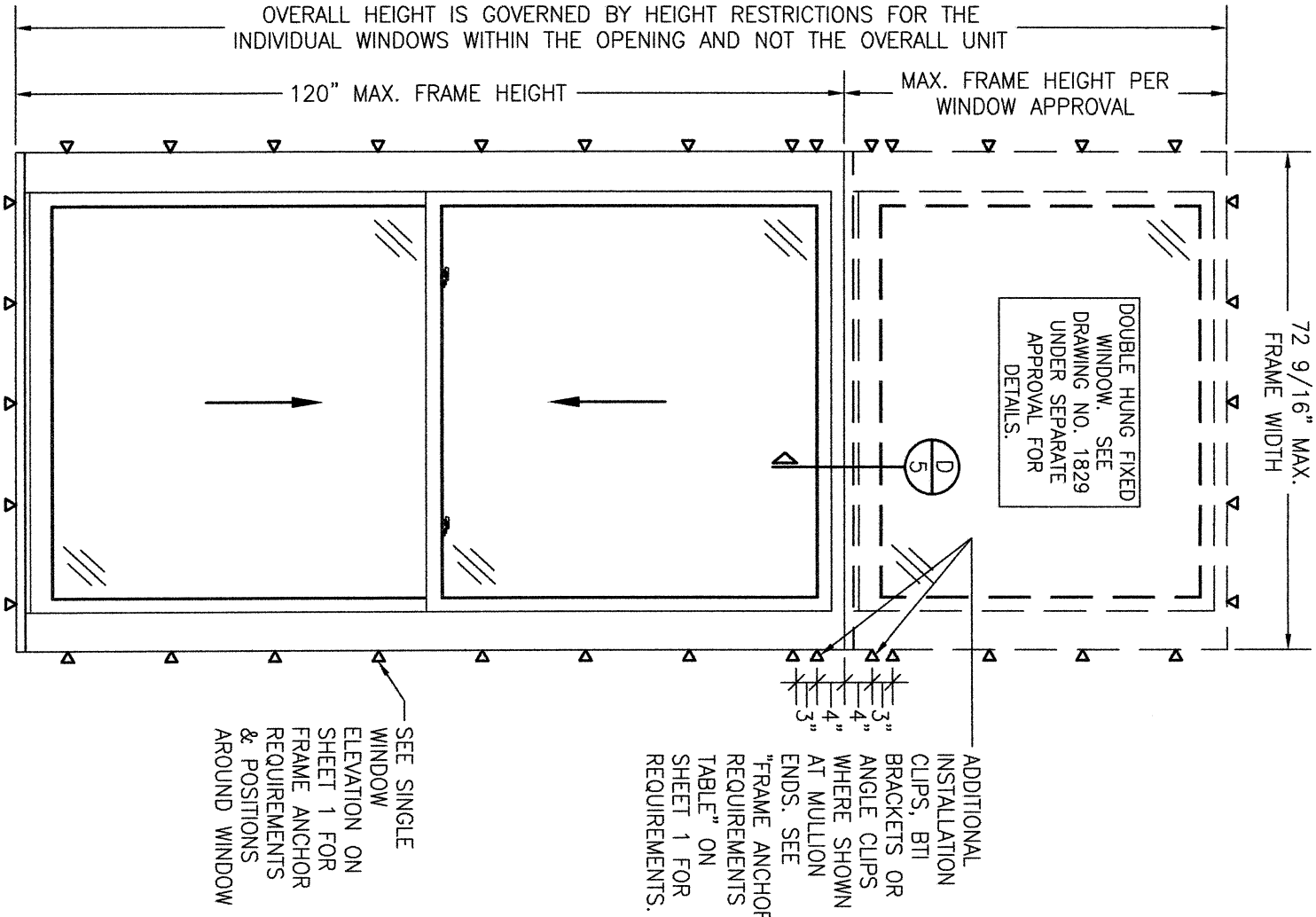




EXTERIOR ELEVATION:
SINGLE WINDOW WITH TRANSOM

SCALE: 1/2" = 1'-0"
(DOUBLE HUNG WINDOW SHOWN. SINGLE HUNG WINDOW ALSO APPLIES)
(FOR DETAIL NOT SHOWN, SEE SINGLE WINDOW ELEVATION ON SHEET 1)

