MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

BUILDING CODE COMPLIANCE OFFICE
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

CONTRACTOR LICENSING SECTION
(305) 375-2527 FAX (305) 375-2558

CONTRACTOR ENFORCEMENT DIVISION
(305) 375-2966 FAX (305) 375-2908

PRODUCT CONTROL DIVISION
(305) 375-2902 FAX (305) 372-6339

PRODUCT CONTROL NOTICE OF ACCEPTANCE

Transparent Protection Systems, Inc.
6643 42nd Terrace North
West Palm Beach ,FL 33407

Your application for Notice of Acceptance (NOA) of:
Clear Polycarponate Storm Panels Shutter
under Chapter 8 of the Code of Miami-Dade County governing the use of Alternate Materials and Types of Construction, and completely described herein, has been recommended for acceptance by the Miami-Dade County Building Code Compliance Office (BCCO) under the conditions specified herein.

This NOA shall not be valid after the expiration date stated below. BCCO reserves the right to secure this product or material at any time from a jobsite or manufacturer's plant for quality control testing. If this product or material fails to perform in the approved manner, BCCO may revoke, modify, or suspend the use of such product or material immediately. BCCO reserves the right to revoke this approval, if it is determined by BCCO that this product or material fails to meet the requirements of the South Florida Building Code.

The expense of such testing will be incurred by the manufacturer.

ACCEPTANCE NO.: 00-0524.14
EXPIRES: 07/19/2004

Raul Rodriguez
Chief Product Control Division

THIS IS THE COVERSHEET, SEE ADDITIONAL PAGES FOR SPECIFIC AND GENERAL CONDITIONS
BUILDING CODE & PRODUCT REVIEW COMMITTEE

This application for Product Approval has been reviewed by the BCCO and approved by the Building Code and Product Review Committee to be used in Miami-Dade County, Florida under the conditions set forth above.

Francisco J. Quintana, R.A.
Director
Miami-Dade County
Building Code Compliance Office

APPROVED: 07/19/2001

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

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APPROVED: 07/19/2001

Transparent Protection Systems, Inc.

ACCEPTANCE No. : 00-0524.14

APPROVED : 07/19/2001

EXPIRES : 07/19/2004

NOTICE OF ACCEPTANCE: SPECIFIC CONDITIONS

1. SCOPE

This approves Clear Polycarbonate Storm Panels Shutter, as described in Section 2 of this Notice of Acceptance, designed to comply with the South Florida Building Code, 1994 Edition for Miami-Dade County, for the locations where the pressure requirements, as determined by SFBC Chapter 23, do not exceed the Design Pressure Rating values indicated in the approved drawings.

2. PRODUCT DESCRIPTION

This Clear Polycarbonate Storm Panels Shutter and its components shall be constructed in strict compliance with the following documents: Drawing No. 00-246, titled " Clear Polycarbonate Storm Panel ", prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, P.E., dated December 14, 2000, last revision #1 dated June 7, 2001, sheets 1 through 3 of 3, bearing the Miami-Dade County Product Control approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division. These documents shall hereinafter be referred to as the approved drawings.

3. LIMITATIONS

All permanent set components, included but not limited to embedded anchor bolts, threaded cones, metal shields, headers and sills, must be protected against corrosion, contamination and damage at all times.

4. INSTALLATION

This Clear Polycarbonate Storm Panels Shutter and its components shall be installed in strict compliance with the approved drawings.

5. LABELING

Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved".

6. BUILDING PERMIT REQUIREMENTS

6.1 Application for building permit shall be accompanied by copies of the following:

6.1.1 This Notice of Acceptance.

6.1.2 Duplicate copies of the approved drawings, as identified in Section 2 of this Notice of Acceptance, clearly marked to show the components selected for the proposed installation.

6.1.3 Any other documents required by the Building Official or the South Florida Building Code (SFBC) in order to properly evaluate the installation of this system.

Helmy A. Makar

Helmy A. Makar, P.E. -Product Control Examiner
Product Control Division

Transparent Protection Systems, Inc.

