN



MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	7

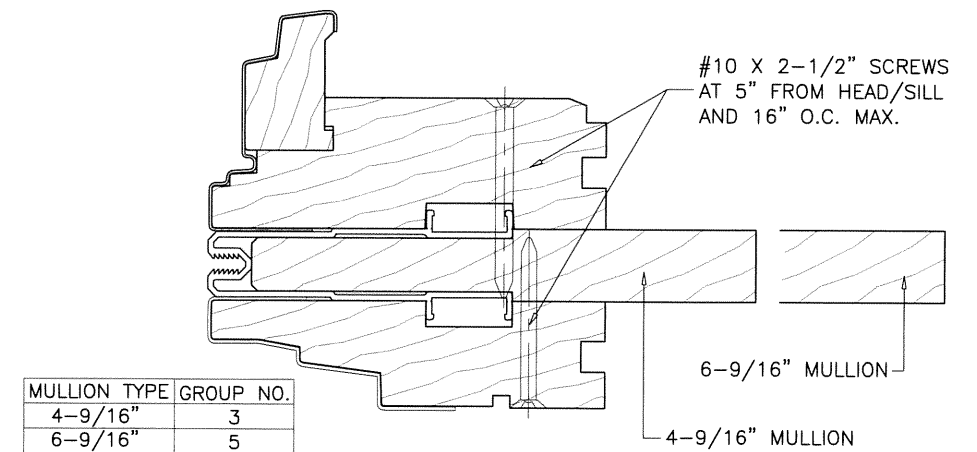
CIRCLE TOP TO CASEMENT
HORIZONTAL JOIN



MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	5

CASMT PICTURE WDW. TO AWNING
VERTICAL JOIN

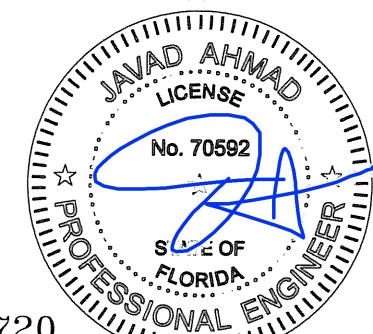
CASMT PICTURE WDW. TO CASEMENT
HORIZONTAL JOIN



MULLION TYPE	GROUP NO.
4-9/16"	3
6-9/16"	5

CASMT PICTURE WDW. TO AWNING
HORIZONTAL JOIN

CASMT PICTURE WDW. TO CASEMENT
VERTICAL JOIN



FL #17720

Date & Time: 05/01/15 16:18

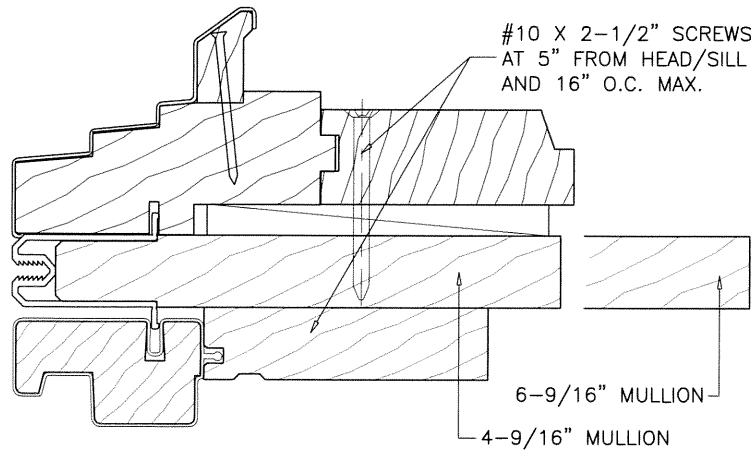
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)
AW

revisions:	no	date	by	description

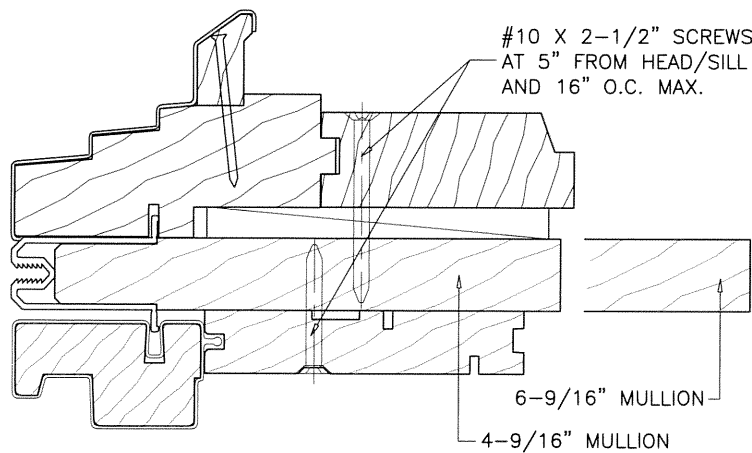
date: 04-28-15	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

drawing no.
M15-01
sheet 8 of 13



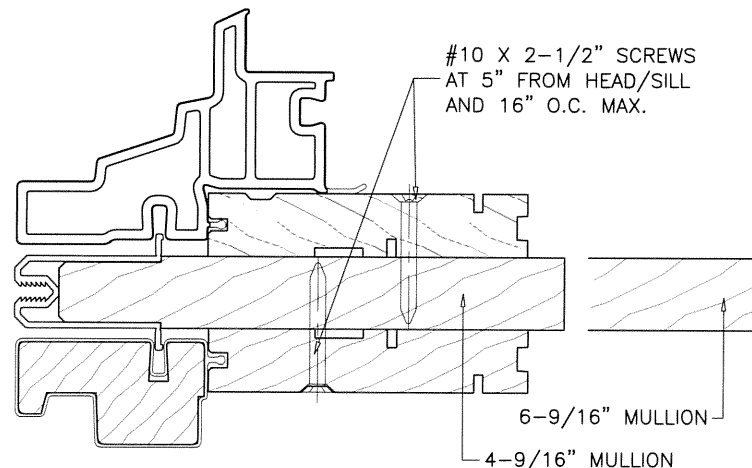
PSNL TO CIRCLE TOP-NL
HORIZONTAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	8



