

GENERAL NOTES:

1. THESE CURTAIN WALL SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH ASTM E330, E283, E331, E1886 & E1996 FOR LARGE MISSILE IMPACT CURTAIN WALL SYSTEMS.
5. THESE CURTAIN WALL SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE (IBC).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THIS CURTAIN WALL SYSTEM.
7. ALL ANCHORS SECURING CURTAIN WALL FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, A DIRECTIONALITY FACTOR OF $K_D = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR $C_D = 1.6$ WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE SEPARATED OR COATED AS REQUIRED TO AVOID CORROSION OF EITHER MATERIAL.
11. THERE SHALL BE NO LIMIT TO THE NUMBER OF HORIZONTAL & VERTICAL PANELS USED FOR ANY JOB PROVIDING ALL RESTRICTIONS ARE MET PER THE ELEVATIONS.
12. TO THE BEST OF OUR KNOWLEDGE, THE CURTAIN WALL SYSTEMS SHOWN HEREIN ARE QUALITY ASSURED BY AN APPROVED CERTIFICATION/QA ENTITY & SHALL BE LABELED IN ACCORDANCE WITH APPLICABLE STANDARDS. THESE DRAWINGS SHOW ALL APPLICABLE ELEVATION, COMBINATION, INSTALLATION & COMPARATIVE ANALYSIS CONDITIONS AS DETERMINED THROUGH TESTING & ENGINEERING RATIONAL ANALYSIS. CURTAIN WALL ASSEMBLY SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, THE MANUFACTURER'S QUALITY ASSURANCE SPECIFICATIONS & TESTING REPORTS.
13. CERTIFICATION OF THESE CURTAIN WALL SYSTEMS SHALL BE CONSIDERED VOID IF THEY ARE INSTALLED WITHOUT A BUILDING PERMIT FROM THE APPLICABLE LOCAL BUILDING DEPARTMENT OR IF THEY ARE INSTALLED BY ANYONE OTHER THAN A LICENSED CONTRACTOR EXPERIENCED WITH CURTAIN WALL INSTALLATIONS.

CORNER CONSTRUCTION:

STANDARD FRAMING AT TOP & BOTTOM HORIZONTAL MEMBERS: VERTICAL MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA A SHEAR BLOCK (ITEM #12). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 2 NO. 12 X 1 7/8" FHTF SCREWS. THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 12 X 7/8" PHTF SCREWS. CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

STANDARD FRAMING AT INTERMEDIATE HORIZONTAL MEMBERS: HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBERS VIA A SHEAR BLOCK (ITEM #13). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL FRAME MEMBER WITH 2 NO. 12 X 1 7/8" FHTF SCREWS. THE INTERMEDIATE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 12 X 7/8" FHTF SCREWS. CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

TYPICAL 90 DEGREE CORNER FRAMING: VERTICAL CORNER MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE MITER CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL CORNER FRAME MEMBERS WITH 3 NO. 12 X 7/16" PHTF SCREWS. THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 12 X 1/2" FHTF SCREWS. CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

90 DEGREE CORNER FRAMING AT SPLICE JOINT LOCATIONS: VERTICAL CORNER MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE MITER CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA A SHEAR BLOCK (ITEM #16). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL CORNER FRAME MEMBERS WITH 2 NO. 12 X 7/16" PHTF SCREWS (2 PER SHEAR BLOCK). THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 12 X 1/2" FHTF SCREWS (2 PER SHEAR BLOCK). CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

STANDARD FRAMING AT SPLICE JOINT LOCATIONS: VERTICAL MEMBERS RUN THROUGH WHILE THE HORIZONTAL MEMBERS ARE SQUARE CUT, BUTTED AND MECHANICALLY FASTENED TO THE VERTICAL MEMBERS VIA A SHEAR BLOCK (ITEM #15). THE SHEAR BLOCK IS MECHANICALLY FASTENED TO THE VERTICAL CORNER FRAME MEMBERS WITH 2 NO. 12 X 1 7/8" PHTF SCREWS (2 PER SHEAR BLOCK). THE HORIZONTAL FRAME MEMBERS ARE ATTACHED TO THE SHEAR BLOCK WITH 2 NO. 12 X 1/2" FHTF SCREWS (2 PER SHEAR BLOCK). CORNERS ARE SEALED WITH DOW 795 SILICONE SEALANT.

**ANCHOR REQUIREMENTS TABLE
(SINGLE & MULTI-SPAN REINFORCED CURTAIN WALLS)**

OPENING TYPE (SUBSTRATE)	FRAME/CLIP TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
F--PERIMETER ANCHOR SCREWS			
MIN. 16 GA. 50 KSI METAL STUD	1/4"-14 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 2X6 WOOD FRAME OR BUCK (MIN. GR. 2 & G=0.55)	1/4" DIA. GR. 5 COARSE THREAD SCREW	1 1/4"	3/4"
MIN. 1/8" THK A36 STEEL	1/4"-14 OR 20 GR. 5 SELF TAP/DRILL SCREW	FULL	1/2"
MIN. 3000 PSI CONCRETE	(1) 3/8" CONCRETE SCREW ANCHOR	2 1/2"	2 1/2"
MIN. C-90 CMU FILLED WITH MIN. 2500 PSI CONCRETE	(1) 3/8" CONCRETE SCREW ANCHOR	2 1/2"	2 1/2"
T & F--ANCHOR SCREWS/BOLTS (VERTICAL MEMBER ENDS)			
MIN. 1/8" THK A36 STEEL	1/4"-120 OR 14 430 SS HCMS OR GR. 5 CS THREAD FORMING SCREW	FULL	3/4"
	1/4" GR. 5 CS OR 410 SS BOLT WITH LOCK WASHER & NUT	FULL	3/4"
	1/2"-13 300 SS HCMS OR GR. 5 CS THREAD FORMING SCREW	FULL	1"
	1/2" GR. 5 CS OR 410 SS BOLT WITH LOCK WASHER & NUT	FULL	1"
(2) MIN. 3000 PSI CONCRETE	(1) 1/2" CONCRETE SCREW ANCHOR	3 1/2"	SEE DETAILS

(1) 1/2" CONCRETE SCREWS SHALL BE SIMPSON STRONG-TIE TITAN HD SCREW ANCHOR (GALVANIZED STEEL).
 (2) MINIMUM CONCRETE SLAB THICKNESS FOR PLACEMENT OF "T" & "F" ANCHORS IS 5 1/2".

MAXIMUM ALLOWABLE FRAMING MEMBER DEFLECTION
L/180 (SPAN OF MEMBER DIVIDED BY 180)
 NOTE: THIS IS THE MAXIMUM ALLOWABLE DEFLECTION AS RESTRICTED BY THE BUILDING CODE. IF JOB CONDITIONS REQUIRE LESS DEFLECTION, THE JOB CONDITIONS SHALL CONTROL.

MAXIMUM ALLOWABLE DESIGN PRESSURE (MULTI & SINGLE SPAN CURTAIN WALL)
+60/-60 PSF

1. THE ABOVE STATED PRESSURES ARE THE MAXIMUM ALLOWED ON ANY JOB REGARDLESS OF WHAT THE JOB SPECIFIC DESIGN RESULTS MAY SHOW. INCREASE OF ALLOWABLE DESIGN PRESSURE ON ANY JOB IS CONSIDERED OUTSIDE THE SCOPE OF THIS APPROVAL. SEE "MULTI-SPAN OR SINGLE SPAN WALL NOTES" ON SHEETS 2 & 4 FOR ACTUAL JOB DESIGN CONDITIONS.

ANCHOR LEGEND

ANCHOR SYMBOL	ANCHOR DESCRIPTION
⊞	STANDARD WIND LOAD ANCHOR
⊕	CORNER WIND LOAD ANCHOR
△	STANDARD DEAD LOAD ANCHOR
◊	CORNER DEAD LOAD ANCHOR
⊞	STANDARD T-ANCHOR
⊕	CORNER T-ANCHOR
△	F-ANCHOR (FRAME MEMBER ENDS)

SEE SHEETS 5-9 FOR DETAILS OF ANCHORS

VERTICAL MEMBER REINFORCEMENT LEGEND
[R1] = REINFORCEMENT PART NUMBER 29
[R2] = REINFORCEMENT PART NUMBER 29 & 30
[R3] = REINFORCEMENT PART NUMBER 31

SEE PARTS DRAWINGS & PARTS LIST FOR APPLICABLE REINFORCEMENT MEMBERS & THEIR DETAIL.

DRAWING USE INSTRUCTIONS:

1. DETERMINE IF THE WALL SYSTEM IS TO BE A MULTI-SPAN OR SINGLE SPAN CONDITION. IF MULTI-SPAN, ALL CONDITIONS SHOWN ON SHEETS 2 & 3 SHALL APPLY. IF A SINGLE SPAN, ALL CONDITIONS SHOWN ON SHEET 4 SHALL APPLY.
2. CONDITIONS MAY NOT BE MIXED BETWEEN WALL SYSTEM TYPES.
3. ALLOWABLE GLASS PRESSURE SHALL BE CONSIDERED WITH ALL WALL CONDITIONS AND SHALL CONTROL IF LESS THAN THOSE ALLOWABLE PRESSURES STATED FOR THE APPLICABLE FRAMING SYSTEM.

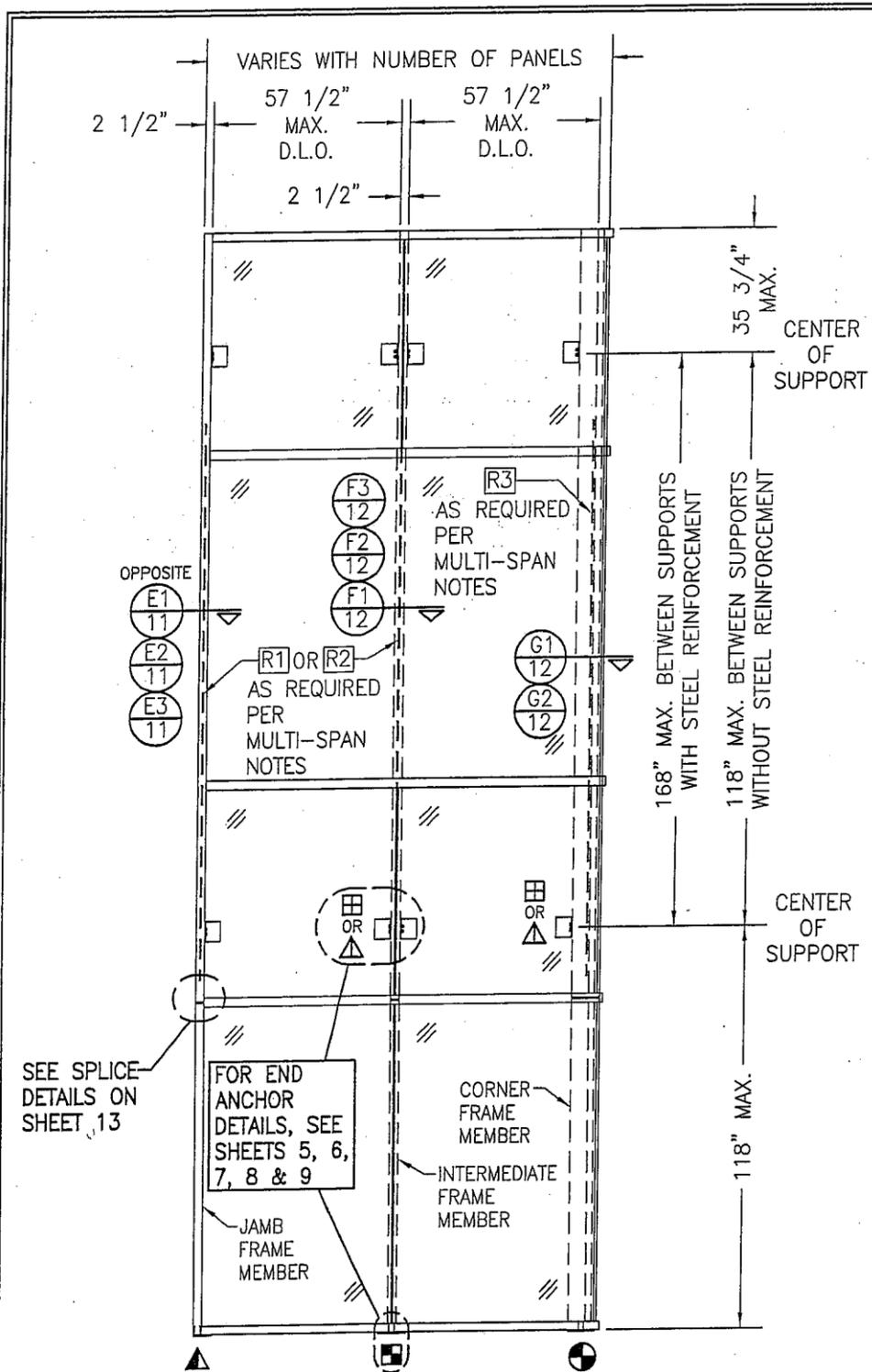
FREE SPANNING JAMB PERIMETER SEALANT NOTE (APPLICABLE TO ELEVATION ON ALL FREE SPANNING PERIMETER FRAME MEMBERS):

WHEN THERE IS NO CONTINUOUS JAMB SUPPORT, THE MINIMUM & MAXIMUM ALLOWABLE SPACE BETWEEN JAMB FRAME MEMBERS & THE OPENING SUBSTRATE OR FINISHES SHALL BE SPECIFIED BY THE ENGINEER OR ARCHITECT OF RECORD FOR EACH JOB BUT SHALL NOT BE LESS THAN 1/2" NOR GREATER THAN 1 3/8". WHEN CONSIDERING TYPE, DEPTH & JOINT SPAN OF SEALANT, THE ENGINEER/ARCHITECT SHALL TAKE INTO CONSIDERATION THE DEFLECTION OF THE JAMB MEMBER THAT WOULD OCCUR WHILE SUPPORTING THE JOB REQUIRED DESIGN WIND PRESSURE. ALSO TO BE CONSIDERED SHALL BE THE MATERIALS & SURFACES TO WHICH THE SEALANT WILL BE APPLIED.

EVALUATION OF THIS PRODUCT IS BASED ON APPLICABLE STANDARDS AND/OR INFORMATION & RESULTS FROM APPLICABLE TEST REPORTS. THE BUILDING CODE VERSION CONSIDERED WITH THIS EVALUATION WAS THAT IN FORCE AT THE TIME OF THE EVALUATION. IN THE EVENT OF CODE VERSION CHANGES/UPDATES OR IN THE EVENT THAT NEW OR ADDITIONAL TESTING IS COMPLETED ON THIS PRODUCT, PRIOR TO STATING CODE COMPLIANCE, THE MANUFACTURER SHALL CONFIRM WITH THE EVALUATION ENGINEER OF RECORD THAT EVERYTHING SPECIFIED HERE-IN IS CURRENT WITH ALL CURRENT TESTING, CODES AND APPLICABLE STANDARDS.

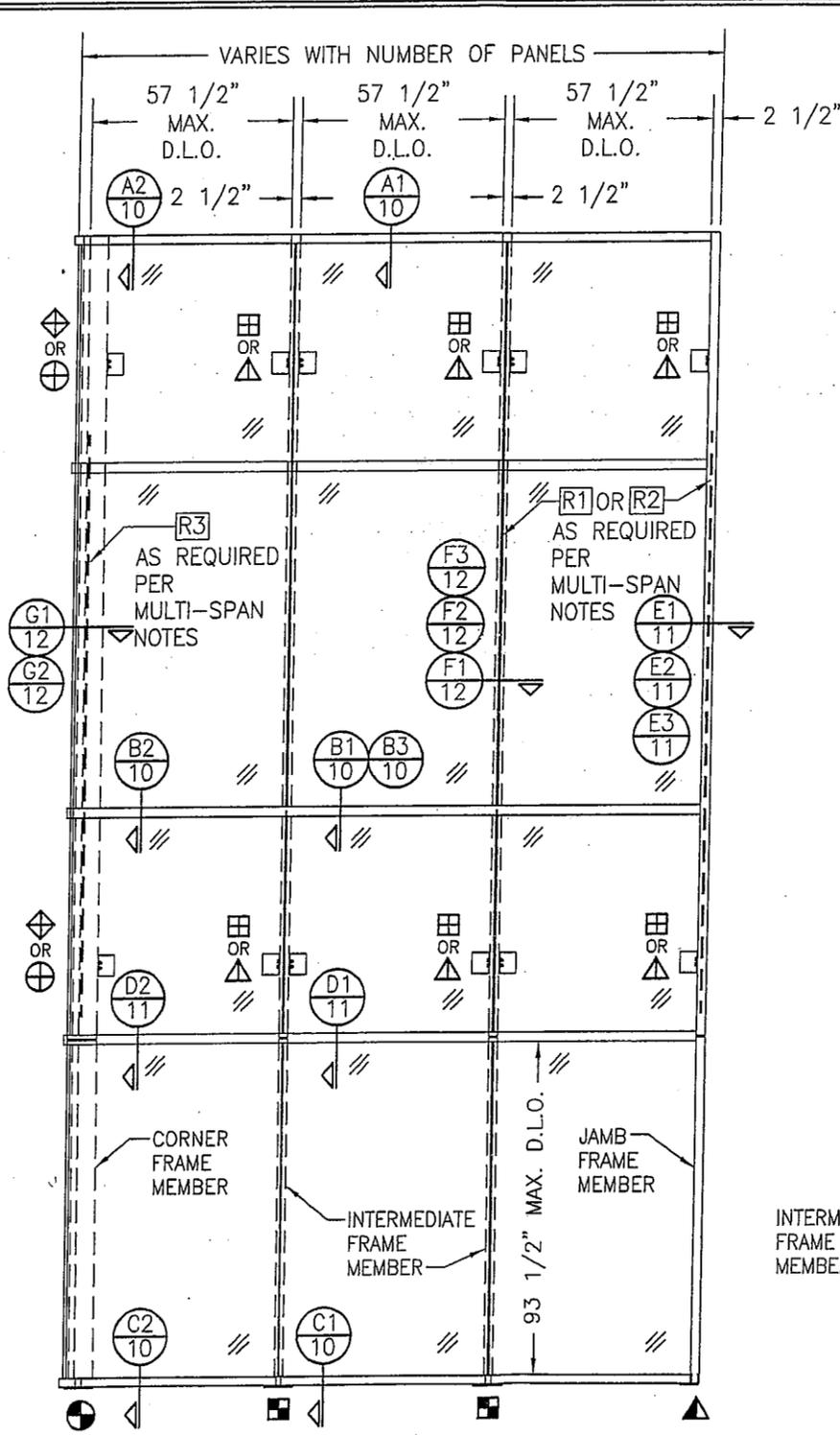
NOTE: INFORMATION ON THIS SHEET APPLIES TO ALL ELEVATIONS.

