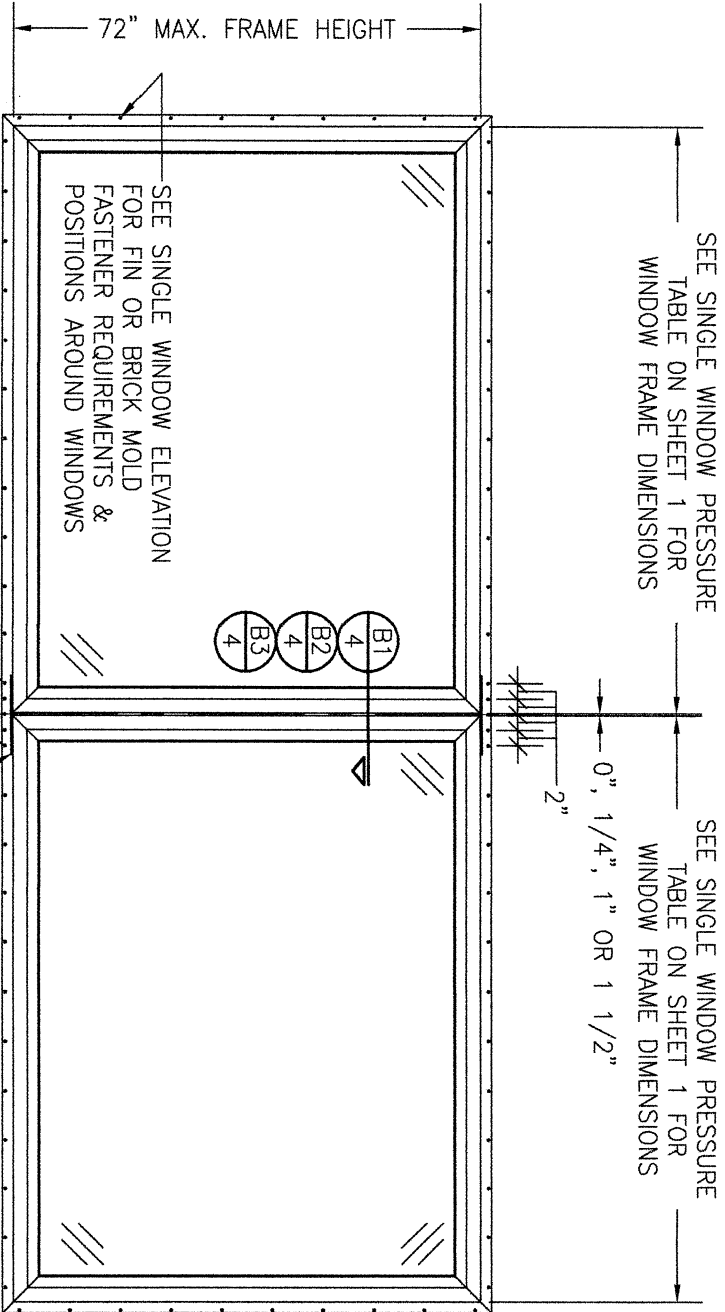


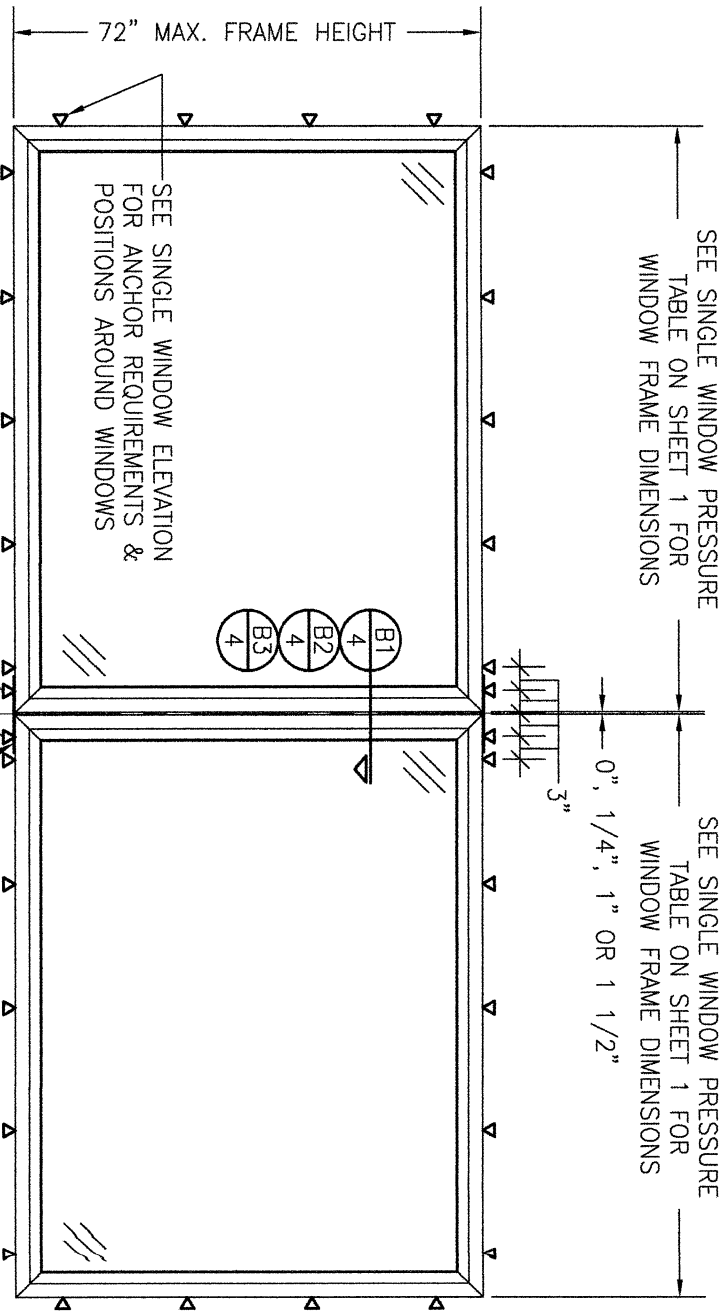


CLUSTER FIN OR BRICK MOLD ——— SEE CORNER CONSTRUCTION DESCRIPTION FOR MULLION END CONSTRUCTION

**EXTERIOR ELEVATION:
MULTIPLE FIXED WINDOW**

SCALE: 1/2" = 1'-0"

(NAIL FIN & BRICK MOLD MOUNT CONDITIONS)



ADDITIONAL FRAME SCREWS ——— SEE CORNER CONSTRUCTION DESCRIPTION FOR MULLION END CONSTRUCTION

**EXTERIOR ELEVATION:
MULTIPLE FIXED WINDOW**

SCALE: 1/2" = 1'-0"

(FRAME SCREW MOUNT CONDITION)

**ALLOWABLE DESIGN PRESSURE
(SIDE-BY-SIDE WINDOWS)**

ALLOWABLE DESIGN PRESSURE SHALL BE AS CONTROLLED BY THE INDIVIDUAL WINDOWS. SEE PRESSURE TABLE ON SHEET 1 FOR APPLICABLE PRESSURES.

CORNER CONSTRUCTION:

RECTANGULAR FRAME: MEMBERS ARE RABBETTED, BUTTED AND JOINED WITH THREE(3) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE HORIZONTAL FRAME MEMBERS INTO THE VERTICAL MEMBERS & TWO(2) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

SHAPED FRAME (EYEBROW TOP): HEAD TO JAMB MEMBERS ARE MITERED, BUTTED, AND JOINED WITH 2 NO. 8 X 2" WOOD SCREWS THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS AND 2 NO. 8 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS. SILL TO JAMB MEMBERS ARE RABBETTED, BUTTED AND JOINED WITH THREE(3) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE HORIZONTAL FRAME MEMBERS & TWO(2) 16GA. X 7/16" X 1 3/4" STAPLES THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

SHAPED FRAME (HALF ROUND): JAMB TO SILL MEMBERS ARE MITERED, BUTTED, AND JOINED WITH 2 NO. 8 X 2" WOOD SCREWS THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS AND 2 NO. 8 X 2" WOOD SCREWS THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS. CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