400 TW TO CIRCLE TOP-NL
HORIZONTAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	9

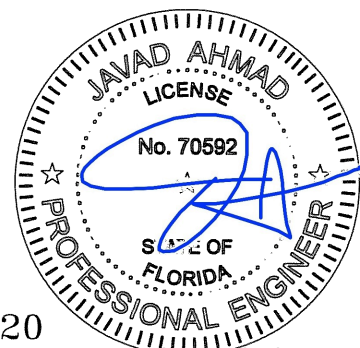


400 TW TO TW TRANSOM
HORIZONTAL JOIN

MULLION TYPE	GROUP NO.
4-9/16"	1
6-9/16"	6

VALUES USED GROUP		ALUMINUM COVER	WOOD+MULL 4-9/16"	WOOD+MULL 6-9/16"	TOTAL 'I' IN TERMS OF WOOD
1	Ix IN^4	0.0655	12.2451	-	12.7489
	Sx IN^3	0.0719	4.5182	-	
2	Ix IN^4	0.5801	10.7178	-	15.1801
	Sx IN^3	0.3427	3.7804	-	
3	Ix IN^4	0.5801	11.7200	-	16.1823
	Sx IN^3	0.3427	5.2952	-	
4	Ix IN^4	0.0655	15.6790	-	16.1828
	Sx IN^3	0.0719	8.0691	-	
5	Ix IN^4	0.5801	-	25.1317	29.5940
	Sx IN^3	0.3427	-	6.8663	
6	Ix IN^4	0.5801	-	25.1317	29.5940
	Sx IN^3	0.3427	-	7.8598	
7	Ix IN^4	0.0655	-	29.0902	29.5940
	Sx IN^3	0.0719	-	10.0284	
8	Ix IN^4	0.0655	-	29.0902	29.5940
	Sx IN^3	0.0719	-	10.7842	
9	Ix IN^4	0.0655	-	29.0902	29.5940
	Sx IN^3	0.0719	-	11.9135	

NOTE: TO OBTAIN TOTAL COMBINED 'I' VALUES
EALUM = 10^7
EWOOD = 1,300,000 PSI



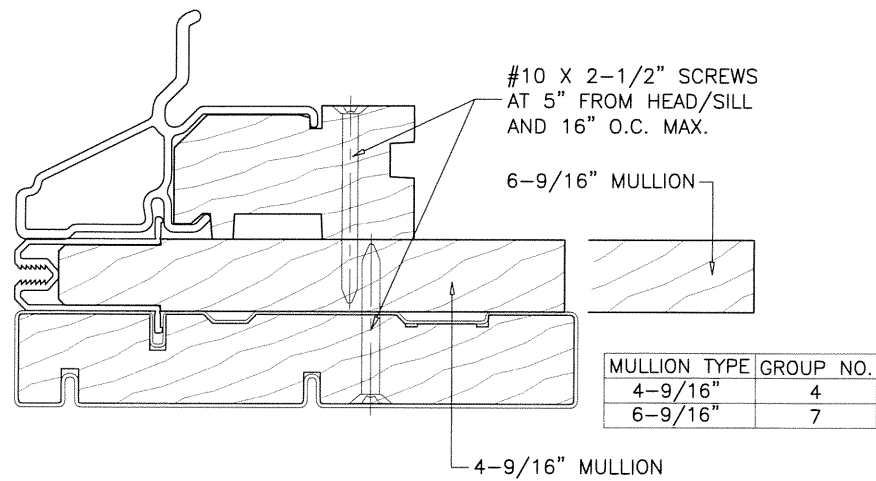
FL #17720

Date & Time: 05/01/15 16:18

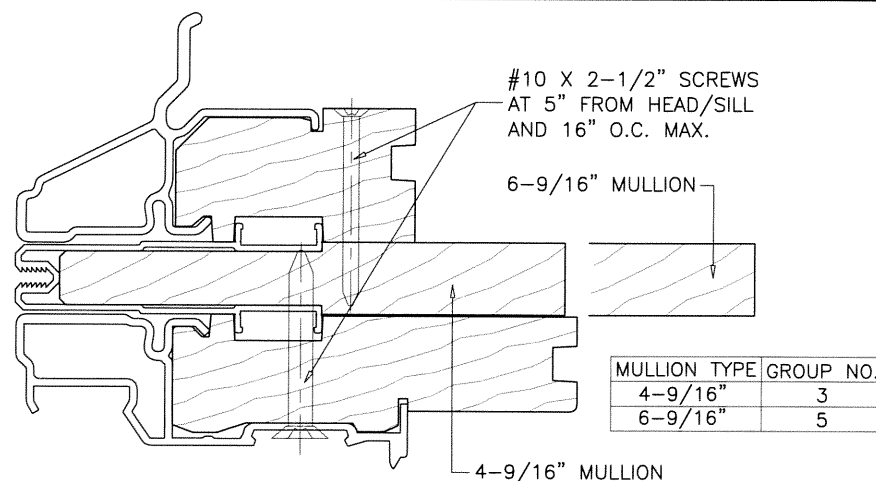
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978
MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

