

# CAT 5 HURRICANE SCREENS, LLC

## WIND ABATEMENT SYSTEM

### INSTALLATION ANCHORAGE DETAILS

**GENERAL NOTES:**

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2007 FLORIDA BUILDING CODE AND THE 2006 INTERNATIONAL BUILDING / RESIDENTIAL CODE. FOR USE OUTSIDE FLORIDA'S HIGH VELOCITY HURRICANE ZONE (HVHZ) ONLY, AS A LARGE MISSILE IMPACT SYSTEM. (QUALIFIES SMALL MISSILE).
2. 33-1/3% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
3. ALL BOLTS AND WASHERS SHALL BE ZINC COATED, GALVANIZED OR STAINLESS STEEL.
4. ACCEPTANCE CRITERIA AS PROVIDED IN ASTM E 330-02, ASTM E 1886-02 AND ASTM E 1996-02, HAS BEEN MET BY THIS SYSTEM AS A NON-POROUS SYSTEM. THEREFORE NO MINIMUM SEPARATION FROM THE GLAZING BEING PROTECTED IS REQUIRED.
5. WIND ABATEMENT SYSTEM HAS BEEN DESIGNED AND TESTED TO THE MAXIMUM SPAN AND LOADS SHOWN IN THESE DRAWINGS. SEE CERTIFIED TESTING LABORATORIES TEST REPORTS CTLA-1827W & CTLA-1523W.

**SPAN NOTES:**

1. ALLOWABLE DESIGN PRESSURES SHALL NOT BE EXCEEDED.
2. WIND ABATEMENT SYSTEM SPANS LONGER THAN MAXIMUM NOTED ARE NOT ALLOWED.
3. WIND ABATEMENT SYSTEM MAY BE MOUNTED VERTICALLY OR HORIZONTALLY.

**ANCHORING NOTES:**

1. SEE ANCHOR SCHEDULES FOR ALLOWABLE LOADS, SPANS AND ANCHOR SPACING FOR EACH ANCHORAGE SCENARIO.
2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. ALL WOOD ANCHORS SHALL HAVE EMBEDMENT AS SHOWN INTO STRUCTURAL FRAMING, NOT INCLUDING PLYWOOD OR OTHER FINISHES.
4. ENSURE THAT MINIMUM EDGE DISTANCES AND MINIMUM EMBEDMENT VALUES AS SHOWN FOR EACH ANCHOR TYPE IN ANCHOR SCHEDULES ARE MAINTAINED.
5. ALL ANCHORS SHALL HAVE A LENGTH ADEQUATE TO PROVIDE THE MINIMUM EMBEDMENT VALUES LISTED FOR EACH ANCHOR.

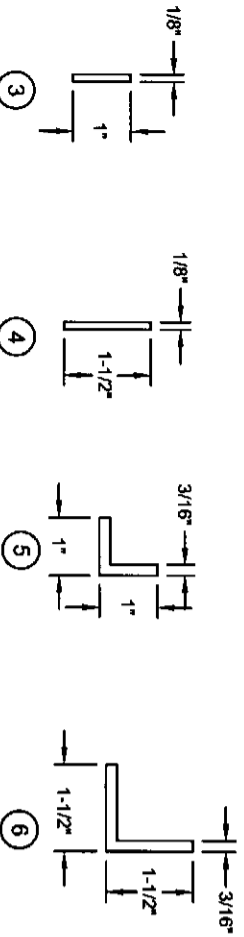


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DESIGN PRESSURE RATING (PSF)		IMPACT RATING
SPAN	TEST REPORT #	DESIGN PRESSURE
0° - 120°	CTLA-1523W	±90.0
121° - 180°	CTLA-1827W	±80.0

LARGE MISSILE IMPACT

### BILL OF MATERIALS

ITEM #	DESCRIPTION	MATERIAL
1	POLYPROPYLENE FABRIC (COLORS MAY VARY)	
2	THREAD - 16 OZ. ANEFIL POLYETHYLENE (COLORS MAY VARY)	
3	1" X 1/8" THICK ALUMINUM FLAT BAR	6061-T6 ALLOY
4	1-1/2" X 1/8" THICK ALUMINUM FLAT BAR	6061-T6 ALLOY
5	1" X 1" X 3/16" THICK ALUMINUM ANGLE	6061-T6 ALLOY
6	1-1/2" X 1-1/2" X 3/16" THICK ALUMINUM ANGLE	6061-T6 ALLOY
7	ANCHORS, SEE ANCHOR SCHEDULES	
8	1/4"-20 X 3/4" 18-8 STAINLESS STEEL BOLT (WITH VARIOUS HEAD TYPES)	
9	1/4"-20 18-8 STAINLESS STEEL LOCK NUT	
10	1/4"-20 WINGNUT	
11	3/16" ALUMINUM POP RIVET 1/2" LONG	