RECTANGULAR SASH: MEMBERS ARE COPED, BUTTED AND JOINED WITH THREE(3) 1/4" X 1 3/8" DOWELS AND PVA RESIN PER SASH JOINT.

SHAPED HEAD RAIL TO STILE: MEMBERS ARE MITERED, BUTTED AND JOINED WITH 1 NO. 8 X 2" WOOD SCREW THROUGH THE VERTICAL MEMBERS INTO THE HORIZONTAL MEMBERS AND 1 NO. 8 X 2" WOOD SCREW THROUGH THE HORIZONTAL MEMBERS INTO THE VERTICAL MEMBERS AND PVA RESIN PER SASH JOINT.

FRAME CLAD: MITERED MEMBERS ARE JOINED VIA A CORNER KEY (ITEM #31 FOR RECTANGULAR UNITS AND ITEM# 33 FOR SHAPED UNITS) & WITH 2 NO. 6 X 3/8" SMS SCREW PER CORNER. ALL CORNERS ARE SEALED WITH POLYURETHANE SEALANT.

SASH CLAD: RAIL CLADDING IS COPED INTO STILE CLADDING & MEMBERS ARE SECURED TO THE SASH WITH CLADDING RETAINER (PART #23).

MULLION ENDS: THE OPPOSING JAMBS AT THE MULLION ENDS SHALL BE JOINED WITH THREE(3) 1/2" X 1" CORRUGATED FASTENERS SPACED 1 1/2" APART & A SINGLE 0.039" X 2 3/4" X 10" 50 KSI GALVANIZED STEEL MULLION END REINFORCEMENT PLATE. THE PLATE IS SECURED TO EACH JAMB MEMBER WITH SIX(6) 16 GA. X 7/16" X 1/2" LONG STAPLES. NOTE THAT WHEN A WOOD REINFORCEMENT IS USED BETWEEN THE JAMBS, EACH JAMB IS JOINED TO THAT REINFORCEMENT WITH 3 CORRUGATED FASTENERS.

MULTIPLE UNIT NOTES:

1. FOR ALL DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATIONS.
2. THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
3. INDIVIDUAL WINDOW SIZES SHALL BE RESTRICTED AS SPECIFIED IN THE SINGLE WINDOW ELEVATIONS.
4. RECTANGULAR WINDOWS SHOWN: SHAPED WINDOWS ALSO APPLY TO THE MULLION CONDITION SHOWN.