DRAWING TITLE SINGLE & DOUBLE HUNG WEIGHT & CHAIN SYSTEM
IMPACT WINDOW

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

MANUFACTURER
TISCHLER UND SOHN (USA) LTD.
SIX SUBURBAN AVENUE
STAMFORD, CONNECTICUT
203-674-0600

NO.	REVISION DESCRIPTION	BY	DATE

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CHECKED BY: W.M.S.
PLOT: 1=24
DATE: 07/02/12

CERTIFICATION

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

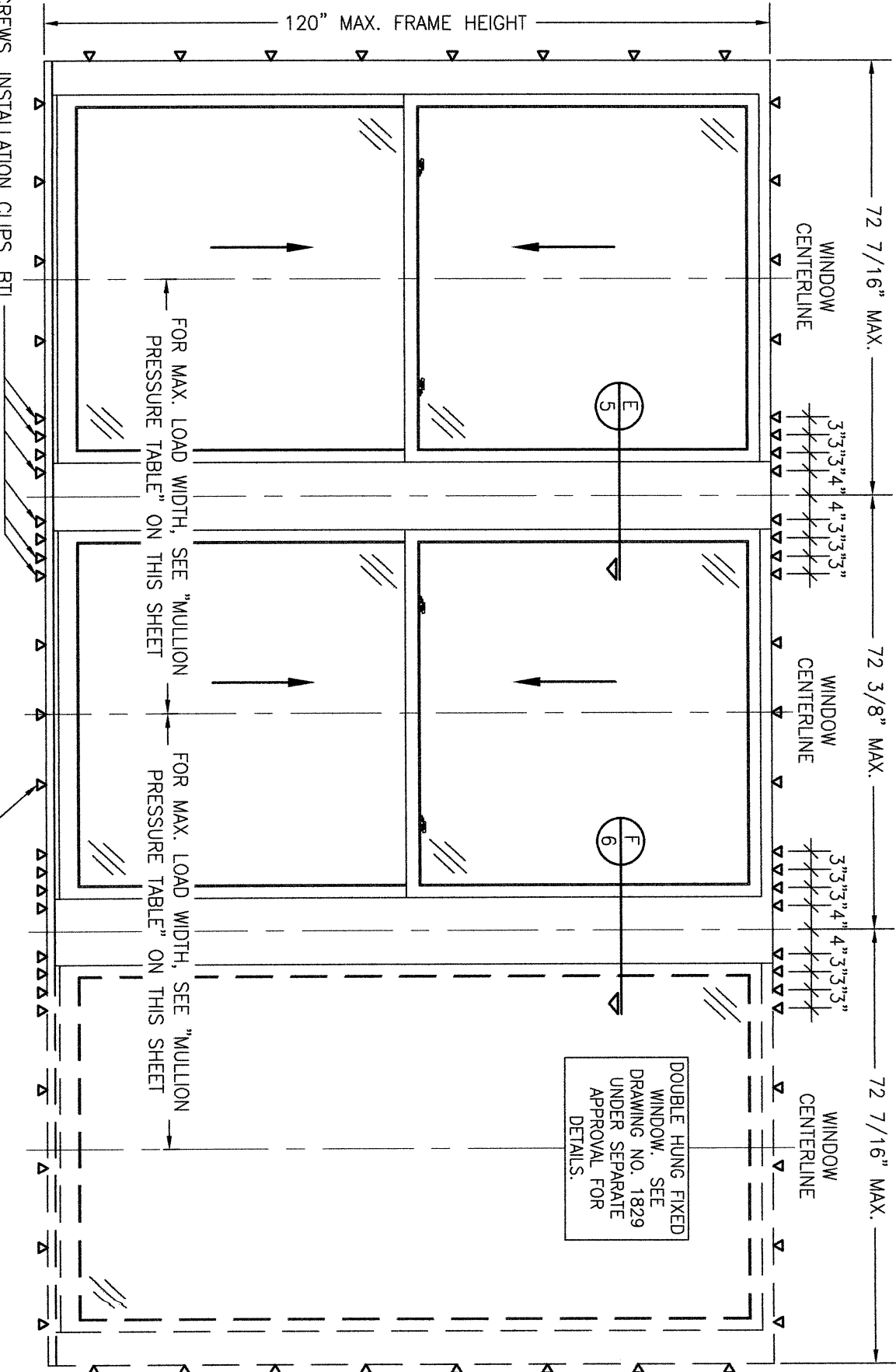
DRAWING NO. 1828
SHEET NO. 2 OF 9
REV. C