ACCEPTANCE No. : 00-0524.14

APPROVED : 07/19/2001

EXPIRES : 07/19/2004

NOTICE OF ACCEPTANCE: STANDARD CONDITIONS

1 Renewal of this Acceptance (approval) shall be considered after a renewal application has been filed and the original submitted documents, including test-supporting data, engineering documents, are no older than eight (8) years.

2. Any and all approved products shall be permanently labeled with the manufacturer's name, city, state, and the following statement: "Miami-Dade County Product Control Approved", or as specifically stated in the specific conditions of this Acceptance.

3. Renewals of Acceptance will not be considered if:
   a. There has been a change in the South Florida Building Code affecting the evaluation of this product and the product is not in compliance with the code changes.
   b. The product is no longer the same product (identical) as the one originally approved.
   c. If the Acceptance holder has not complied with all the requirements of this acceptance, including the correct installation of the product.
   d. The engineer, who originally prepared, signed and sealed the required documentation initially submitted, is no longer practicing the engineering profession.

4. Any revision or change in the materials, use, and/or manufacture of the product or process shall automatically be cause for termination of this Acceptance, unless prior written approval has been requested (through the filing of a revision application with appropriate fee) and granted by this office.

5. Any of the following shall also be grounds for removal of this Acceptance:
   a. Unsatisfactory performance of this product or process.
   b. Misuse of this Acceptance as an endorsement of any product, for sales, advertising or any other purposes.

6. The Notice of Acceptance number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the Notice of Acceptance is displayed, then it shall be done in its entirety.

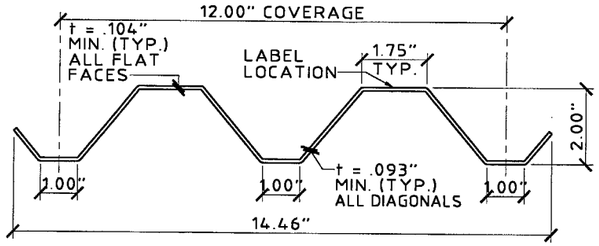
7. A copy of this Acceptance as well as approved drawings and other documents, where it applies, shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at all time. The engineer needs not reseal the copies.

8. Failure to comply with any section of this Acceptance shall be cause for termination and removal of Acceptance.

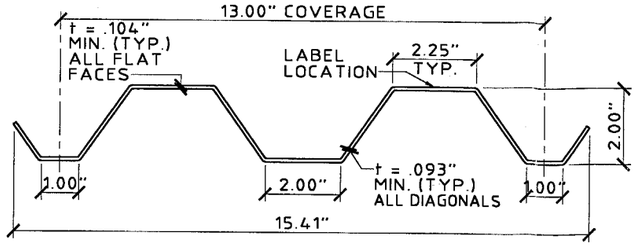
9. This Notice of Acceptance consists of pages 1, 2 and this last page 3.

END OF THIS ACCEPTANCE

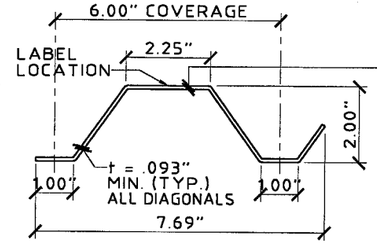
Helmy A. Makar, P.E. -Product Control Examiner
Product Control Division



1 **STORM PANEL**
SCALE: 3" = 1' - 0"



2 **STORM PANEL**
SCALE: 3" = 1' - 0"



3 **STORM PANEL**
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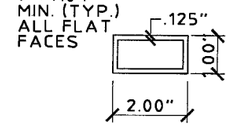
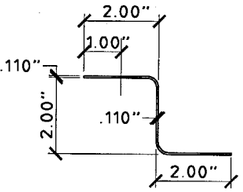
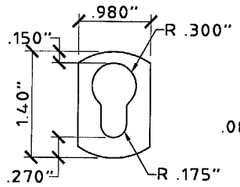


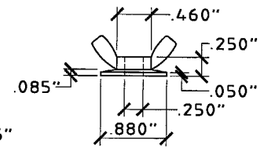
(6061-T6 ALUM.)
4 **INTERMEDIATE SUPPORT STRAP**
SCALE: 3" = 1' - 0"