DRAWN BY: W.R.M.		CHECKED BY: W.W.S.		
DATE: 03/10/11				
NO.	REVISION	DESCRIPTION	BY	DATE
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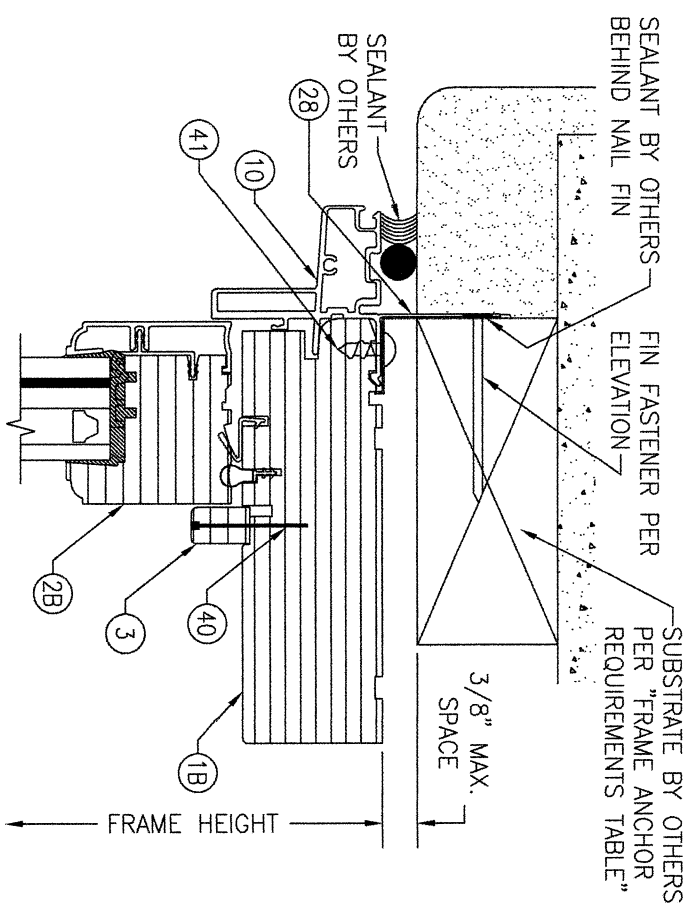