VERTICAL MULLION END ANCHOR QUANTITIES					
MAX. WINDOW FRAME HEIGHT (IN.)	MAX. LOAD WIDTH (IN.)	INSTALLATION METHOD & ANCHOR QUANTITIES			
		FRAME SCREWS	INSTALLATION CLIPS	ANGLE CLIPS	BTI BRACKETS
120	72 1/2	8	8	6	4
	48	6	4	4	4
	34	4	4	4	4
	72 1/2	8	6	6	4
108	54	6	6	4	4
	48	6	4	4	4
	38	4	4	4	4
	72 1/2	8	6	6	4
96	66	6	6	6	4
	60	6	4	4	4
	43	4	4	4	4
	72 1/2	6	6	6	4
84	66	6	4	4	4
	49	4	4	4	4
	72 1/2	6	4	4	4
72	58	4	4	4	4
	72 1/2	6	4	4	4
	63	4	4	4	4
60	72 1/2	6	4	4	4
	69	4	4	4	4
57	72 1/2	4	4	4	4

ADDITIONAL FRAME SHEAR SCREWS, INSTALLATION CLIPS, BTI BRACKETS OR ANGLE CLIPS WHERE SHOWN AT MULLION ENDS. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON SHEET 1 FOR REQUIREMENTS. NOTE: ANCHOR QUANTITY AT MULLION ENDS MAY VARY WITH UNIT SIZE. SEE "ANCHOR QUANTITY" TABLE ON THIS SHEET FOR QUANTITY OF ANCHORS REQUIRED.

EXTERIOR ELEVATION:
MULTIPLE OPERABLE/FIXED WINDOW
SCALE: 1/2" = 1'-0"
(DOUBLE HUNG WINDOWS SHOWN, SINGLE HUNG WINDOWS ALSO APPLY)
SEE SINGLE WINDOW ELEVATION ON SHEET 1 FOR FRAME ANCHOR REQUIREMENTS & POSITIONS AROUND WINDOW

- MULTIPLE SIDE-BY-SIDE UNIT NOTES:
- FOR ALL DETAIL NOT SHOWN, SEE INDIVIDUAL WINDOW ELEVATION.
 - THERE IS NO LIMIT ON THE NUMBER OF WINDOWS THAT MAY BE COMBINED HORIZONTALLY IN ONE DIRECTION INTO ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT ALL LOADS TRANSFERRED FROM THE WINDOWS & THEIR MULLIONS.
 - ANY COMBINATION OF FIXED/OPERABLE WINDOWS IN ONE OPENING SHALL APPLY.