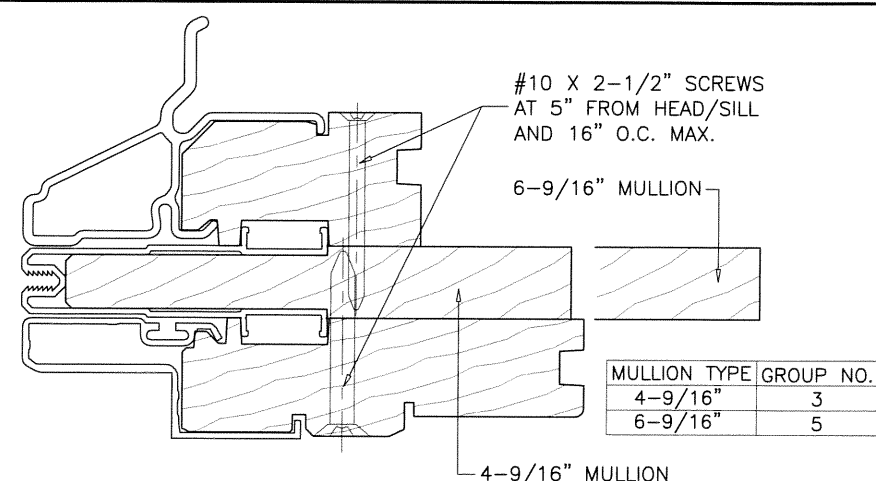
revisions:
no date by description
date: 04-28-15
scale: 1/2" = 1"
dr. by: HAMID
chk. by:
drawing no.
M15-01
sheet 9 of 13



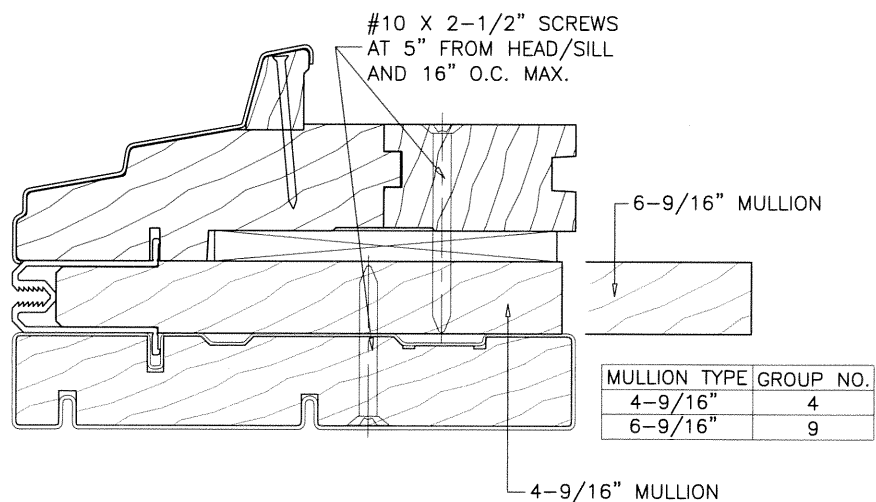
FLEXIFRAME/ARCH/SPRINGLINE TO FW GLIDING DOOR
HORIZONTAL JOIN



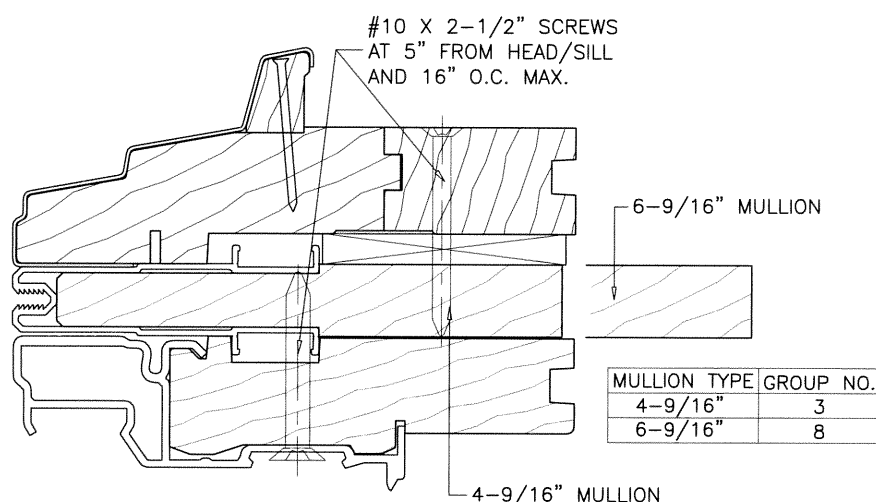
FLEXIFRAME/ARCH/SPRINGLINE TO FWH DOOR
HORIZONTAL JOIN