PROJECT # 308-0208.26

Douglas J McDougall  
Florida P.E. No. 28392

PTC, LLC  
1535 N. Cogswell Street, Suite C25  
Rockledge, Florida 32955  
FBPE Certificate of Authorization NO. 25935

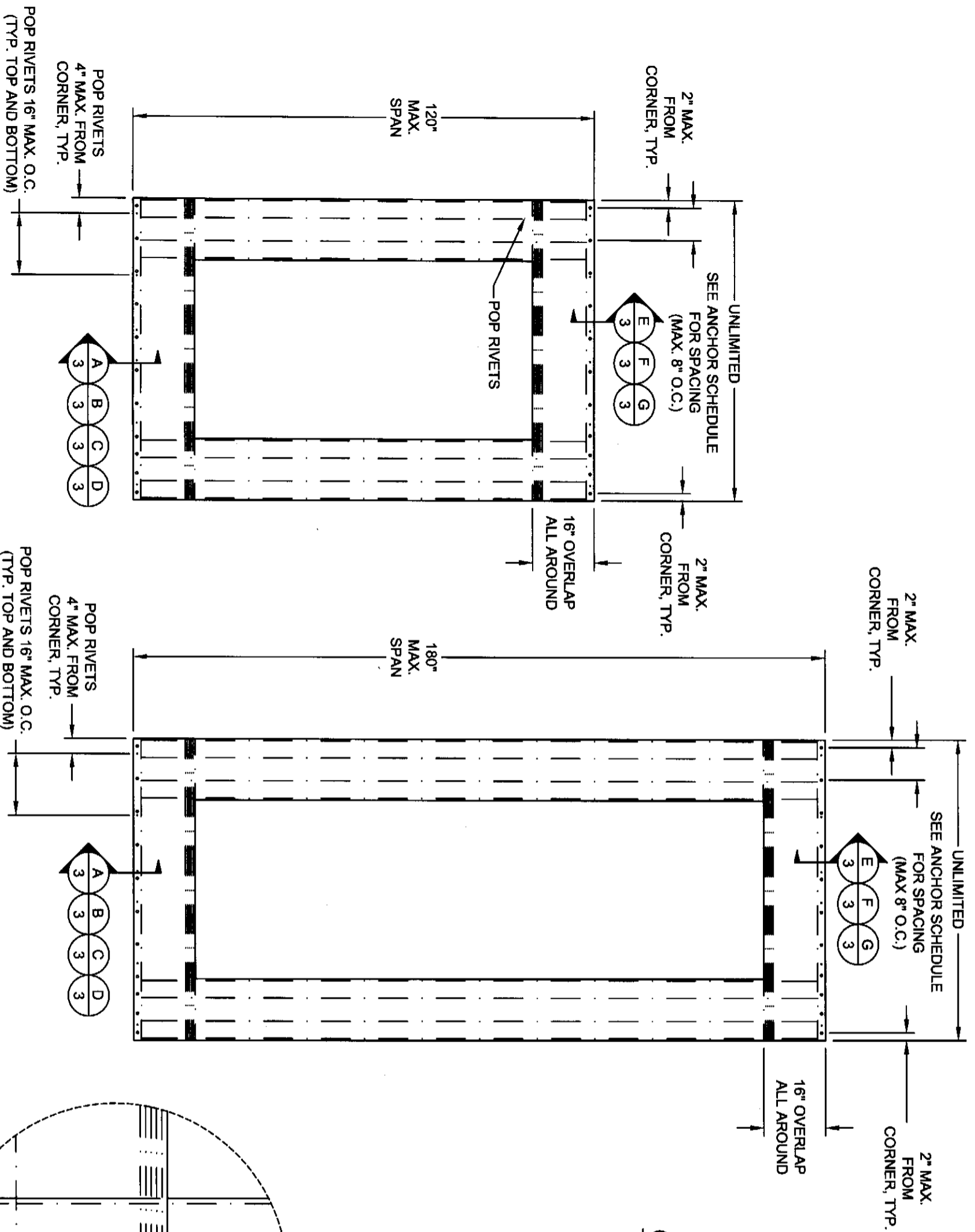
**CAT 5 HURRICANE SCREENS, LLC**  
13484 CHAMBORD ST.  
BROOKSVILLE, FL 34613

TITLE: WIND ABATEMENT SYSTEM  
NOTES, ANCHORAGE CHARTS & D.P. CHARTS



PREPARED BY:	DRAWN BY:	DATE:
	SMC	09/09/08
SCALE:	DRAWING NO:	
N.T.S.	CAT0005	
