

Wednesday, September 20, 2006

Scott Wolters  
322 Buchanan St. #609  
Hollywood, FL 33019

Florida Building Commission  
2555 Shumard Oak Blvd.  
Tallahassee, FL 32399

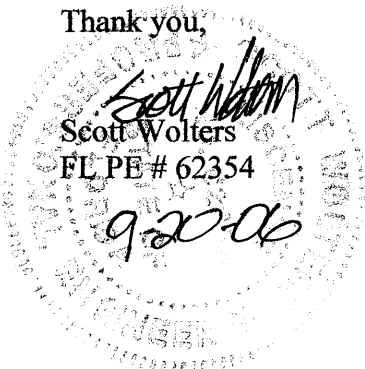
Re: CTC Total Vision System

Dear Sir or Madam:

The CTC Total Vision System, as manufactured by the Crawford Tracy Company and shown in the attached drawing #CT06-1, has been tested per the provisions of the 2004 Florida Building Code and ASTM E283, E330, and E331. Tests were conducted by the American Test Lab of South Florida, as listed in their Report # 0317.01-06, and verified by the attached calculations. The system was not tested to meet impact criteria, therefore shutters will be required.

Provided it is installed per the attached drawings, the CTC Total Vision System meets all requirements of the 2004 Florida Building Code generally, and chapters 16, 20, and 24 specifically. If you have any questions or need more information please contact me.

Thank you,



# CTC TOTAL VISION SYSTEM FLORIDA STATE APPROVAL

MANUFACTURER: CRAWFORD TRACY  
3301 SW 13th DRIVE  
DEERFIELD BEACH, FL 33442

PRODUCT: CTC TOTAL VISION SYSTEM IS A BUTT-GLAZED SYSTEM MADE WITH 3/4" CLEAR TEMPERED GLASS, SET IN A 2" ALUMINUM GLAZING CHANNEL FORMED OUT OF 1/4" ALUMINUM ANGLES. THE GLASS IS STRUCTURALLY SEALED TO THE ALUMINUM USING DOW CORNING 995 OR 983 SILICONE. ALUMINUM ANGLES ARE ATTACHED TO THE SURROUNDING CONDITION WITH EITHER 1/4" TAPCON CONCRETE SCREWS OR 1/4" TEKS SCREWS.

DESIGN CRITERIA:

WINDLOAD (P):

DESIGN PRESSURE
62 PSF POSITIVE
62 PSF NEGATIVE

MATERIAL PROPERTIES:

ALUMINUM: E =  $10 \times 10^6$  Psi  
(6063-T5) S<sub>y</sub> = 16,000 Psi  
θ<sub>ALLOW</sub> = 9,600 Psi

STEEL: E =  $29 \times 10^6$  Psi  
(A36) S<sub>y</sub> = 36,000 Psi  
θ<sub>ALLOW</sub> = 28,800 Psi

CALCULATIONS PREPARED BY:

SCOTT WOLTERS  
FL PE # 62354  
322 BUCHANAN ST.  
HOLLYWOOD, FL 33019  
PH/FX: (954) 921-5828



GLASS AREA ANALYSIS:

GLASS TYPE: 3/4" CLEAR TEMPERED

GLASS SIZE = 82 1/2" x 119 1/2"

WORST CASE IS INTERMEDIATE LITES, WHICH ARE SUPPORTED  
ON TWO OPPOSITE SIDES.

PER ASTM E330 02:

NON FACTORED LOAD = 17.5 psf (Table A1.25)

GLASS TYPE FACTOR = 4.0

LOAD RESISTANCE = 70 psf

DESIGN PRESSURE = 62 psf

&lt; OK &gt;

BENDING STRESS IN ANGLES:2" x 4" x 1/4" ALUMINUM ANGLE  
( 6063 T5)LINEAR LOAD

$$P = \frac{(62 \text{ psf}) \cdot (60 \text{ in})}{(144 \text{ in}^2/\text{ft}^2)}$$

$$= 25.8 \text{ lb/in}$$

STRESS

$$\theta = \frac{(25.8 \text{ lb/in}) \cdot (1.75 \text{ in}) \cdot 6}{(.25 \text{ in})^2}$$

$$\theta_{\text{ALLOW}} = 9,600 \text{ psi}$$

$$= 4340 \text{ psi} < \theta_{\text{ALLOW}} < \text{OK} >$$

FASTENER CALCULATIONSDETAILS 1, 3

1/4" DIA. TEKS SCREWS  
8 1/2" O.C.

$$V = \frac{(62 \text{ psf}) \cdot (60 \text{ in}) \cdot (8.5 \text{ in})}{(144 \text{ in}^2/\text{ft}^2)}$$

$$= 220 \text{ lb. (per fast.)}$$

$$V_{\text{ALLOW}} = 475 \text{ lb.}$$

(AAMA TIR-A9-1991)

$$\frac{V < V_{\text{ALLOW}}}{< \text{OK} >}$$

DETAIL 2CONCRETE ANCHORS

1/4" DIA. TAPCON FASTENER  
8 1/2" O.C.