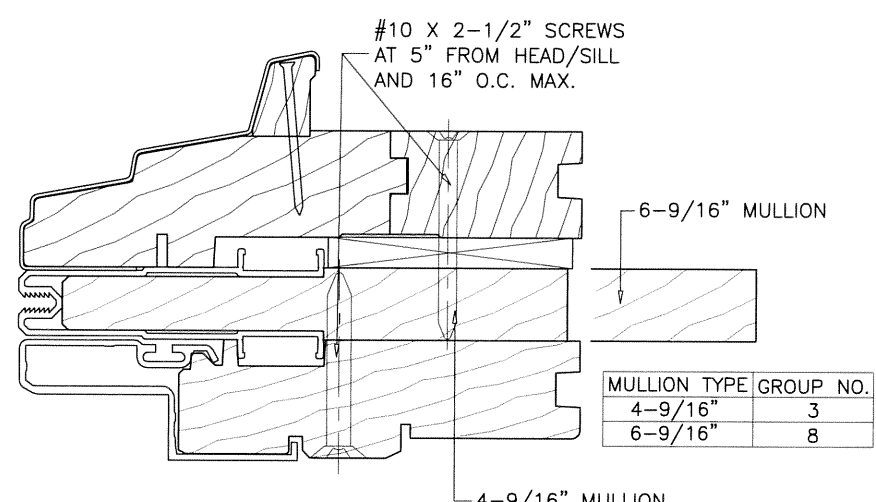
FLEXIFRAME/ARCH/SPRINGLINE TO FWO DOOR
HORIZONTAL JOIN



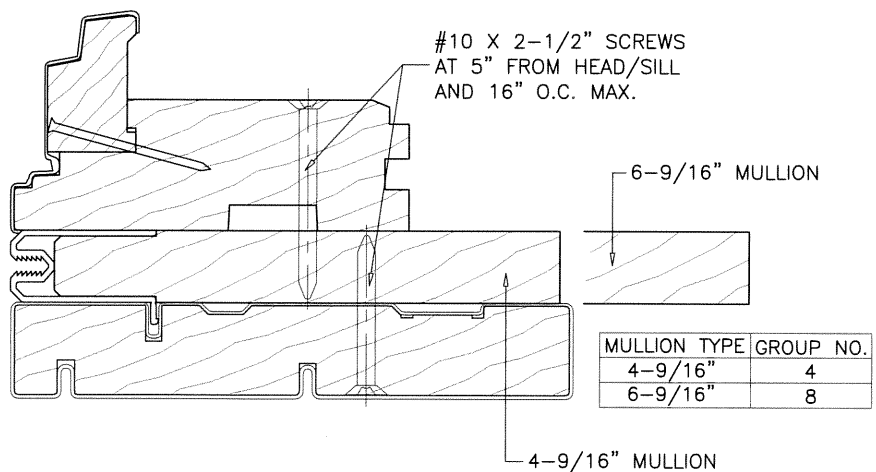
FLEXIFRAME/ARCH/SPRINGLINE TO FW GLIDING DOOR
HORIZONTAL JOIN



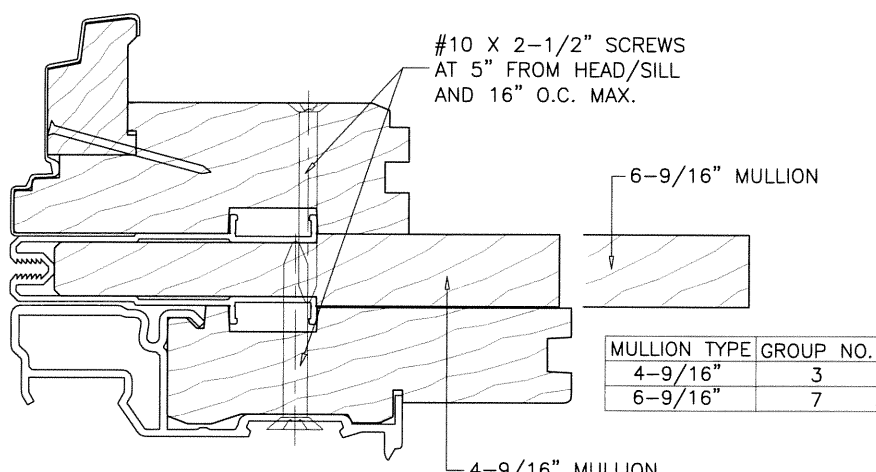
FLEXIFRAME/ARCH/SPRINGLINE TO FWH DOOR
HORIZONTAL JOIN



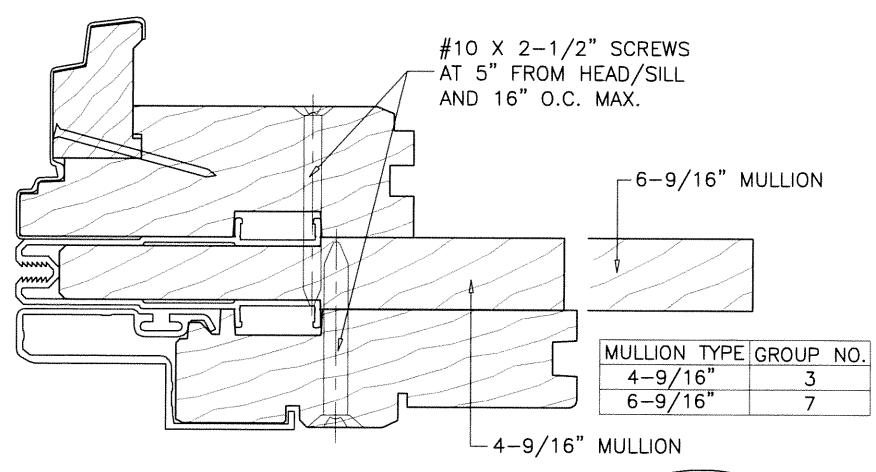
FLEXIFRAME/ARCH/SPRINGLINE TO FWO DOOR
HORIZONTAL JOIN