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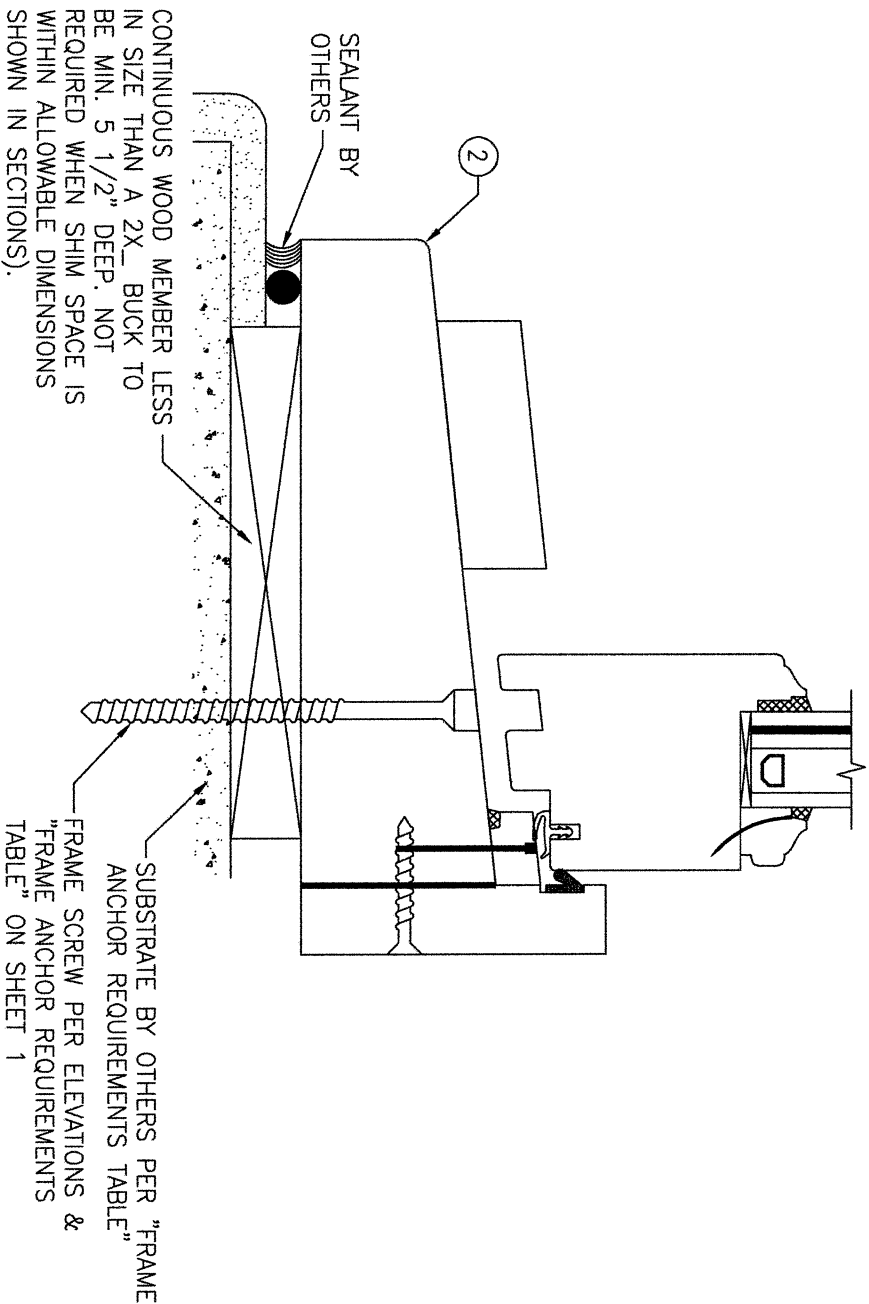
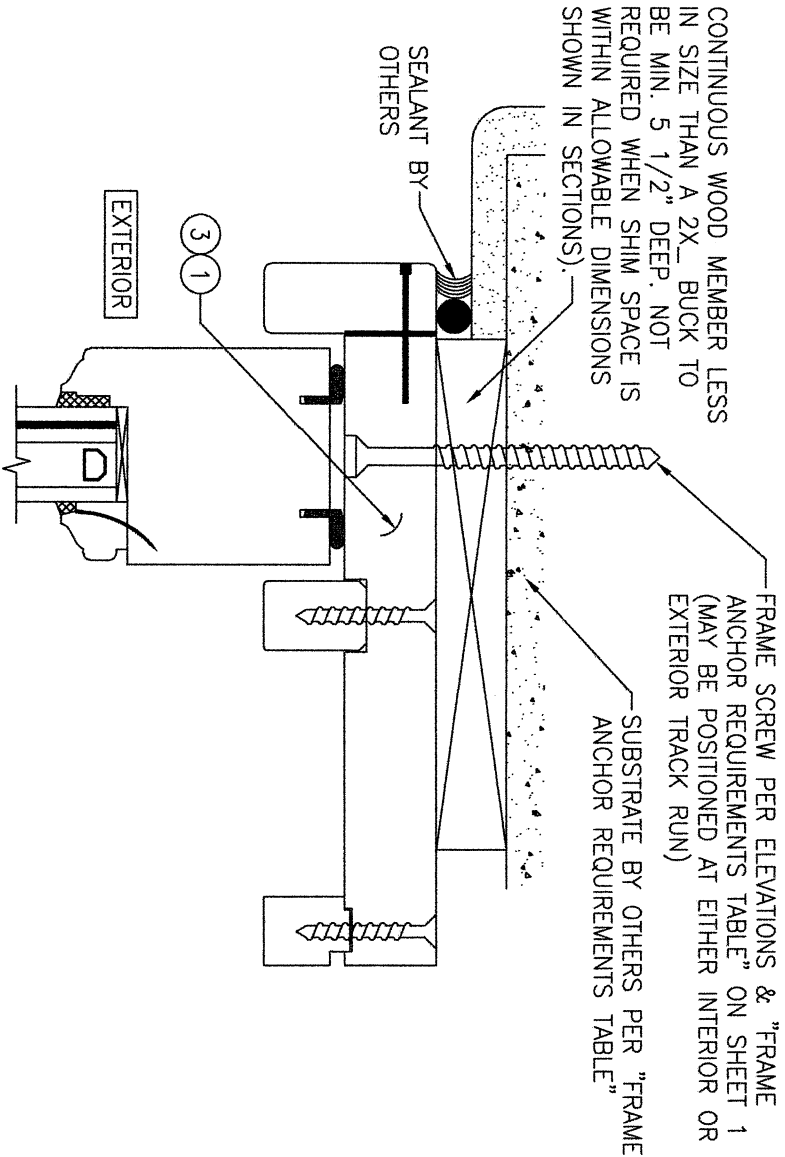
DRAWING TITLE		MANUFACTURER	
SINGLE & DOUBLE HUNG WEIGHT & CHAIN SYSTEM IMPACT WINDOW		TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	