REV:	SHEET:	
	1 OF 4	

REV	DESCRIPTION	DATE	BY



**ELEVATION - 0'' - 120''**

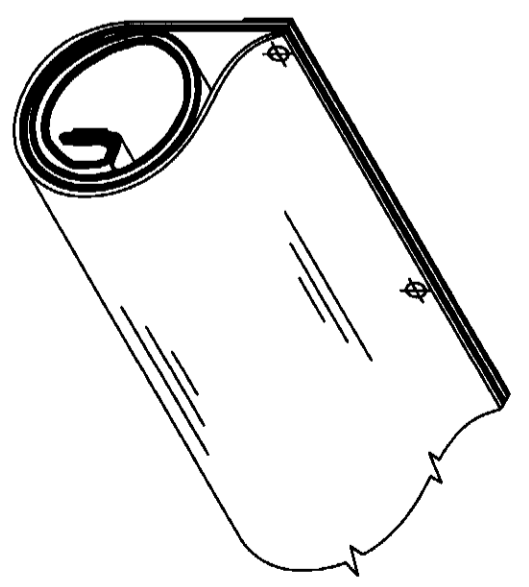
EXTERIOR VIEW

DESIGN PRESSURE RATING CHART  
ALL APPROVED CONFIGURATIONS  
+90.0/-90.0 PSF

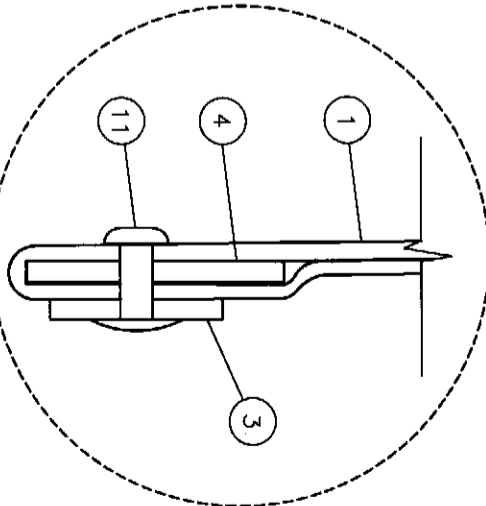
**ELEVATION - 121'' - 180''**

EXTERIOR VIEW

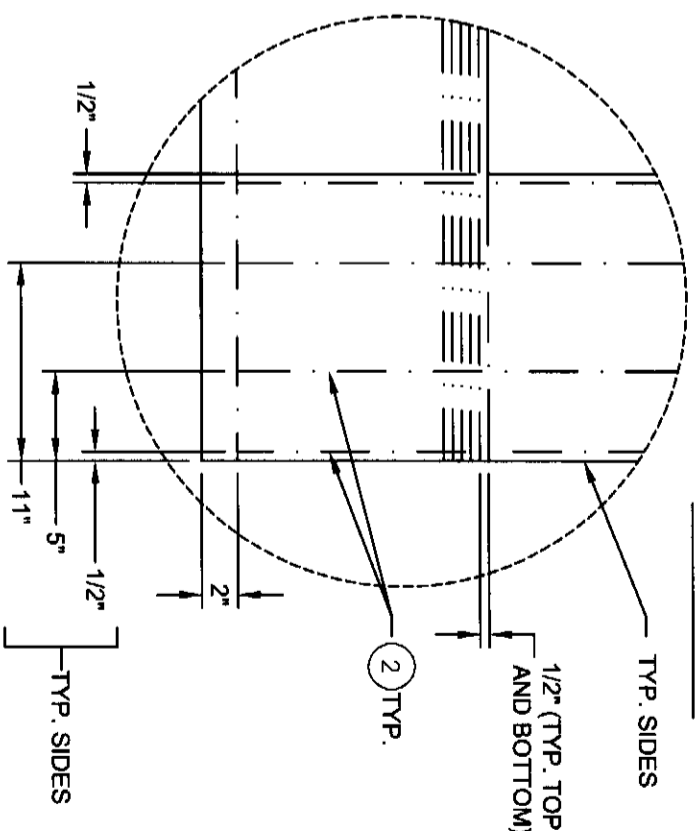
DESIGN PRESSURE RATING CHART  
ALL APPROVED CONFIGURATIONS  
+60.0/-60.0 PSF