5 **"Z" BAR**
SCALE: 3" = 1' - 0"



(OPTIONAL)
6 **KEYHOLE WASHER**
SCALE : HALF SIZE



(ZAMAC 3 ALLOY)
7 **WASHERED WINGNUT**
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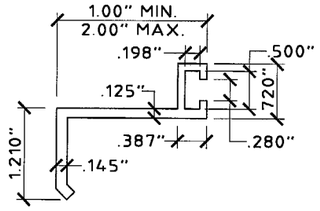
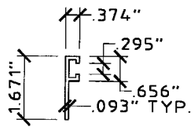
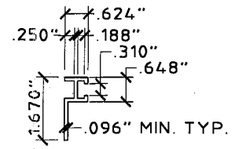


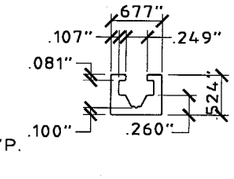
8 **BUILD-OUT F-TRACK**
SCALE : HALF SIZE



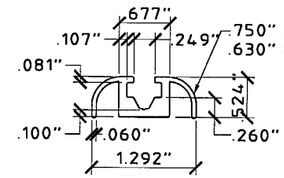
9 **"F" TRACK**
SCALE: 3" = 1' - 0"



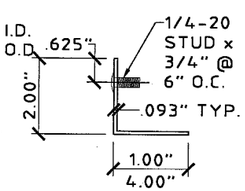
10 **"B F" TRACK (5/8")**
SCALE: 3" = 1' - 0"



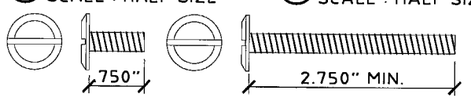
11 **PRE-STUCCO C-TRACK**
SCALE : HALF SIZE



12 **C-TRACK (FINISH)**
SCALE : HALF SIZE



13 **STUD ANGLE**
SCALE: 3" = 1' - 0"



14 **1/4-20 MACHINE SCREW**
SCALE : HALF SIZE

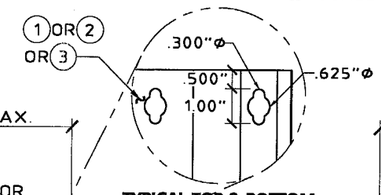
(6053 ALUM.)
15 **1/4" RIVNUT**
SCALE : HALF SIZE

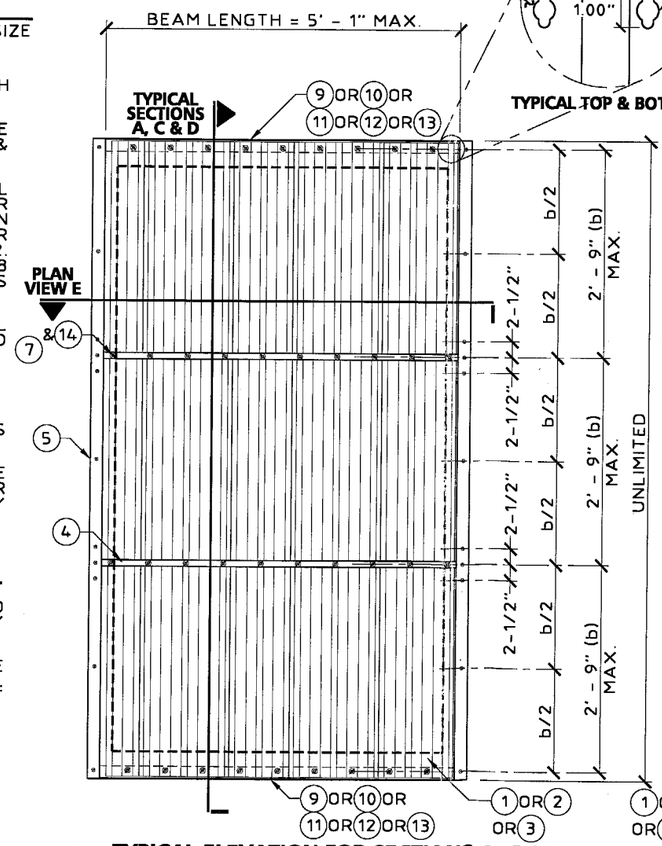
GENERAL NOTES:

1. THIS SHUTTER SYSTEM IS DESIGNED IN ACCORDANCE WITH THE SOUTH FLORIDA BUILDING CODE 1994 EDITION FOR MIAMI-DADE COUNTY.
2. STORM PANELS SHALL BE EXTRUDED IN CLEAR POLYCARBONATE WITH A MINIMUM THICKNESS AS INDICATED ON COMPONENTS 1, 2 & 3. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
3. MATERIAL SPECIFICATIONS: ALL POLYCARBONATE PANELS SHALL BE FABRICATED FROM 100% GE SYNTHETIC THERMOPLASTIC POLYMER LEXAN RESIN NUMBER 103-112, WHICH IS COMPARATIVE TO GE LEXAN POLYCARBONATE SHEET NUMBER 9034 AS APPROVED UNDER MIAMI-DADE COUNTY NOTICE OF ACCEPTANCE NUMBER 00-0718.02. SYNTHETIC THERMOPLASTIC POLYMER TENSILE STRENGTH Fy = 8,908 P.S.I., FLEXURAL STRENGTH Fby = 12,900 P.S.I., FLEXURAL MODULUS = 328,700 P.S.I.
4. PRODUCT MARKINGS SHALL BE WITHIN 12" OF ONE END OF THE PANEL WITH A MIN. OF ONE MARKING PER PANEL, AND SHALL BE LABELED AS FOLLOWS:

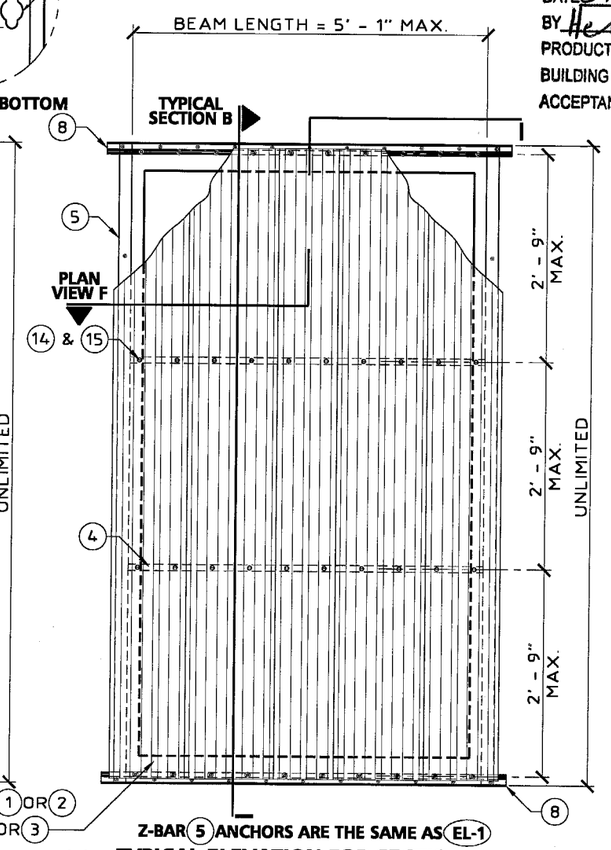
   TRANSPARENT PROTECTION SYSTEMS, INC.
   WEST PALM BEACH, FLORIDA
   MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED

5. ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N.
6. THE DETAILS AND SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED FOR IMPACT, CYCLIC AND UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH MIAMI-DADE COUNTY PROTOCOLS PA 201, 202, AND 203.
   MAX. POSITIVE DESIGN LOAD = + 72.0 P.S.F.
   MAX. NEGATIVE DESIGN LOAD = - 72.0 P.S.F.
7. **REFERENCE CONSTRUCTION TESTING CORPORATION (C.T.C.) TEST REPORT No. 00-045.**
8. TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED HORIZONTALLY WHERE APPLICABLE.
9. AT LEAST ONE PERMANENT WARNING LABEL PER PANEL SHALL BE PLACED WITHIN 12" OF THE LOWER LEFT CORNER OF EACH PANEL FOR ANY JOB PERMITTED USING THIS MIAMI-DADE COUNTY PRODUCT APPROVAL. THIS LABEL SHALL READ AS FOLLOWS:
   "WARNING: THIS STORM PANEL SYSTEM WON'T OFFER HURRICANE PROTECTION UNLESS ALL REINFORCING BOLTS AND STRAPS ARE PROPERLY INSTALLED.