DRAWN BY: W.W.S.	CHECKED BY: W.W.S.
PLOT: 1=48	DATE: 03/19/13
DATE	BY
REVISION DESCRIPTION	NO.
JOB INFORMATION:	
KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555	
DRAWING TITLE: SYSTEM 2 CURTAIN WALL (L.M.I.)	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
STATE OF TEXAS WARREN W. SCHAEFER 113497 PROFESSIONAL ENGINEER	
CERTIFICATION: MAR 20 2013	
DRAWING NO. 1791T	REV.
SHEET NO. 1 OF 16	



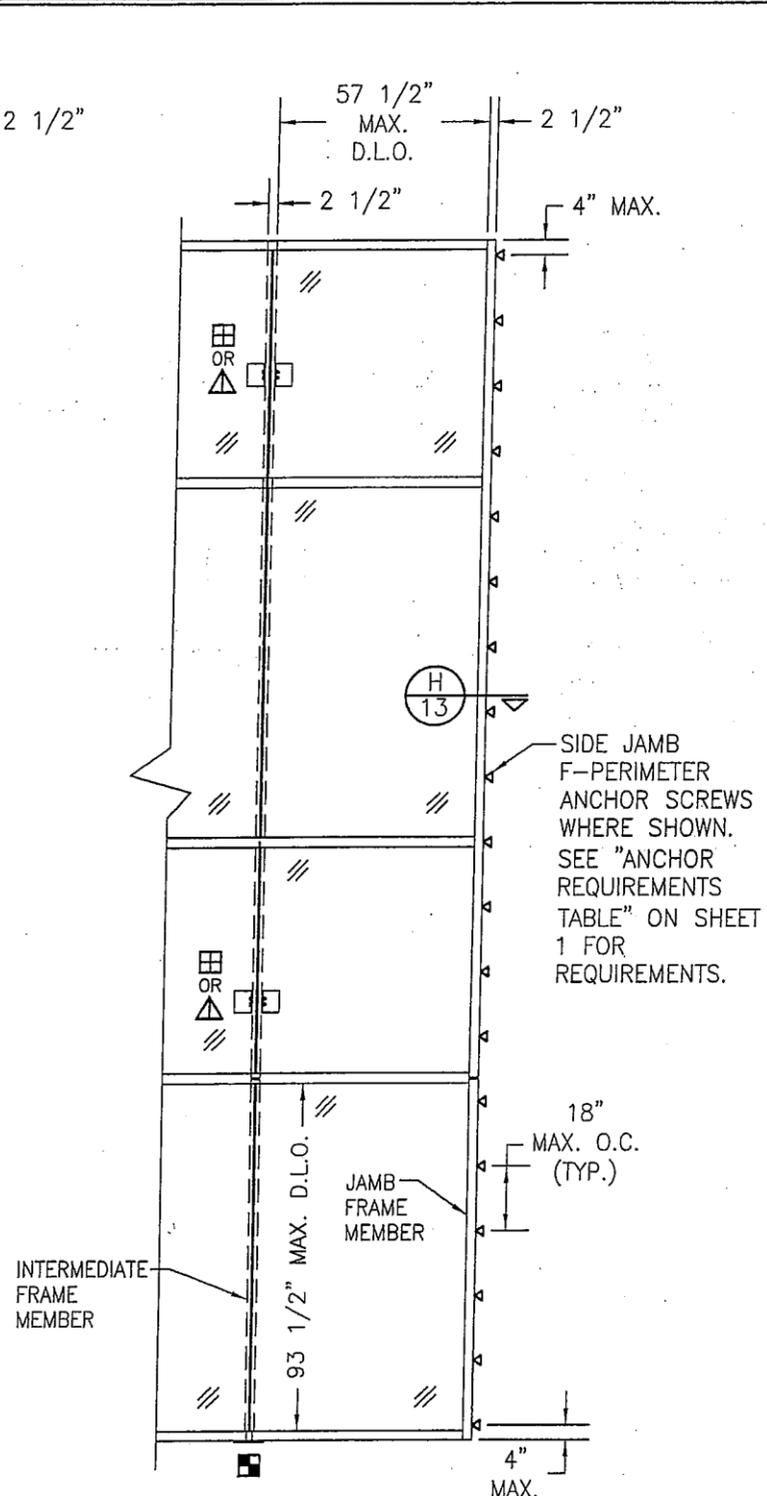
EXTERIOR ELEVATION VIEW "A-A":
MULTI-SPAN CURTAIN WALL

SCALE: 1/4" = 1'-0"
SPANNING SIDE JAMB SHOWN.
CONTINUOUSLY SUPPORTED SIDE
JAMB ALSO APPLIES PER
ALTERNATE SIDE JAMB CONDITION
ELEVATION ON THIS SHEET.



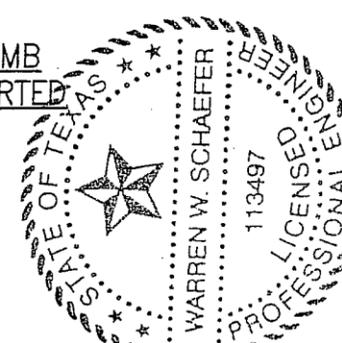
EXTERIOR ELEVATION VIEW "B-B":
MULTI-SPAN CURTAIN WALL

SCALE: 1/4" = 1'-0"
SPANNING SIDE JAMB SHOWN.
CONTINUOUSLY SUPPORTED SIDE
JAMB ALSO APPLIES PER
ALTERNATE SIDE JAMB CONDITION
ELEVATION ON THIS SHEET.



ALTERNATE MULTI-SPAN SIDE JAMB
CONDITION: CONTINUOUSLY SUPPORTED

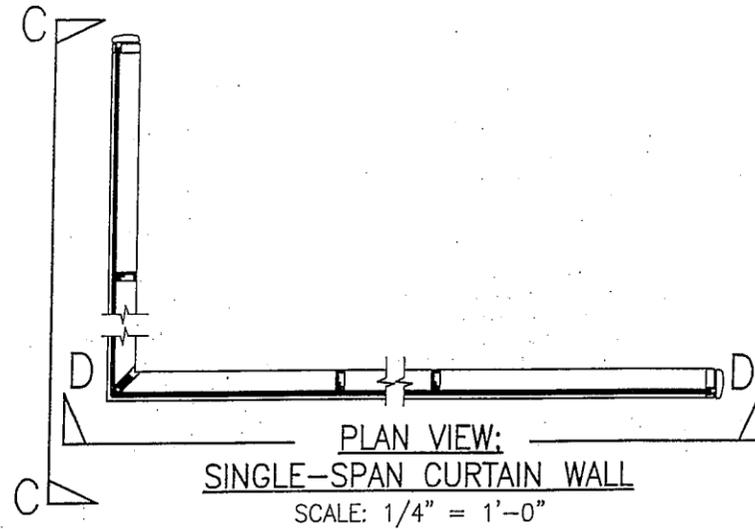
SCALE: 1/4" = 1'-0"



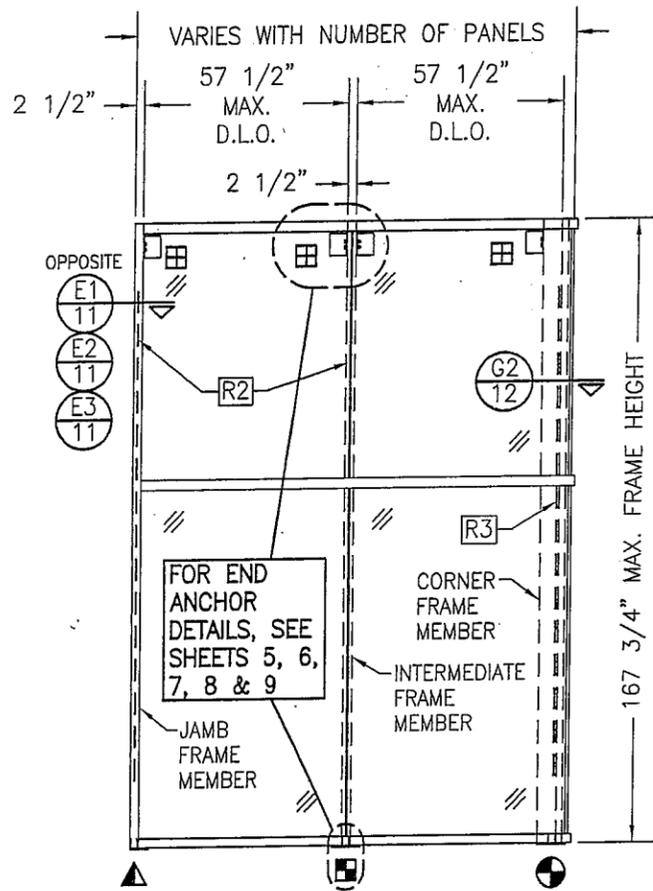
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=48		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
CONSULTANTS JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION MAR 20 2013 WARREN W. SCHAEFER, P.E. P.E. NO. 113497			
DRAWING NO. 1791T		REV.	
SHEET NO. 3		OF 16	

NOTES APPLICABLE TO SINGLE-SPAN CURTAIN WALLS

1. ALL SPANNING VERTICAL MEMBERS IN A SINGLE SPAN CURTAIN WALL SHALL BE REINFORCED WITH REINFORCEMENT R2 IN SIDE JAMB & INTERMEDIATE MEMBERS & WITH R3 IN CORNER FRAME MEMBERS. REINFORCEMENT SHALL RUN CONTINUOUS IN ALL SPANNING VERTICAL MEMBERS & EXTEND TO WITHIN 18" OF THE ENDS.
2. SIDE JAMB MEMBERS DO NOT REQUIRE REINFORCEMENT WHEN THEY ARE SUPPORTED WITH A CONTINUOUS SIDE JAMB F-PERIMETER ANCHOR.
3. THERE IS NO LIMIT TO THE NUMBER OF SECTIONS HORIZONTALLY PROVIDING THE OPENING IS DESIGNED TO SUPPORT THE LOADS TRANSFERRED FROM THE WALL SYSTEM.
4. THE ELEVATION HERE-IN SHOWS F & T-ANCHORS AT THE BASE OF THE WALL ONLY. THESE ANCHORS MAY ALSO BE USED AT THE TOP OF A WALL IN LIEU OF THE WIND LOAD ANCHORS SHOWN PROVIDING THEY ARE INSTALLED THE SAME AS SHOWN AT THE BASE.
5. SIDE JAMB FRAME MEMBERS MAY BE SUPPORTED EITHER BY A CONTINUOUS SIDE JAMB FRAME F-PERIMETER ANCHOR OR BY END ANCHORS AS SHOWN.
6. ALL CONDITIONS SHOWN IN THESE ELEVATIONS SHALL APPLY TO ALL JOBS. CONDITIONS DIFFERING FROM THOSE SHOWN ARE NOT PART OF THIS PRODUCTS APPROVAL AND ARE CONSIDERED OUTSIDE THE SCOPE OF THIS APPROVAL.

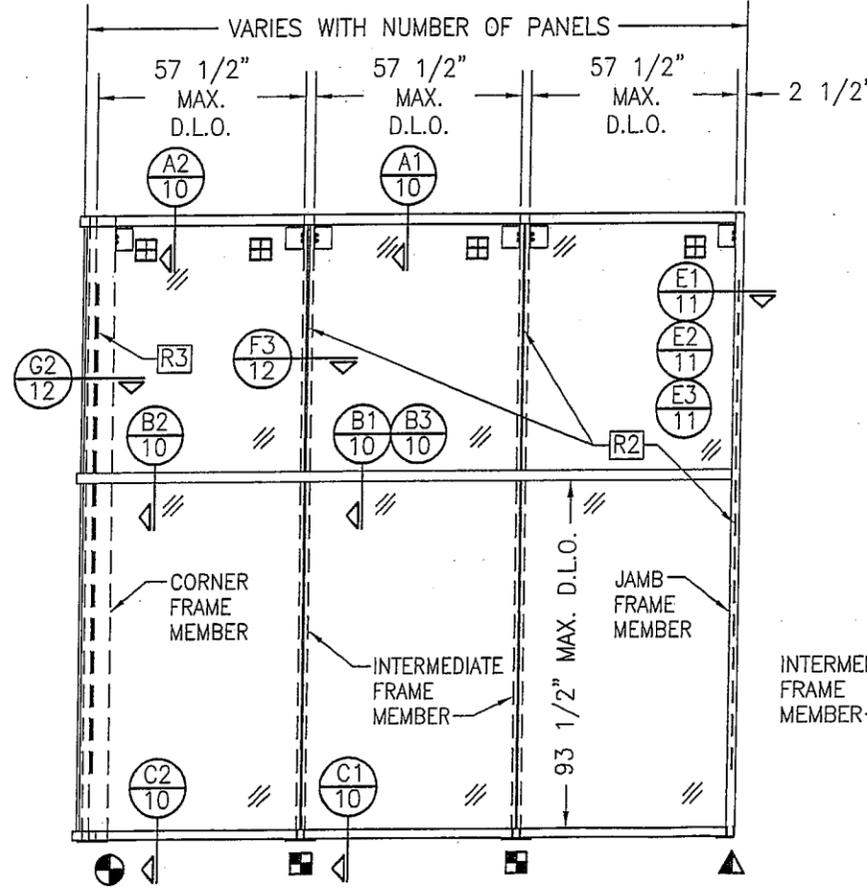


NOTE: INFORMATION ON THIS SHEET APPLIES TO ELEVATIONS ON THIS SHEET ONLY.



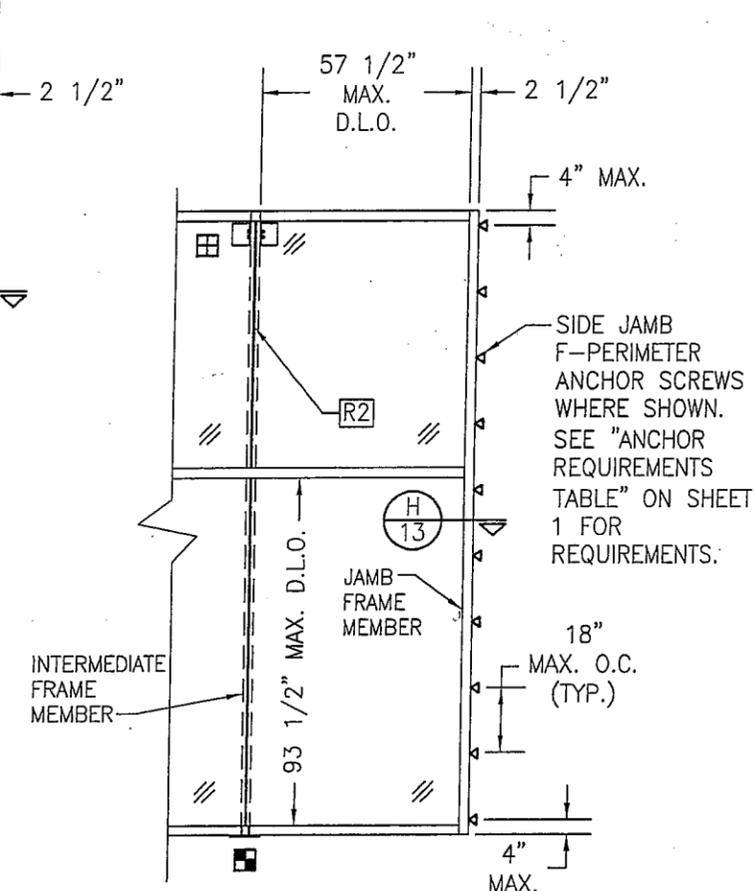
**EXTERIOR ELEVATION VIEW "C-C":
SINGLE SPAN CURTAIN WALL**

SCALE: 1/4" = 1'-0"
SPANNING SIDE JAMB SHOWN.
CONTINUOUSLY SUPPORTED SIDE
JAMB ALSO APPLIES PER
ALTERNATE SIDE JAMB CONDITION
ELEVATION ON THIS SHEET.



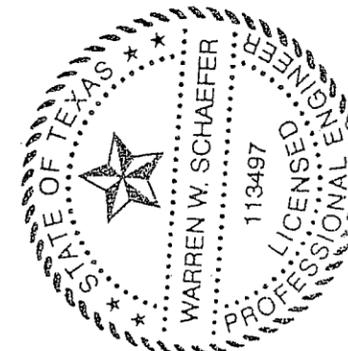
**EXTERIOR ELEVATION VIEW "D-D":
SINGLE SPAN CURTAIN WALL**

SCALE: 1/4" = 1'-0"
SPANNING SIDE JAMB SHOWN.
CONTINUOUSLY SUPPORTED SIDE
JAMB ALSO APPLIES PER
ALTERNATE SIDE JAMB CONDITION
ELEVATION ON THIS SHEET.