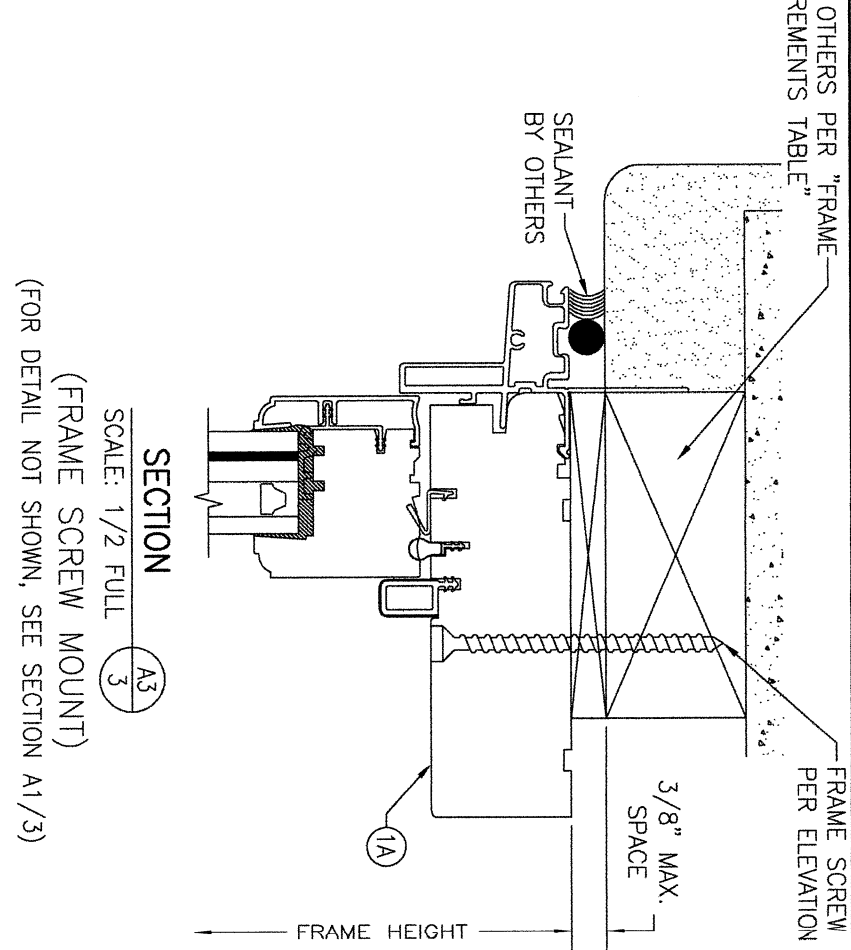
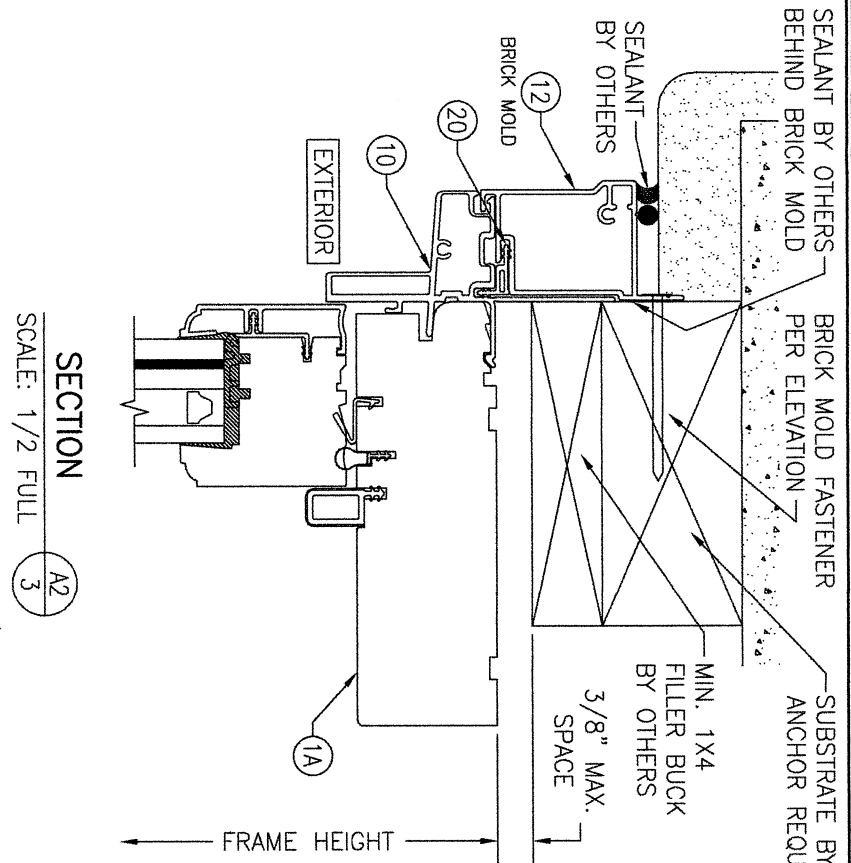
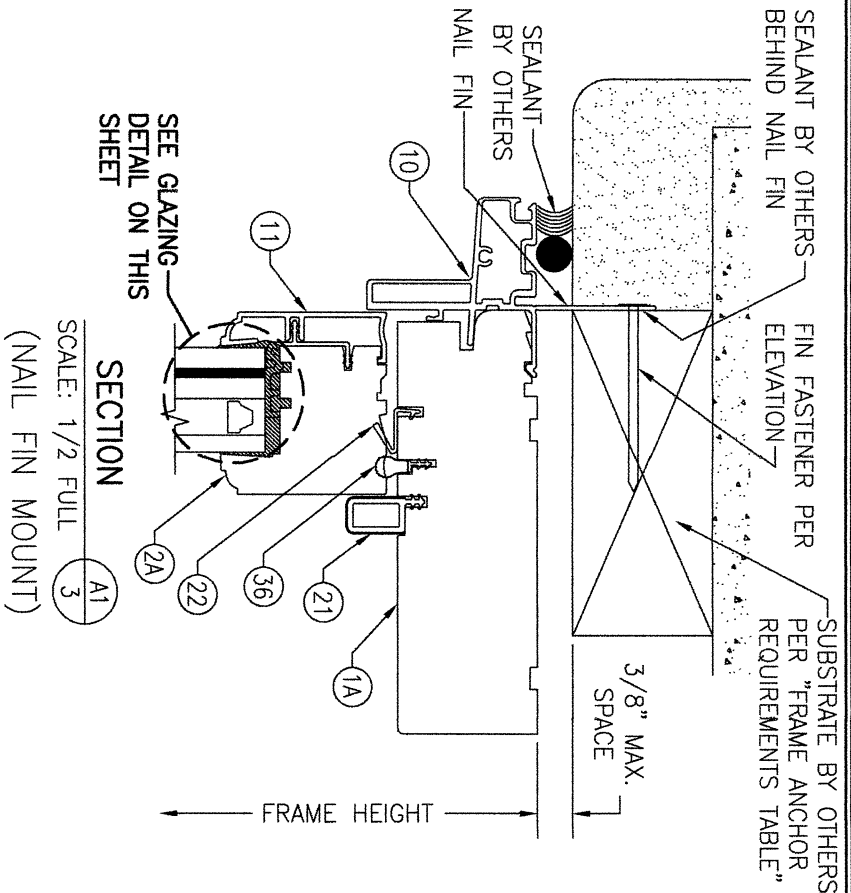
C.P. LOEWEN ENTERPRISES
77 HWY 52 WEST
STEINBACH, MB, CANADA R5G 1B2
204-326-6446