**OPTIONAL STORAGE SYSTEM**



**DETAIL 1**



**STITCHING DETAIL**

TYP. TOP, BOTTOM AND SIDES

REV	DESCRIPTION	DATE	BY

**CAT 5 HURRICANE SCREENS, LLC**  
13484 CHAMBORD ST.  
BROOKSVILLE, FL 34613

TITLE: **WIND ABATEMENT SYSTEM ELEVATIONS**

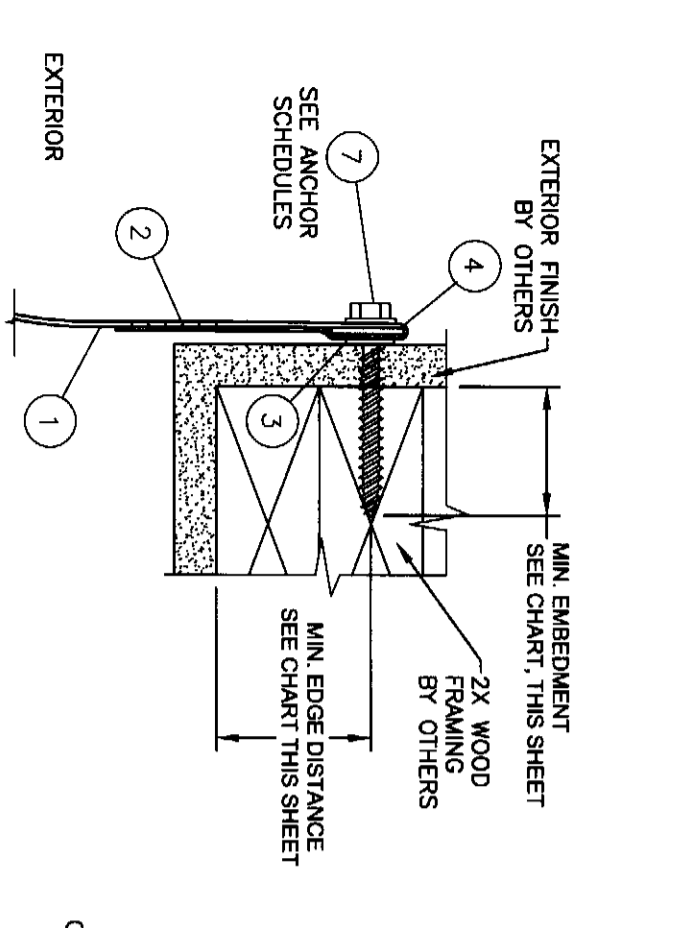
PREPARED BY: **PTC**

DRAWN BY: SMC	DATE: 09/09/08
SCALE: N.T.S.	DRAWING NO: CAT0005
REV: -	SHEET: 2 OF 4

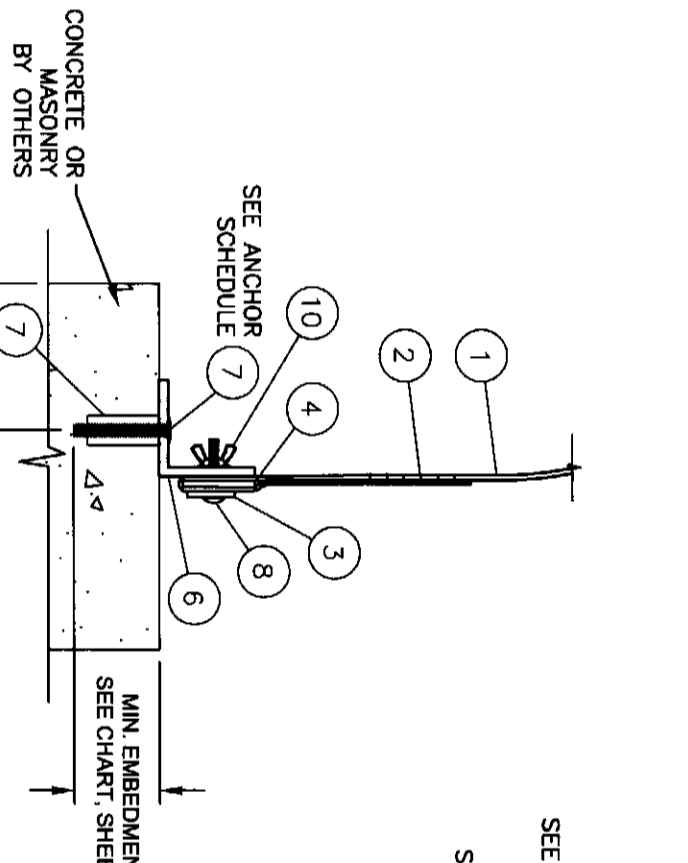
PROJECT # 308-0208.26  
Douglas J McDougall  
Florida P.E. No. 28392