**ALTERNATE SINGLE SPAN SIDE JAMB
CONDITION: CONTINUOUSLY SUPPORTED**

SCALE: 1/4" = 1'-0"



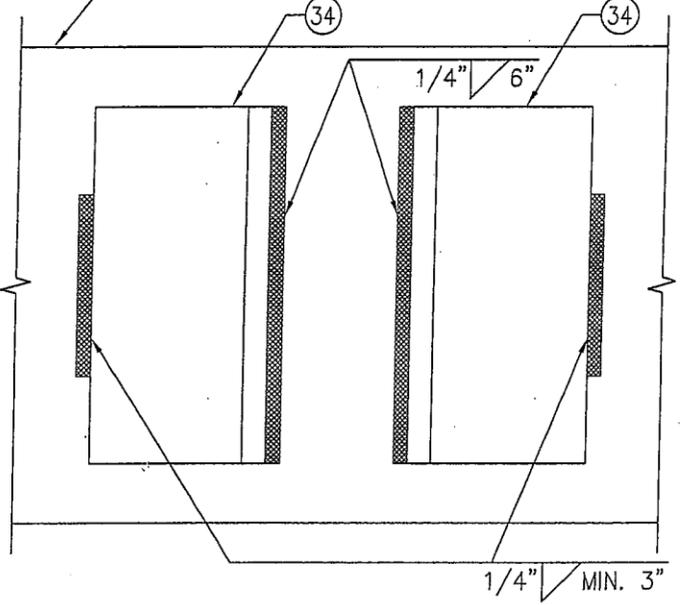
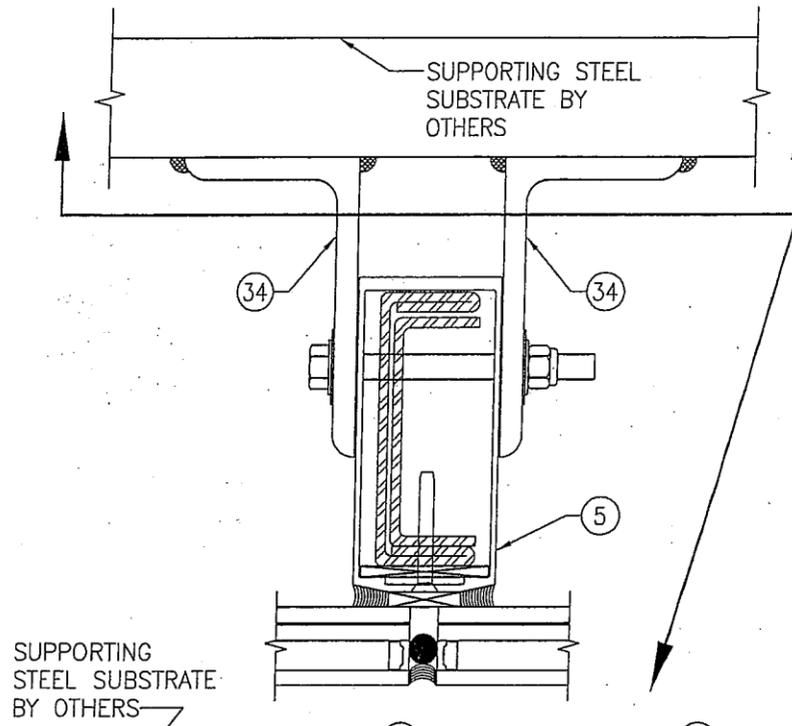
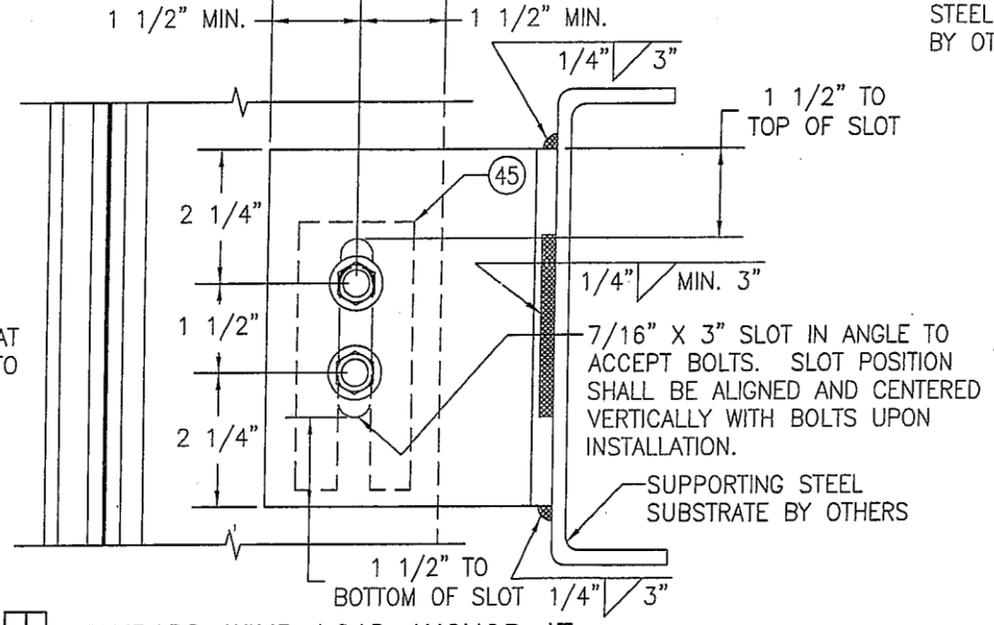
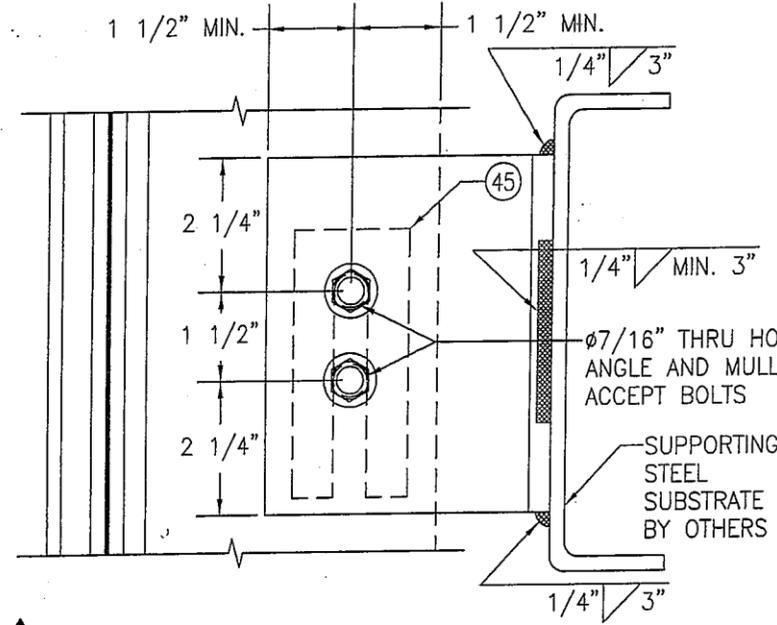
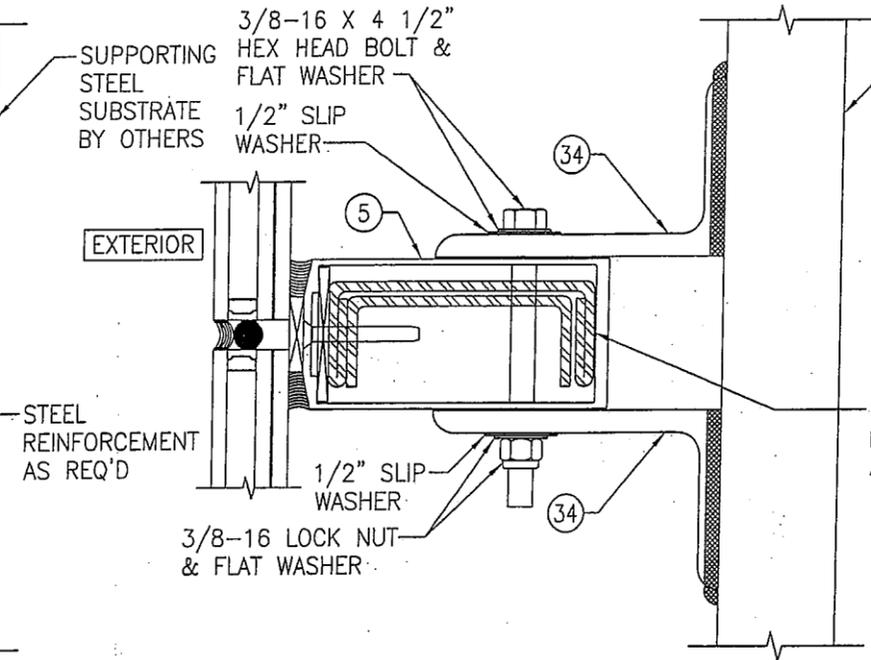
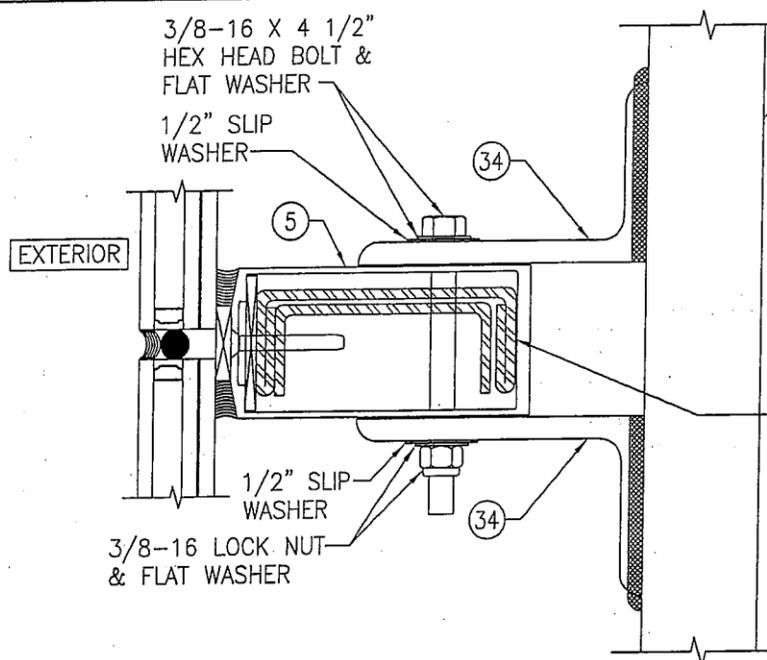
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PLOT: 1=48	DATE: 03/19/13
NO.	DATE
BY	
REVISION DESCRIPTION	

1600 SYSTEM 2 CURTAIN WALL (L.M.I.)
JOB INFORMATION:
KAWNEER COMPANY, INC.
555 GUTHRIDGE COURT
NORCROSS, GA 30092
770-449-5555

CONSULTANTS
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CERTIFICATION
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WARREN W. SCHAEFER, P.E.
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SHEET NO. 4	OF 16



▲ STANDARD DEAD LOAD ANCHOR AT INTERMEDIATE MEMBERS
SCALE: 1/3 FULL

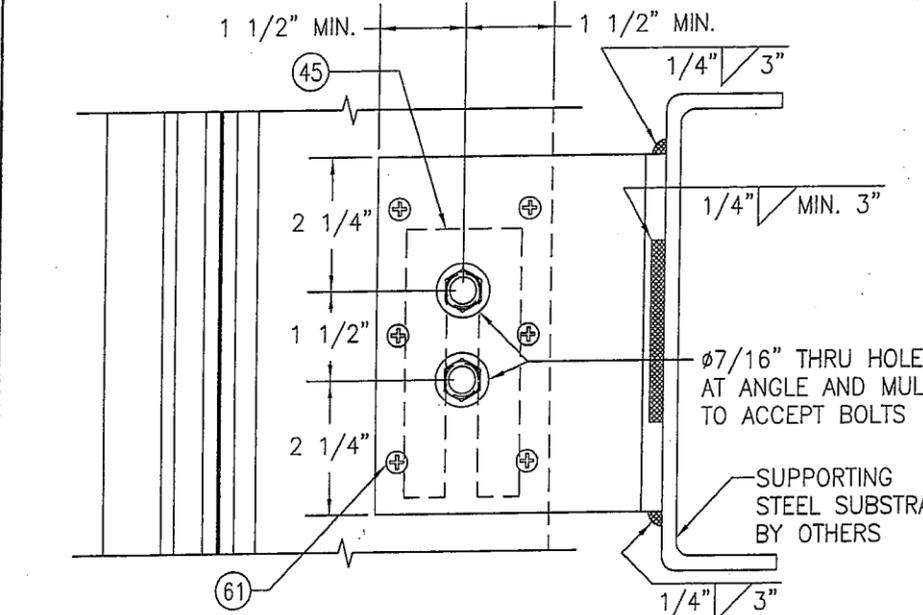
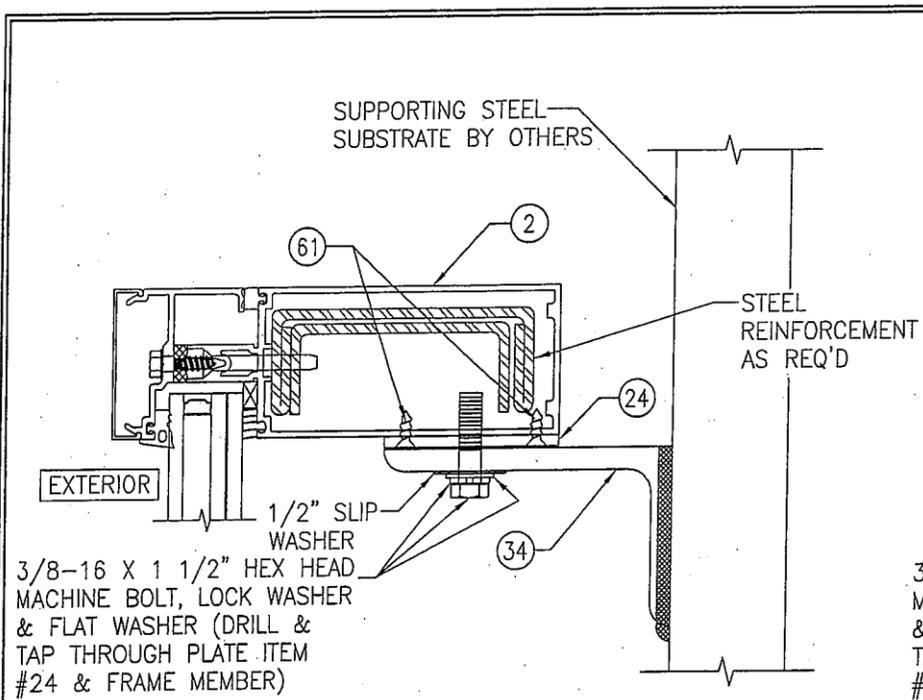
⊞ STANDARD WIND LOAD ANCHOR AT INTERMEDIATE MEMBERS
SCALE: 1/3 FULL

ALTERNATE WELD DETAIL FOR WIND & DEAD LOAD ANCHORS AT INTERMEDIATE MEMBERS
SCALE: 1/3 FULL

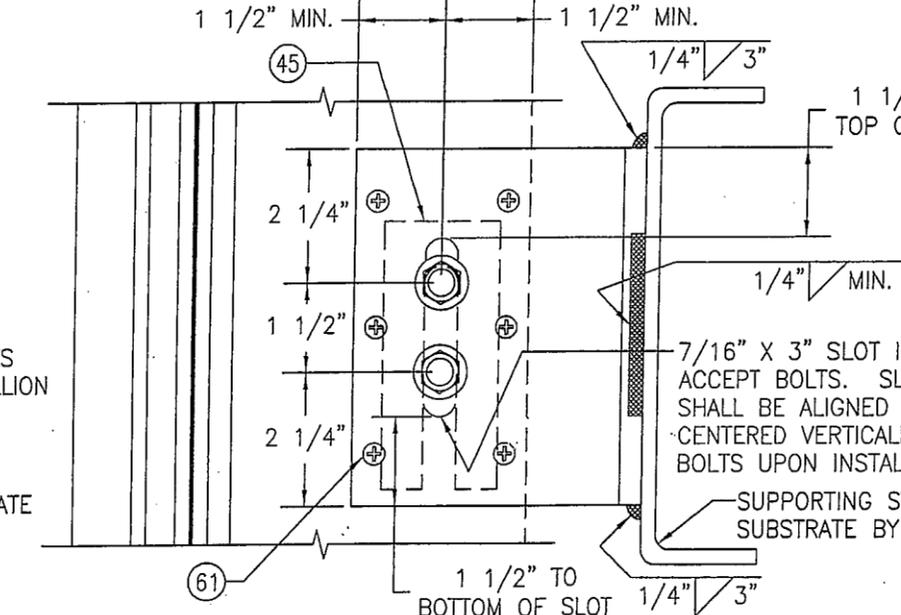
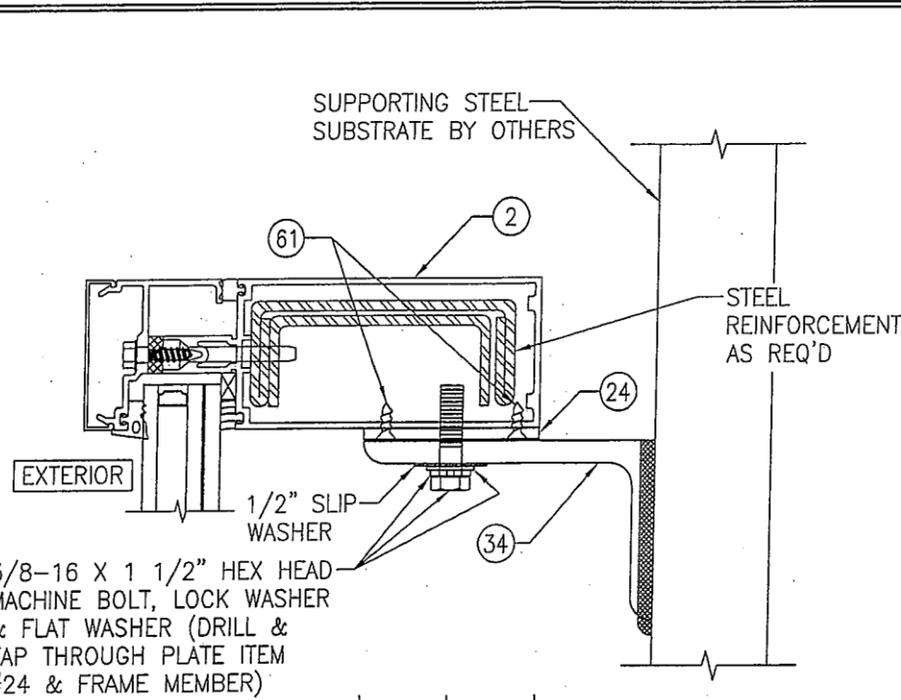
NOTE: ALL 3/8" BOLTS CONNECTING ANGLES TO MULLIONS SHALL BE GRADE 5 STEEL OR 300 SERIES STAINLESS STEEL.