DRAWING TITLE	MANUFACTURER
SERIES 25 ALUMINUM CLAD IMPACT DOUBLE HUNG TRANSOM WINDOW	C.P. LOEWEN ENTERPRISES
CONSULTANTS	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	
25601 AYSSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	

CERTIFICATION

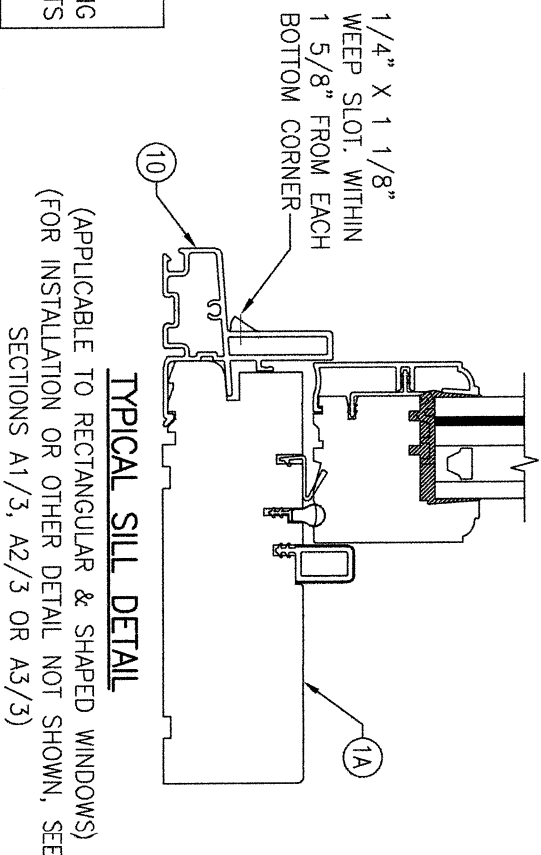
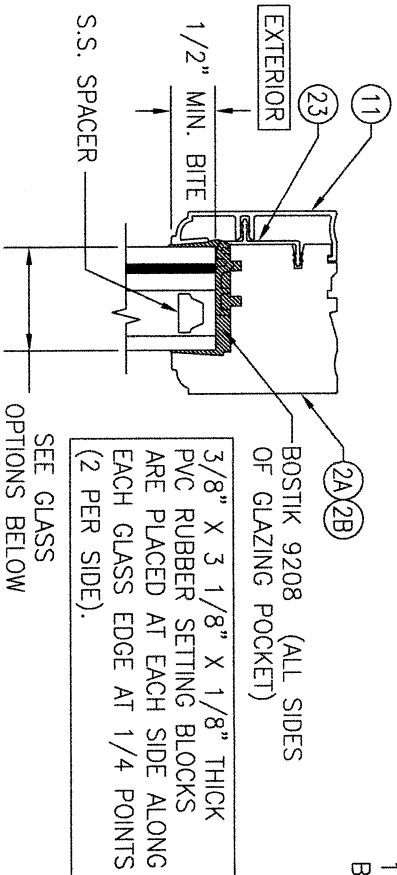
WARREN W. SCHAEFER, P.E.
P.E. NO. 44135

DRAWING NO.	REV.
1754	C
SHEET NO.	
2 OF 5	



SECTION A2
SCALE: 1/2 FULL
(BRICK MOLD MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION A1/3)

SECTION A3
SCALE: 1/2 FULL
(FRAME SCREW MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTION A1/3)



TYPICAL GLAZING DETAIL

TYPICAL SILL DETAIL

- GLASS OPTION 1: 1 1/8" THICK I.G. GLASS (1/4" AN./0.09 KURARAY SG/1/4" AN. EXTERIOR; 3/8" SPACER; 3/16" AN. INTERIOR)
GLASS OPTION 2: 1 1/8" THICK I.G. GLASS (3/16" HT. ST./0.09 KURARAY SG/1/4" HT. ST. EXTERIOR; 3/8" SPACER; 1/4" AN. INTERIOR)
GLASS OPTION 3: 1 1/8" THICK I.G. GLASS (3/16" AN./0.09 KURARAY SG/3/16" AN. EXTERIOR; 1/2" SPACER; 5/32" AN. INTERIOR)

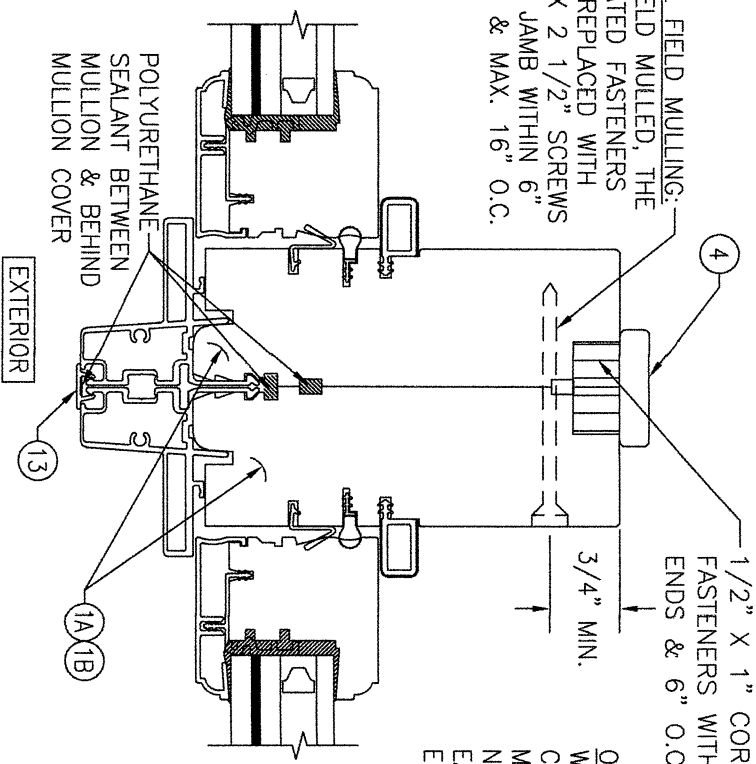
SECTION A4
SCALE: 1/2 FULL
(SHAPED WINDOW WITH NAIL FIN MOUNT)
(FOR DETAIL NOT SHOWN, SEE SECTIONS A1/3)
(FOR BRICKMOLD AND FRAME SCREW INSTALLATIONS, SEE SECTIONS A2/3 & A3/3)

NO.	REVISION	DESCRIPTION	BY	DATE
1-2				05/10/11

DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT DOUBLE HUNG TRANSOM WINDOW	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