*D.J. McDougall*  
9-10-08

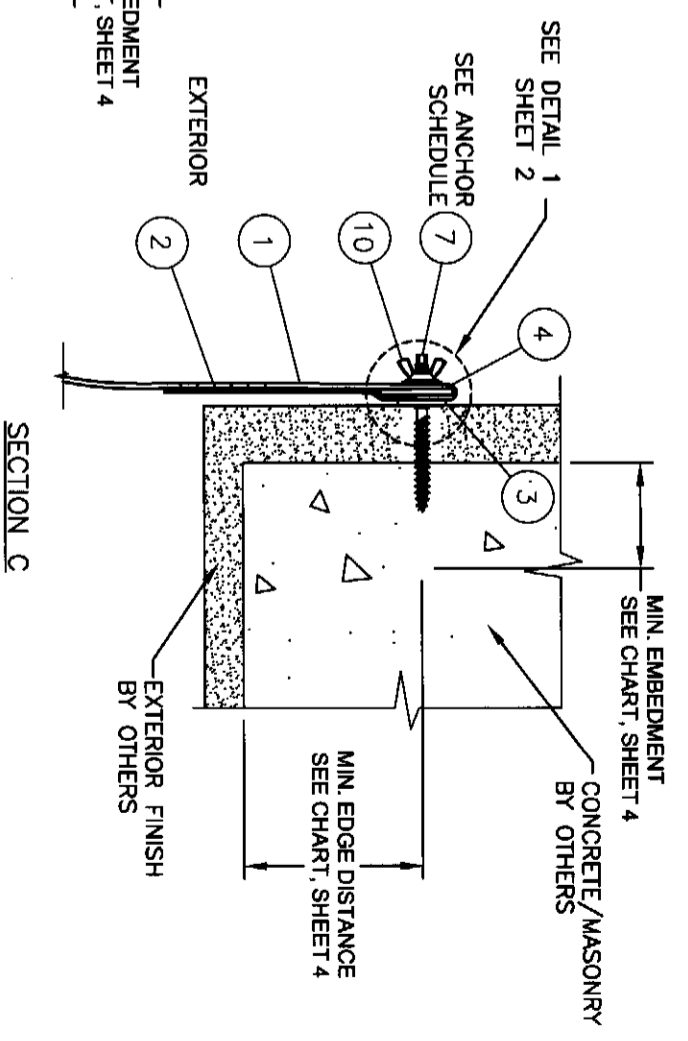
PTC, LLC  
1535 N. Cogswell Street, Suite C25  
Rockledge, Florida 32955  
FBPE Certificate of Authorization NO. 25935



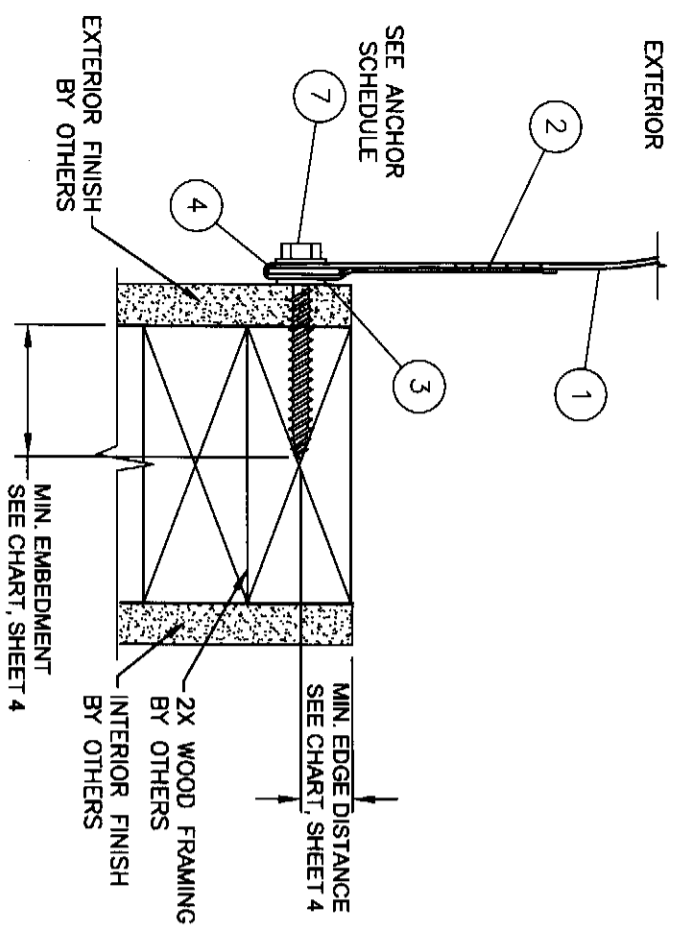
SECTION A  
WOOD INSTALLATION  
CONNECTION #1