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PLOT: 1-3		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION MAR 20 2013 WARREN W. SCHAEFER, P.E. P.E. NO. 113497			
DRAWING NO. 1791T		REV.	
SHEET NO. 5		OF 16	

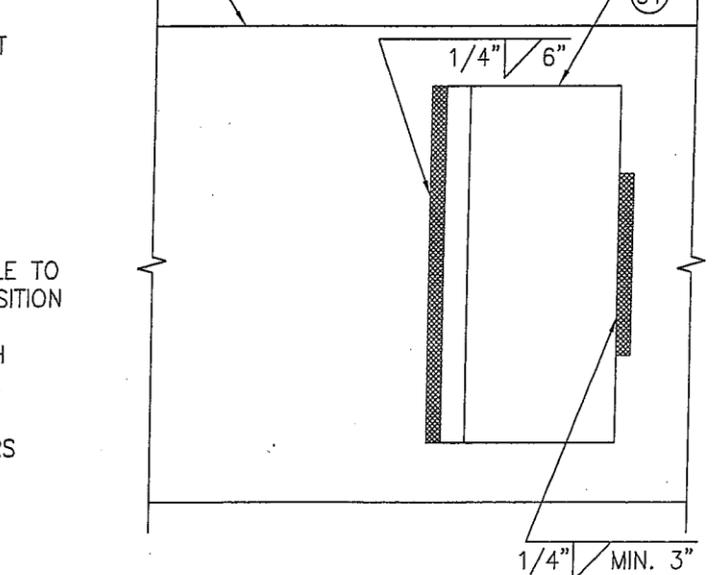
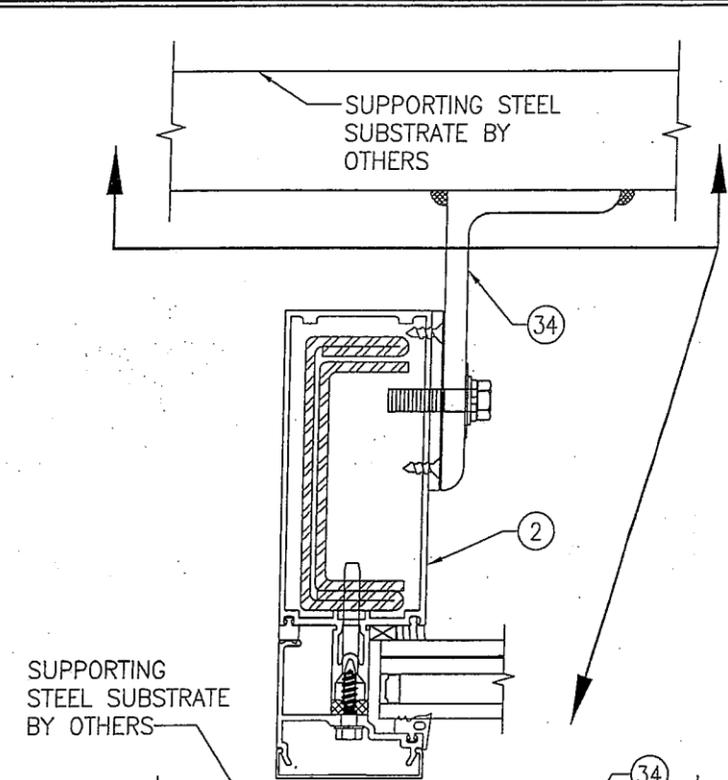


▲ STANDARD DEAD LOAD ANCHOR AT SIDE JAMB MEMBERS
SCALE: 1/3 FULL

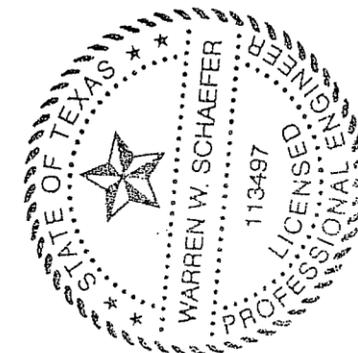


⊞ STANDARD WIND LOAD ANCHOR AT SIDE JAMB MEMBERS
SCALE: 1/3 FULL

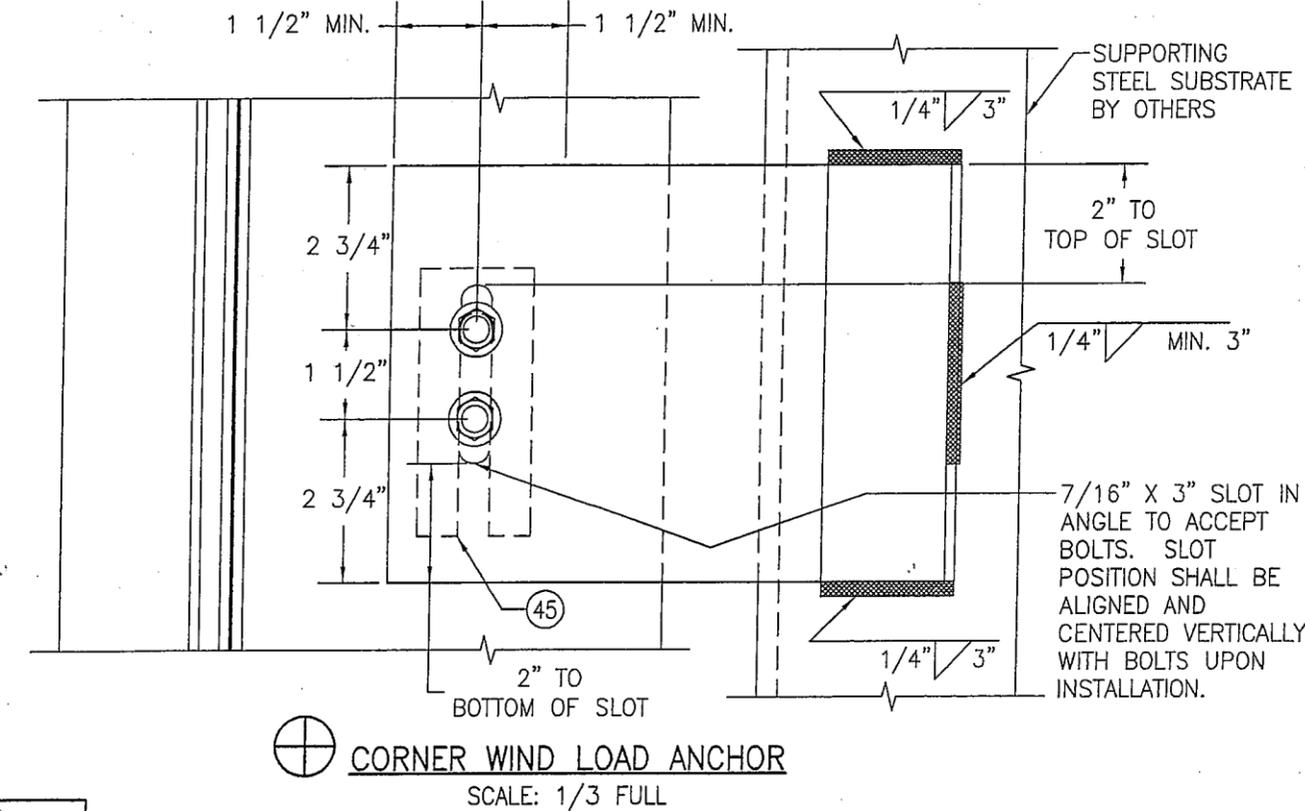
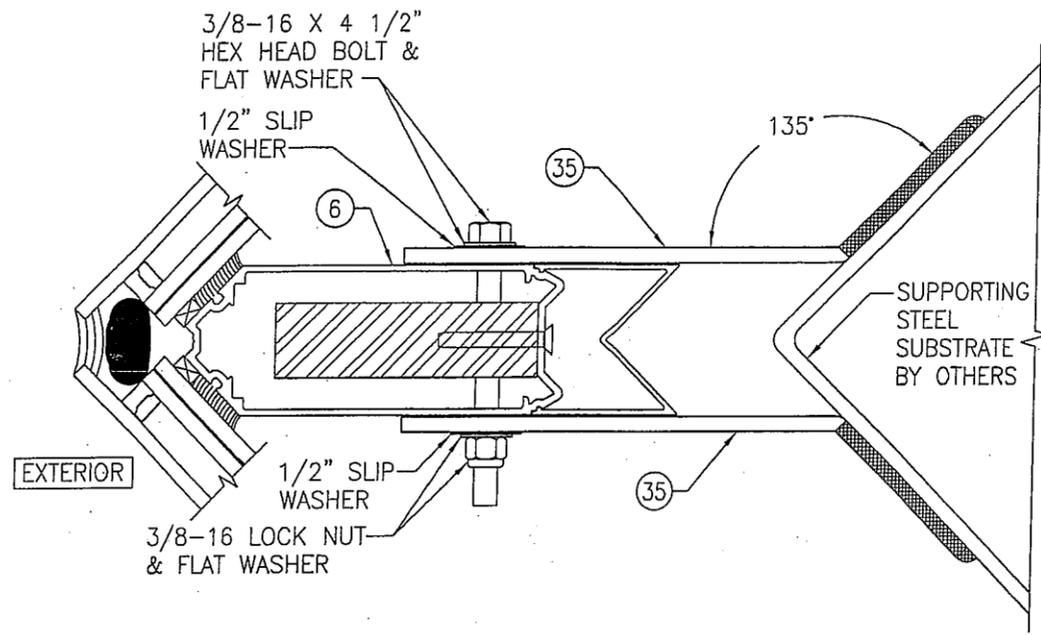
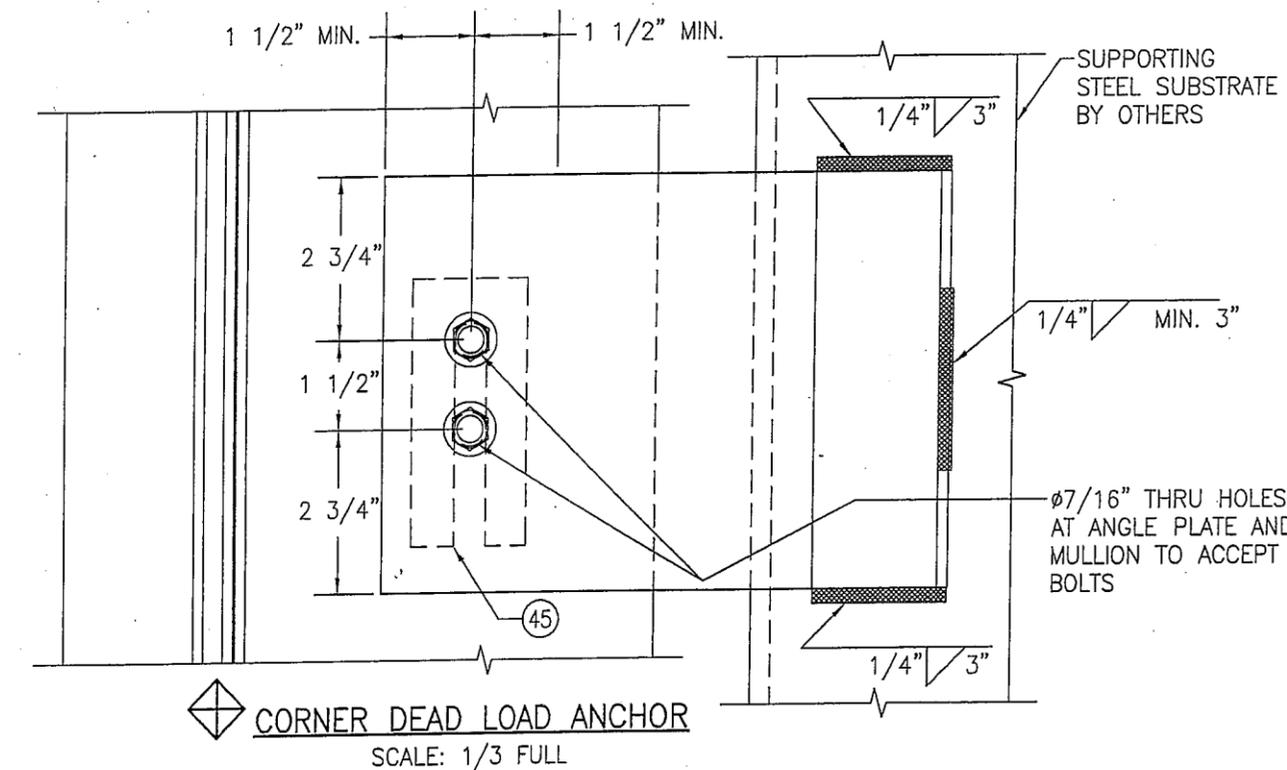
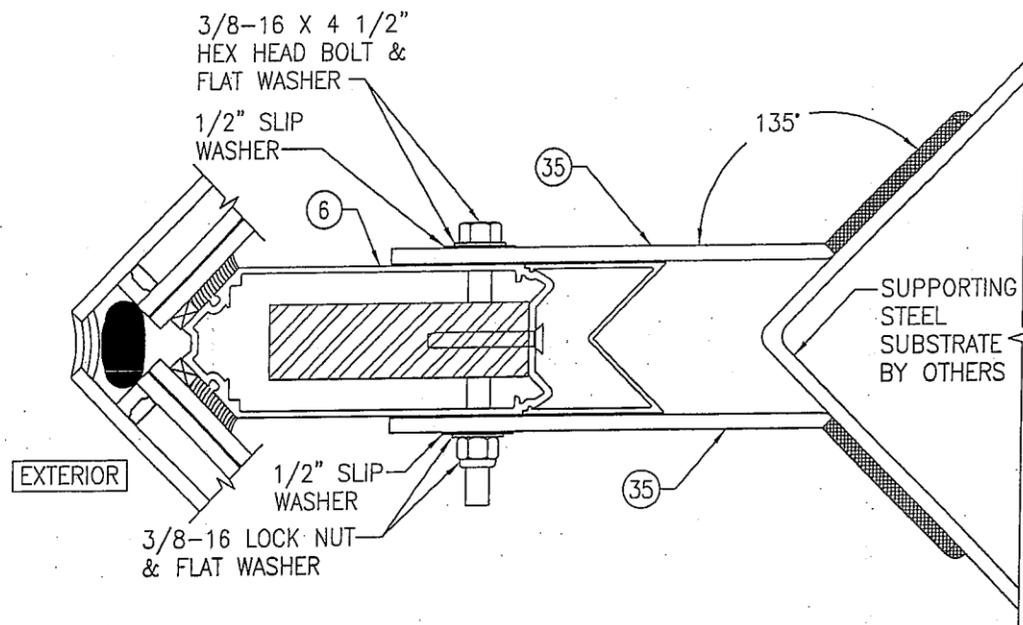
NOTE: ALL 3/8" BOLTS CONNECTING ANGLES TO MULLIONS SHALL BE GRADE 5 STEEL OR 300 SERIES STAINLESS STEEL.



ALTERNATE WELD DETAIL FOR WIND & DEAD LOAD ANCHORS AT SIDE JAMB MEMBERS
SCALE: 1/3 FULL



DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=3		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIE COURT NORCROSS, GA 30092 770-449-5555			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
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DRAWING NO. 1791T		REV.	
SHEET NO. 6 OF 16			

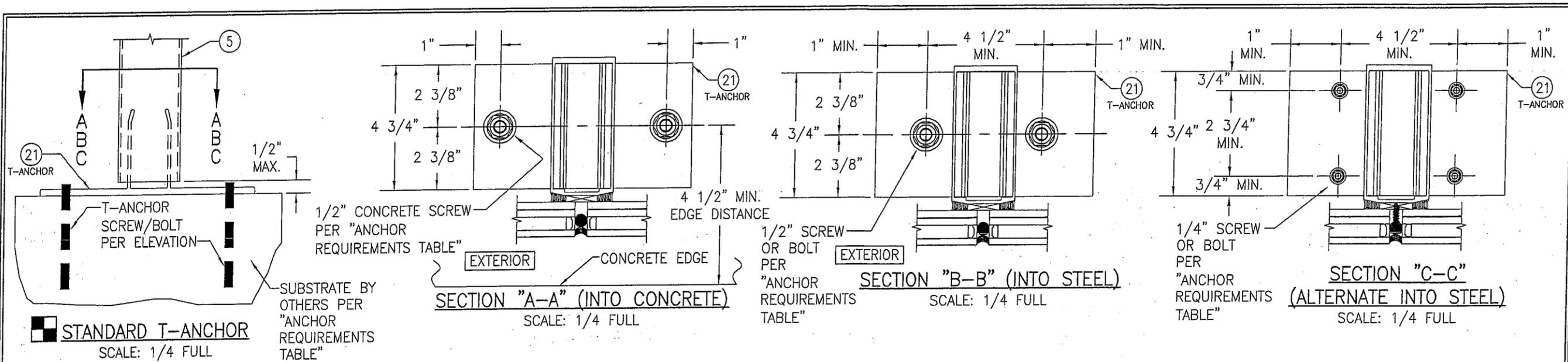


NOTE: ALL 3/8" BOLTS
CONNECTING ANGLES TO
MULLIONS SHALL BE GRADE
5 STEEL OR 300 SERIES
STAINLESS STEEL.