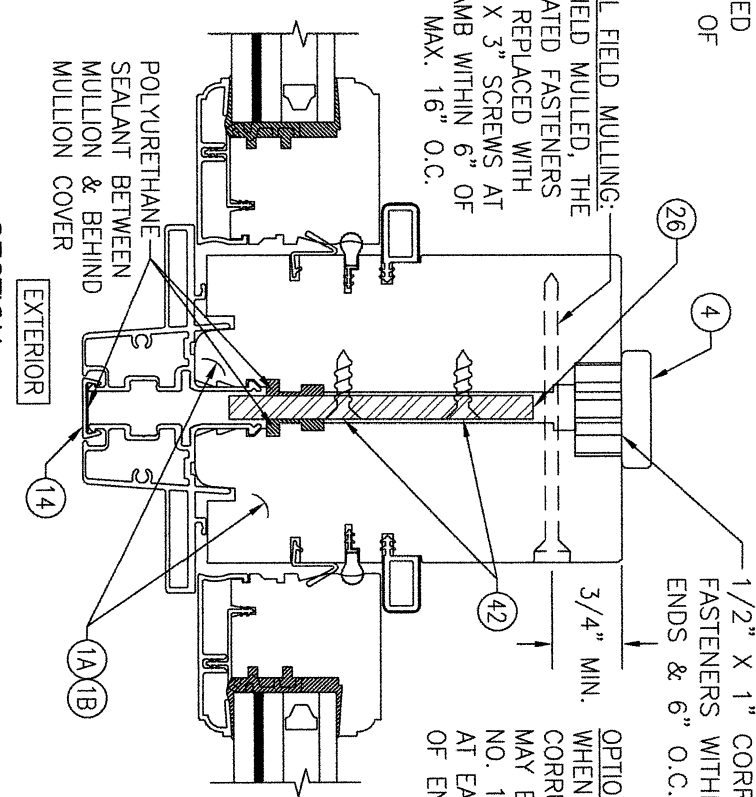
CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1754	REV. C
SHEET NO. 3	OF 5

OPTIONAL FIELD MULLING:
WHEN FIELD MULLED, THE
CORRUGATED FASTENERS
MAY BE REPLACED WITH
NO. 10 X 2 1/2" SCREWS
AT EACH JAMB WITHIN 6"
OF ENDS & MAX. 16" O.C.



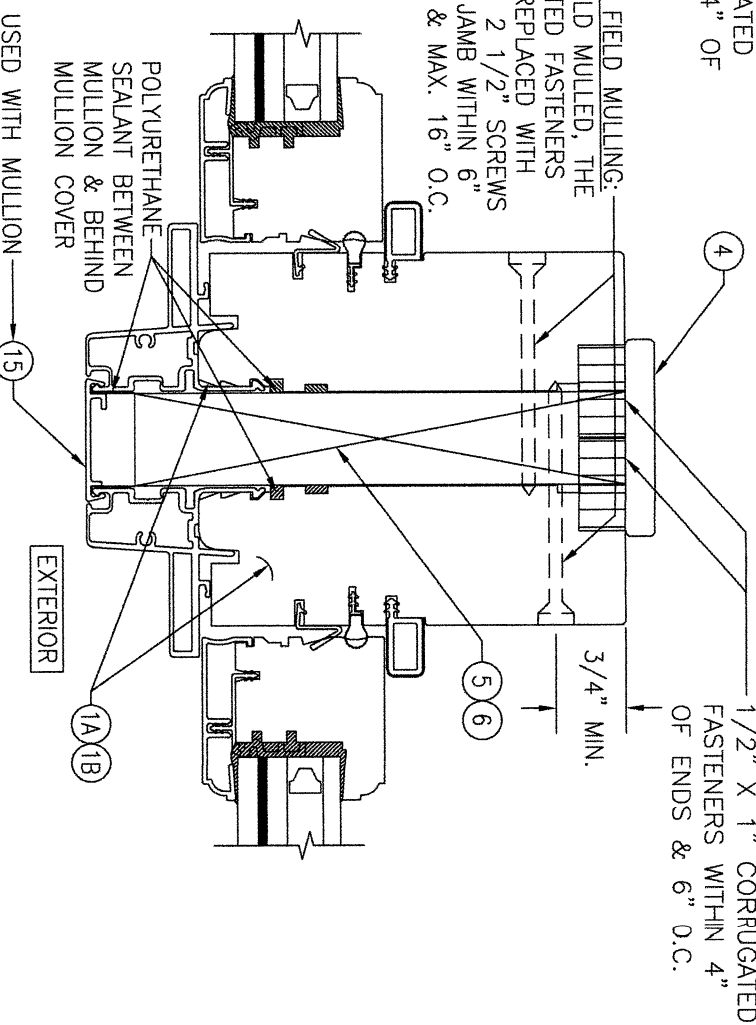
SECTION B1
SCALE: 1/2 FULL
(NON-REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

OPTIONAL FIELD MULLING:
WHEN FIELD MULLED, THE
CORRUGATED FASTENERS
MAY BE REPLACED WITH
NO. 10 X 3" SCREWS AT
EACH JAMB WITHIN 6" OF
ENDS & MAX. 16" O.C.