EL-1 **TYPICAL ELEVATION FOR SECTIONS A, C & D**
SCALE: 1/2" = 1' - 0"



Z-BAR 5 ANCHORS ARE THE SAME AS EL-1

EL-2 **TYPICAL ELEVATION FOR SECTION B**
SCALE: 1/2" = 1' - 0"

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 07/19/2001
BY [signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0524.14

KNEZEVICH & ASSOCIATES, INC.
CONSULTING ENGINEERS • PRODUCT TESTING
1260 N. UNIVERSITY DRIVE, SUITE 180 • FORT LAUDERDALE, FL 33322
TEL: (954) 382-2800 • FAX: (954) 382-2989 • FLORIDA COA #3205
WEBSITE: WWW.KNEZEVICH.COM • E-MAIL: KA@KNEZEVICH.COM

COPYRIGHT © 2001 KNEZEVICH & ASSOCIATES, INC

CLEAR POLYCARBONATE STORM PANEL

Transparent Protection Systems, Inc.
6643 N. 42ND TERRACE
WEST PALM BEACH, FL 33407
(888) 447-8320

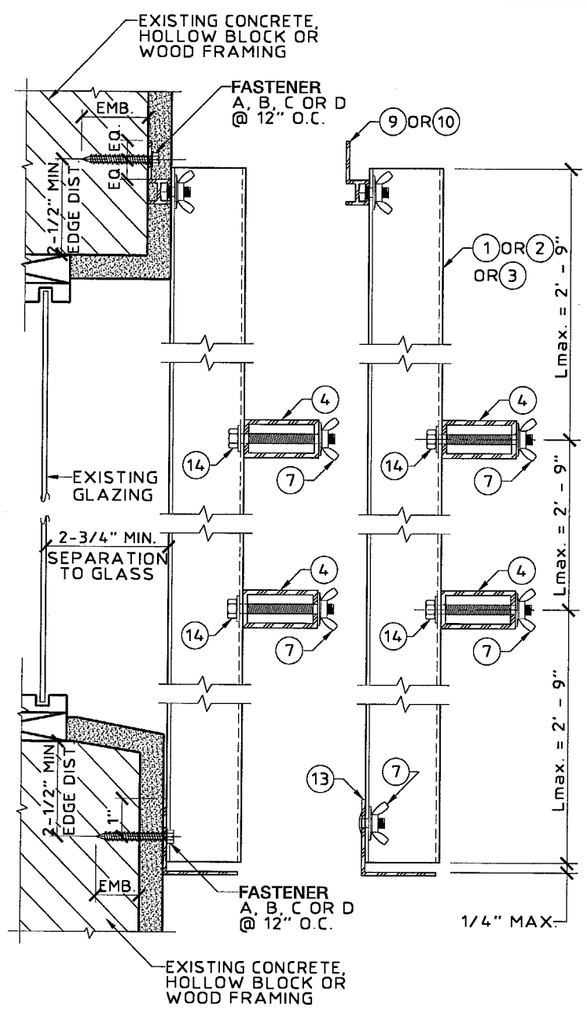
CLEAR GUARD HURRICANE PANELS

V.J. KNEZEVICH
PROFESSIONAL ENGINEER
FL License No: PE 0010983

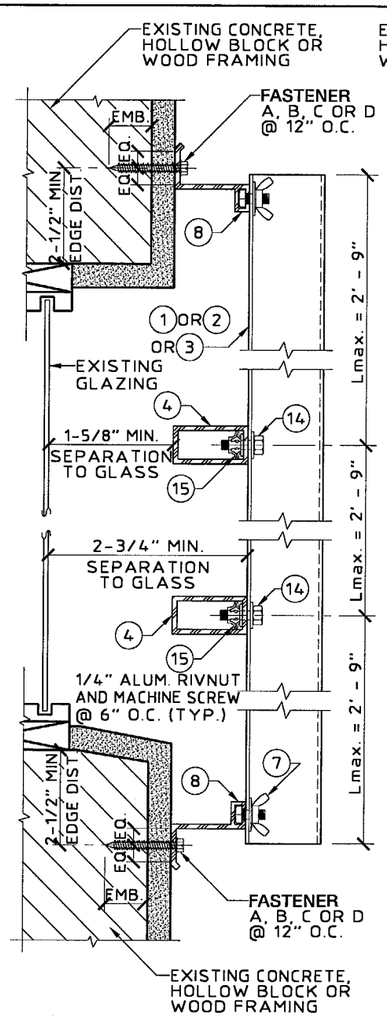
JUN 07 2001

revisions			
no	date	by	description
1	06/07/01	OLB	COUNTY COMMENTS

date	12/14/00
scale AS NOTED	drawn by MC
design by VJK	checked by VJK
drawing no.	00-246
sheet 1 of 3	



A WALL MOUNT SECTION
SCALE: 3" = 1' - 0"



B BUILD-OUT MOUNT SECTION
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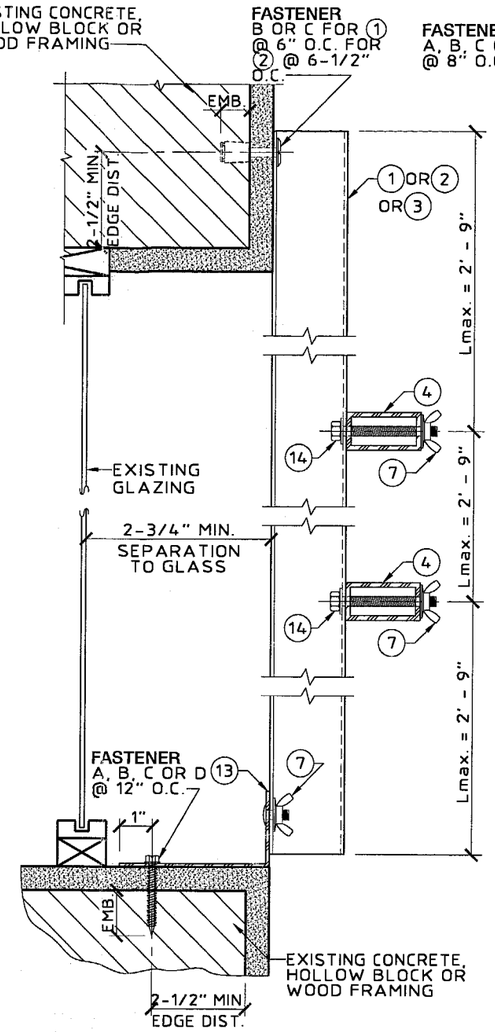
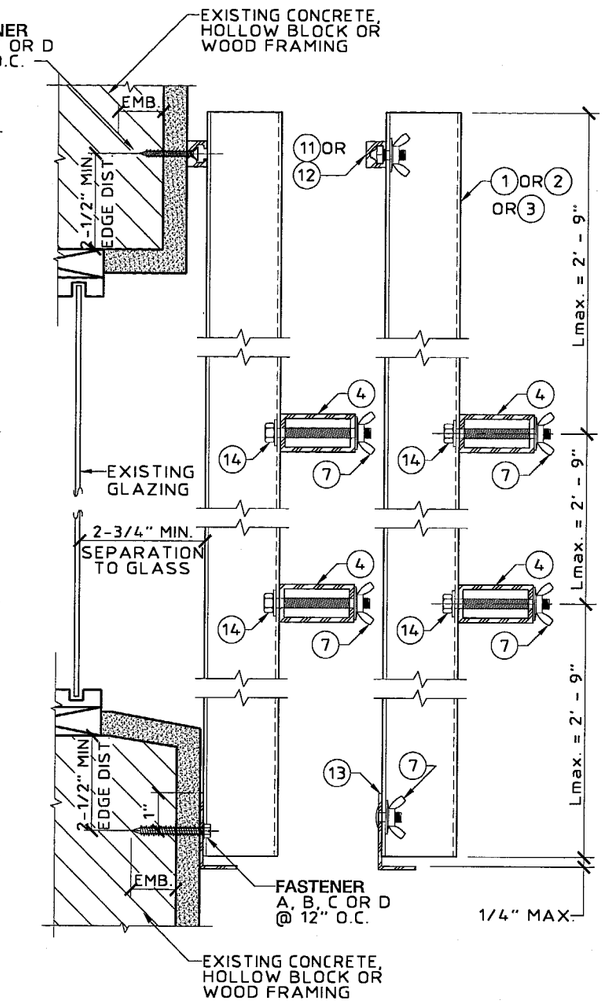