CONSULTANTS	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	

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

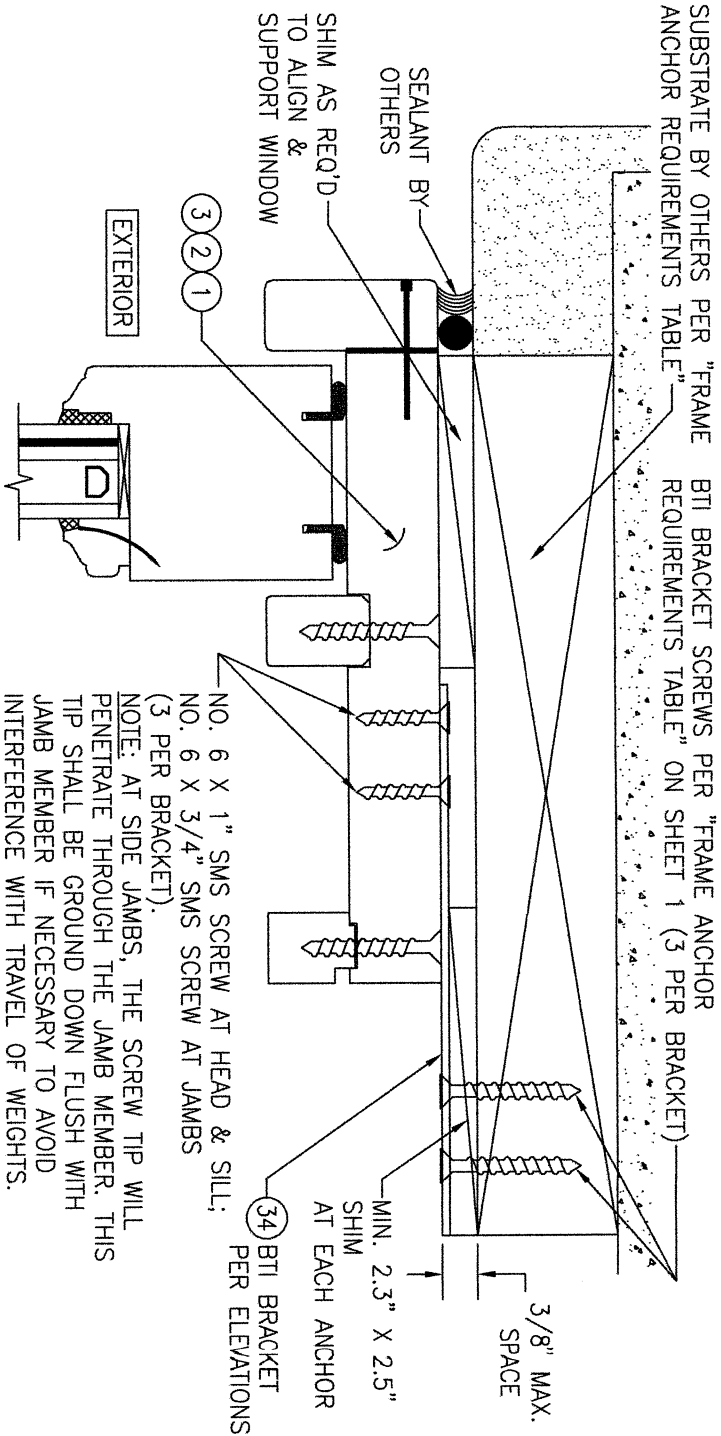
DRAWING NO. REV.	
1828 C	

SHEET NO.	
3 OF 9	



OPTIONAL DIRECT MOUNT DETAIL TO SUBSTRATE WITH SPACER

(FRAME SCREW IS NOT APPLICABLE AT JAMBS)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL BTI BRACKET INSTALLATION DETAIL

(HEAD SECTION SHOWN, SILL & SIDES ARE INSTALLED THE SAME)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

SEE PART #34 BTI BRACKET
DETAIL ON SHEET 8 FOR SCREW
LOCATIONS THROUGH BRACKET

NO.	REVISION	DESCRIPTION	BY	DATE

DRAWING TITLE SINGLE & DOUBLE HUNG WEIGHT & CHAIN SYSTEM IMPACT WINDOW		MANUFACTURER TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			

CERTIFICATION WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1828	REV. C
SHEET NO. 7 OF 9			

ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	HEAD	WOOD
2	SILL	WOOD
3	JAMB	WOOD
4	SUB-JAMB	WOOD
5	TOP RAIL	WOOD
6	TOP CHECK-RAIL	WOOD
7	BOTTOM CHECK-RAIL	WOOD
8	BOTTOM RAIL	WOOD
9	STILE	WOOD
10	HEAD/JAMB EXTERIOR SASH STOP	WOOD
11	PARTING STOP	WOOD
12	HEAD/JAMB INTERIOR SASH STOP	WOOD
13	TOP CHECK-RAIL EXTENSION	WOOD
14	WATER GUARD	WOOD
15	BOTTOM SASH STOP	WOOD
16	SILL INTERIOR SASH STOP	WOOD
17	JAMB EXTERIOR SASH STOP	WOOD
18	JAMB INTERIOR SASH STOP	WOOD
20	MULLION EXTERIOR SASH STOP	WOOD
21	MULLION INTERIOR SASH STOP	WOOD
22	MULLION INTERMEDIATE FRAME	WOOD
23	GLAZING BEAD	WOOD
24	SINGLE HUNG WINDOW SASH BLOCKING	WOOD
29	TOP CHECK-RAIL REINFORCEMENT	34 KSI STAINLESS STEEL OR A36 STEEL
30	WEIGHT & CHAIN SEPERATOR	6063-T6 ALUMINIUM
33	INSTALATION CLIP	GALVANIZED 54 KSI STEEL
34	BTI BRACKET	GALVANIZED 54 KSI STEEL
37	ANGLE CLIP	6061-T6 ALUMINIUM
HARDWARE		
41	SASH LOCK & KEEPER	PHELPS LKF-14
42	WEIGHT & CHAIN SYSTEM:	VON MORRIS 2400X605 NL BRASS PHELPS SP225BB RE BRASS DOEBLER STEEL TUBE WITH GOSLER SOLID LEAD
	SASH STOP	
	PULLEY	
	COUNTER WEIGHT	
SEALS & SEALANTS		
46	WEATHERSTRIP	SCHLEGEL QWS-250
47	WEATHERSTRIP	SCHLEGEL QFS-375
48	SILL WEATHERSTRIP	DEVENTER S6961
49	WEATHERSTRIP	SCHLEGEL QL-3055
FASTENERS		
53	NO. 8 X 1 1/2" SMS OR WOOD SCREW	WITHIN 2" FROM CORNERS & 12" MAX. O.C.
54	18 GA. X 1 1/2" S.S. BRAD NAIL	WITHIN 2" FROM CORNERS & 12" MAX. O.C.
55	NO. 8 X 3/4" SMS OR WOOD SCREW	2 PER EACH SASH LOCK AND KEEPER
56	NO. 10 X 2" SMS OR WOOD SCREW	WITHIN 2" FROM ENDS & ONE AT MID-SPAN
57	NO. 6 X 13/16" SMS OR WOOD SCREW	WITHIN 3" FROM CORNERS & 8" MAX. O.C.
58	NO. 14 X 3 1/8" BAUTEC WOOD SCREW	WITHIN 4" FROM CORNERS & 12" MAX. O.C.
59	18 GA. X 1 1/2" S.S. CURVED NAIL	WITHIN 4" FROM CORNERS & 12" MAX. O.C.

NOTE: WOOD USED IN TESTING WAS SIPO MAHOGANY WITH A SPECIFIC GRAVITY OF G = 0.63 AND A MODULUS OF ELASTICITY OF E = 1,560,000 PSI. OTHER WOOD SPECIES APPLICABLE FOR USE WITH THIS PRODUCT ARE THOSE WITH A SPECIFIC GRAVITY OF 0.63 AND MODULUS OF ELASTICITY OF 1,560,000 PSI OR GREATER. ALL WOOD IS MINIMUM GRADE 2 MILLED BY TISCHLER UND SOHN TO SELECT.

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W.R.M.		W.M.S.	
PLOT: 1=2		DATE: 07/02/12	
NO.	REVISION DESCRIPTION	BY	DATE

DRAWING TITLE	SINGLE & DOUBLE HUNG WEIGHT & CHAIN SYSTEM IMPACT WINDOW
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	TISCHLER UND SOHN (USA) LTD. SIX SUBURBAN AVENUE STAMFORD, CONNECTICUT 203-674-0600

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P.E. NO. 44135