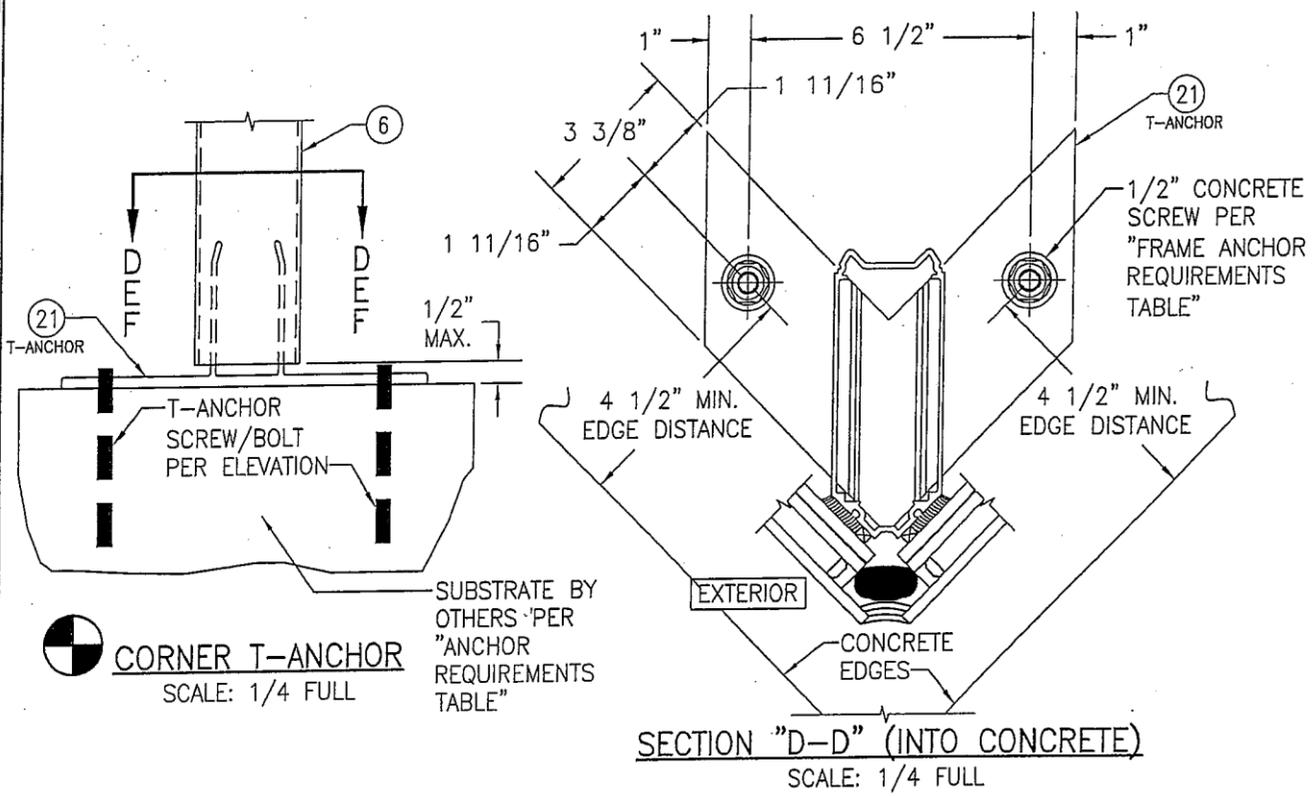
FOR ALTERNATE WELDING OF
ANGLES TO SUBSTRATE, SEE
"ALTERNATE WELD DETAIL"
ON SHEET 5.



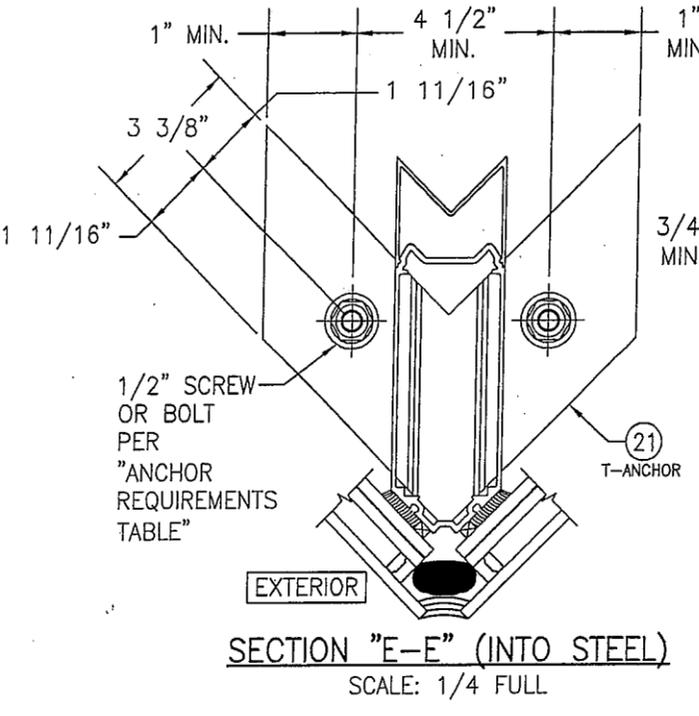
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PLOT: 1=3		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	DATE	BY
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION		MAR 20 2013	
DRAWING NO. 1791T		REV.	
SHEET NO. 7		OF 16	



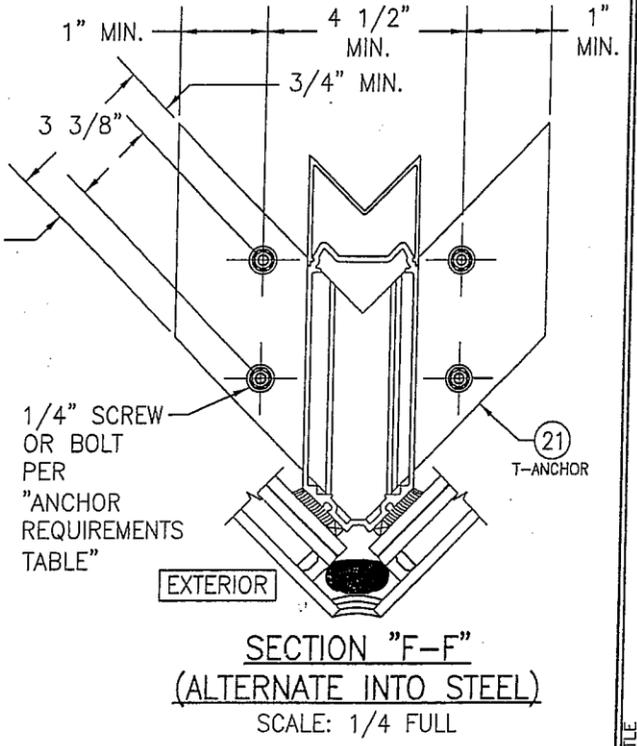
STANDARD T-ANCHOR
SCALE: 1/4 FULL



CORNER T-ANCHOR
SCALE: 1/4 FULL



SECTION "E-E" (INTO STEEL)
SCALE: 1/4 FULL

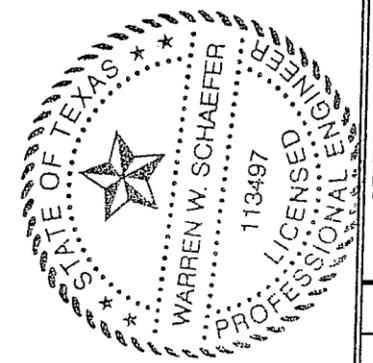


SECTION "F-F" (ALTERNATE INTO STEEL)
SCALE: 1/4 FULL

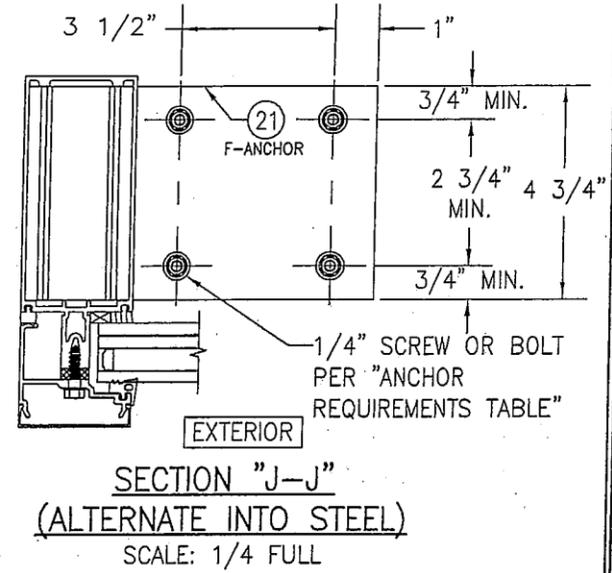
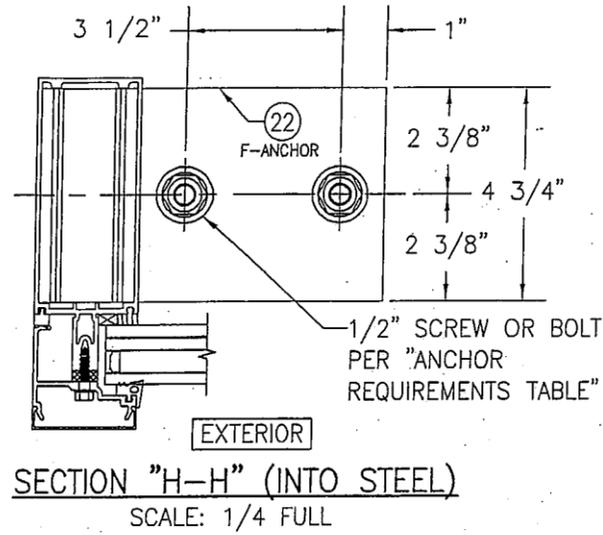
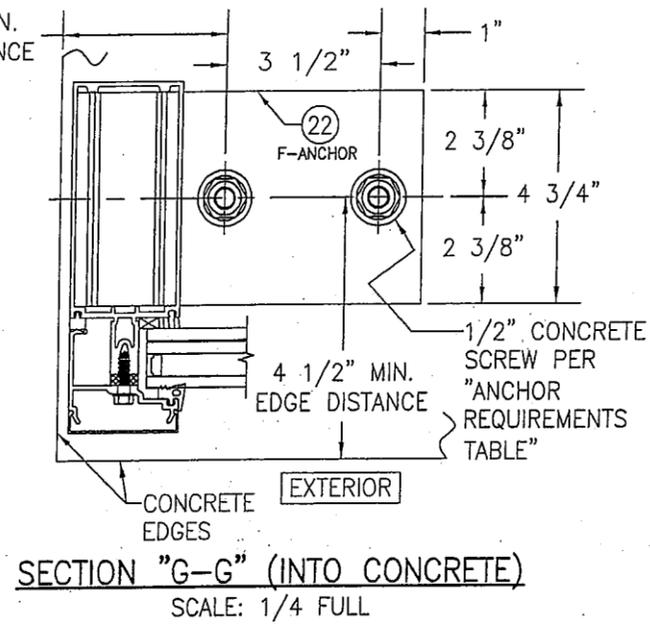
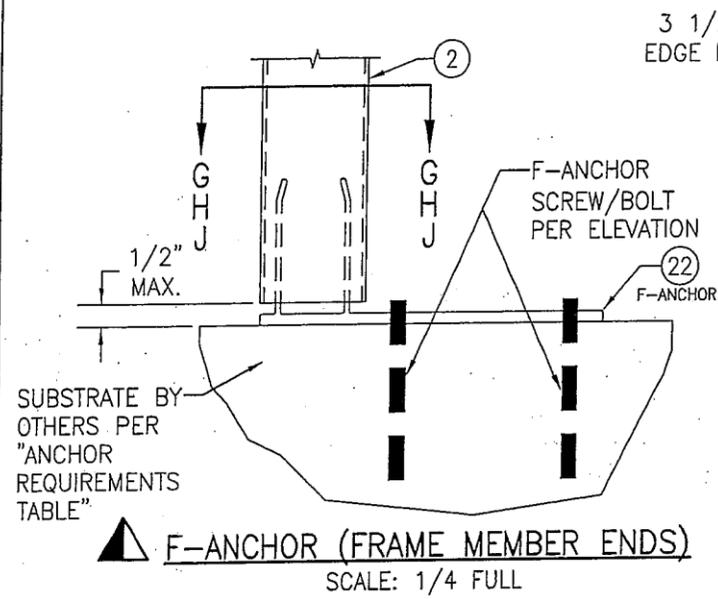
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PLOT: 1=4	DATE: 03/19/13
DATE	
BY	
REVISION DESCRIPTION	
NO.	

JOB INFORMATION:
KAWNEER COMPANY, INC.
555 GUTHRIE COURT
NORCROSS, GA 30092
770-449-5555

DRAWING TITLE: 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424



CERTIFICATION	MAR 20 2013
DRAWING NO.	1791T
SHEET NO.	8 OF 16
REV.	

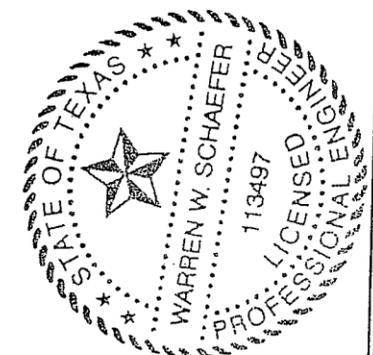


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PLOT: 1=4	DATE: 03/19/13
DATE	
BY	
REVISION DESCRIPTION	
NO.	