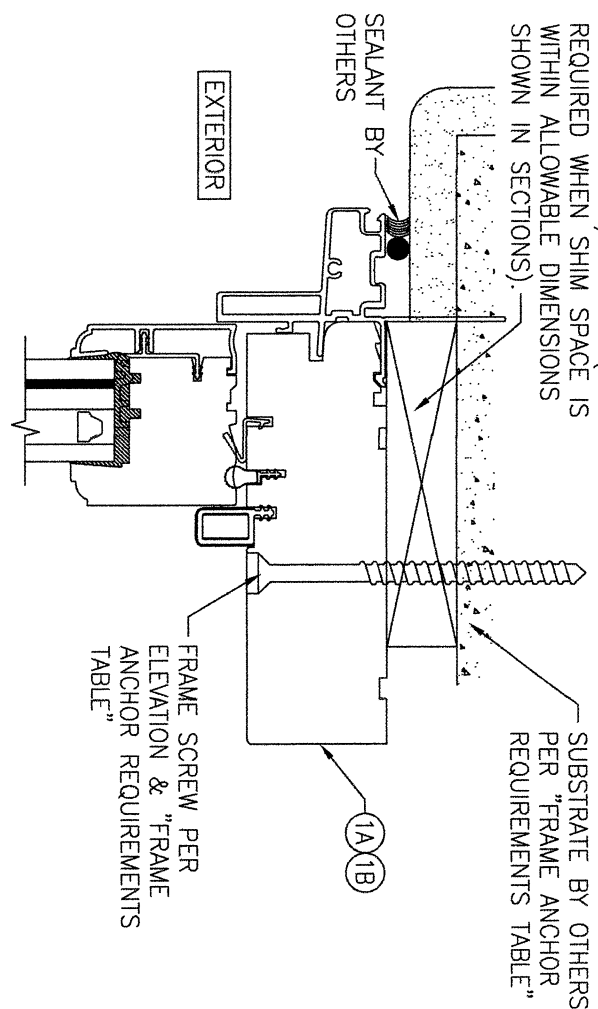
SECTION B2
SCALE: 1/2 FULL
(OPTIONAL BAR REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

OPTIONAL FIELD MULLING:
WHEN FIELD MULLED, THE
CORRUGATED FASTENERS
MAY BE REPLACED WITH
NO. 10 X 2 1/2" SCREWS
AT EACH JAMB WITHIN 6"
OF ENDS & MAX. 16" O.C.



SECTION B3
SCALE: 1/2 FULL
(OPTIONAL WOOD REINFORCED MULLION)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

CONTINUOUS WOOD MEMBER LESS
IN THICKNESS THAN A 2X_ BUCK
TO BE MIN. 3 1/2" DEEP (NOT
REQUIRED WHEN SHIM SPACE IS
WITHIN ALLOWABLE DIMENSIONS
SHOWN IN SECTIONS).



**OPTIONAL DIRECT MOUNT DETAIL
TO SUBSTRATE WITH SPACER**
(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

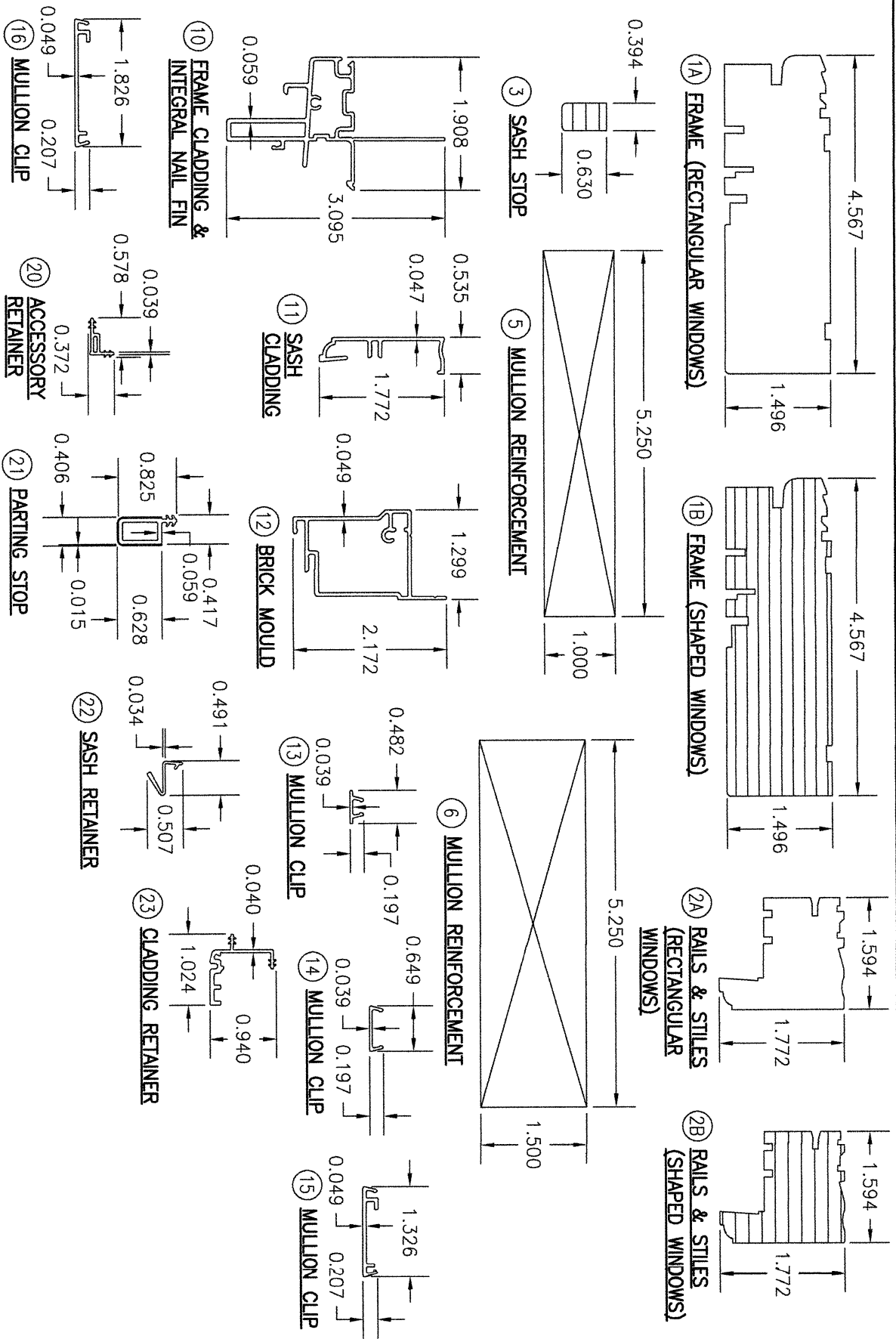
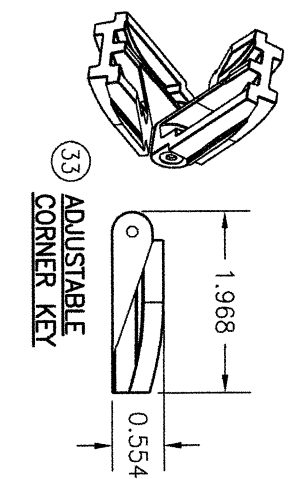
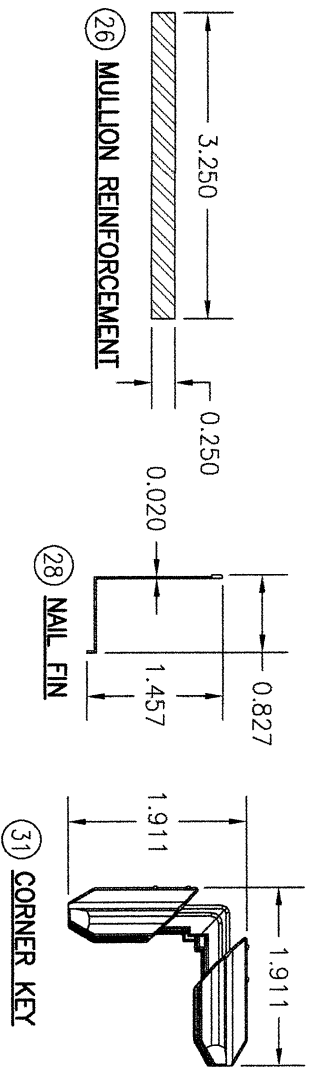
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DATE: 03/10/11					DATE: 03/10/11				
PLT: 1=2									
NO.	REVISION DESCRIPTION				BY	DATE			