PSCA PICTURE WDW TO FW GLIDING DOOR
HORIZONTAL JOIN

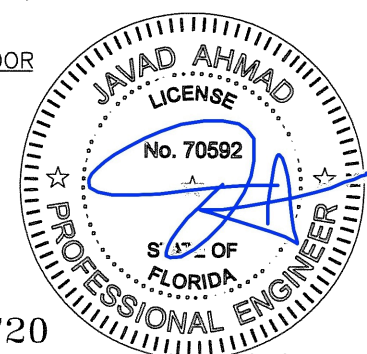


PSCA PICTURE WDW TO FWH DOOR
HORIZONTAL JOIN



PSCA PICTURE WDW TO FWO DOOR
HORIZONTAL JOIN

SEE SHEET 9 FOR 'I' VALUES OF VARIOUS GROUPS



FL #17720

Date & Time: 05/01/15 16:18

af c

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

MULLION M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM

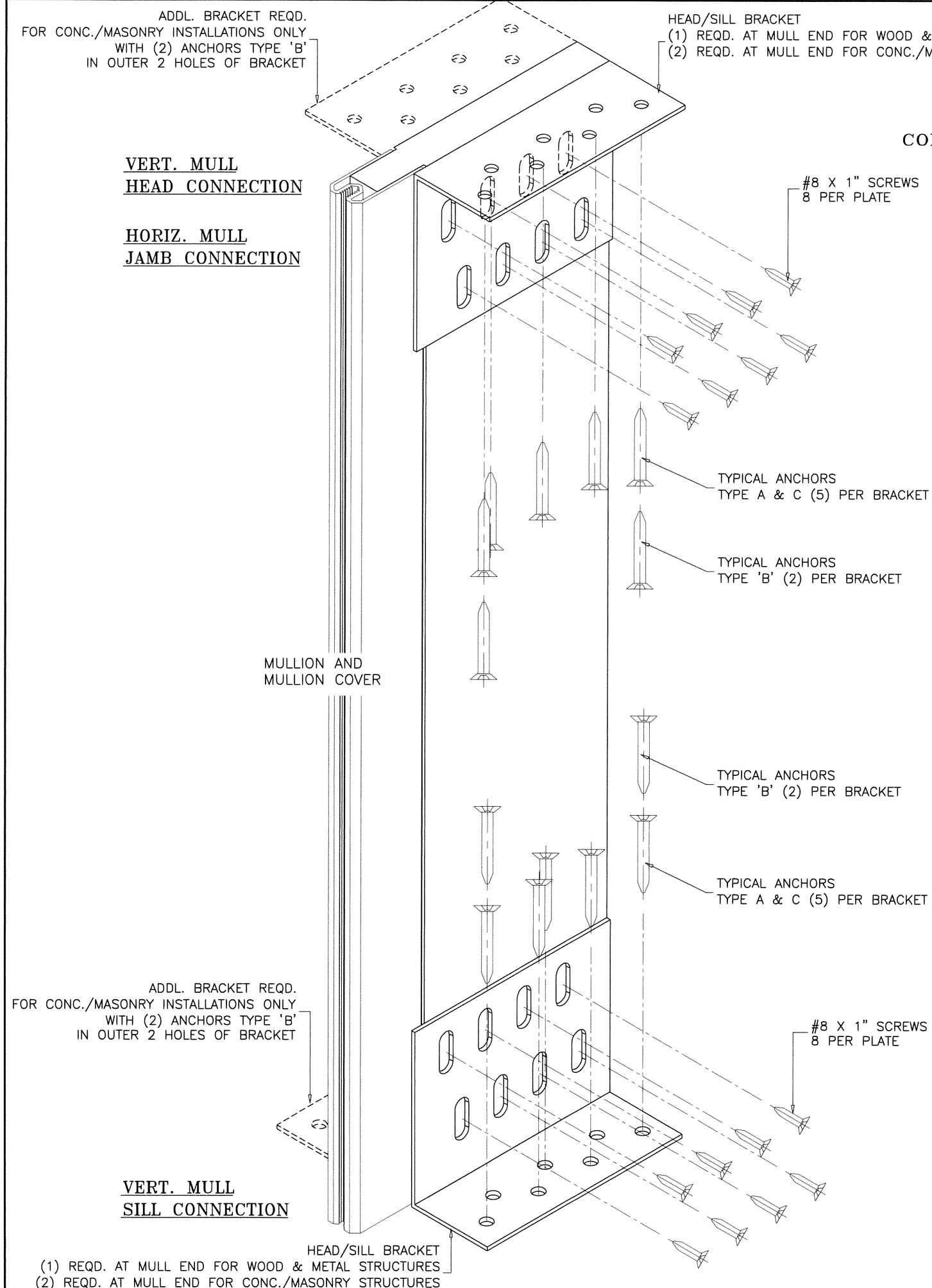
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