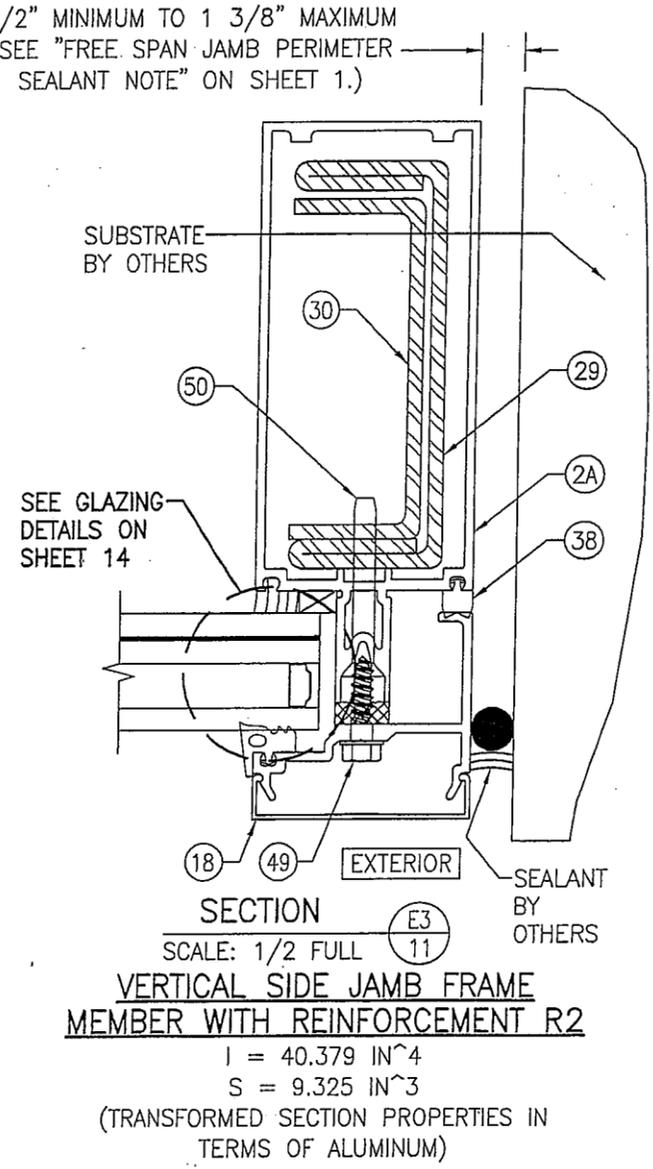
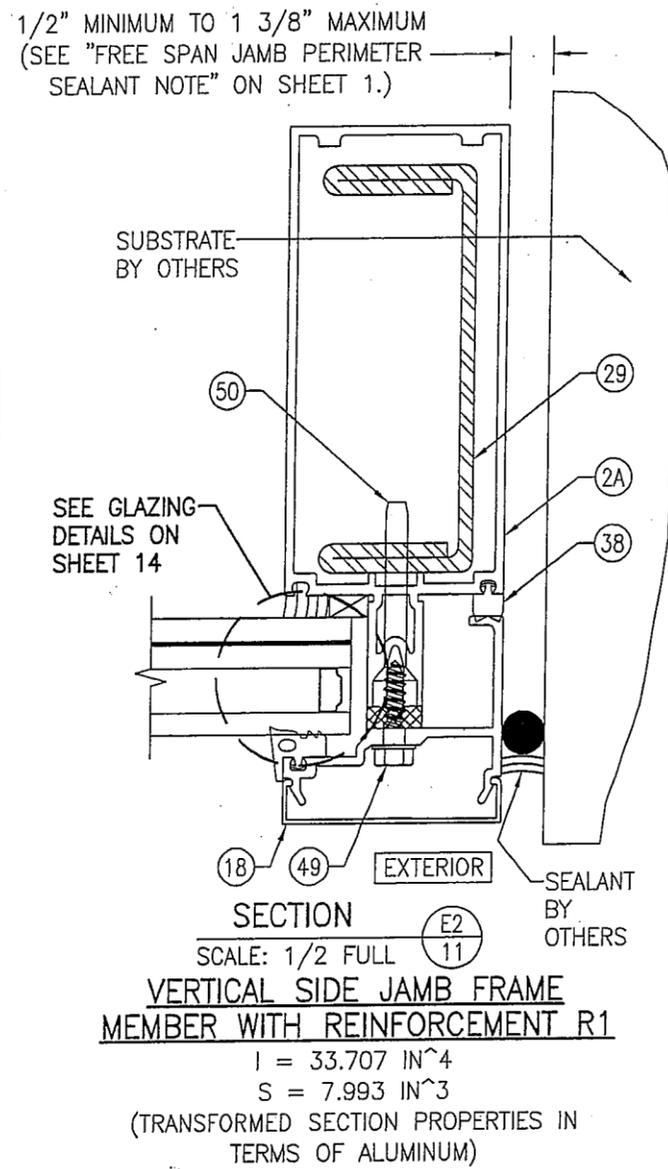
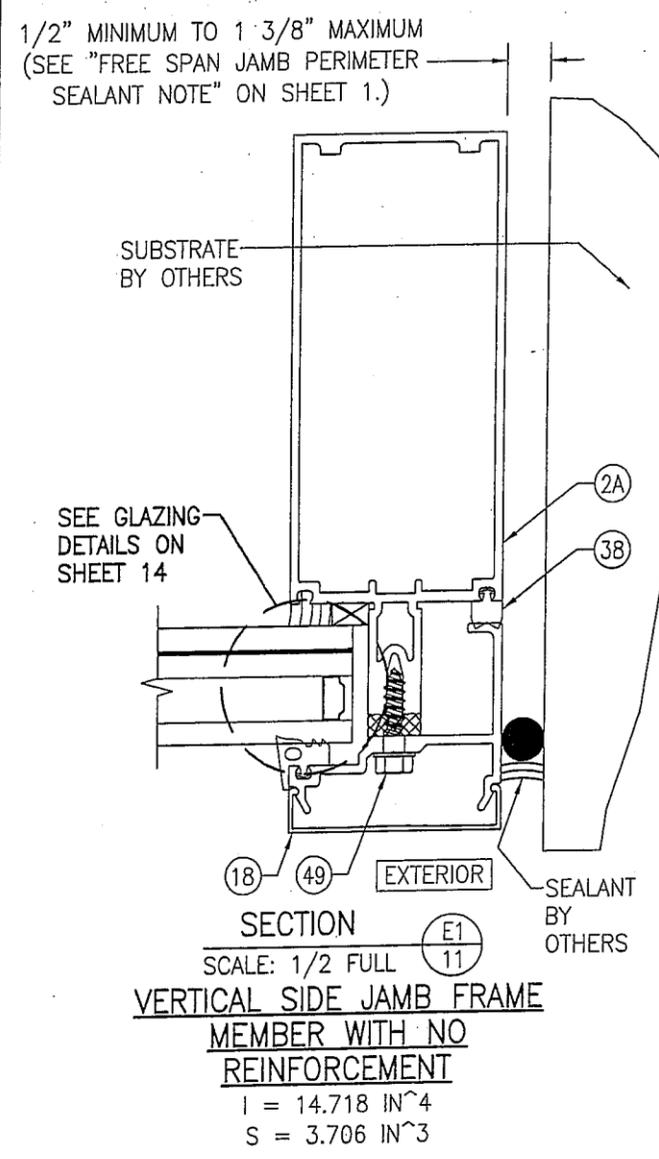
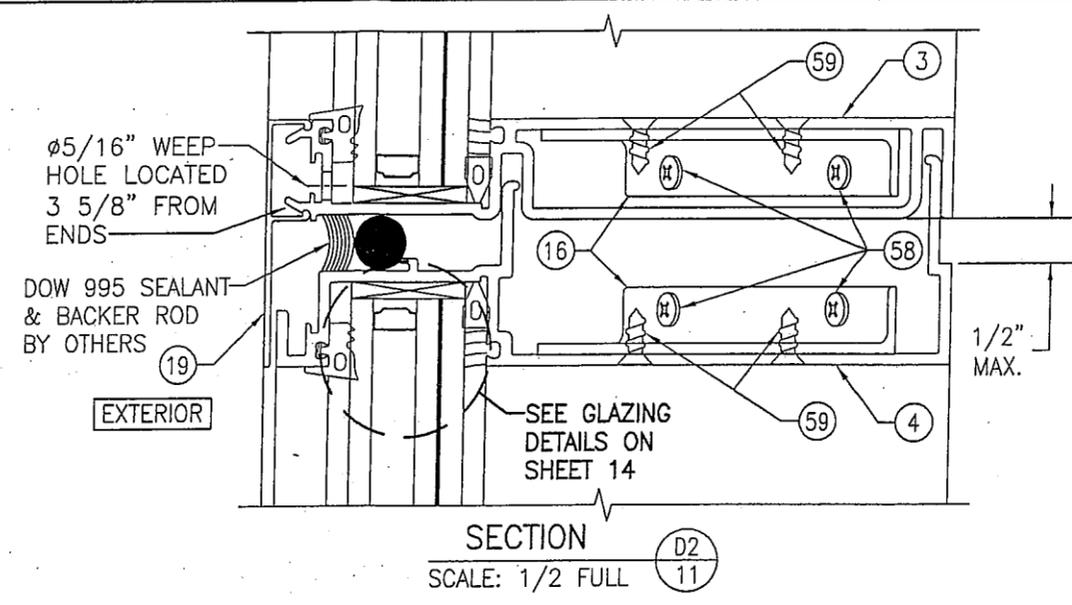
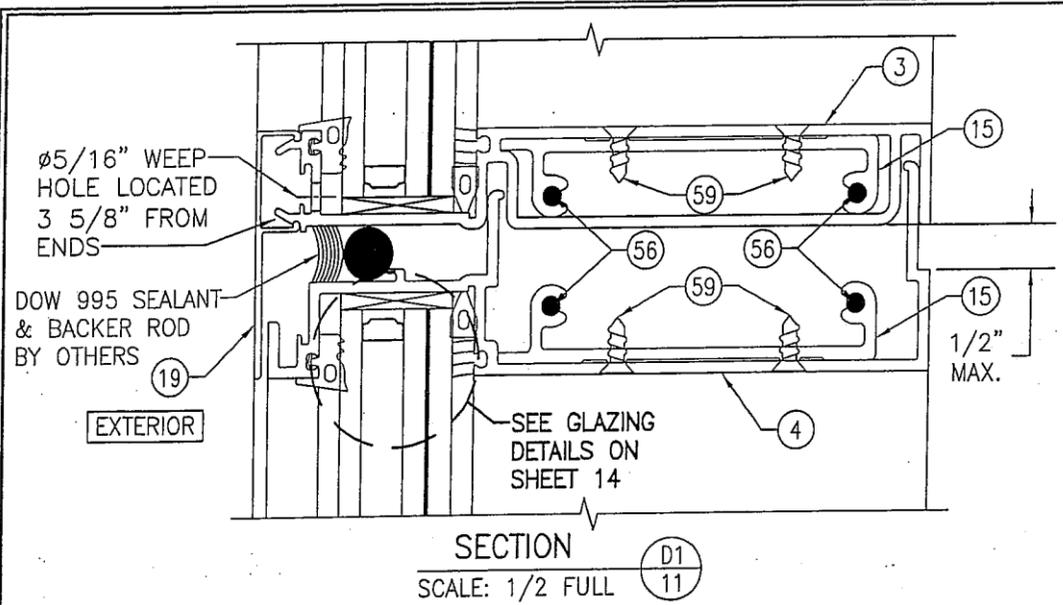
DRAWING TITLE
1600 SYSTEM 2 CURTAIN WALL (L.M.I.)

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

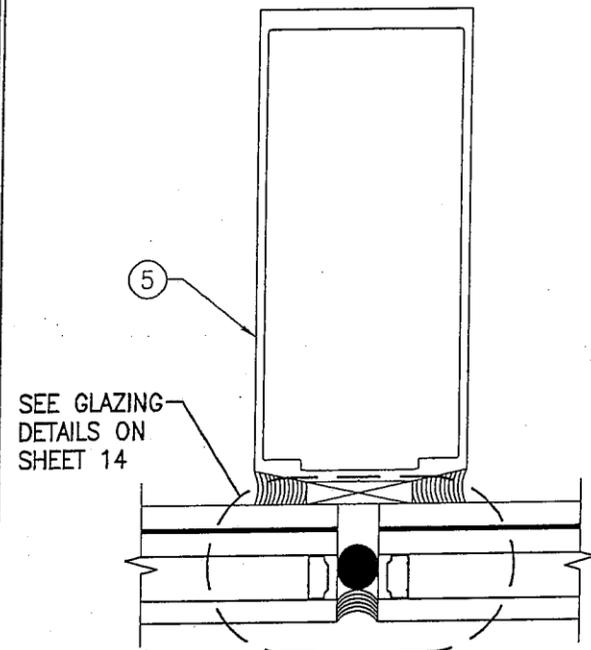
JOB INFORMATION:
KAWNEER COMPANY, INC.
555 GUTHRIDGE COURT
NORCROSS, GA 30092
770-449-5555



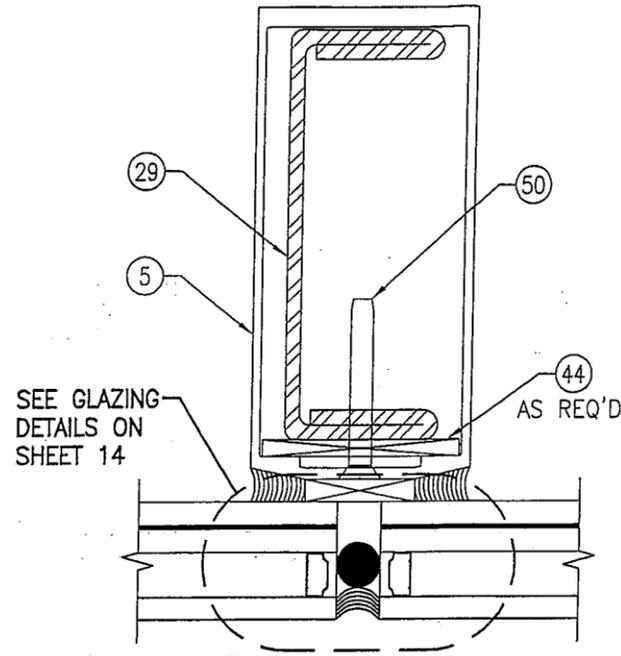
CERTIFICATION	
MAR 20 2013	
WARREN W. SCHAEFER, P.E.	
P.E. NO. 113497	
DRAWING NO. 1791T	REV.
SHEET NO. 9	OF 16



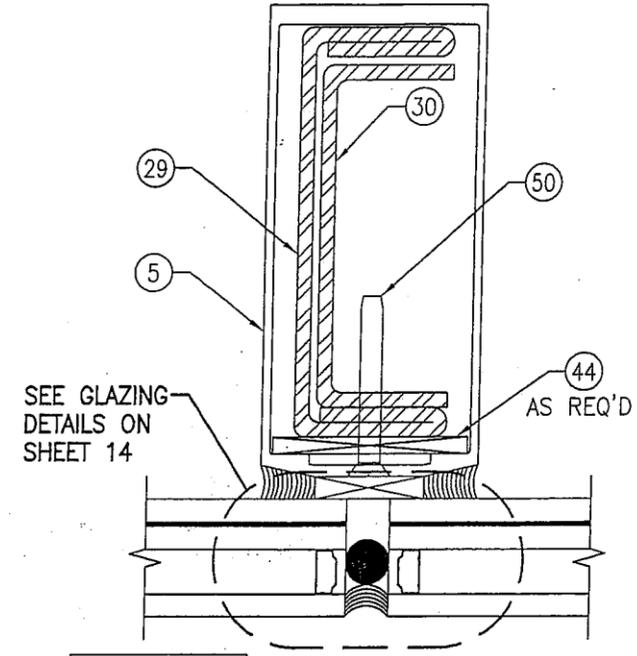
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PLOT: 1=2		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE: 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION: MAR 20 2013		WARREN W. SCHAEFER, P.E. P.E. NO. 113497	
DRAWING NO. 1791T		REV.	
SHEET NO. 11 OF 16			



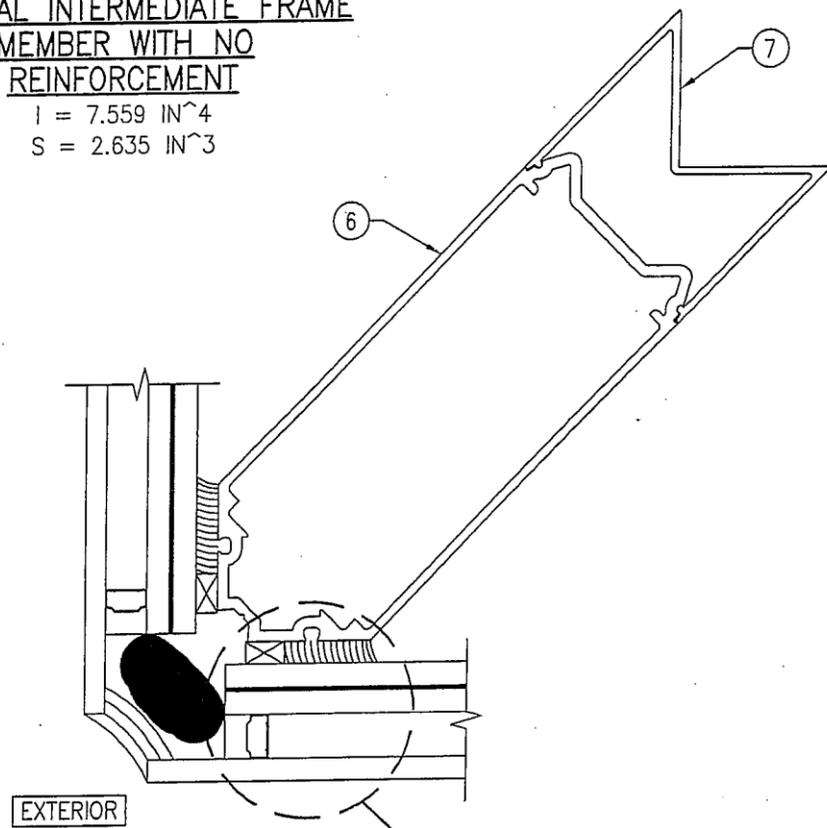
EXTERIOR SECTION **F1**
SCALE: 1/2 FULL **12**
VERTICAL INTERMEDIATE FRAME MEMBER WITH NO REINFORCEMENT
 $I = 7.559 \text{ IN}^4$
 $S = 2.635 \text{ IN}^3$



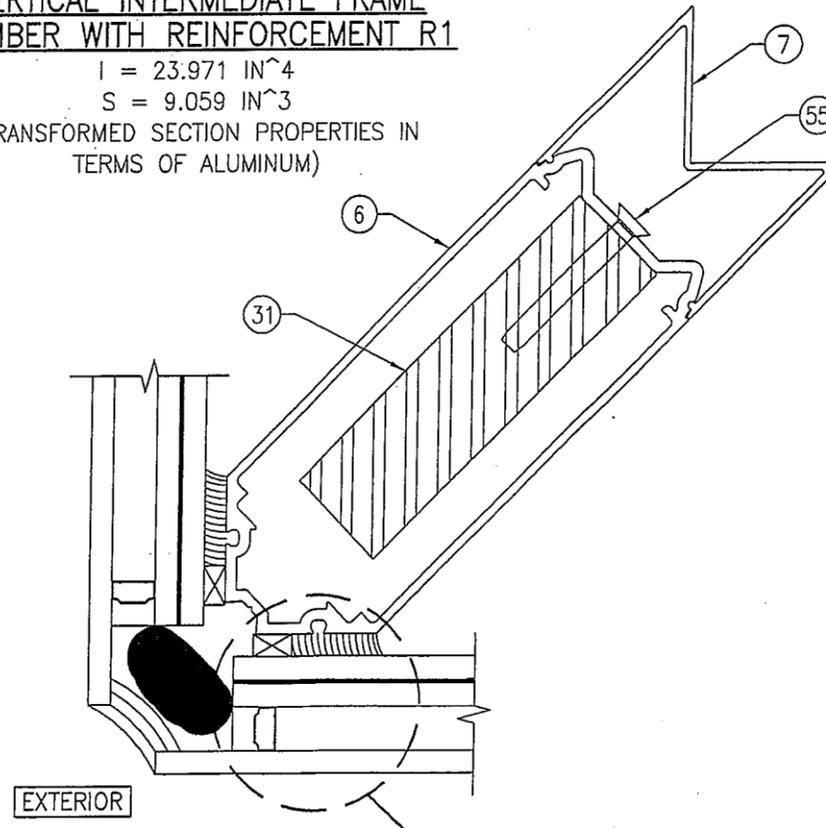
EXTERIOR SECTION **F2**
SCALE: 1/2 FULL **12**
VERTICAL INTERMEDIATE FRAME MEMBER WITH REINFORCEMENT R1
 $I = 23.971 \text{ IN}^4$
 $S = 9.059 \text{ IN}^3$
(TRANSFORMED SECTION PROPERTIES IN TERMS OF ALUMINUM)



EXTERIOR SECTION **F3**
SCALE: 1/2 FULL **12**
VERTICAL INTERMEDIATE FRAME MEMBER WITH REINFORCEMENT R2
 $I = 30.342 \text{ IN}^4$
 $S = 11.485 \text{ IN}^3$
(TRANSFORMED SECTION PROPERTIES IN TERMS OF ALUMINUM)