DRAWING TITLE	CONSULTANTS	MANUFACTURER
SERIES 25 ALUMINUM CLAD IMPACT DOUBLE HUNG TRANSOM WINDOW	W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	C.P. LOEWEN ENTERPRISES
	25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424	77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446

CERTIFICATION	DRAWING NO.	REV.
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	1754	C
	SHEET NO.	
	4 OF 5	

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1A	FRAME (RECTANGULAR WINDOWS)	WOOD
1B	FRAME (SHAPED WINDOWS)	WOOD (LAMINATED)
2A	RAILS & STILES (RECTANGULAR WINDOWS)	WOOD
2B	RAILS & STILES (SHAPED WINDOWS)	WOOD (LAMINATED)
3	SASH STOP	WOOD (LAMINATED)
4	MULLION INTERIOR COVER AS REQ'D	WOOD
5	MULLION REINFORCEMENT	WOOD
6	MULLION REINFORCEMENT	WOOD
10	FRAME CLADDING & INTEGRAL NAIL FIN	6063-T5 ALUMINUM
11	SASH CLADDING	6063-T5 ALUMINUM
12	BRICK MOLD	6063-T5 ALUMINUM
13	MULLION CLIP	6063-T5 ALUMINUM
14	MULLION CLIP	6063-T5 ALUMINUM
15	MULLION CLIP	6063-T5 ALUMINUM
16	MULLION CLIP	6063-T5 ALUMINUM
20	ACCESSORY RETAINER	PVC
21	PARTING STOP	PVC & VENEER WRAPPED
22	SASH RETAINER	PVC
23	CLADDING RETAINER	PVC
26	MULLION REINFORCEMENT	A-36 STEEL
28	NAIL FIN (APPLICABLE TO SHAPED TOP UNITS)	50 KSI STEEL
31	CORNER KEY (HEAD TO SIDE FRAME CLADDING)	NYLON CL 200
33	ADJUSTABLE CORNER KEY (HEAD TO SIDE FRAME CLADDING)	NYLON CL 200
SEALS & SEALANTS		
36	WEATHERSTRIP	SCHLEGEL QEZD300
FASTENERS		
40	16 GA. X 1 1/4" FINISH NAIL	WITHIN 2 1/2" FROM CORNERS & MAX. 6" O.C.
41	NO. 8 X 1/2" SELF TAPPING SCREW	WITHIN 1" FROM CORNERS & MAX. 6" O.C.
42	NO. 8 X 3/4" SMS OR WOOD SCREW	WITHIN 6" FROM ENDS & MAX. 15" O.C.

NOTE: WOOD USED IN TESTING WAS DOUGLAS FIR WITH A SPECIFIC GRAVITY OF G = 0.49 AND A MODULUS OF ELASTICITY OF E = 1,600,000 PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.49 AND MODULUS OF ELASTICITY OF 1,600,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY C.P. LOEWEN ENTERPRISES TO SELECT.



DRAWING TITLE SERIES 25 ALUMINUM CLAD IMPACT DOUBLE HUNG TRANSOM WINDOW		CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 25601 AYSEN DRIVE PUNTA GORDA, FL 33983 PHONE: 561-744-3424		MANUFACTURER C.P. LOEWEN ENTERPRISES 77 HWY 52 WEST STEINBACH, MB, CANADA R5G 1B2 204-326-6446	
DRAWING NO. 1754		SHEET NO. 5 OF 5		CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWN BY: W.R.M.		CHECKED BY: W.M.S.		DATE: 03/10/11	
NO.		REVISION DESCRIPTION		BY	