C WALL / FLOOR MOUNT SECTION
SCALE: 3" = 1' - 0"



D WALL MOUNT SECTION
SCALE: 3" = 1' - 0"

FASTENER TYPE	DESCRIPTION	BLOCK MIN. EMBEDMENT	CONCRETE MIN. EMBEDMENT	WOOD MIN. EMBEDMENT
A	1/4"Ø ELCO TAPCON OR 1/4"Ø ELCO CRETE FLEX	1-1/4"	1-1/4" (MINIMUM 3,300 P.S.I. CONCRETE)	N / A
* B	1/4"Ø POWERS CALK-IN & 1/4-20 STAINLESS STEEL MACHINE SCREW	7/8"	7/8" (MINIMUM 3,000 P.S.I. CONCRETE)	N / A
* * C	1/4"Ø ELCO MALE/ FEMALE "PANELMATE" & 1/4-20 MACHINE SCREW WITH NUT	1-1/4"	1-3/4" (MINIMUM 3,300 P.S.I. CONCRETE)	1-7/8"
1-3/4" D	1/4"Ø x MIN. 2-1/2" LONG WOOD LAG SCREW PARALLEL OR PERPENDICULAR TO GRAIN (G= .55 MIN.)	N / A	N / A	1-3/4"

ANCHOR NOTES:

1. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
2. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH OR STUCCO. EMBEDMENT OF FASTENER SHALL ONLY INCLUDE THE THREADED PORTION. EDGE DISTANCE SHALL BE AS NOTED ON DRAWING OR SPECIFIED IN THIS NOTES.
3. WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD.
4. WHERE ELCO PANELMATES OR LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2" x 4" (MIN.) WOOD STUD. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING. WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
5. MACHINE SCREWS SHALL HAVE MIN. OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND SHALL HAVE A WAFER HEAD (SIDEWALK BOLT), U.O.N.
6. * DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHERED WINGNUT.
7. ALL FASTENERS USED FOR HEADERS AND SILLS SHALL BE INSTALLED @ 12" O.C. FOR ALL WIND LOADS LESS THAN OR EQUAL TO 72.0 P.S.F.

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 07/19/2001
BY [signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0524.14

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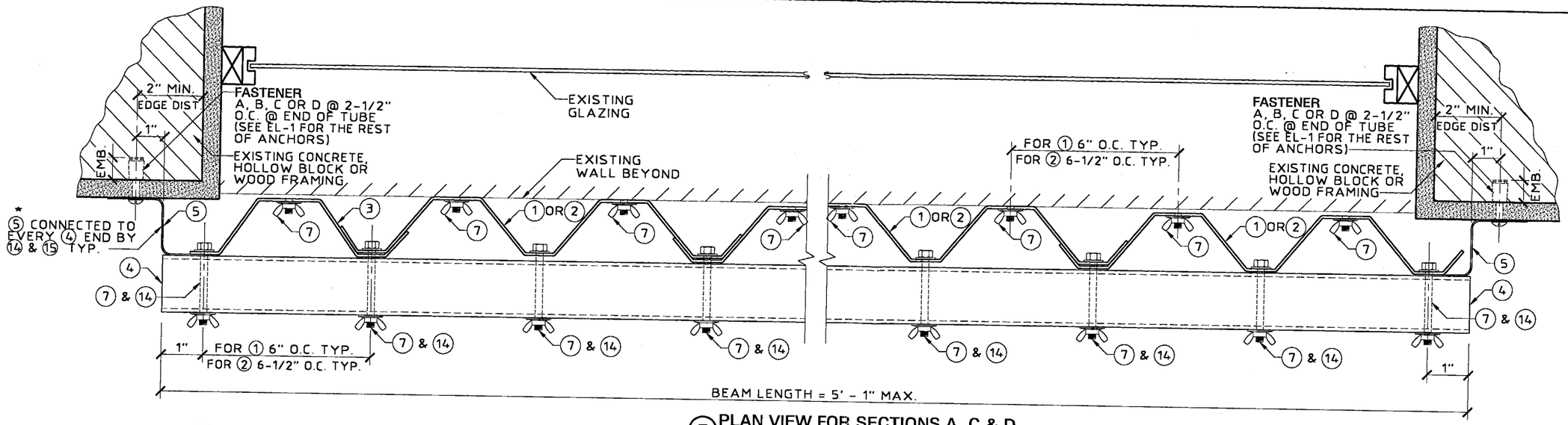
CLEAR GUARD HURRICANE PANELS