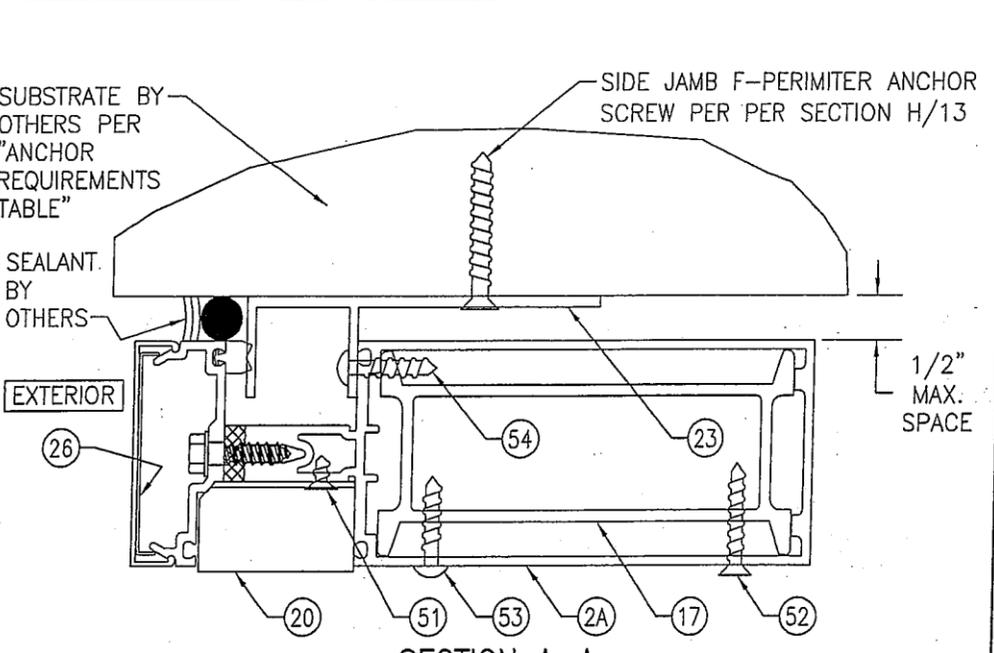
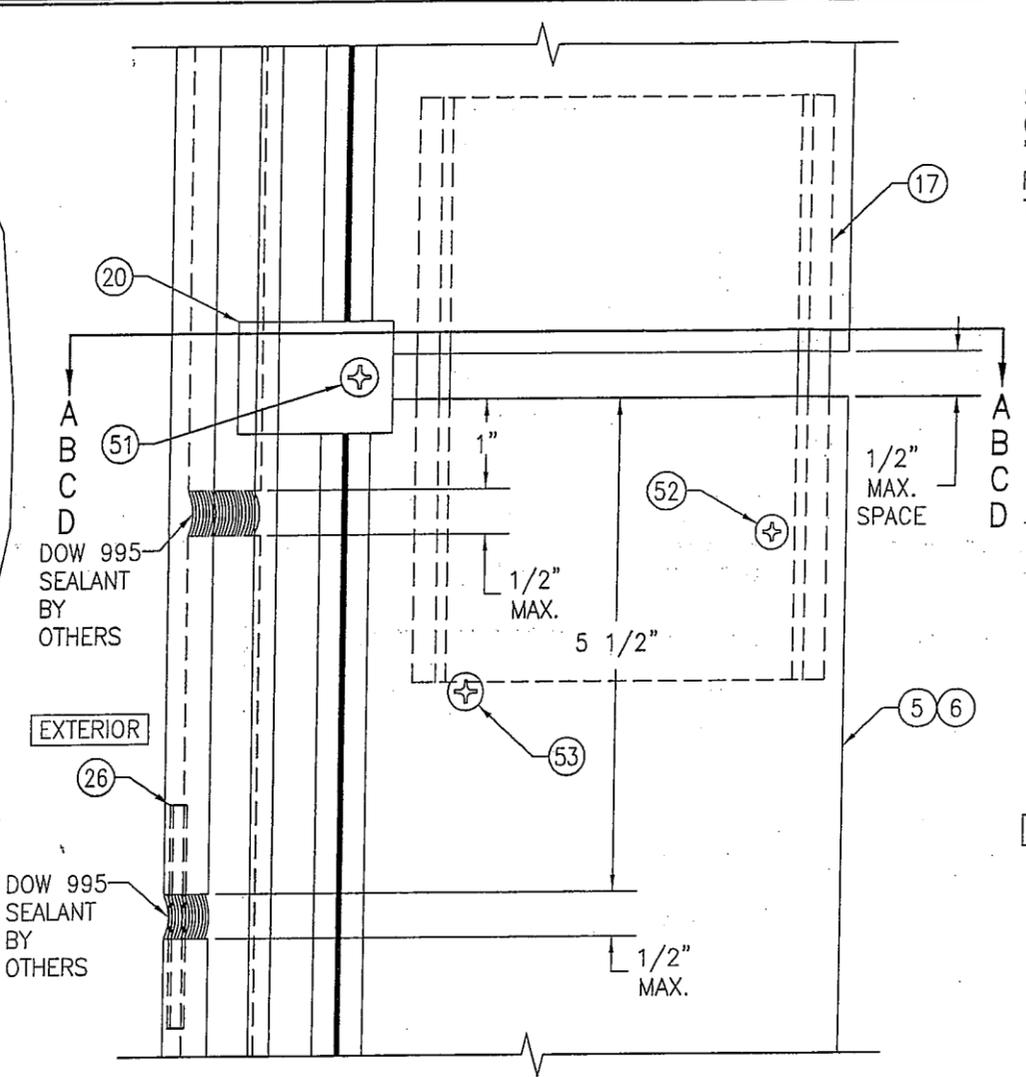
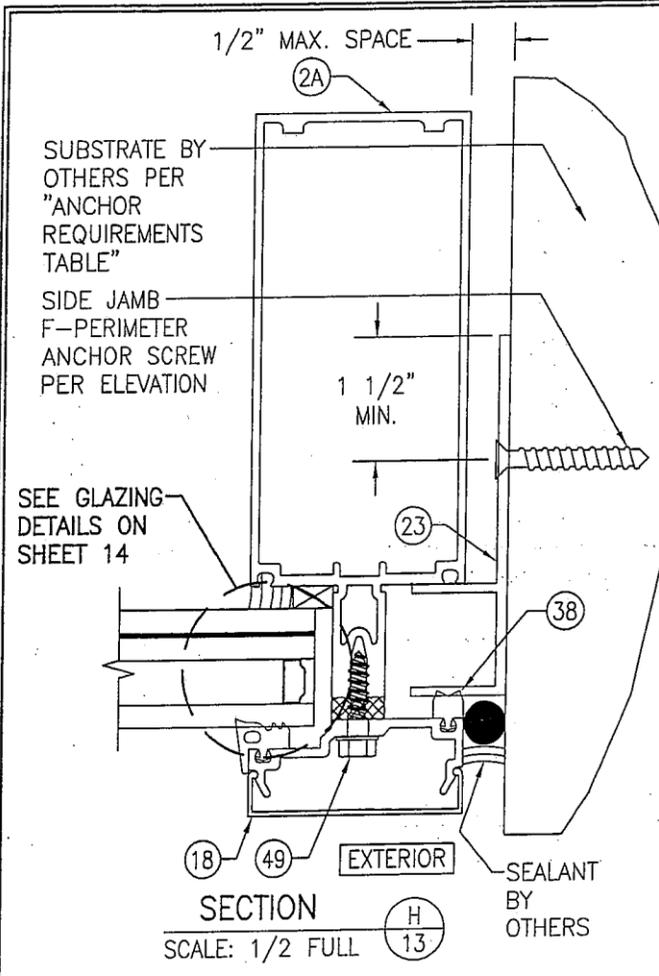
EXTERIOR SECTION **G1**
SCALE: 1/2 FULL **12**
VERTICAL CORNER/FRAME MEMBER WITH NO REINFORCEMENT
 $I = 9.685 \text{ IN}^4$
 $S = 2.951 \text{ IN}^3$
NOTE: "I" & "S" VALUES ARE TAKEN IN THE PLANE OF THE MULLION



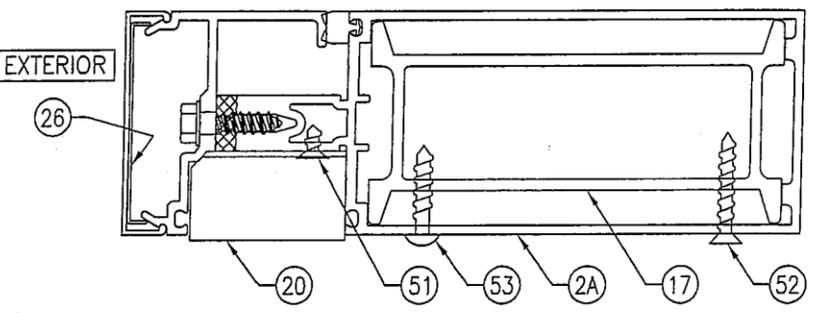
EXTERIOR SECTION **G2**
SCALE: 1/2 FULL **12**
VERTICAL CORNER/FRAME MEMBER WITH REINFORCEMENT R3
 $I = 37.376 \text{ IN}^4$
 $S = 10.029 \text{ IN}^3$
NOTE: "I" & "S" VALUES ARE TAKEN IN THE PLANE OF THE MULLION
(TRANSFORMED SECTION PROPERTIES IN TERMS OF ALUMINUM)



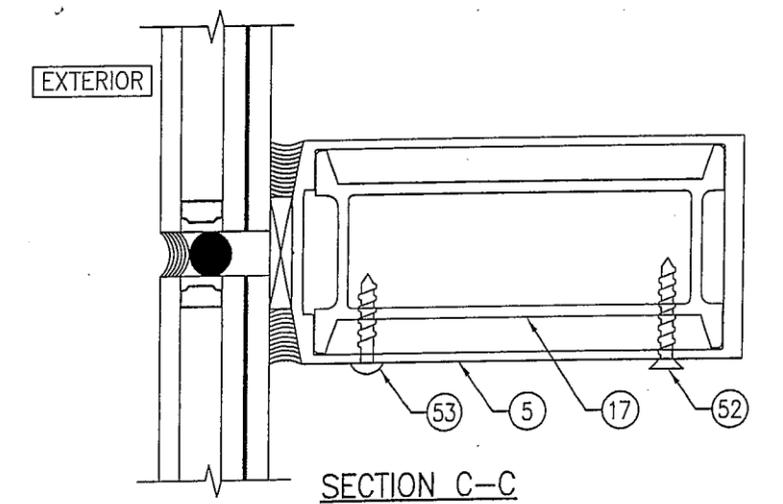
DRAWN BY: W.W.S.		CHECKED BY: W.W.S.	
PLOT: 1=2		DATE: 03/19/13	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
CERTIFICATION	MAR 20 2013		
DRAWING NO. 1791T			
SHEET NO. 12 OF 16			



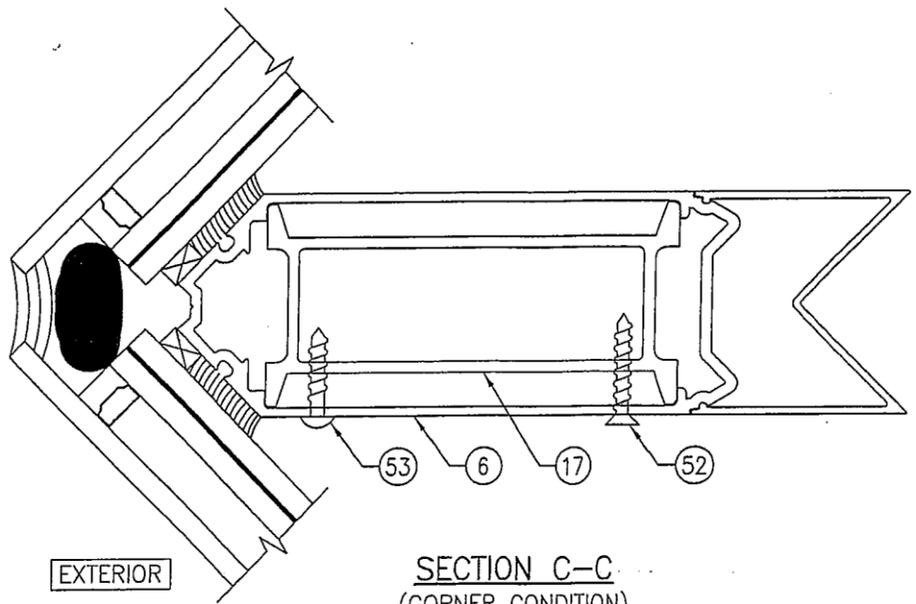
SECTION A-A
(CONTINUOUS F-PERIMETER ANCHOR JAMB CONDITION)
(FOR DETAIL NOT SHOWN, SEE SECTION H/13)



SECTION B-B
(STANDARD JAMB CONDITION)
(FOR DETAIL NOT SHOWN, SEE SECTION C1/11, C2/11 & C3/11)



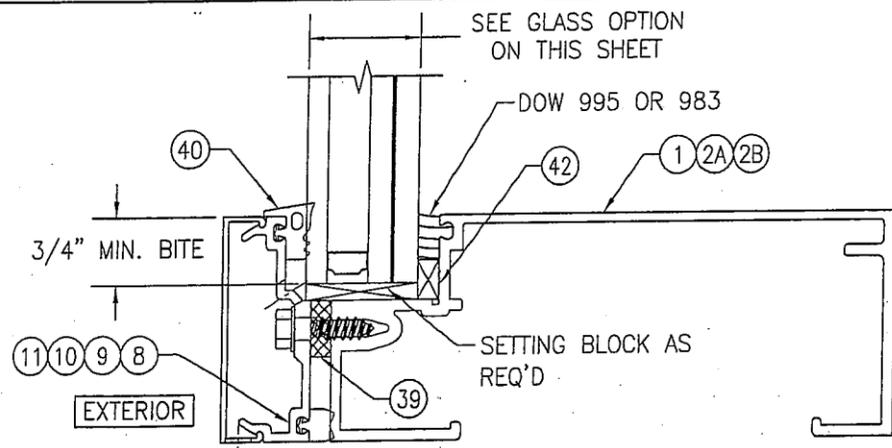
SECTION C-C
(INTERMEDIATE CONDITION)
(FOR DETAIL NOT SHOWN, SEE SECTION F1/12, F2/12 & F3/12)



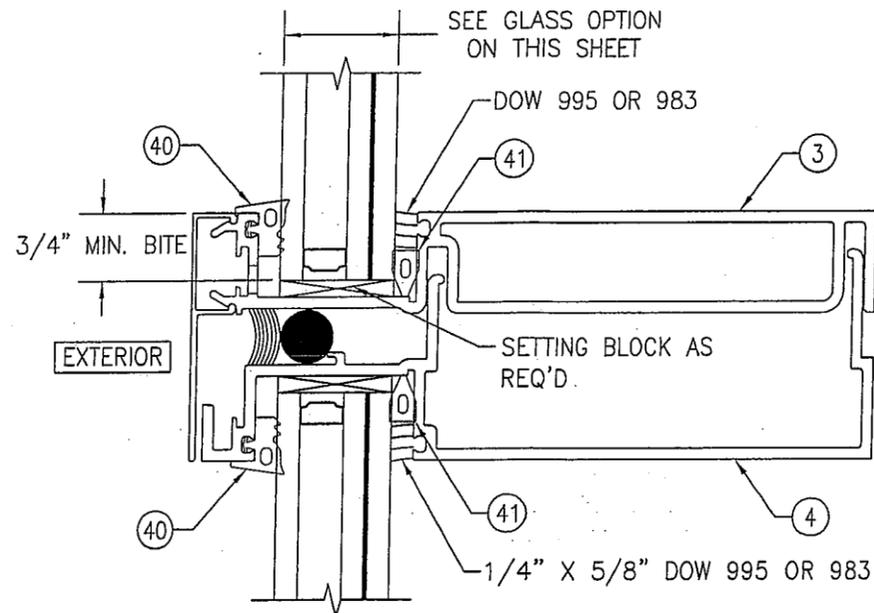
SECTION C-C
(CORNER CONDITION)
(FOR DETAIL NOT SHOWN, SEE SECTION G1/12 & G2/12)



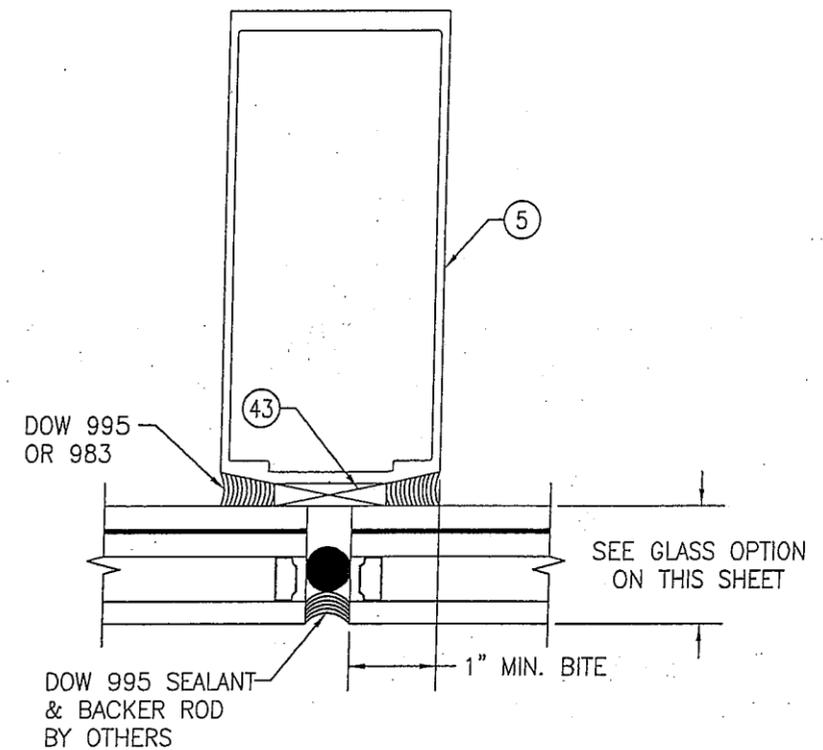
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PLOT: 1=2	DATE: 03/19/13
NO.	REVISION DESCRIPTION
BY	DATE
DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555	
CERTIFICATION	MAR 20 2013
DRAWING NO. 1791T	REV.
SHEET NO. 13	OF 16