AW

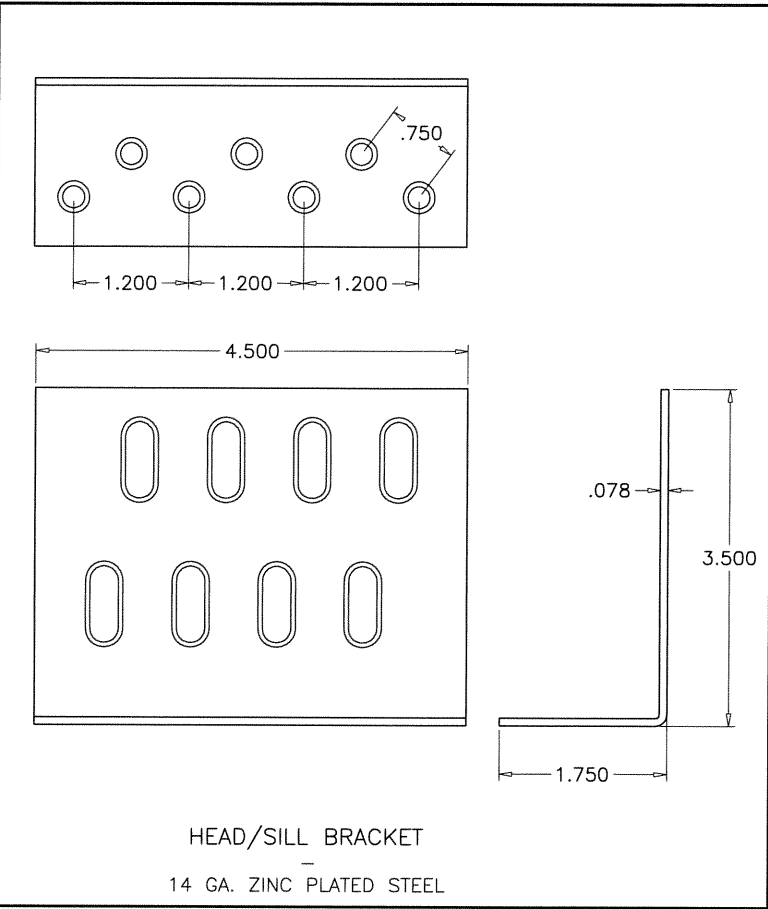
revisions:	
no	description

date: 04-28-15	scale: 1/2" = 1"	dr. by: HAMID	chk. by:
----------------	------------------	---------------	----------

drawing no.	sheet 10 of 13
M15-01	



4-9/16" MULLION
6-9/16" MULLION
CONNECTION DETAIL W/ BRACKET



TYPICAL ANCHORS: SEE ELEV. FOR SPACING

TYPE 'A'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD

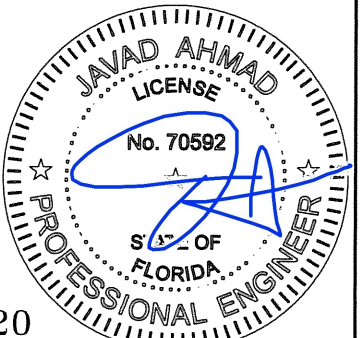
TYPE 'B'- 1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)
THRU 1BY BUCKS INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY
DIRECTLY INTO CONC. OR MASONRY
1-1/4" MIN. EMBED INTO CONC. OR MASONRY

TYPE 'C'- #12 SMS OR SELF DRILLING SCREWS (GRADE 2 CRS)
INTO METAL STRUCTURES
STEEL : 12 GA. MIN. (Fy = 36 KSI MIN.)
ALUMINUM : 1/8" THK. MIN. (6063-T5 MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

ANCHORS CL TO CL DISTANCES
INTO CONCRETE AND MASONRY = 3" MIN.
INTO WOOD STRUCTURE = 3/4" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