V.J. KNEZEVICH
PROFESSIONAL ENGINEER
FL License No: PE 0010983
JUN 07 2001

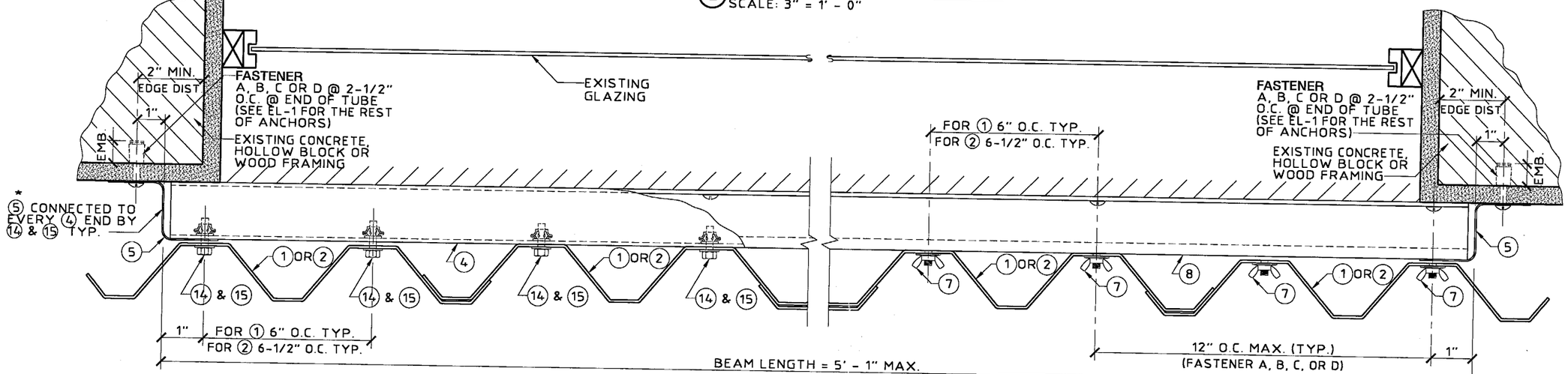
revisions			
no	date	by	description
1	06/07/01	DLB	COUNTY COMMENTS

date 12/14/00
scale AS NOTED
drawn by MC
design by VJK
checked by VJK
drawing no. 00-246
sheet 2 of 3



(E) PLAN VIEW FOR SECTIONS A, C & D

SCALE: 3" = 1' - 0"



(F) PLAN VIEW FOR SECTION B

SCALE: 3" = 1' - 0"

*** NOTE:**

ALL INSTALLATIONS MUST PROVIDE FULL PANELS OR HALF PANELS AT OPENINGS TO ENSURE THAT ASSEMBLY CLOSURE ⑤ HAS POSITIVE CONNECTIONS AS SHOWN IN ABOVE PLAN VIEW DETAILS (E) & (F).

APPROVED AS COMPLYING WITH THE SOUTH FLORIDA BUILDING CODE
DATE 07/19/2001
BY [signature]
PRODUCT CONTROL DIVISION
BUILDING CODE COMPLIANCE OFFICE
ACCEPTANCE NO. 00-0524.14

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