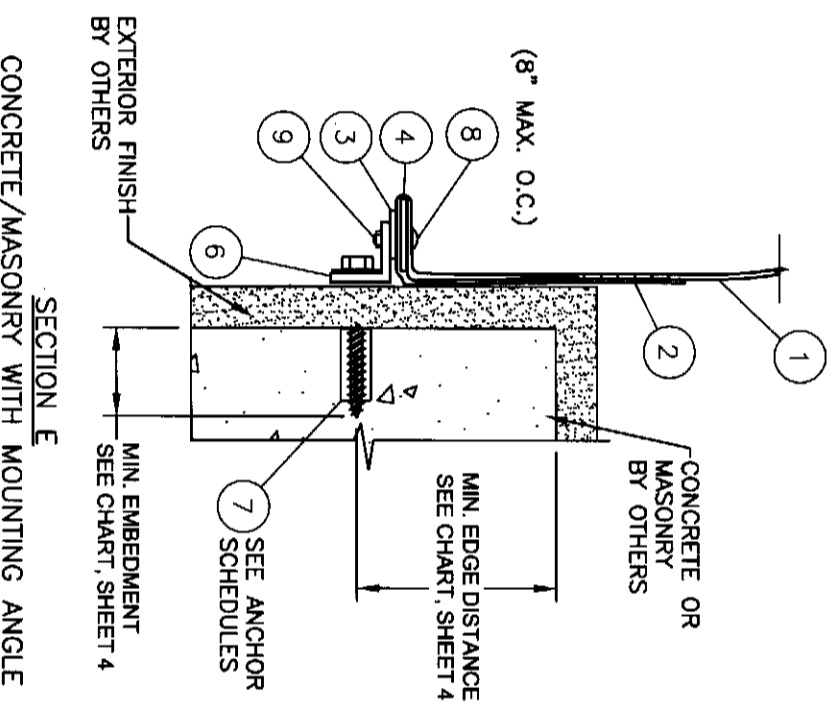
SECTION B  
CONCRETE/MASONRY WITH MOUNTING ANGLE  
CONNECTION #4



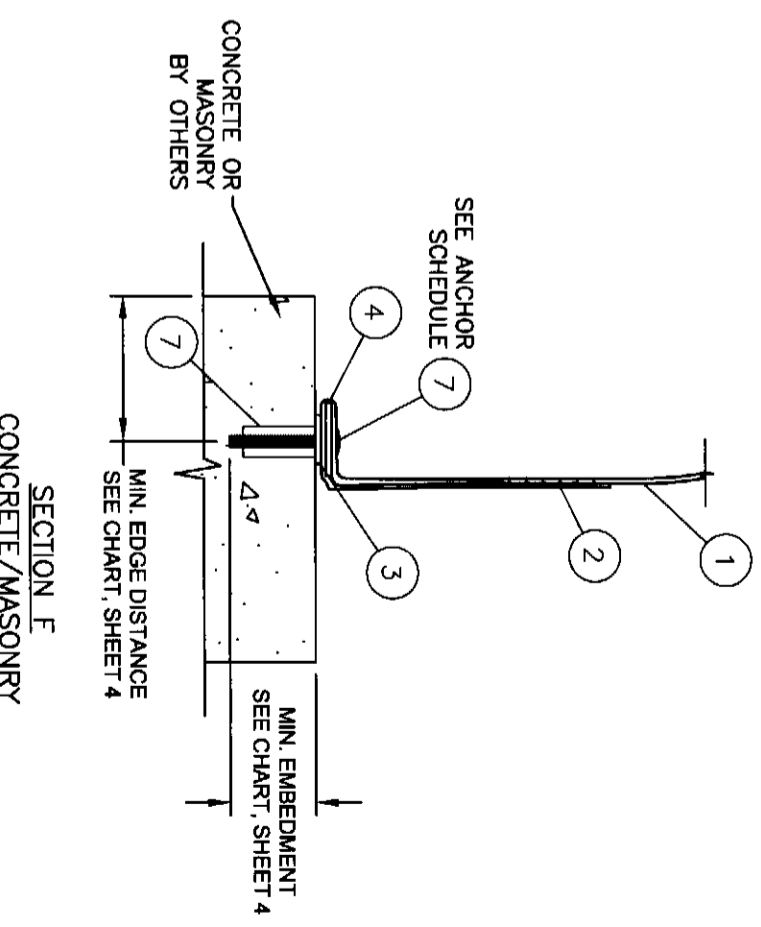
SECTION C  
CONCRETE/MASONRY INSTALLATION  
CONNECTION #2



SECTION D  
WOOD INSTALLATION  
CONNECTION #1



SECTION E  
CONCRETE/MASONRY WITH MOUNTING ANGLE  
CONNECTION #3



SECTION F  
CONCRETE/MASONRY  
CONNECTION #4

NOTE: DETAILS ARE REPRESENTATIVE REGARDLESS OF ORIENTATION.

PROJECT # 308-0208.26  
Douglas J McDougall  
Florida P.E. No. 28392  
*[Signature]*  
9-12-08  
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CAT 5 HURRICANE SCREENS, LLC  
13484 CHAMBORD ST.  
BROOKVILLE, FL 34613

WIND ABATEMENT SYSTEM  
CROSS SECTIONS

TITLE:



PREPARED BY:

DRAWN BY:

DATE:

SMC

09/09/08

SCALE:

DRAWING NO:

0.250

CAT0005

REV:

SHEET:

3 OF 4

REV	DESCRIPTION	DATE	BY

0" - 120" SPAN

FASTENER TYPE	Substrate Type	Diameter (in)	Minimum Embedment (inches)	Minimum Edge Distance (inches)	Connections #1, #2, & #3			Connection #4	
					Max psf at 8" O.C.	Max O.C. at 90 psf	Max psf at 8" O.C.	Max O.C. at 90 psf	
ELCO MALE PANELMATE PLUS	CONCRETE	1/4"	2	2-1/2"	90.0	8.0	90.0	8.0	
	CMU	1/4"	1-1/4"	2	42.2	3.8	46.4	4.1	