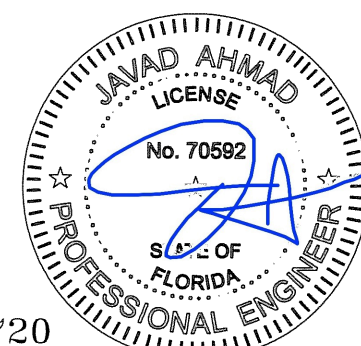
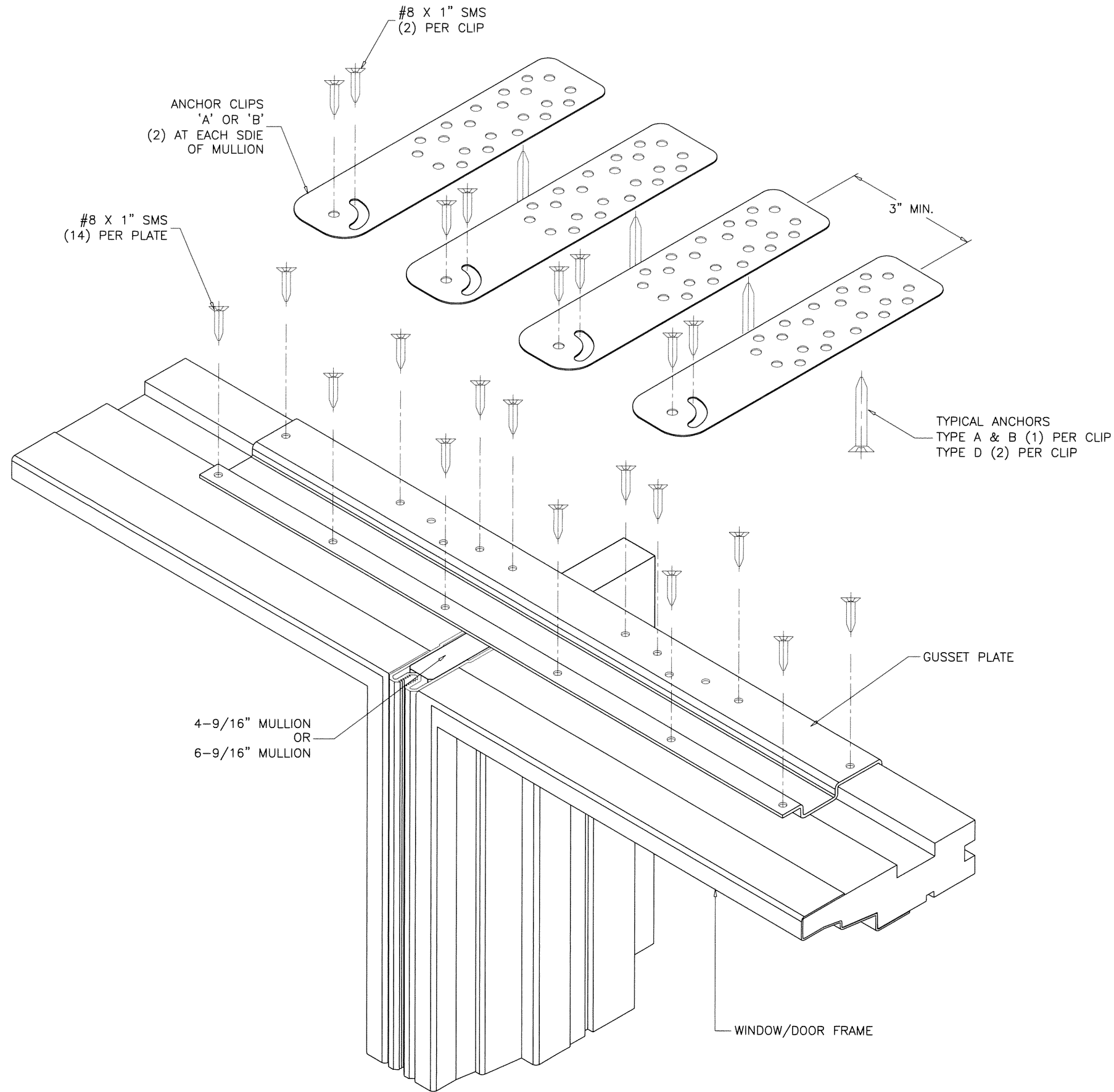
LAMINATED VENEERED LUMBER MULLION SYSTEM

ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

revisions:	
no	date by description

date: 04-28-15
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

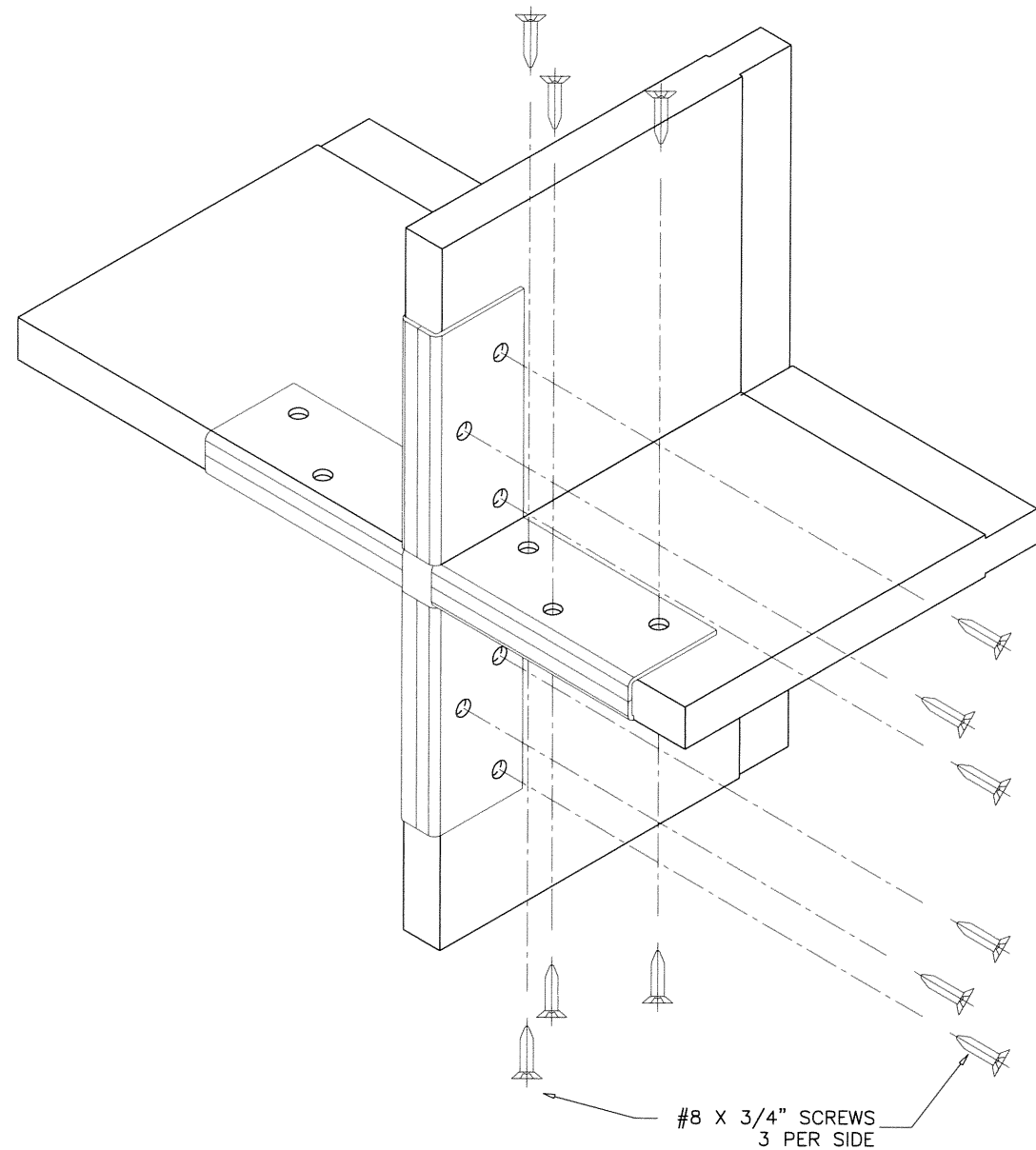
drawing no.
M15-01
sheet 11 of 13



FL #17720

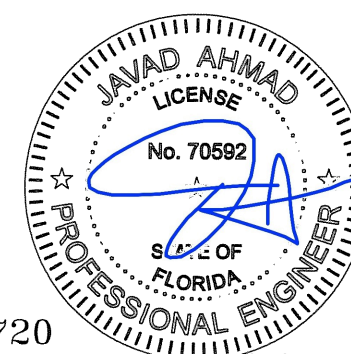
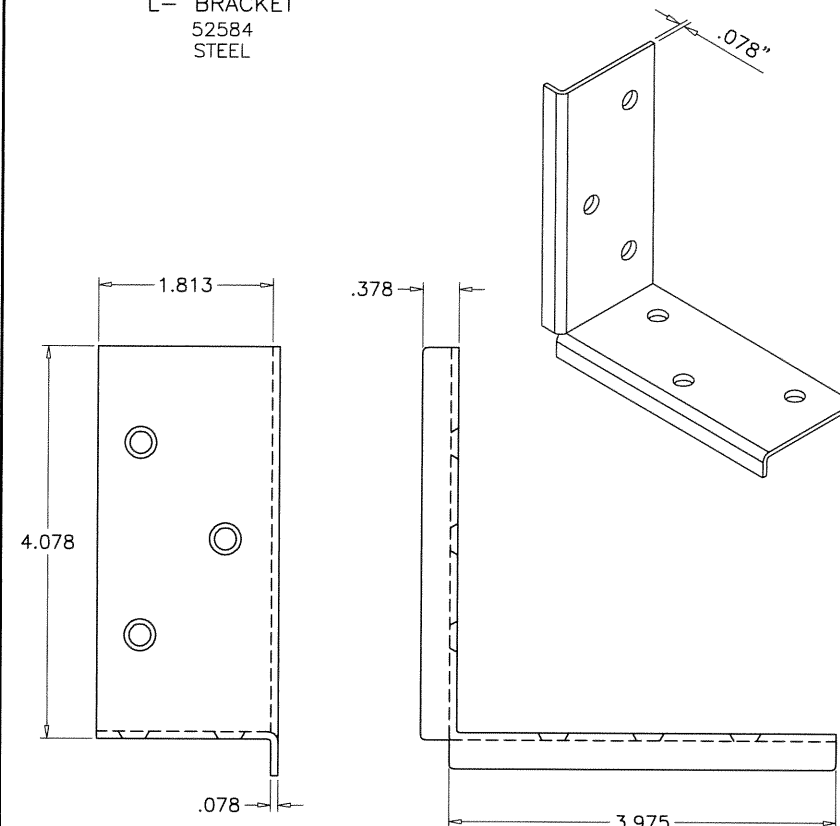
Date & Time: 05/01/15 16:19

AL-FAROOQ CORPORATION ENGINEERS & PRODUCT DEVELOPMENT 1235 S.W. 87 AVE MIAMI, FLORIDA 33174 TEL. (305) 264-8100 FAX. (305) 262-6978 MULLION\M15-01AC																															
LAMINATED VENEERED LUMBER MULLION SYSTEM ANDERSEN CORPORATION 100 FOURTH AVE. NORTH BAYPORT, MN. 55003-1096 TEL. (800) 426-7691 FAX (-)																															
<table border="1"> <thead> <tr> <th>revisions:</th> <th>no</th> <th>date</th> <th>by</th> <th>description</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>		revisions:	no	date	by	description																									
revisions:	no	date	by	description																											
date: 04-28-15 scale: 1/2" = 1" dr. by: HAMID chk. by:	drawing no. M15-01 sheet 12.1 of 13																														



VERT. MULLION CONNECTION TO HORIZONTAL MULLION

L- BRACKET
52584
STEEL



FL #17720

Date & Time: 05/01/15 16:10

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
1235 S.W. 87 AVE
MIAMI, FLORIDA 33174
TEL. (305) 264-8100 FAX. (305) 262-6978

MULLION\M15-01AC

LAMINATED VENEERED LUMBER MULLION SYSTEM
ANDERSEN CORPORATION
100 FOURTH AVE. NORTH
BAYPORT, MN. 55003-1096
TEL. (800) 426-7691 FAX (-)

revisions:		by description	
no	date		

date: 04-28-15
scale: 1/2" = 1"
dr. by: HAMID
chk. by:

drawing no.
M15-01
sheet 13 of 13