$$V = \frac{(62 \text{ psf}) \cdot (60 \text{ in}) \cdot (8.5 \text{ in})}{(144 \text{ in}^2/\text{ft}^2)}$$

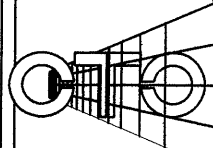
$$= 220 \text{ lb. (per fast.)}$$

$$V_{\text{ALLOW}} = 384 \text{ lb.}$$

(NOA# 03-0722.05)

$$\frac{V < V_{\text{ALLOW}}}{< \text{OK} >}$$





3301 S.W. 13 DRIVE  
DEERFIELD BEACH, FL 33442  
PHONE: (954) 698-6888  
FAX: (954) 698-6889  
E-MAIL: GLAZING@MINDSPRING.COM

DRAWN	ALL
DRAFTING CHECK	ALL
SALES CHECK	
PM CHECK	

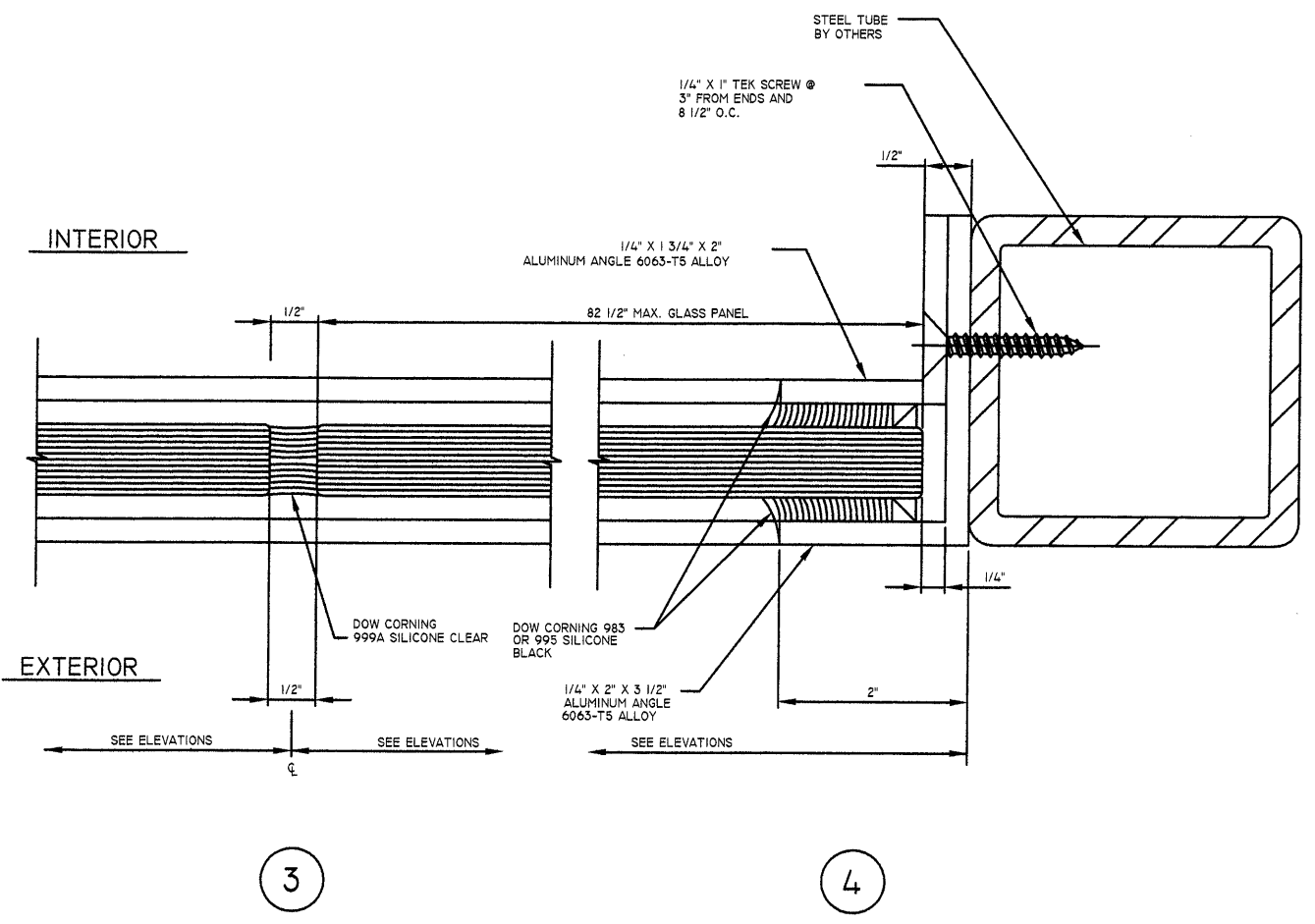
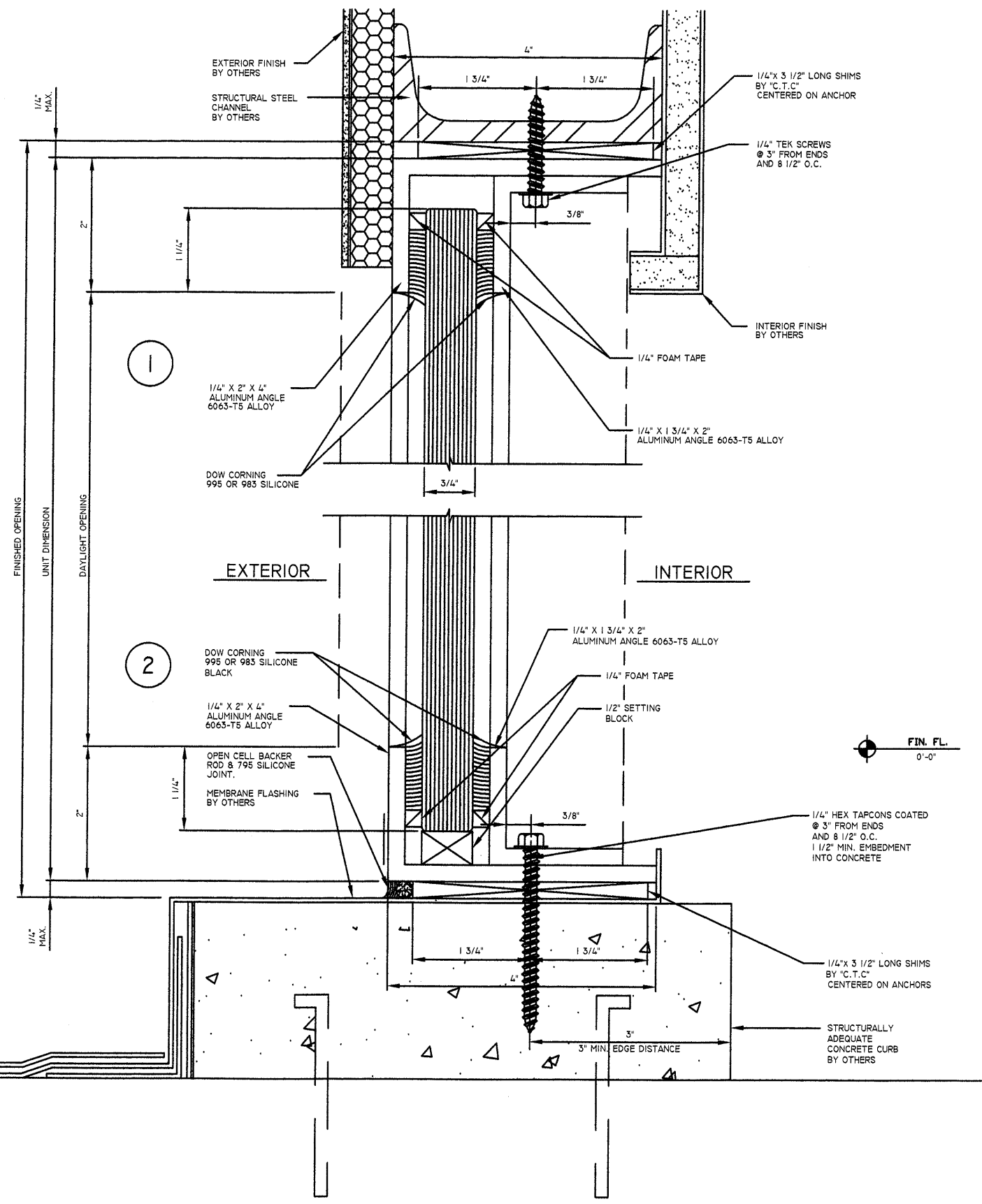
CONTRACTOR

PROJECT

FLORIDA APPLICATION  
CTC TOTAL VISION SYSTEM

ARCHITECT

PROJECT #	
REVISIONS	
SHEET DESCRIPTION	COVER & ELEVATION
SCALE	
100% DATE	9/19/06
DRAWING NO.	CT06-01
PAGE	2 OF 2



GLASS TYPE: 3/4" TEMPERED, MAX. SIZE 82 1/2" X 119 1/2"

SEAL  
SCOTT WALTERS  
FL PE# 62354  
322 BUCHANAN #609  
HOLLYWOOD, FL 33019  
PH/FAX(954) 921-5828  
9-19-06

FOR OFFICE USE ONLY