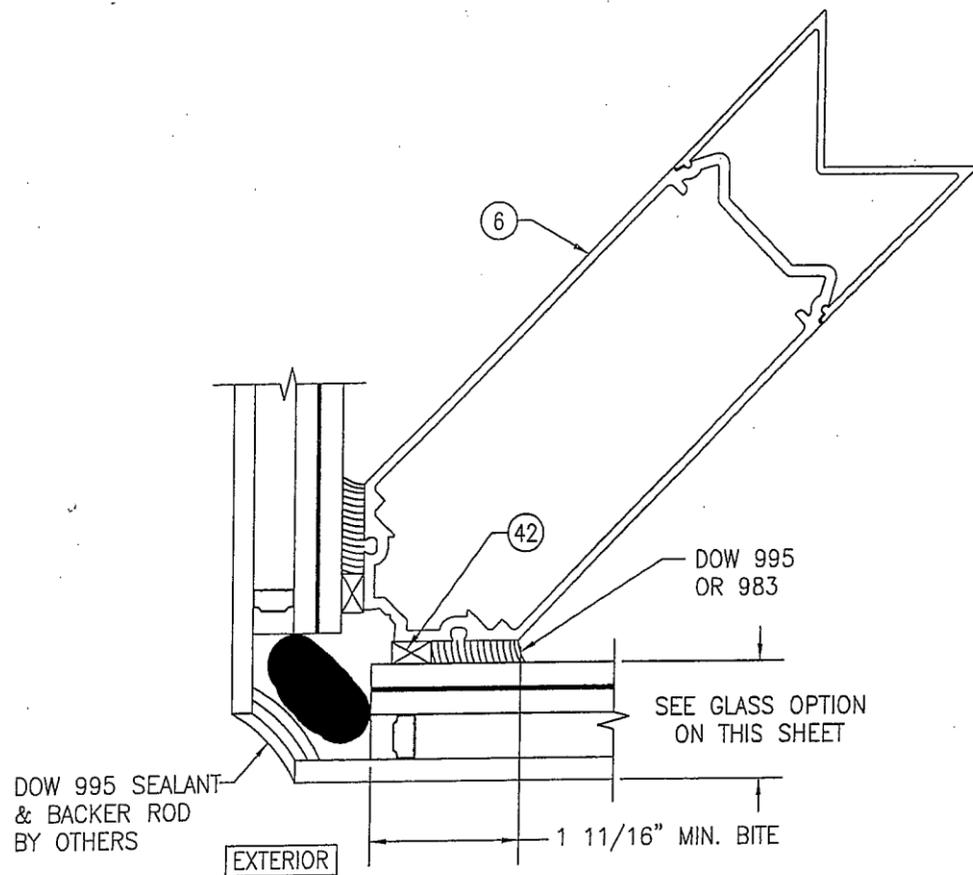
TYPICAL GLAZING DETAIL TO SIDE JAMB & HORIZONTAL FRAMING



TYPICAL GLAZING DETAIL TO SPLICE JOINT FRAMING



TYPICAL GLAZING DETAIL TO VERTICAL INTERMEDIATE FRAMING



TYPICAL GLAZING DETAIL TO CORNER FRAMING

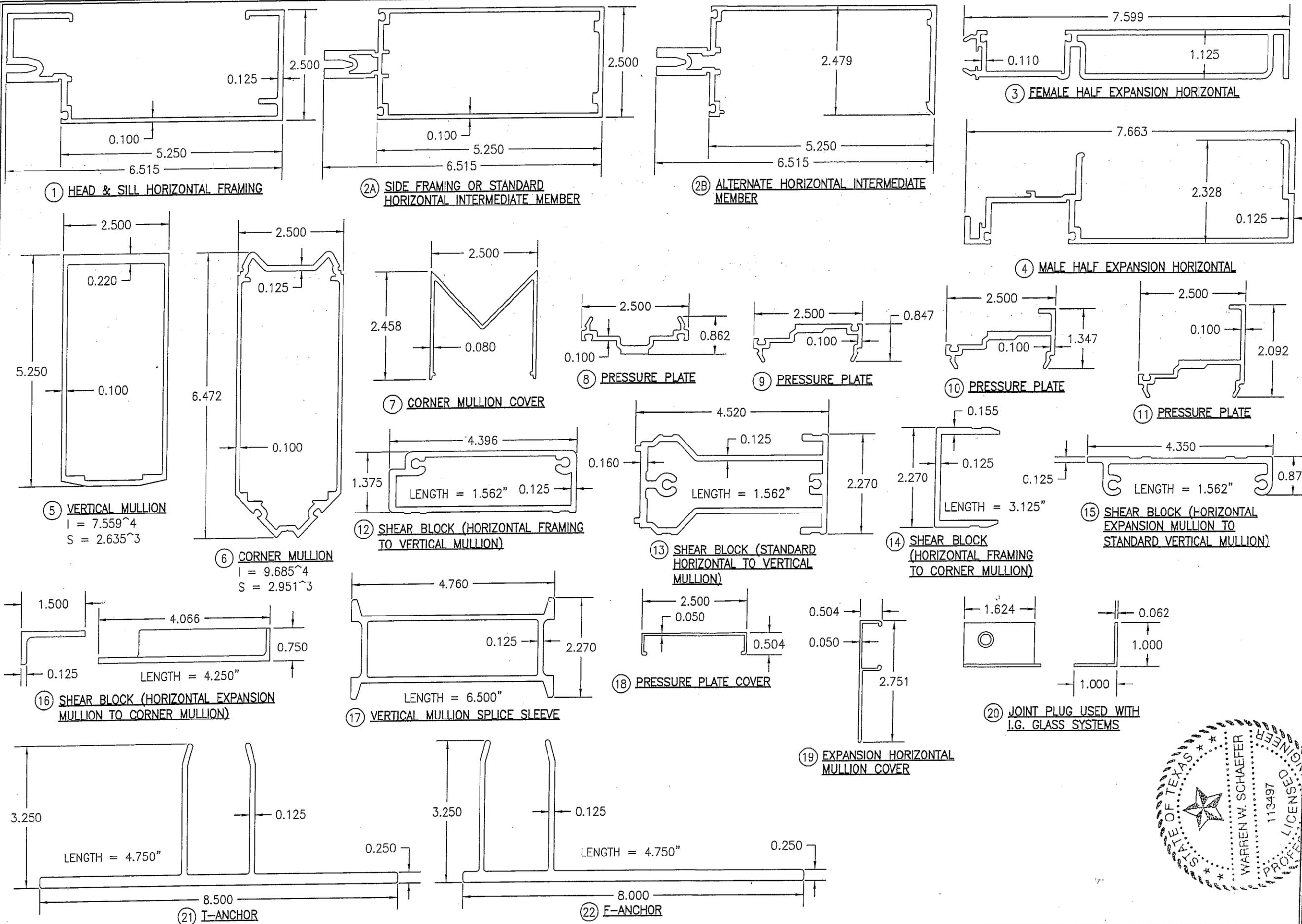
GLASS OPTIONS:

OPTION 1: 1 5/16" THICK I.G LAMINATED GLASS (1/4" HT. ST. OR TEMPERED EXTERIOR; 1/2" AIR SPACE; 1/4" HT. ST./0.100" SOLUTIA SAFLEX HP/1/4" HT. ST. INTERIOR)

NOTE: EXTERIOR GLASS PANE OF I.G. GLAZING SHALL BE TEMPERED WHEN CURTAIN WALL GLASS IS INSTALLED IN A SMALL MISSILE IMPACT LOCATION OF A BUILDING OR WHEN GLASS IS REQUIRED TO BE SAFETY GLAZED.



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DRAWING TITLE: 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)			
CONSULTANTS: W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)			
JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555			
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION		MAR 20 2013	
DRAWING NO. 1791T		REV.	
SHEET NO. 14		OF 16	

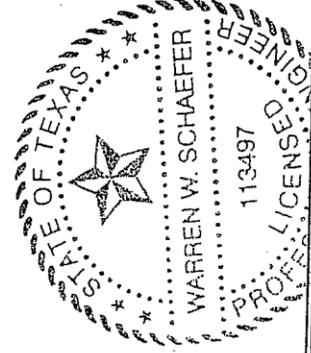


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JOB INFORMATION:
KAWNEER COMPANY, INC.
 555 GUTHRIDGE COURT
 NORCROSS, GA 30092
 770-449-5555

DRAWING TITLE
1600 SYSTEM 2 CURTAIN WALL (L.M.I.)

CONSULTANTS
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980)
 7480 150TH COURT NORTH
 PALM BEACH GARDENS, FL 33418
 PHONE: 561-744-3424

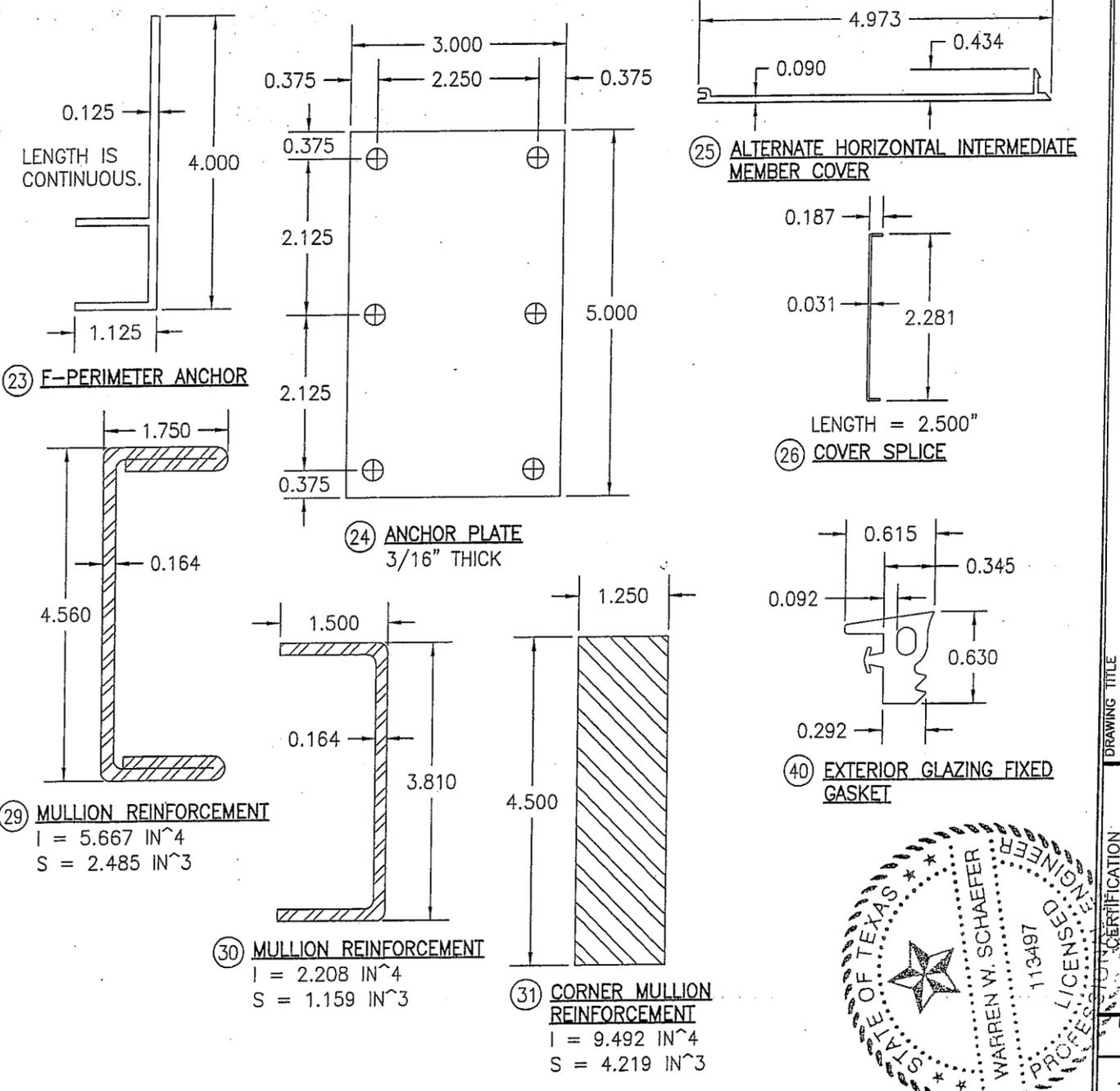


MAR 20 2013

WARREN W. SCHAEFER, P.E.
 P.E. NO. 113497

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD & SILL HORIZONTAL FRAMING	6063-T6 ALUMINUM
2A	SIDE FRAMING OR STANDARD HORIZONTAL INTERMEDIATE MEMBER	6063-T6 ALUMINUM
2B	ALTERNATE HORIZONTAL INTERMEDIATE MEMBER	6063-T6 ALUMINUM
3	FEMALE HALF EXPANSION HORIZONTAL	6063-T6 ALUMINUM
4	MALE HALF EXPANSION HORIZONTAL	6063-T6 ALUMINUM
5	VERTICAL MULLION	6063-T6 ALUMINUM
6	CORNER MULLION	6063-T6 ALUMINUM
7	CORNER MULLION COVER	6063-T6 ALUMINUM
8	PRESSURE PLATE	6063-T6 ALUMINUM
9	PRESSURE PLATE	6063-T6 ALUMINUM
10	PRESSURE PLATE	6063-T6 ALUMINUM
11	PRESSURE PLATE	6063-T6 ALUMINUM
12	SHEAR BLOCK (HORIZONTAL FRAMING TO STANDARD VERTICAL MULLION)	6063-T6 ALUMINUM
13	SHEAR BLOCK (STANDARD HORIZONTAL TO STANDARD VERTICAL MULLION)	6063-T6 ALUMINUM
14	SHEAR BLOCK (HORIZONTAL FRAMING TO CORNER MULLION)	6063-T6 ALUMINUM
15	SHEAR BLOCK (HORIZONTAL EXPANSION MULLION TO STANDARD VERTICAL MULLION)	6063-T6 ALUMINUM
16	SHEAR BLOCK (HORIZONTAL EXPANSION MULLION TO CORNER MULLION)	6063-T6 ALUMINUM
17	VERTICAL MULLION SPLICE SLEEVE	6063-T6 ALUMINUM
18	PRESSURE PLATE COVER	6063-T6 ALUMINUM
19	EXPANSION HORIZONTAL MULLION COVER	6063-T6 ALUMINUM
20	JOINT PLUG	6063-T6 ALUMINUM
21	T-ANCHOR	6063-T6 ALUMINUM
22	F-ANCHOR	6063-T6 ALUMINUM
23	F-PERIMETER ANCHOR	6063-T6 ALUMINUM
24	ANCHOR PLATE	6063-T6 ALUMINUM
25	ALTERNATE HORIZONTAL INTERMEDIATE MEMBER COVER	6063-T6 ALUMINUM
26	COVER SPLICE	5005 H32 ALUMINUM
29	MULLION REINFORCEMENT	ASTM A1011 GRADE 50 STEEL
30	MULLION REINFORCEMENT	ASTM A1011 GRADE 50 STEEL
31	CORNER MULLION REINFORCEMENT	ASTM A36 STEEL
34	5" X 3" X 3/8" X 6" LONG ANGLE	50 KSI STEEL
35	8" X 3" X 3/8" X 6" LONG BENT PLATE	50 KSI STEEL
SEALS & SEALANTS		
38	FIXED GASKET	TREMCO TR4726P EPDM DUROMETER 70 +/-5
39	THERMAL SEPERATOR	TREMCO TR-4015P EPDM DUROMETER 60 +/-5
40	EXTERIOR GLAZING FIXED GASKET	TREMCO TR-4014P EPDM DUROMETER 60 +/-5
41	WEDGE GLAZING GASKET	TREMCO TR-4873S SILICONE DUROMETER 70 +/-5
42	5/16" X 7/16" GLAZING TAPE	NORTON V2100 FOAM OR TREMCO 920
43	1/4" X 1" GLAZING TAPE	NORTON V2100 FOAM OR TREMCO 920
44	3/16" X 2 1/4" SHIM	PLASTIC, STEEL OR ALUMINUM
45	STEEL TO ALUMINUM SEPERATOR	THERMO-TOK TN-9004

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
FASTENERS		
49	1/4" X 1" HWHTF TYPE AB SCREW 300 SERIES S.S.	WITHIN 3" FROM ENDS & 9" MAX. O.C.
50	1/4-20 X 2" FNTCS 300 SERIES S.S.	WITHIN 9" FROM ENDS & 9" MAX. O.C.
51	NO. 10 X 3/8" FHTFS 300 SERIES S.S.	1 PER JOINT PLUG
52	10-16 X 1 1/4" FHS DS 300 SERIES S.S.	1 PER VERTICAL MULLION SPLICE SLEEVE
53	NO. 12 X 1" PHTFS 300 SERIES S.S.	1 PER VERTICAL MULLION SPLICE SLEEVE
54	NO. 12 X 1" PHTFS 300 SERIES S.S.	2 ABOVE SPLICE; WITHIN 3" OF END 3" O.C.
55	1/4-20 X 2" FNTCS 300 SERIES S.S.	WITHIN 9" FROM ENDS & 24" MAX. O.C.
56	NO. 12 X 1 7/8" PHTFS 300 SERIES S.S.	2 PER SHEAR BLOCK
57	NO. 12 X 7/8" FHTFS 300 SERIES S.S.	2 PER SHEAR BLOCK
58	NO. 12 X 7/16" PHTFS 300 SERIES S.S.	2 PER SHEAR BLOCK
59	NO. 12 X 1/2" FHTFS 300 SERIES S.S.	2 PER SHEAR BLOCK
60	NO. 12 X 1/2" FHTFS 300 SERIES S.S.	4 PER SHEAR BLOCK
61	NO. 10 X 5/8" FHTF 300 SERIES S.S.	6 PER PLATE



DRAWN BY: W.W.S. CHECKED BY: W.W.S. PLOT: 1=2 DATE: 03/19/13	NO. _____ REVISION DESCRIPTION _____ BY _____ DATE _____	DRAWING TITLE 1600 SYSTEM 2 CURTAIN WALL (L.M.I.)	JOB INFORMATION: KAWNEER COMPANY, INC. 555 GUTHRIDGE COURT NORCROSS, GA 30092 770-449-5555
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (REG. NO. F-14980) 7460 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		MAR 20 2013	WARREN W. SCHAEFER, P.E. P.E. NO. 113497
DRAWING NO. 1791T		REV. _____	SHEET NO. 16 OF 16