	WOOD (2")	1/4"	---	---	---	---	---	---	
ELCO FEMALE PANELMATE c/w SIDEWALK BOLT	WOOD (3/4")	1/4"	1-7/8"	3/4	66.4	5.9	90.0	8.0	
	CONCRETE	1/4"	1-3/4"	2-1/2"	90.0	8.0	90.0	8.0	
	CMU	1/4"	1-1/4"	2-1/2"	44.9	4.0	60.7	5.4	
ITW TAPCON SG	WOOD (2")	1/4"	1-1/2"	2	87.6	7.8	90.0	8.0	
	WOOD (3/4")	1/4"	1-1/2"	3/4	74.5	6.6	90.0	8.0	
	CONCRETE	1/4"	1-3/4"	2-1/2"	81.2	7.2	90.0	8.0	
ITW SAMMYS SSC c/w SIDEWALK BOLT	WOOD (2")	1/4"	1-1/2"	2	67.9	6.0	90.0	8.0	
	WOOD (3/4")	1/4"	1-1/2"	2	43.2	3.8	76.2	6.8	
	CONCRETE	1/4"	1-3/4"	2-3/16"	65.3	5.8	90.0	8.0	
ITW Tapcon	WOOD	1/4"	1-3/4"	4"	44.9	4.0	33.2	2.9	
	CONCRETE	5/16"	1-3/4"	2-1/2"	90.0	8.0	90.0	8.0	
	CMU	5/16"	1-1/4"	2-1/2"	78.3	7.0	44.4	3.9	
Elco Ultracore	WOOD	1/4"	1-3/4"	2-1/2"	90.0	8.0	82.9	7.4	
	CONCRETE	1/4"	1-3/4"	2-3/16"	75.7	6.7	80.8	7.2	
	CMU	1/4"	1-1/4"	1-9/16"	52.5	4.7	29.8	2.6	
1/4-20 Machine Screw Anchor (Powers Calk-In)	WOOD	1/4"	---	---	53.6	4.8	87.6	7.8	
	CONCRETE	5/16"	7/8"	2"	90.0	8.0	90.0	8.0	
	CMU	5/16"	7/8"	2"	30.1	2.7	43.4	3.9	
1/4-20 Machine Screw Anchor (Powers Calk-In)	WOOD	1/4"	---	---	79.1	7.0	62.1	5.6	
	CONCRETE	1/4"	7/8"	2	57.8	5.1	80.0	7.1	
	CMU	1/4"	7/8"	2	42.5	3.8	29.8	2.6	

121" - 180" SPAN

FASTENER TYPE	Substrate Type	Dia (in)	Minimum Embedment (inches)	Minimum Edge Distance (inches)	Connections #1, #2, & #3			Connection #4	
					Max psf at 8" O.C.	Max O.C. at 60 psf	Max psf at 8" O.C.	Max O.C. at 60 psf	
ELCO MALE PANELMATE PLUS	CONCRETE	1/4"	2	2-1/2"	60.0	8.0	60.0	8.0	
	CMU	1/4"	1-1/4"	2	31.7	4.2	34.9	4.6	
	WOOD	1/4"	---	---	---	---	---	---	
ELCO FEMALE PANELMATE c/w SIDEWALK BOLT	WOOD	1/4"	1-7/8"	3/4	49.8	6.6	60.0	8.0	
	CONCRETE	1/4"	1-3/4"	2-1/2"	36.8	8.0	50.0	8.0	
	CMU	1/4"	1-1/4"	2-1/2"	33.7	4.5	45.6	6.1	
ITW TAPCON SG	WOOD	1/4"	1-1/2"	2	36.8	8.0	60.0	8.0	
	WOOD	1/4"	1-1/2"	3/4	55.9	7.5	60.0	8.0	
	CONCRETE	1/4"	1-1/2"	2-1/2"	26.8	3.6	42.3	5.6	
ITW SAMMYS SSC c/w SIDEWALK BOLT	WOOD	1/4"	1-1/2"	2	36.8	8.0	60.0	8.0	
	WOOD	1/4"	1-1/2"	2-1/2"	33.7	4.5	45.6	6.1	
	CONCRETE	1/4"	1-1/2"	2-1/2"	60.0	8.0	60.0	8.0	
ITW Tapcon	WOOD	1/4"	1-1/2"	2	50.9	6.8	60.0	8.0	
	CONCRETE	1/4"	1-1/2"	3/4	32.4	4.3	51.1	6.8	
	CMU	1/4"	1-1/4"	2-1/2"	49.0	5.5	60.0	8.0	
Elco Ultracore	WOOD	1/4"	1-1/4"	2-1/2"	33.7	4.5	24.9	3.3	
	CONCRETE	5/16"	1-3/4"	2-3/16"	0.0	8.0	60.0	8.0	
	CMU	5/16"	1-3/4"	4"	52.6	7.0	33.3	4.4	
1/4-20 Machine Screw Anchor (Powers Calk-In)	WOOD	1/4"	1-3/4"	4"	0.0	8.0	60.0	8.0	
	CONCRETE	1/4"	1-3/4"	2-1/2"	56.8	7.6	60.0	8.0	
	CMU	1/4"	1-1/4"	2-1/2"	35.2	4.7	22.3	3.0	
1/4-20 Machine Screw Anchor (Powers Calk-In)	WOOD	1/4"	2-1/4"	2-1/2"	40.2	5.4	60.0	8.0	
	CONCRETE	5/16"	1-3/4"	2-3/16"	0.0	8.0	60.0	8.0	
	CMU	5/16"	1-1/4"	1-9/16"	22.6	3.0	32.6	4.3	
1/4-20 Machine Screw Anchor (Powers Calk-In)	WOOD	1/4"	2-1/4"	2-1/2"	59.4	7.9	46.6	6.2	
	CONCRETE	1/4"	7/8"	2"	43.4	5.8	60.0	8.0	
	CMU	1/4"	7/8"	2"	31.9	4.3	22.3	3.0	

PROJECT # 308-0208.26

Douglas J McDougall  
Florida P.E. No. 28392

*DJ McDougall*  
9/12/08  
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FBPE Certificate of Authorization NO. 25935

CAT 5 HURRICANE SCREENS, LLC  
13484 CHAMBORD ST.  
BROOKVILLE, FL 34613

TITLE: WIND ABATEMENT SYSTEM  
CROSS SECTIONS, DETAIL, BOM & COMPONENTS

PREPARED BY:



PTC, LLC  
Phone 321.690.1788  
Fax 321.690.1789

DRAWN BY:

SMC

SCALE: 0.250

REV:

DATE:

09/09/08

DRAWING NO: CAT0005

SHEET:

4 OF 4

REV	DESCRIPTION	DATE	BY